Economics of the GATT/WTO

"GATT-Think"

- "...So if our theories really held sway, there would be no need for trade treaties: global free trade would emerge spontaneously from the unrestricted pursuit of national interest..." (Krugman, 1997)
- Why then in trade negotiations does a government "...require a 'concession' from its trading partner(s) in order to do what is in any event best for the country"? (Bagwell and Staiger, 1999)
- Observation that governments seek reciprocity in trade agreements often interpreted to mean trade negotiators are adopting a mercantilist perspective inconsistent with economic logic

"GATT-Think"

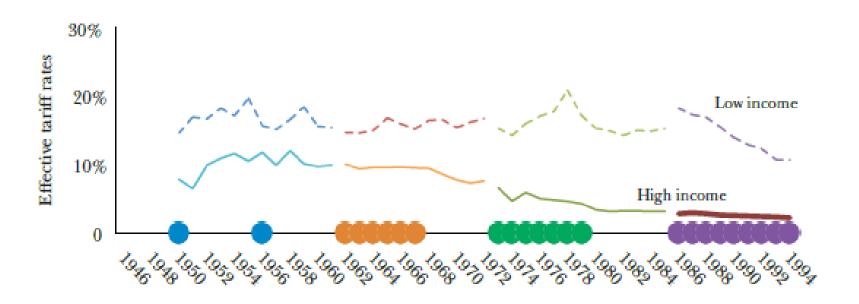
- Krugman (1991) observes that there are three simple rules about the objectives of negotiating countries:
 - exports are good
 - imports are bad
 - ceteris paribus, an equal increase in imports and exports is good
- **"GATT-think** is "enlightened mercantilism", i.e., it is *mercantilist* in presuming countries unilaterally like to subsidize exports and tax imports, and *enlightened* in recognizing this could be destructive
- **"GATT-think"** sees trade policy problem as one where individually countries have an incentive to be protectionist, yet collectively they gain from free trade

"GATT-Think"

- What is hidden logic of "GATT-think"?
- Based on political pressure arguments, government policy does not necessarily represent public interest, but rather well-organized groups such as exporters and import-competing producers explains first two principles of "GATT-think"
- Despite ignoring gains from trade as economists understand them, in setting exporter interests as a counter-weight to import-competing interests, and by bargaining for access to each others' markets, trade negotiators do move system closer to free trade
- Since 1947, through 8 rounds of GATT, average *ad valorem* tariffs cut from 40 to 4%, and GATT/WTO membership has risen to 157 countries

GATT – A Tariff-Cutting "Juggernaut"

Effective Tariff Rates, 1946-1994



Source: Baldwin, 2016

Where is the WTO at present?

- December 2013, WTO agreement on "trade facilitation" essentially measures to simplify customs rules
- While lauded in media as a breakthrough in Doha Round, it has not pushed forward typical agenda of tariff-cutting
- Raises question(s) of why a multilateral agreement, similar to those concluded under GATT, not reached under its successor
- Focus here on two themes:
 - Is the WTO subject to a "latecomers" problem?
 - Are activities such as offshoring pushing countries to seek "deep integration" via preferential trade agreements (PTAs)?

What is the function of the WTO?

- Standard result is that where country is small, first-best outcome is free trade, i.e., tariffs are not optimal
- So why would countries pursue reciprocal tariff-cutting through the WTO?
- Countries may be able to influence their terms of trade through tariffs, i.e., they have *monopsony/monopoly* power Johnson (1954)
- **Supported by empirical evidence for sample of countries prior to their joining the WTO (Broda** *et al.***, 2008)**
- This result, along with political-economy considerations, has informed modern analysis of WTO as resolution of a terms-of-trade Prisoner's Dilemma (Bagwell and Staiger, 1999)

Basic argument

- Assume "home" country imports x on which it levies tariff t, and "foreign" country imports y on which it levies tariff t^*
- $p = p_x/p_y$ and $p^* = p_x^*/p_y^*$ are domestic relative prices, where $p_x = p_x^*(1+t)$, and $p_y^* = p_y(1+t^*)$, where $\delta p/\delta t > 0 > \delta p^*/\delta t^*$
- $p^w = p_x^*/p_y$ is world relative price, where $\delta p^w/\delta t < 0 < \delta p^w/\delta t^*$
- Home and foreign welfare are: $W(p, p^w)$, and $W^*(p^*, p^w)$, where $\delta W(p, p^w)/\delta p^w < 0$, and $\delta W^*(p^*, p^w)/\delta p^w > 0$, i.e., improved terms of trade raise welfare
- With unilateral policies, tariffs chosen to maximize:

$$W_{p}\left[dp / d\tau\right] + W_{p^{w}}\left[dp^{w} / d\tau\right] = W_{p} + \lambda W_{p^{w}} = 0$$
 (1)

$$W_{p^*}^* \left[dp^* / d\tau^* \right] + W_{p^w}^* \left[dp^w / d\tau^* \right] = W_p^* + \lambda^* W_{p^w}^* = 0 \qquad (2)$$

where $\lambda = [\delta p^w/\delta t]/[\delta p/\delta t] < 0$ and $\lambda^* = [\delta p^w/\delta t^*]/[\delta p^*/\delta t^*] < 0$

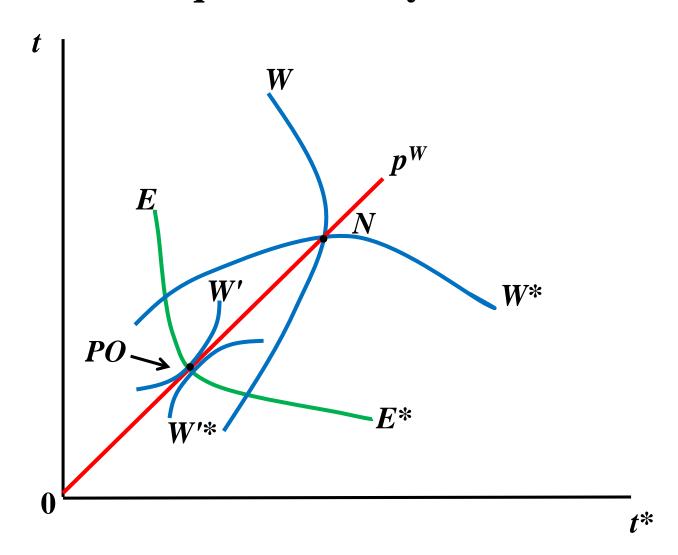
Basic argument

- (1) and (2) are tariff reaction functions, each government striking balance over effect of tariff on local and world-prices
- Nash equilibrium inefficient as each country attempts to shift costs of policy choice onto other country WTO is mechanism by which tariffs are cut reciprocally to efficient level
- If terms-of-trade effects do not matter to either government, politically optimal tariffs satisfy,

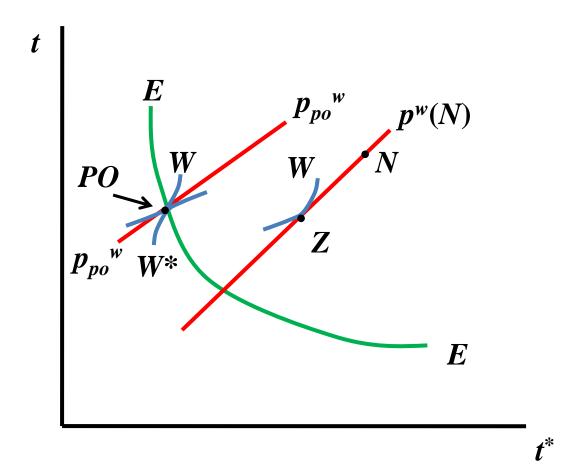
$$W_p = 0$$
, and $W *_p = 0$

- Allows for possibility that tariffs are zero if objective of governments is to maximize national income, i.e., free trade
- Reciprocal tariff-cutting through WTO is Pareto-improving, terms-of-trade externality being neutralized

Tariff equilibrium: symmetric case



Tariff equilibrium: symmetric case



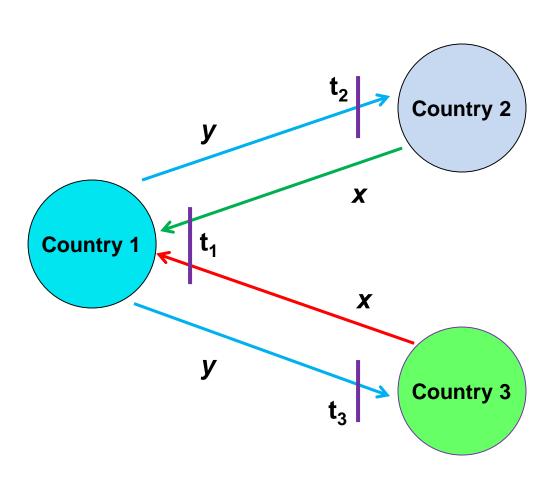
Pillars of the WTO

- Terms-of-trade effects translate into negotiation-language: tariffs lead to import volume effects, i.e., loss of *market access*
- Previous GATT rounds essentially about bilateral exchange of market access via commitment to lower tariffs
- Multilateral nature of WTO due to application of mostfavored nation (MFN) principle, i.e., bilateral concessions on tariffs offered to all WTO members
- In principle, WTO is self-enforcing, i.e., member can retaliate against another if latter unilaterally modifies tariff concession, thereby reducing former's market access
- Retaliation may occur if WTO panel finds in favor of harmed member, and offending country fails to offer compensation

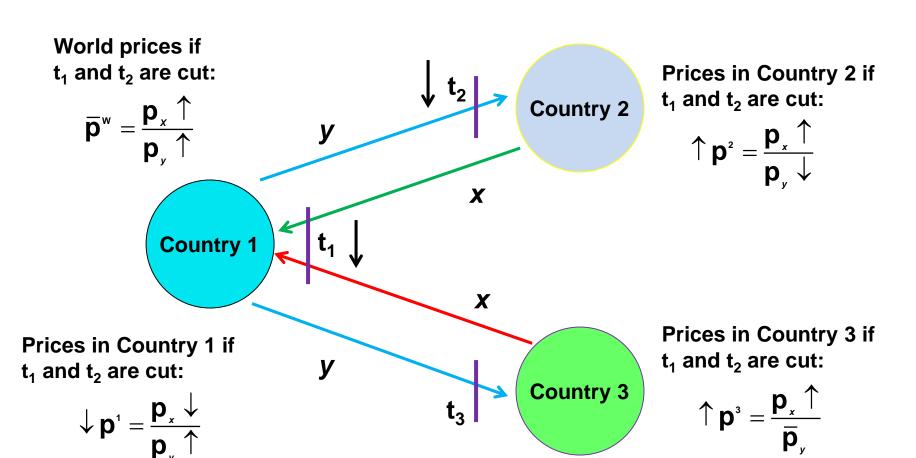
Developing countries and the WTO

- Developing countries get "free pass" to tariff cuts negotiated in GATT/WTO under MFN clause but do not have to reciprocate, i.e., special and differential treatment (SDT)
- Objective to ensure developing countries benefit from gaining market access to developed country markets
- Evidence suggests GATT/WTO membership has resulted in significant increase in trade volumes for developed countries but less so for developing countries (Subramanian and Wei, 2007)
- Bagwell and Staiger (2013) argue that SDT will not deliver benefits of reciprocity simple maxim for trade negotiations: "what you get is what you give"

Structure of trade and policies



Relative prices with tariff-cuts



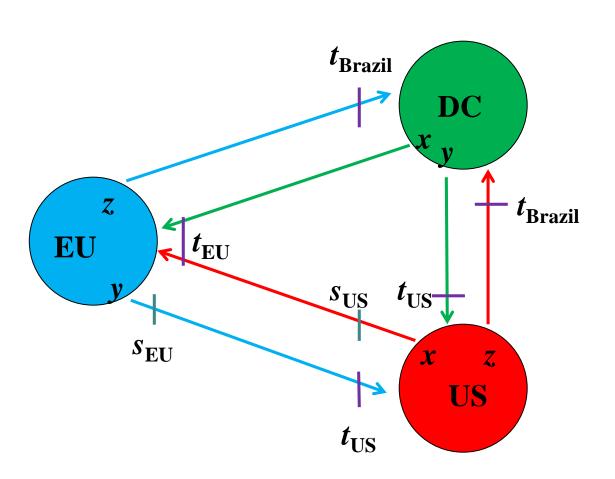
Is there a "latecomers" problem?

- Even if relaxing SDT pushes Doha Round back towards its original purpose, developing countries may be "latecomers"
- **50** years of reciprocity among developed countries has left tariffs on manufactures very low
- Local price distortions in developed countries already eliminated, making it difficult for them to identify new tariff bargains with developing countries "globalization fatigue"
- In theory, problem could be solved by developed countries renegotiating tariffs (upward) to make room for tariff negotiations (downward) with developing countries
- Is reduction in farm subsidies key to making "room at the table" for developing countries?

Farm subsidies and latecomers problem

- lacktriangle Cut in export subsidies on x and y a bargaining chip for US and EU in negotiations with developing countries
- Increase in local relative price of say x in EU places higher value on reciprocal tariff cuts between EU and developing country, EU cutting tariff on x, and developing country cutting tariff on z
- This type of bargain requires relaxation of SDT and clear focus on reciprocal exchange of market access
- However only likely to be effective for large agricultural exporters such as Brazil
- Also requires political will in US and EU to reduce farm subsidies
 commitments already made to get rid of export subsidies

Structure of trade and policies



The rise of offshoring

- Phenomenon of offshoring has seen significant increase in trade in differentiated inputs (Antras and Staiger, 2012)
- In a world where "home" country produces final good using customized inputs supplied by "foreign" country, incomplete contracts may result in a "hold-up" problem
- As a result, input prices determined by *ex post* bargaining as opposed to international market clearing
- Optimal policy choice is free trade in final good and an import subsidy to increase input trade
- Nash policies: home country targets input and final good sectors, while foreign country targets input sector objective is to extract surplus

The WTO and offshoring

- **Emphasis on "shallow integration" via market access may not help in resolving inefficiency that arises in presence of offshoring**
- In simple set up, "home" and "foreign" countries bargain over policies that affect market access of input, but "home country" will be unconstrained in its use of "behind the border policies"
- In presence of offshoring, trade agreement must achieve "deep integration" requiring disciplines on policies beyond market access commitments
- This implies shift from rules-based agreement of the WTO towards individualized agreements that take account of idiosyncratic needs of members

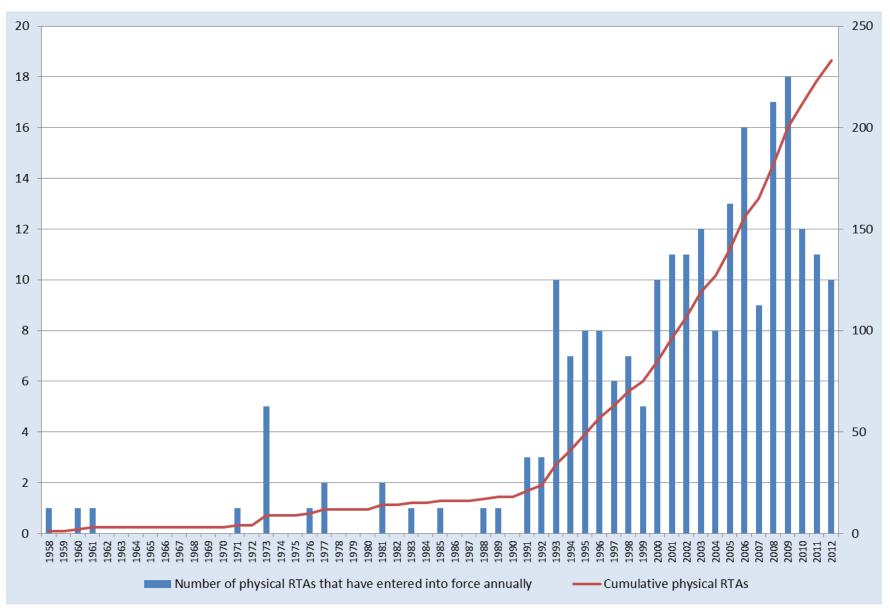
Proliferation of PTAs

- Empirical analysis suggests causal relationship runs from offshoring to PTAs, i.e. depth correlated with importance of production networks (Orefice and Rocha, 2014)
- PTAs such as proposed Trans-Atlantic and Trade and Investment Partnership (TTIP) between US and EU are almost exclusively going "behind the border" to focus on aspects such as "regulatory convergence"
- Poses significant challenge to WTO growth in PTAs lies outside its purview, due to GATT Article XXIV allowing exception to principle of non-discrimination
- Fear of "concession erosion" may have been replaced by fear of "preference erosion", and thereby becoming a stumbling block to further MFN tariff reductions (Limão, 2007)

Proliferation of PTAs

- Baldwin (2006) suggests though that "spaghetti bowl" effect of PTAs may have been somewhat exaggerated
- Growth in PTAs involving EU in early-1990s resulted in complex rules-of-origin for inputs across different bilateral country-pairs
- Subsequent unbundling of production processes and growth of offshoring by EU-based firms resulted in political pressure to harmonize trade in inputs across PTAs in Europe by 1997
- Through simplifying rules of origin, regionalism replaced by multilateralism in input trade within Europe
- WTO was a bystander in all of this though, and there is empirical evidence that it hurt export interests of WTO members outside the "club" Augier *et al.* (2007)

Proliferation of PTAs



Source: WTO

Whither the WTO?

- In post-war period, reciprocal exchange of market access has driven significant reduction in manufacturing tariffs and increased trade among developed countries
- As successor to GATT, WTO has not delivered a new agreement beyond simplifying customs rules
- How to bring developing countries to the table or how to deal with environmental standards, are not the key challenges to the future of WTO as an institution
- Desire for "deep integration", and associated growth in PTAs, does not fit into WTO's focus on "shallow integration"
- WTO still relevant in terms of dispute resolution, but at present it is on the sidelines as countries pursue trade liberalization via regionalism rather than multilateralism