

# **The Economics of the WTO**

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## I. Introduction

### What is the GATT/WTO?

- History: Many failed attempts leading up to the creation of GATT; mostly joint declarations of free-trade ideals.
- GATT was different, and seems to have worked.
- What were the objectives of the original member-governments in creating GATT?
  - GATT Preamble: The Objectives.

*“...Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, developing the full use of the resources of the world and expanding the production and exchange of goods,...”*

- ...in creating the WTO?
  - WTO Preamble: The Objectives.

*“...Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world’s resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development,*

*“Recognizing further that there is need for positive efforts designed to ensure that developing countries, and especially the least developed among them, secure a share in the growth in international trade commensurate with the needs of their economic development,...”*

- How were the rules of GATT seen as contributing to these objectives?
  - GATT Preamble: The Means.

*“...Being desirous of contributing to these objectives by entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce,...”*

- WTO Preamble: The Means.

*“...Being desirous of contributing to these objectives by entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international trade relations,...”*

- The GATT/WTO objectives are to be served by securing *non-discriminatory* and *substantially freer* trade on a *reciprocal* basis.

- GATT/WTO rules provide a legal framework for incorporating the results of negotiations directed toward:
  - the *reciprocal* and mutually advantageous *exchange of market access commitments* on a *non-discriminatory* basis.
- Free trade is *not* an explicit GATT/WTO objective.
  - “*The WTO does not tell governments how to conduct their trade policies. Rather, it’s a ‘member-driven’ organization.*” (WTO Home Page).
  - “*The WTO is blindly for free trade at any cost. Not true. It’s really a question of what countries are willing to bargain with each other.*” (WTO Home Page).
- GATT/WTO negotiations are driven by exporter interests.

## How do economists make sense of this?

– Mostly, they don't:

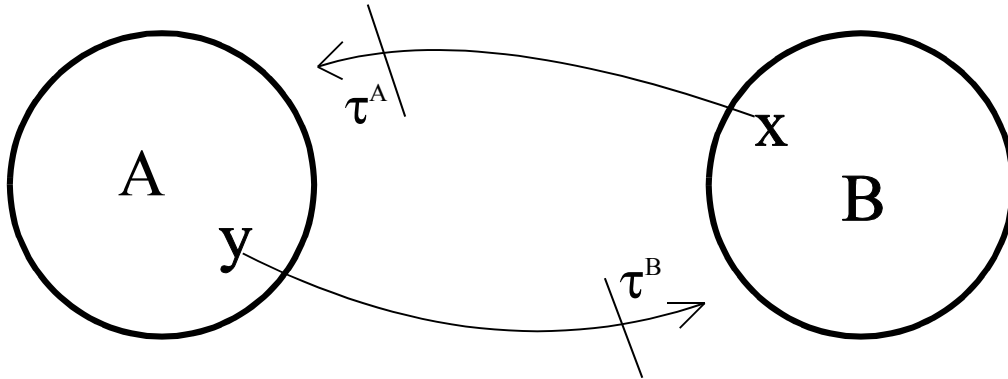
*“There is no generally accepted label for the theoretical underpinnings of GATT. I like to refer to it as ‘GATT-think’ – a simple set of principles that is entirely consistent, explains most of what goes on in negotiations, but makes no sense in terms of economics...”* (Paul R. Krugman).

*“To make sense of international trade negotiations, one needs to remember three simple rules about the objectives of negotiating countries:*

- 1). Exports are good.*
- 2). Imports are bad.*
- 3). Other things equal, an equal increase in imports and exports is good.*

*In other words, GATT-think is enlightened mercantilism.”* (Paul R. Krugman).

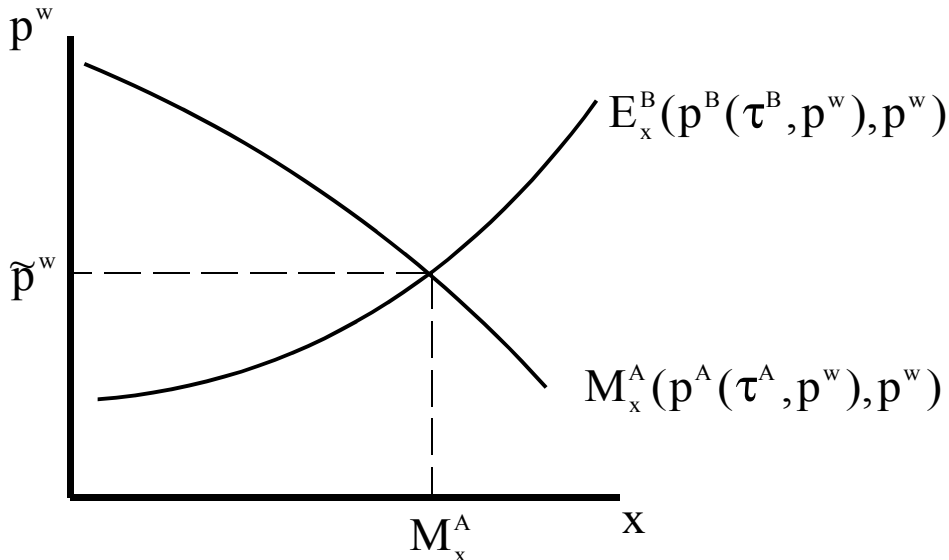
## II. The 2-Country Framework



$$p^A \equiv p_x^A / p_y^A; \quad p^B \equiv p_x^B / p_y^B; \quad p^w \equiv p_x^B / p_y^A;$$

$$p^A = \tau^A p^w \equiv p^A(\tau^A, p^w); \quad p^B = p^w / \tau^B \equiv p^B(\tau^B, p^w).$$

**Market Clearing:**  $\tilde{p}^w(\tau^A, \tau^B).$

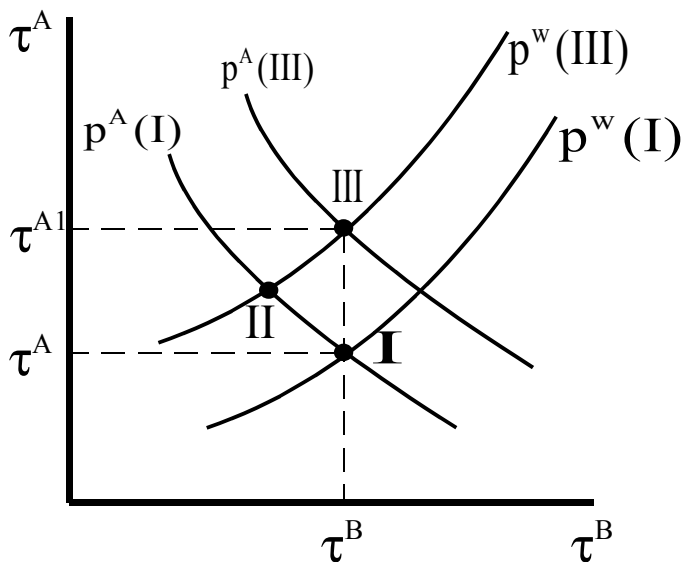


**Balanced Trade:**  $p^w M_x^A = E_y^A; \quad p^w E_x^B = M_y^B.$

**Governments:**

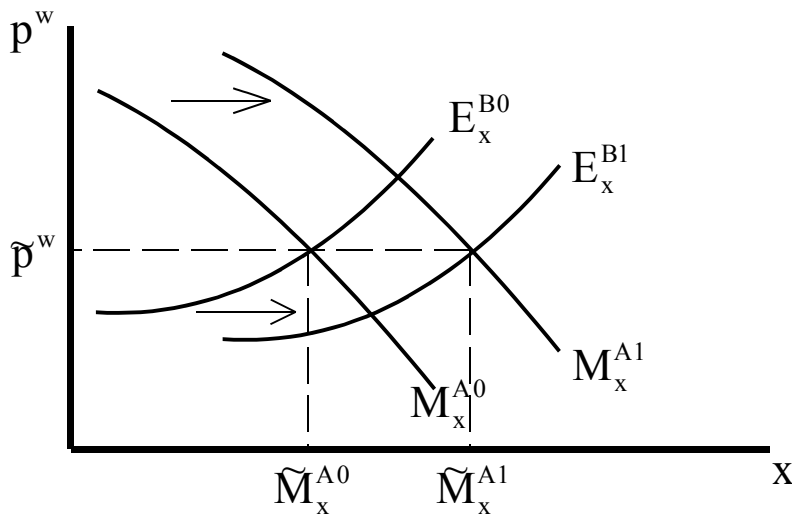
$$W^A(p^A(\tau^A, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^A < 0.$$

$$W^B(p^B(\tau^B, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^B > 0.$$



**Reciprocity:**  $\tilde{p}^{w0} [M_x^{A1} - M_x^{A0}] = E_y^{A1} - E_y^{A0}$ .

**Balanced Trade**  $\Rightarrow (\tilde{p}^{w1} - \tilde{p}^{w0}) M_x^{A1} = 0$ .



– Why would governments want this?

### III. Trade Negotiations

*“The reason why GATT-think works is...that it captures some basic realities of the political process.”* (Paul R. Krugman).

#### i) A Digression to a World of Small Countries

Many x-importing countries, indexed by  $a \in A$ :

$$W^a(p^a(\tau^a, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^a < 0.$$

Many y-importing countries, indexed by  $b \in B$ :

$$W^b(p^b(\tau^b, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^b > 0.$$

Each country is “small” on world markets:

$$\frac{\partial \tilde{p}^w}{\partial \tau^a} = 0 = \frac{\partial \tilde{p}^w}{\partial \tau^b}.$$

Unilateral Tariff Choices:

$$W_{p^a}^a = 0 \text{ for } a \in A; W_{p^b}^b = 0 \text{ for } b \in B.$$

- No government can benefit from negotiated tariff changes that satisfy reciprocity.
- Negotiated tariff changes that benefit all governments are not possible.

## ii) Returning to a World of (2) Large Countries

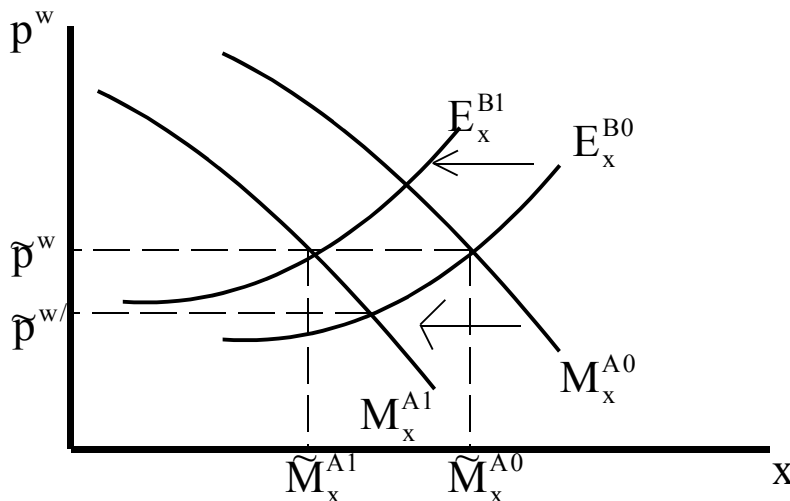
### Unilateral Tariff Choices:

$$W_{p^A}^A \frac{dp^A}{d\tau^A} + W_{p^w}^A \frac{\partial \tilde{p}^w}{\partial \tau^A} = 0 \Rightarrow W_{p^A}^A < 0;$$

$$W_{p^B}^B \frac{dp^B}{d\tau^B} + W_{p^w}^B \frac{\partial \tilde{p}^w}{\partial \tau^B} = 0 \Rightarrow W_{p^B}^B > 0.$$

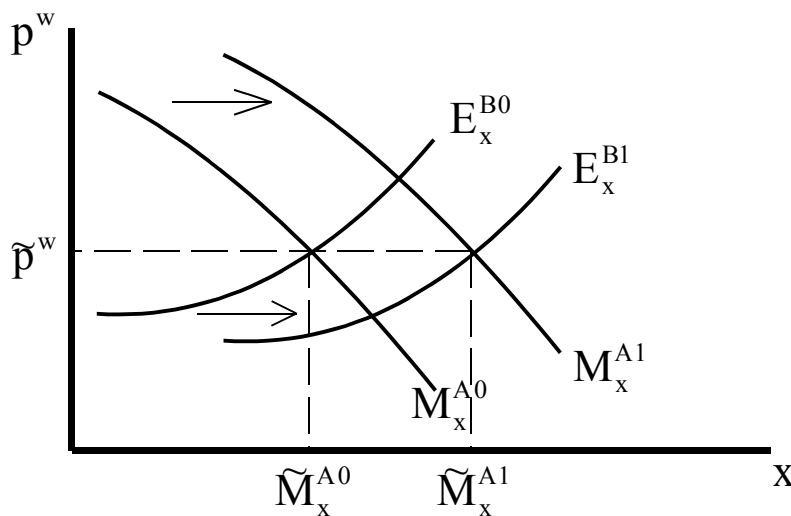
International cost-shifting  $\Rightarrow$  “too little trade” at  $\tilde{p}^w$ .

- Costs are shifted abroad when market access is unilaterally denied.



- No cost-shifting when market access is reciprocally altered.

- Find a way to eliminate international cost-shifting, and each government will desire freer trade (i.e.,  $W_p^A < 0$ ,  $W_p^B > 0$ ).
- A negotiated reciprocal reduction in tariffs accomplishes this, and so is mutually beneficial.



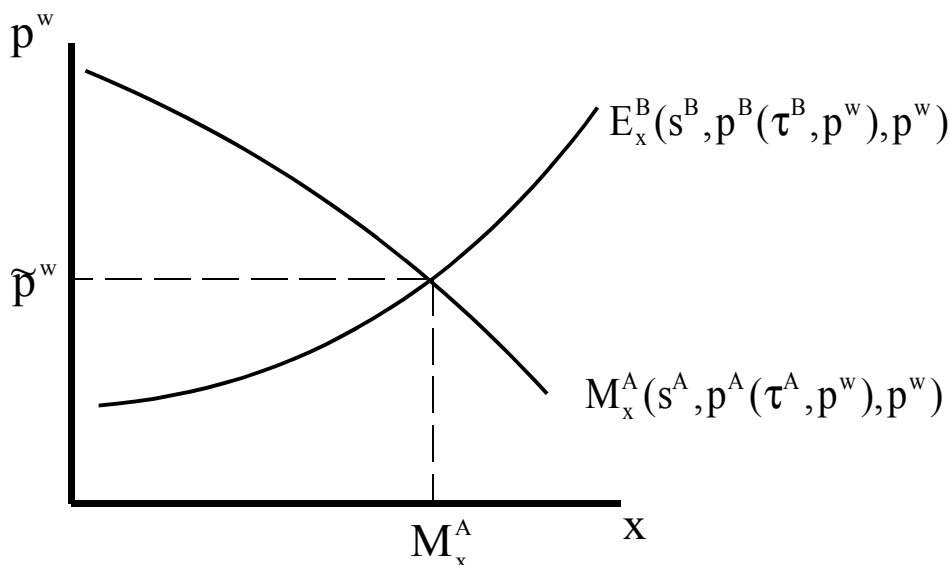
- Trade negotiations eliminate the inefficiencies associated with international cost-shifting (i.e., they solve a terms-of-trade driven Prisoners' Dilemma).
- Beginning from unilateral tariff choices, Krugman's three rules of GATT-think are satisfied.

## IV. Labor and Environmental Standards

- Cost-shifting remains the fundamental problem when additional policy instruments are added.

Labor/environmental standards:  $s^A, s^B$ . No international non-pecuniary externalities.

**Market Clearing:**  $\tilde{p}^w(s^A, \tau^A, s^B, \tau^B)$ .



**Balanced Trade:**  $p^w M_x^A = E_y^A$ ;  $p^w E_x^B = M_y^B$ .

$$W^A(s^A, p^A(\tau^A, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^A < 0.$$

**Governments:**

$$W^B(s^B, p^B(\tau^B, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^B > 0.$$

Externalities run through  $\tilde{p}^w$ , hence market access.

## The race-to-the-bottom/regulatory-chill problem.

Suppose that a government has agreed to hold its tariffs low as a result of a WTO negotiation.

Scenario 1 (Race-to-the-bottom): The government faces pressure from import-competing interests to offer additional protection from imports.

If its WTO commitments prevent the government from responding with a tariff increase, then it might instead choose to relax a labor standard.

Scenario 2 (Regulatory chill) : The government faces pressure from labor interests to introduce new and more stringent standards that serve to enhance workplace safety but which also raise the costs of production of its import-competing firms.

If its WTO commitments prevent the government from raising its tariff to offset the competitive effect of imposing the tighter standards on its firms, then the government might hesitate to introduce these new and improved standards.

- If property rights over negotiated market access levels were sufficiently complete, the race-to-the-bottom/ regulatory chill problem would not arise.

How can these property rights be completed?

### A Simple Rule.

Once a government has agreed to lower its tariffs in a WTO negotiation:

It should not be permitted to take subsequent unilateral policy actions that undercut its implied market access commitments; but

It should be otherwise allowed to configure its unilateral policies in anyway it desires.

Existing GATT/WTO principles are not that far away from approximating this simple rule.

Scenario 1: The government should not be permitted to offer protection to its import-competing industry by weakening its standards.

If it desires to provide additional protection from imports, it should be required to renegotiate with its trading partners to select a higher tariff level.

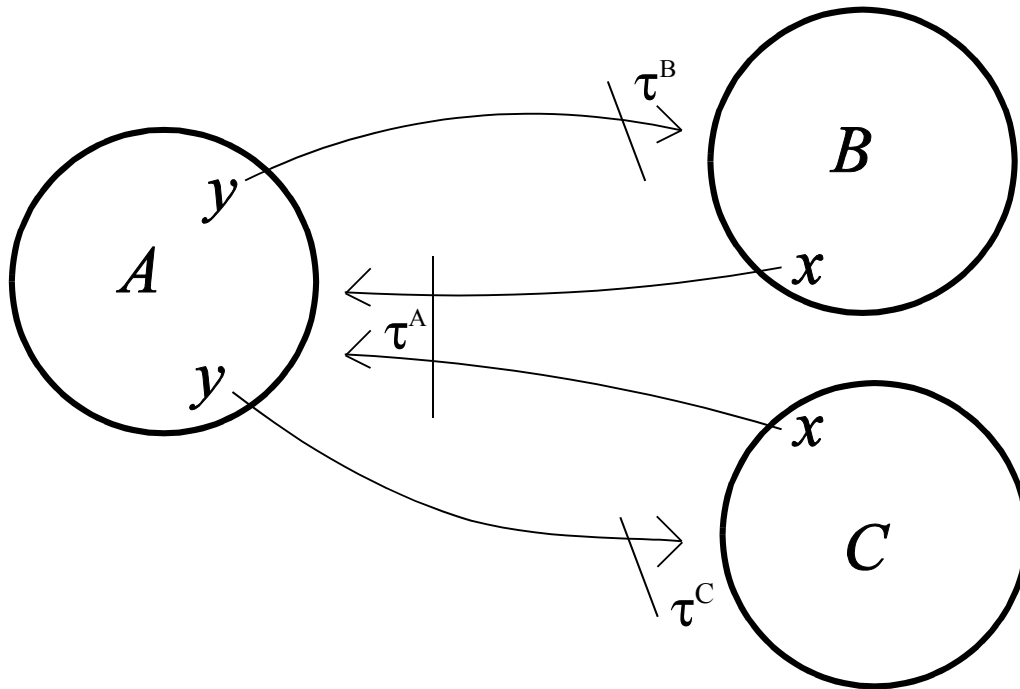
- In principle, “non-violation” nullification-or-impairment complaints can guide governments toward efficient renegotiations (and thereby protect against a race to the bottom).

Scenario 2: The government should be allowed to raise its tariff as it tightens its standard.

But its tariff increase can do no more than offset the competitive effect of the tighter standard.

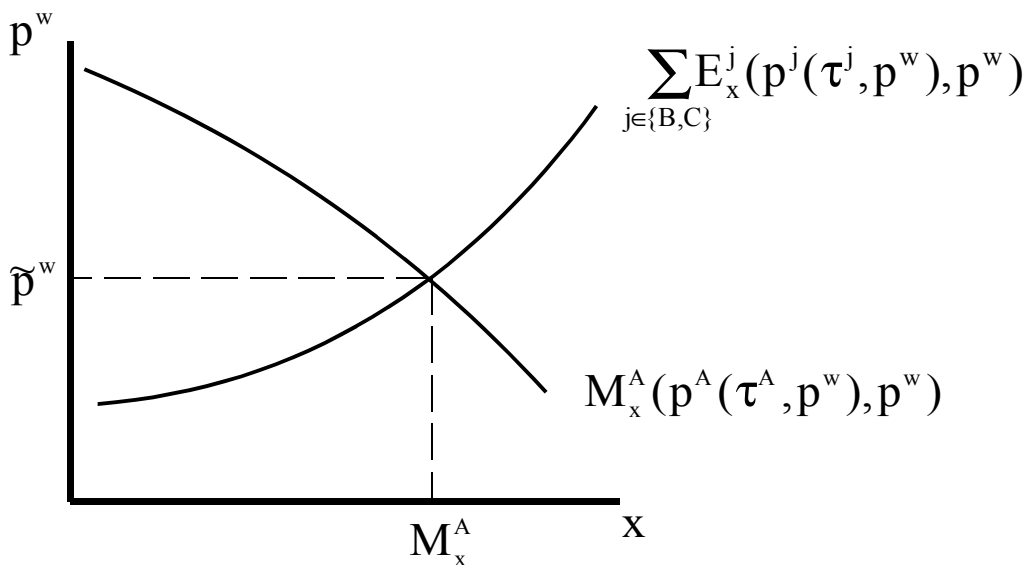
- In principle, renegotiations could involve a commitment to higher standards as “compensation” for tariffs bound at higher levels (and thereby prevent a regulatory chill).

## V. The Many-Country Framework



$$p^j \equiv p_x^j / p_y^j, \quad j \in \{A, B, C\}; \text{MFN} \Rightarrow p^w \equiv p_x^B / p_y^A = p_x^C / p_y^A;$$

**Market Clearing:**  $\tilde{p}^w(\tau^A, \tau^B, \tau^C).$



## Balanced Trade:

$$p^w M_x^A = E_y^A; p^w E_x^B = M_y^B; p^w E_x^C = M_y^C.$$

$$W^A(p^A(\tau^A, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^A < 0.$$

**Governments:**  $W^B(p^B(\tau^B, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^B > 0.$

$$W^C(p^C(\tau^C, \tilde{p}^w), \tilde{p}^w); W_{\tilde{p}^w}^C > 0.$$

## Unilateral Tariff Choices:

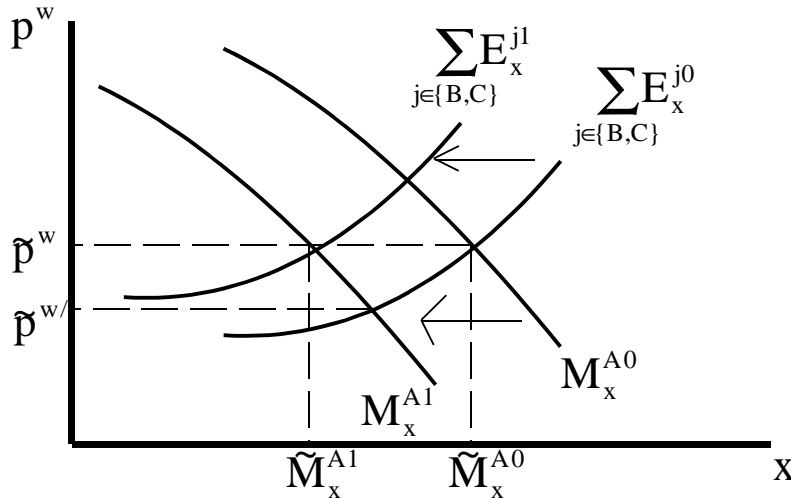
$$W_{p^A}^A \frac{dp^A}{d\tau^A} + W_{p^w}^A \frac{\partial \tilde{p}^w}{\partial \tau^A} = 0 \Rightarrow W_{p^A}^A < 0;$$

$$W_{p^B}^B \frac{dp^B}{d\tau^B} + W_{p^w}^B \frac{\partial \tilde{p}^w}{\partial \tau^B} = 0 \Rightarrow W_{p^B}^B > 0;$$

$$W_{p^C}^C \frac{dp^C}{d\tau^C} + W_{p^w}^C \frac{\partial \tilde{p}^w}{\partial \tau^C} = 0 \Rightarrow W_{p^C}^C > 0.$$

International cost-shifting  $\Rightarrow$  “too little trade” at  $\tilde{p}^w$ .

- Costs are shifted abroad when market access is unilaterally denied.



- No cost-shifting when market access is reciprocally altered.
- Beginning from unilateral tariff choices, all governments gain under reciprocal multilateral liberalization (i.e.,  $W_{p^A}^A < 0$ ,  $W_{p^B}^B > 0$ ,  $W_{p^C}^C > 0$ ).

But GATT/WTO negotiations occur through time, among a subset of governments at any point in time.

- Beginning from unilateral tariff choices, *A* and *B* can reciprocally lower their tariffs and each gain, and leave *C* completely unaffected.
- No Free-Rider Problem with MFN when negotiations conform to reciprocity.
- Lerner Symmetry Theorem.

*A* and *B* can *hurt* *C* if *A* liberalizes less than reciprocally with *B*.

- If *A* will negotiate with *C* later, this is “foot dragging,” and it can lead to inefficiency. (Renegotiation opportunities may help).
- If *A* has negotiated with *C* previously, this is “concession erosion,” and it can lead to inefficiency. (Non-violation nullification-or-impairment rights may help).

## A Simple Rule.

As long as bilateral negotiations abide by MFN and satisfy reciprocity, they can be presumed to produce Pareto improvements across governments.

But if either MFN or reciprocity is violated, then this presumption may not be warranted.

- Non-MFN Example: FTAs and CUs.

$$\tilde{p}^{wAB}(\tau^{AB}, \tau^{AC}, \tau^B, \tau^C); \tilde{p}^{wAC}(\tau^{AB}, \tau^{AC}, \tau^B, \tau^C).$$

- Non-Reciprocity Example: Agreements to limit Export Subsidies.

$$\text{Unilateral tariff choices} \Rightarrow W_{p^B}^B > 0; W_{p^C}^C > 0.$$

## VI. Enforcement

How can governments enforce an agreement to escape from a terms-of-trade driven Prisoners' Dilemma?

- Repeated interaction and the threat of retaliation (Statement by a drafter of Article XXIII):

*“We have asked the nations of the world to confer upon an international organization the right to limit their power to retaliate. We have sought to tame retaliation, to discipline it, to keep it within bounds. By subjecting it to the restraints of international control, we have endeavored to check its spread and growth, to convert it from a weapon of economic warfare to an instrument of international order.”*

- Repositioning retaliation as an off-equilibrium threat that enforces cooperative equilibrium-path rules.
- But a limited role for retaliation also arises along the equilibrium path (Articles XIX, XXVIII, XXIII).

## VII. Conclusion

GATT-think makes sense in terms of economics.

- International cost-shifting incentives are key.
- Costs are shifted abroad with a unilateral denial of market access.
- A reciprocal denial of market access preserves the balance of market access across countries and thereby prevents cost-shifting.

GATT rules attempt to create a negotiating forum in which property rights over the balance of negotiated market access commitments are secure.

- MFN.
- Reciprocity.
- Non-violation nullification or impairment.
- Renegotiation.