

In Defense of Reciprocity and MFN

Last week, 2 observations regarding GATT/WTO.

- Reason for existence: GATT/WTO must permit governments to attain objectives that would otherwise be unattainable.
- GATT/WTO enforcement provisions may approximate efficient breach mechanism.

Monday, observation regarding preferential agreements.

- Beginning from positive MFN tariffs, discriminatory tariff reductions can be good (trade creation) or bad (trade diversion) for world welfare (Viner).

Today, I will suggest:

- GATT/WTO exists to make big countries act as if they were small in trade matters;
- In principle,
 - this brings the world to the international efficiency frontier;
 - this provides for efficient breach when circumstances change;
 - the bigger countries agree to constraints on their power, and in return secure the participation of the smaller countries;
- Reciprocity and MFN play a key role in accomplishing all of this;

- From this perspective, preferential agreements can be seen to pose a threat to the GATT/WTO system.
- A system founded on MFN and reciprocity can in principle help governments in their effort to escape from a T-o-T-driven Prisoners' Dilemma.
 - The problem: too little market access;
 - MFN and reciprocity help facilitate a negotiated solution by securing “property rights” over negotiated market access.
- And significant deviations from MFN can undermine this system (qualification: enforcement).

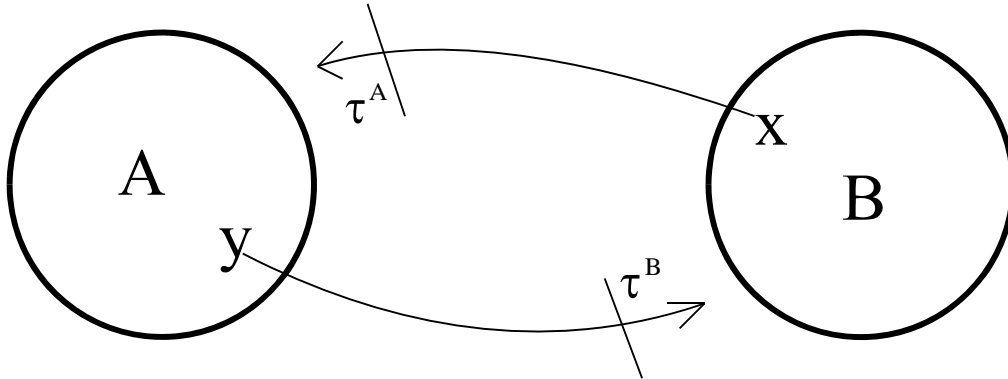
Note: we identify a “problem” associated with Nash trade policy choices; and we ask whether MFN can contribute to the solution.

- Very different from Vinerian analysis of preferential agreements.

I. Introduction

- Trade negotiators strive for agreements in GATT/WTO negotiations that yield an equal increase in imports and exports (*reciprocity*).
- Under GATT/WTO rules, the reimposition of tariffs at home raises the possibility of *reciprocal* tariff increases abroad.
- Is there an economic defense of reciprocity?

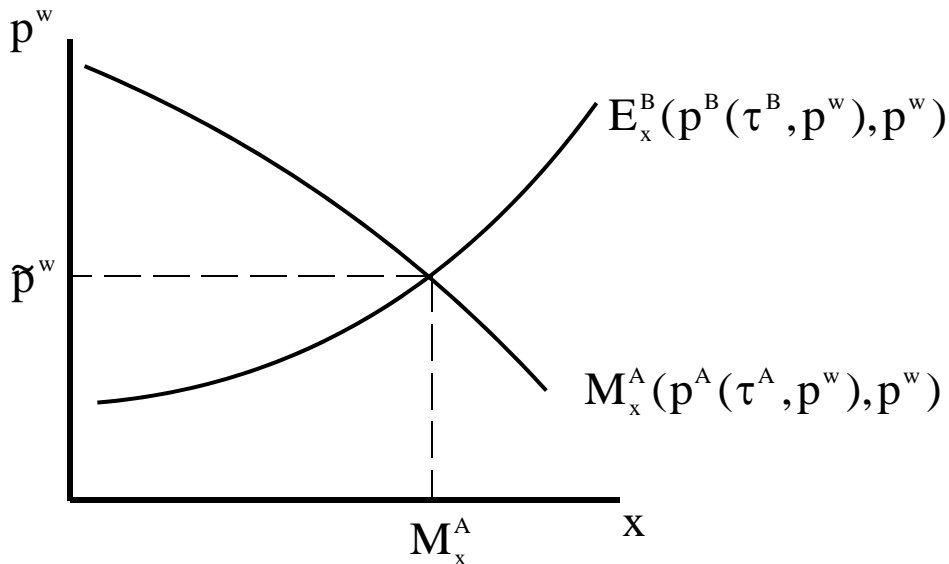
II. The 2-Country Framework



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

$$p^A = \tau^A p^w; \quad p^B = p^w / \tau^B.$$

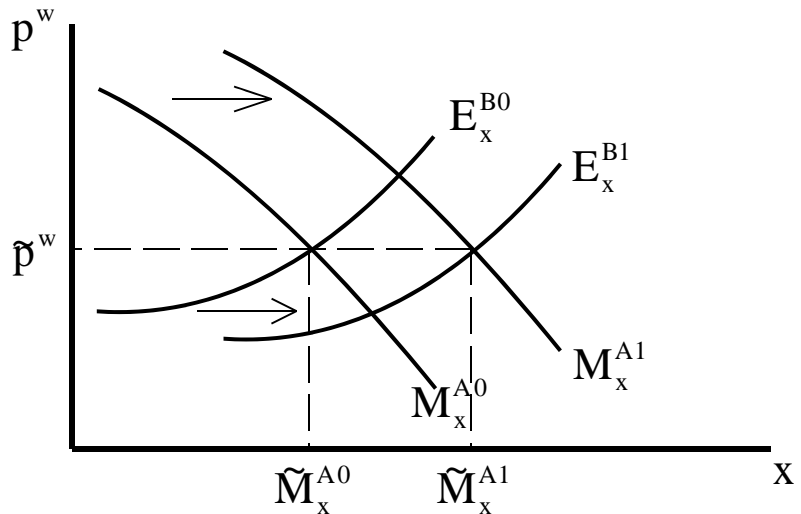
Market Clearing: $\tilde{p}^w(\tau^A, \tau^B).$



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

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?

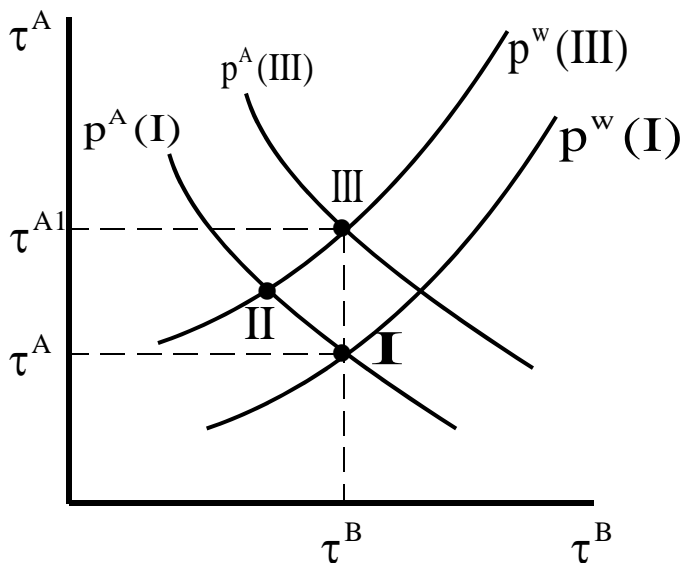
Governments:

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

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

What structure are we imposing on Government objectives? A closer look.

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



Not much: political system/distributional concerns determine how governments feel about changes in domestic prices; no structure imposed here.

Example of $W^A(p^A, \tilde{p}^w)$: $Max_{\tau^A} G^A(p^A, \tilde{p}^w)$
s.t. $S^A(p^A, \tilde{p}^w) \geq \bar{S}.$

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: for $a \in A$; for $b \in B$.

$$W_{p^a}^a \frac{dp^a}{d\tau^a} + W_{p^w}^a \frac{\partial \tilde{p}^w}{\partial \tau^a} = 0; \text{ but } \frac{\partial \tilde{p}^w}{\partial \tau^a} = 0 \Rightarrow W_{p^a}^a = 0.$$

$$W_{p^b}^b \frac{dp^b}{d\tau^b} + W_{p^w}^b \frac{\partial \tilde{p}^w}{\partial \tau^b} = 0; \text{ but } \frac{\partial \tilde{p}^w}{\partial \tau^b} = 0 \Rightarrow W_{p^b}^b = 0.$$

- No government can benefit from negotiated tariff changes that do/don't satisfy reciprocity.

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

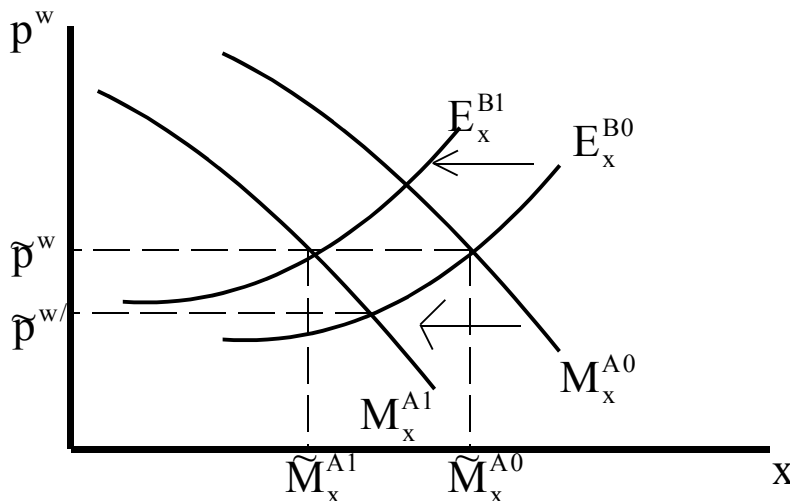
Unilateral Tariff Choices:

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

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

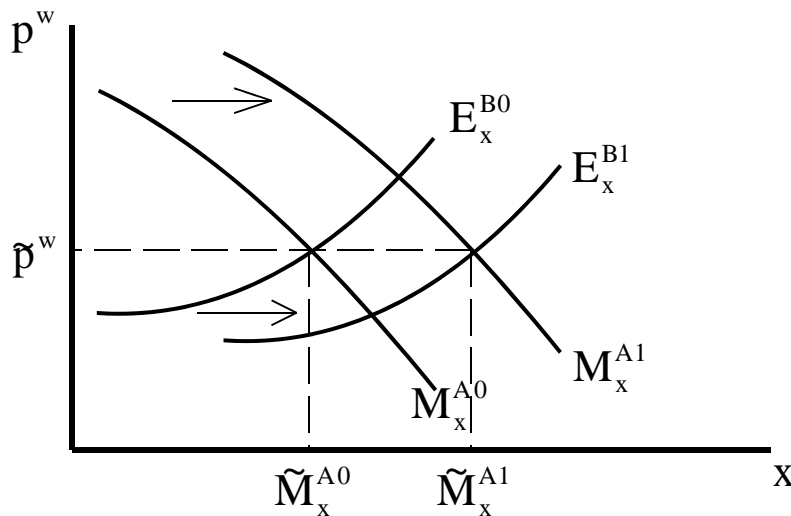
International cost-shifting \Rightarrow “too little trade” at \tilde{p}^w .

- 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 T-o-T driven Prisoners' Dilemma).
- Reciprocity is a simple rule that can eliminate cost-shifting motives for imposing – or reimposing – protection.
- Makes big countries act like small countries.

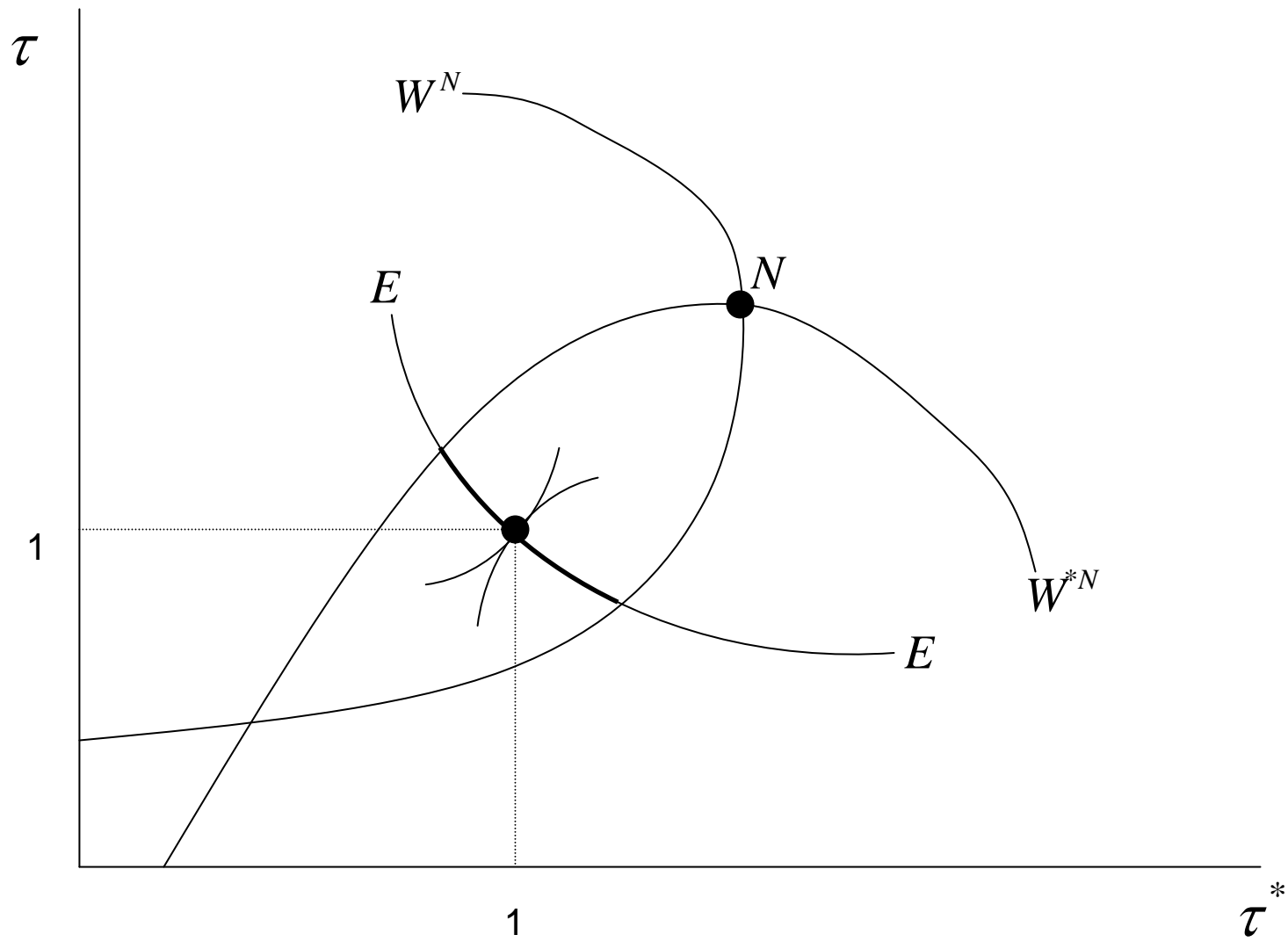


Figure 1

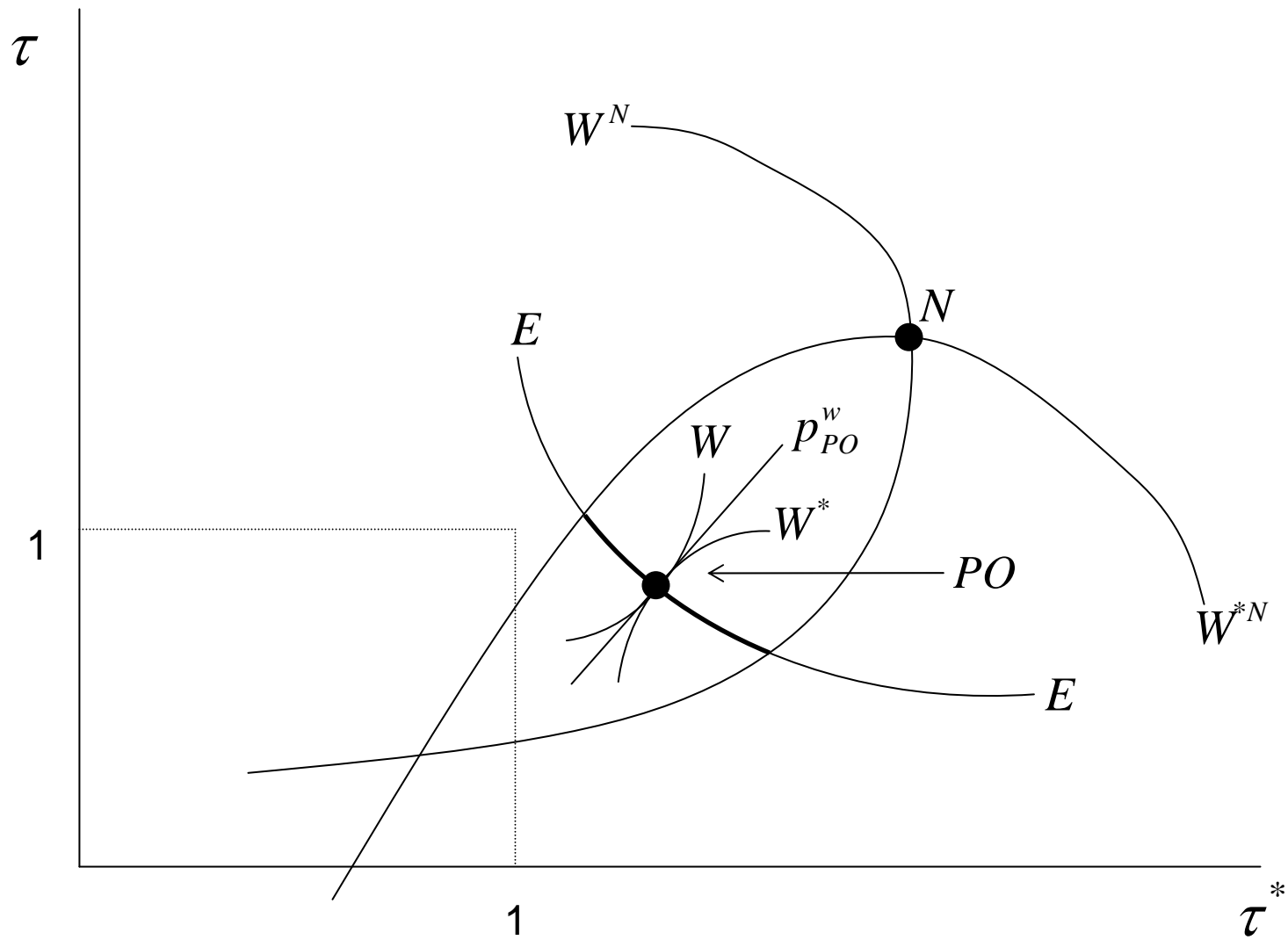


Figure 3

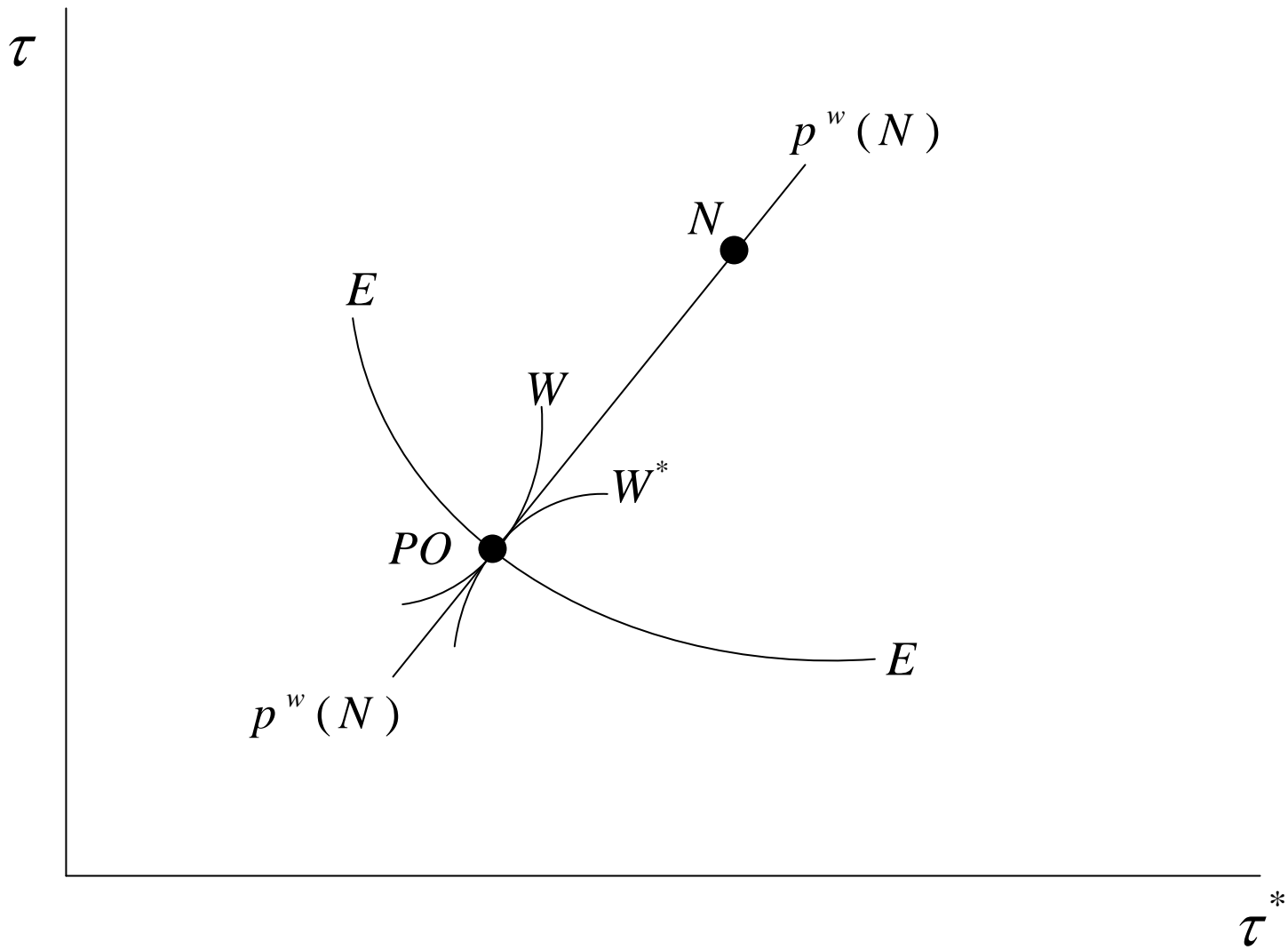


Figure 5a

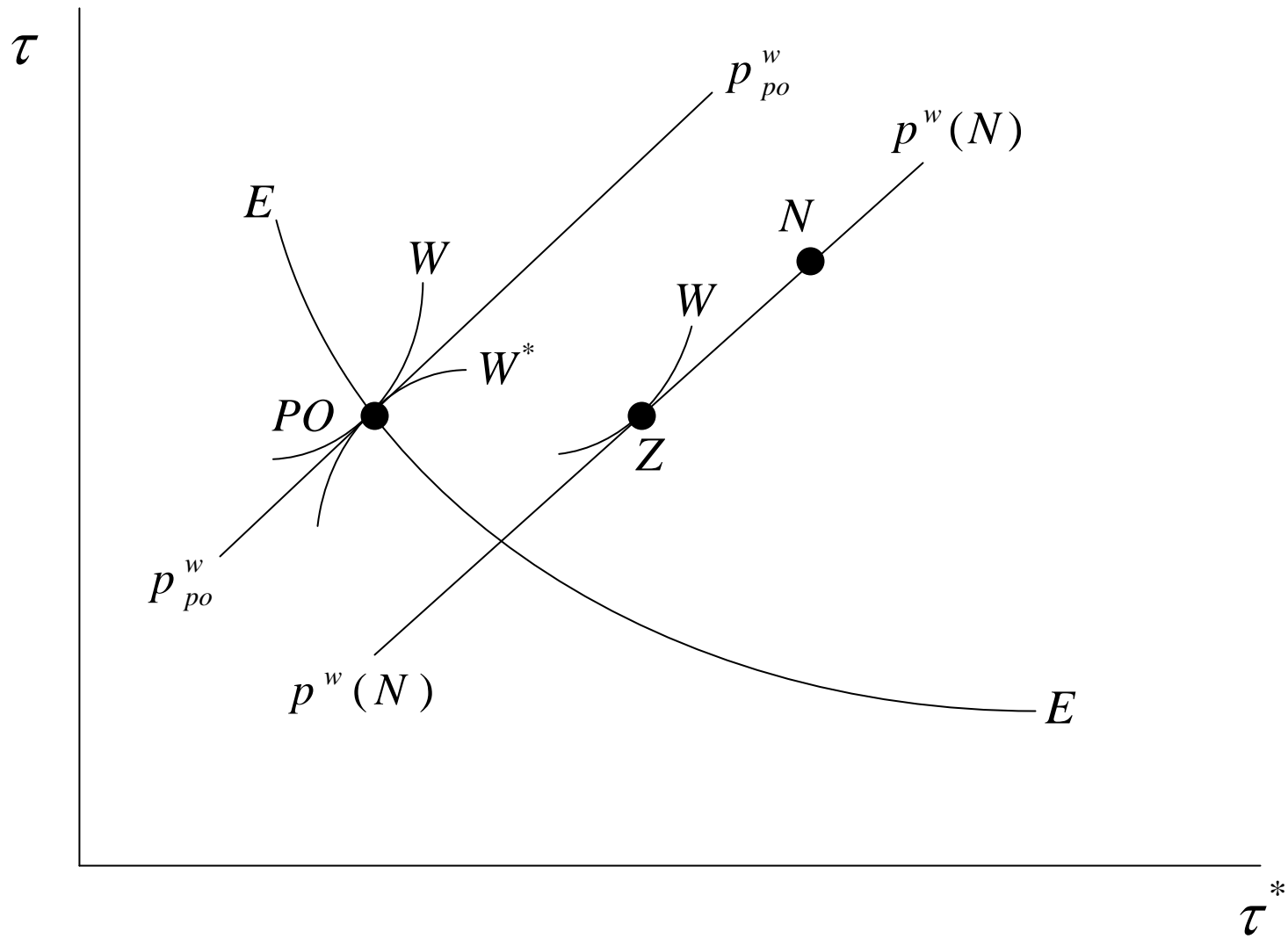


Figure 5b

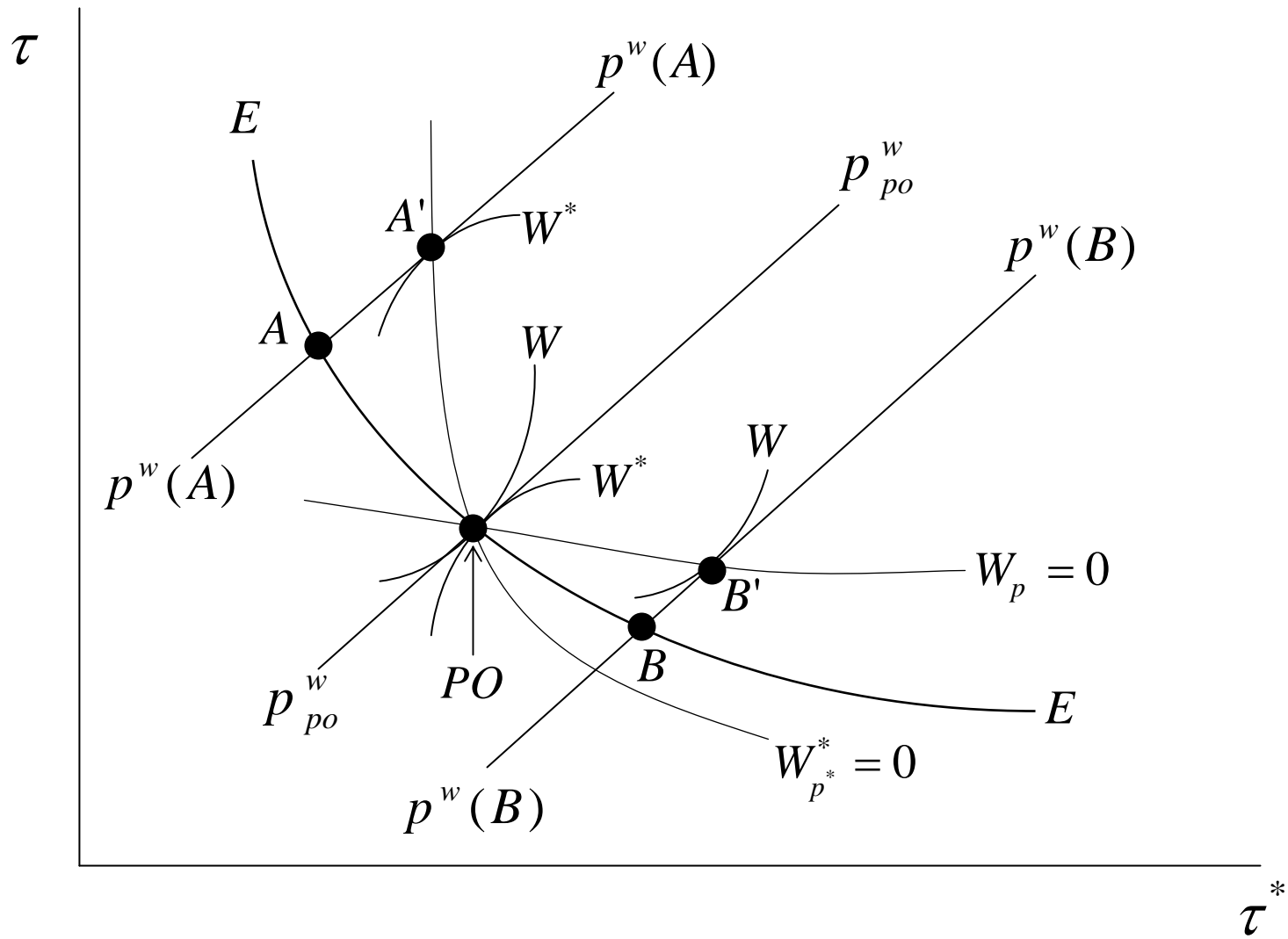


Figure 6

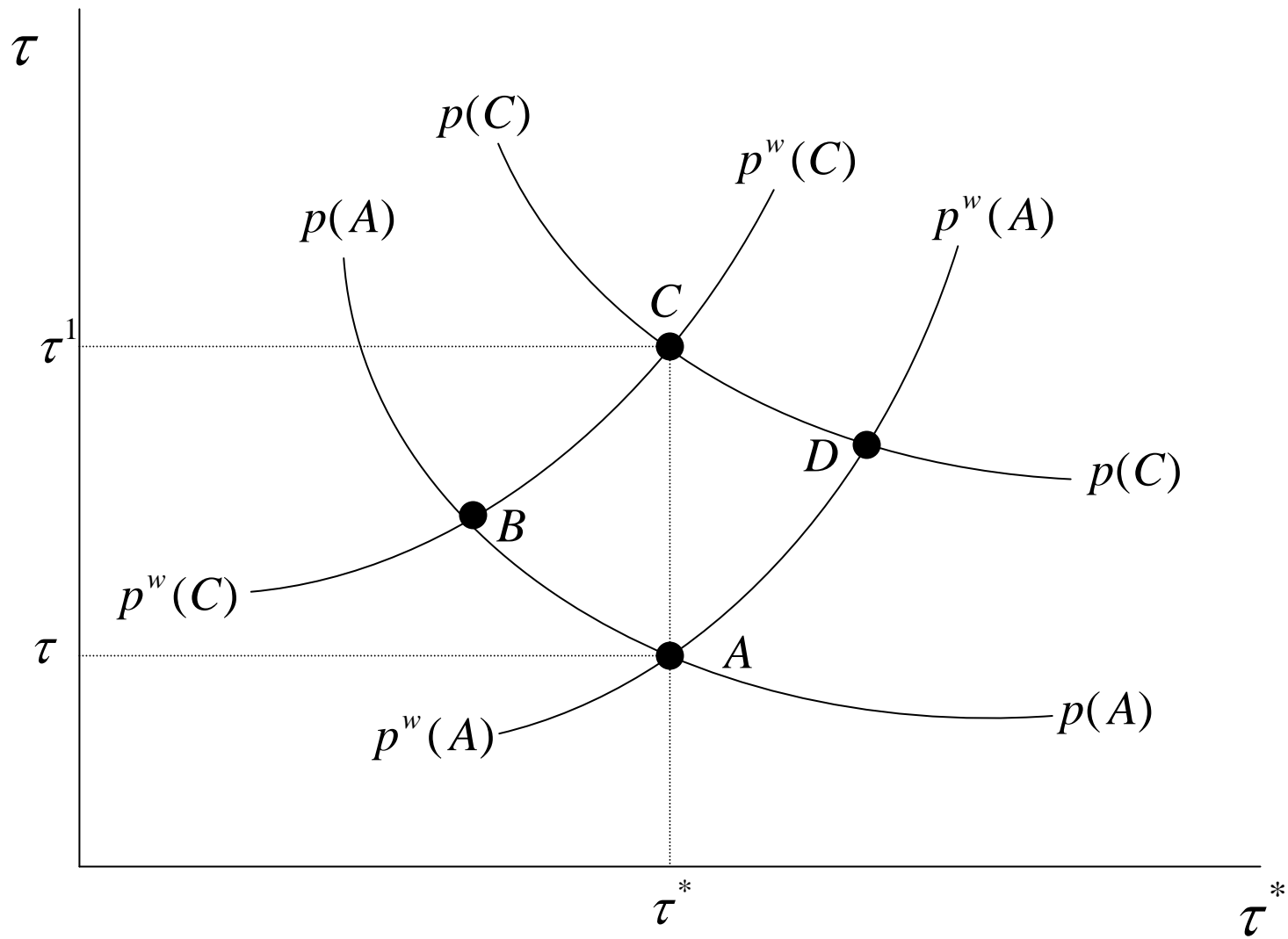
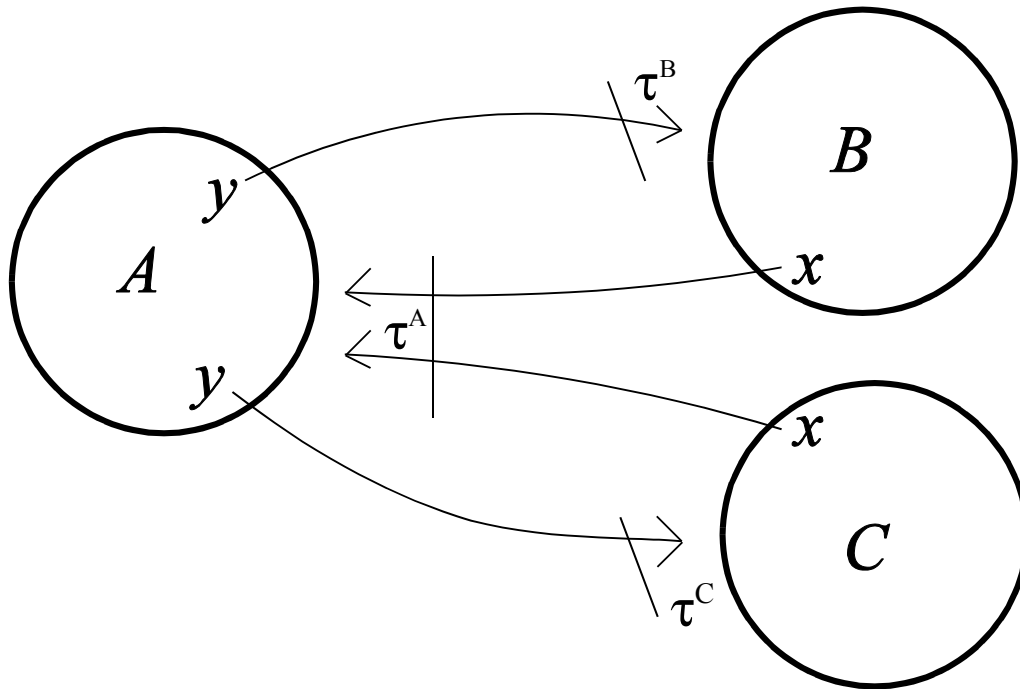


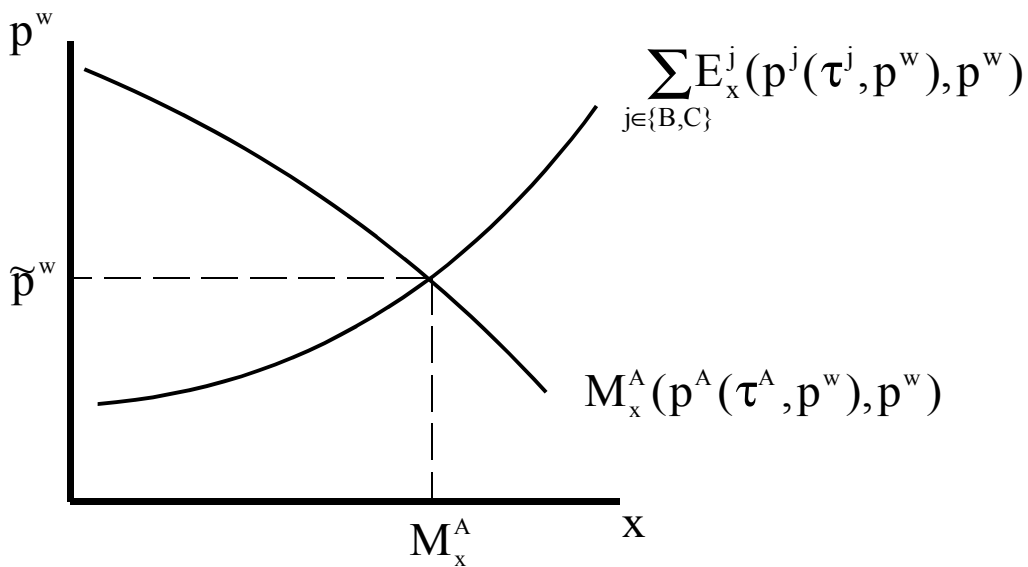
Figure 2

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:

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

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

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

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

Unilateral Tariff Choices:

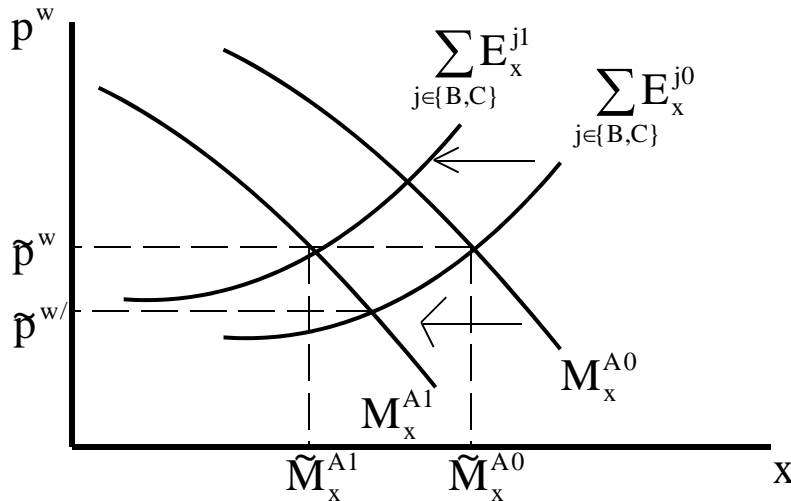
$$W_{p^A}^A \frac{dp^A}{d\tau^A} + W_{p^w}^A \frac{\partial \tilde{p}^w}{\partial \tau^A} = 0 \Rightarrow W_{p^A}^A < 0;$$

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

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

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.

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

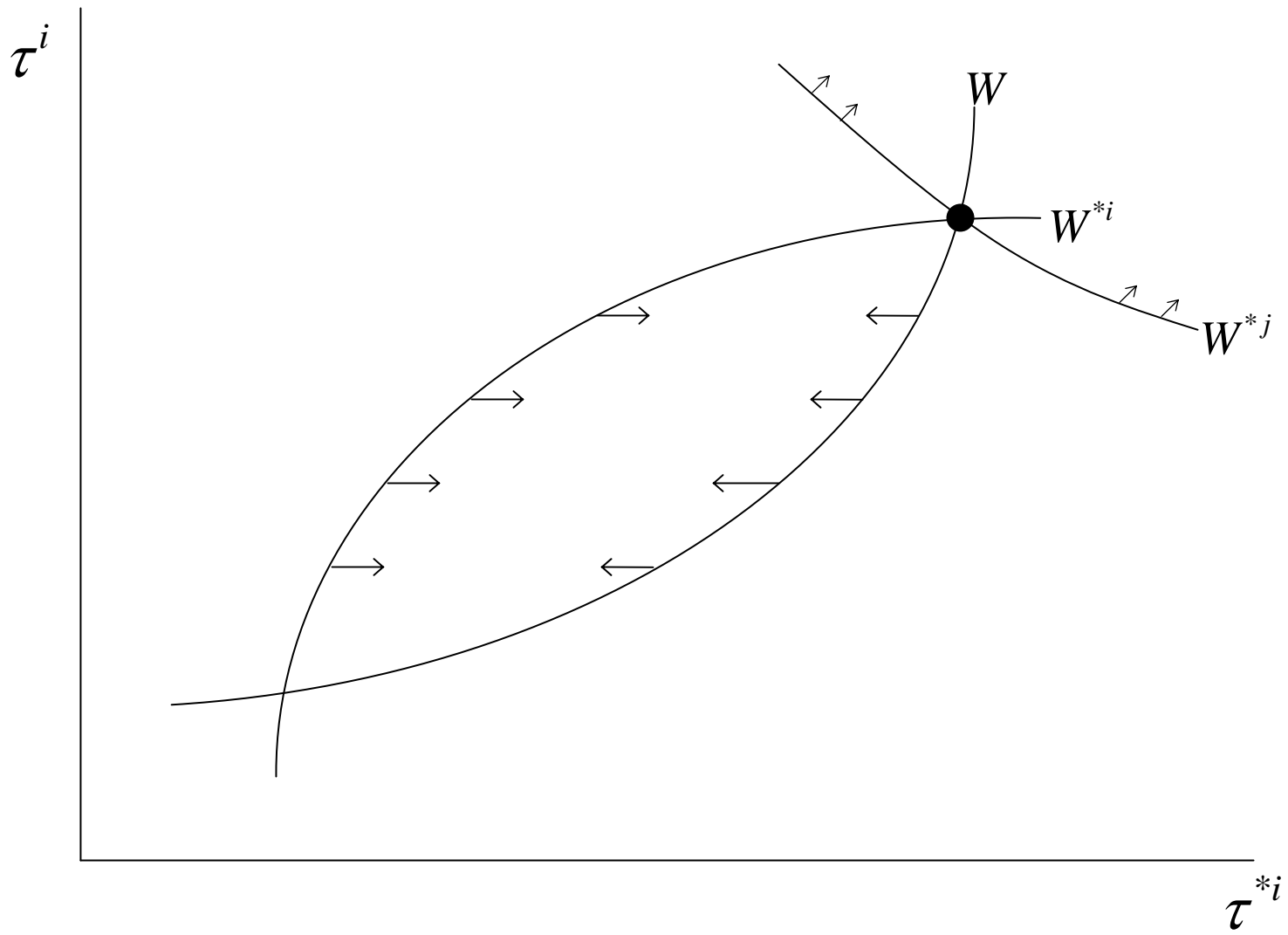


Figure 7

V. Conclusion

- When reciprocity is applied on a non-discriminatory basis, it has some appealing economic features.
 - It eliminates cost-shifting motives.
 - It leaves non-participants unaffected.
- When negotiations do not conform to reciprocity, non-participants may be footing the bill.