

10-13-09

WTO : MANY AGREEMENTS, ARTICLES

DISPUTES:

COMPLAIN → PANEL

↓  
RULING ~~NO~~ YES

↓  
ENTIRE  
WTO

MEMBERSHIP

ACCEPT REJECTS

BOEING  
AIRBUS ]

→ RELATED  
TO "SUBSIDY  
WAYS"  
ISSUES

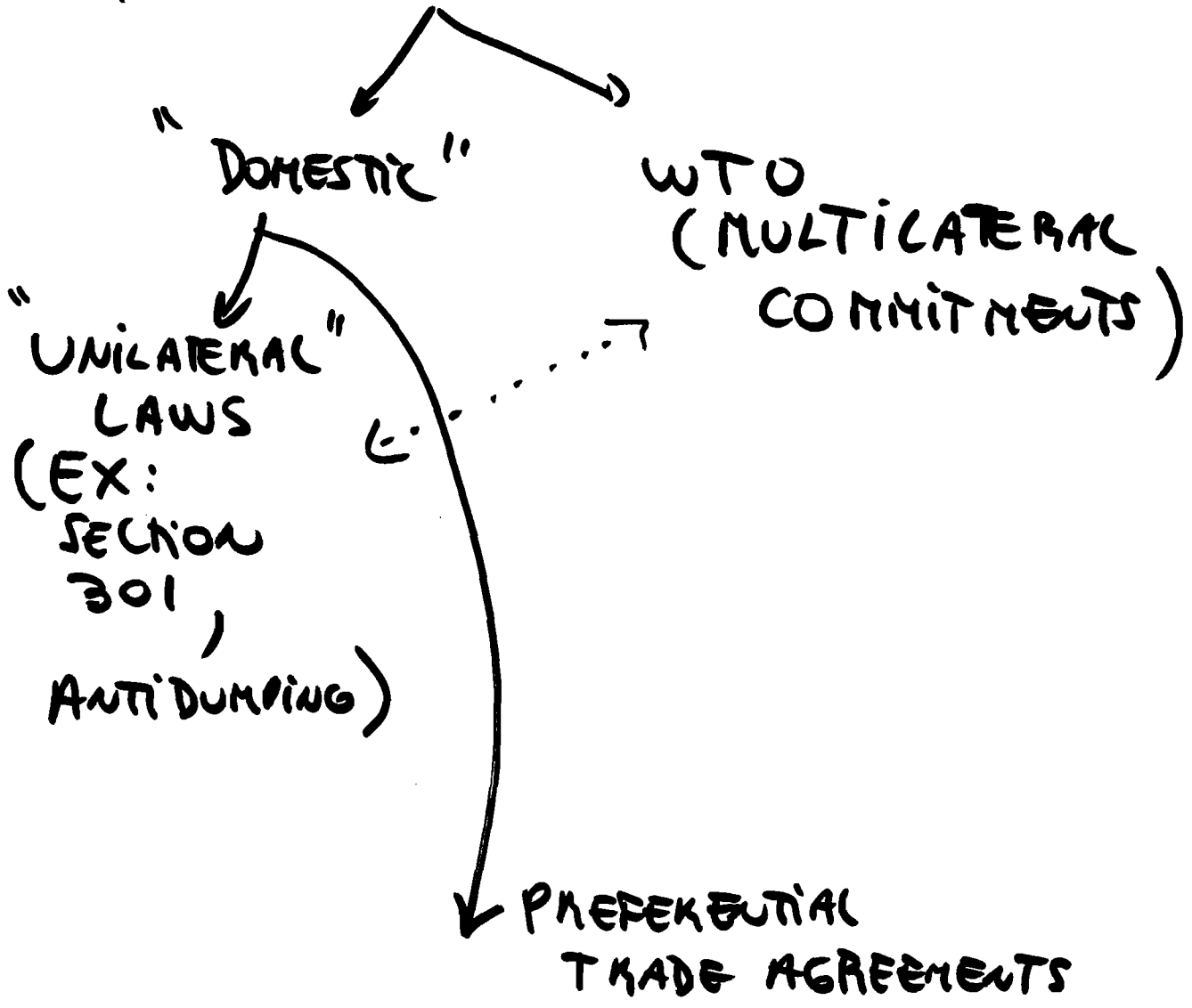
1992 AGREEMENT  
LIMITS "GOV.

2002/1 "SUBSIDIES" + ACTIONS  
FRWIN-PAVNIK STUDY

2004 → DISPUTE STARTS

- US CLAIMS E.U. VIOLATED (1992 AGREEMENT)
- EU CLAIM US + OTHERS VIOLATED .....

# TRADE LAWS



# DUMPING

3

- DEFINITION / PRACTICAL PROCESS
- IMPERFECT COMPETITION / TRADE MODELS FOR DUMPING (NEXT TIME)

## DEF. OF DUMPING:

SELLING AN EXPORTED PRODUCT IN A FOREIGN MARKET AT A PRICE THAT IS "LOWER" THAN:

- AV. COST OF PRODUCTION
- PRODUCT PRICE IN THE HOME MARKET
- PRODUCT PRICE IN A THIRD MARKET

(ASSUMING ZERO TRANSPORT COST)  
THAT IS:

$$\text{OR } p^F < AC \quad (\text{PREDATION})$$

$$\text{OR } p^F < p^H$$

$$\text{OR } p^F < p^{\text{THIRD COUNTRY}}$$

ASSUME NOW T.C R/OA  
TARIFFS ARE POSITIVE,  
THEN DUMPING OCCURS

(4)

IF:

$$P^F < P^H + \tau$$

$$P^F < P^{\text{THIRD}} + \tau$$

$$P^F < AC + \tau$$

WHERE  $\tau = TC + \text{TARIFF}$ .

10-15-09 ①

# WTO / US TRADE LAW

ALLOW USE OF "ANTIDUMPING DUTIES" TO RAISE THE PRICE OF THE "DUMPED" PRODUCT.

- WHAT IS THE DUTY:

$$P^{\text{FAIR}} - P^F = \text{TARIFF}$$

- WHEN CAN THE DUTY BE IMPOSED?

- "PROOF" THAT DUMPING EXISTS
- "PROOF" OF "LINK/CAUSALITY"

BETWEEN DUMPED GOODS AND INJURY TO DOMESTIC INDUSTRY

## ECON. THEORY

### IMPERFECT COMPETITION

RESULTS: PRICE  $\neq$  ACROSS COUNTRIES

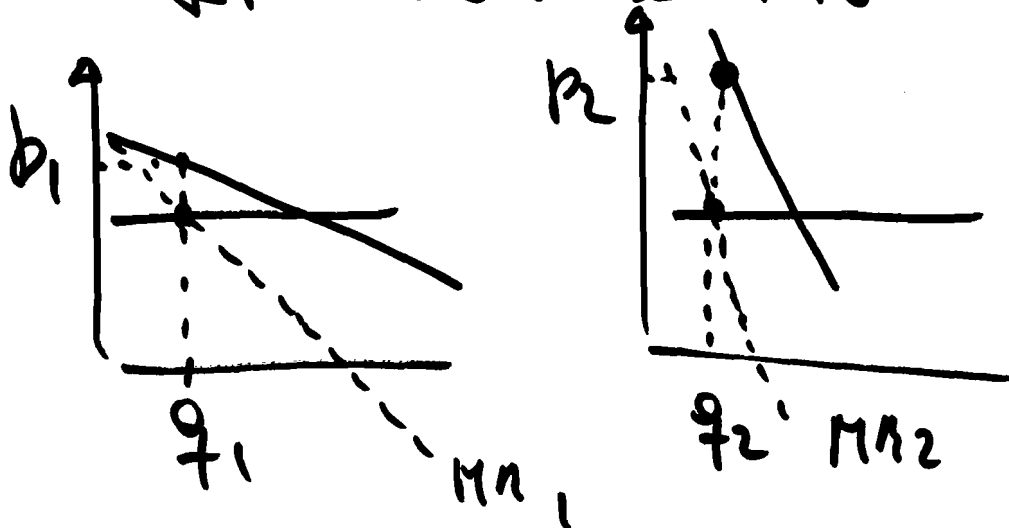
ARE THE NORMAL OUTCOME &

- THEY SHOULD NOT BE A MATTER OF CONCERN

- IN GENERAL LOW PRICES CHANGED BY FOREIGN FIRMS BENEFIT CONSUMERS & RARELY CAN BE ASSOCIATED WITH FUTURE MONOPOLY.

MODEL

(I) MONOPOLIST: 2 MARKETS  
PRICES WILL BE DIFFERENT  
IF DEMANDS ARE



(II) CANNOT COMPARE  
BUT  $\neq$  NUMBER OF  
COMPETITORS IN EACH  
COUNTRY

COUNTRY 1

2 COMPETITORS



$p_1$

COUNTRY 2

5 COMPETITORS



$p_2$



3

III

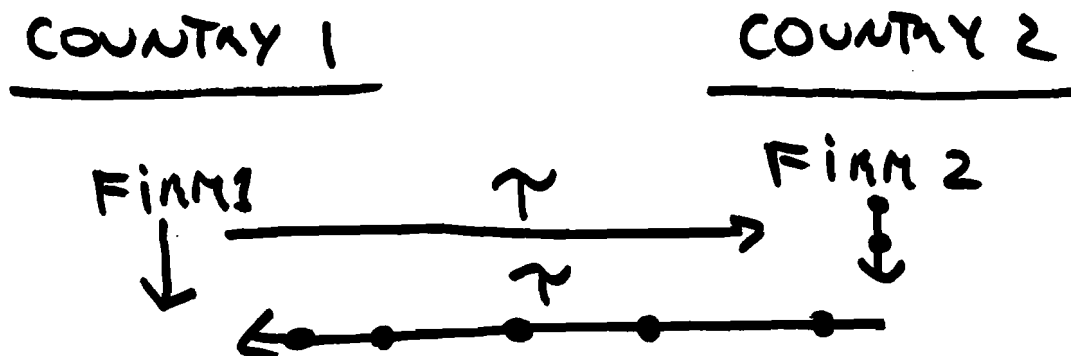
2 COUNTRIES

2 FIRMS

TRANSPORT/TRADE COSTS =  $\tau$  PER UNIT

1 FIRM FROM EACH COUNTRY

BOTH SELL IN BOTH MARKETS



WITH IDENTICAL DEMANDS + MC OF PRODUCTION + COURNOT COMPETITION  $\Rightarrow$

(a) •  $p_1 = p_2$

(b) • LOCAL FIRM WILL HAVE A HIGHER MARKET SHARE AND HIGHER PROFITS

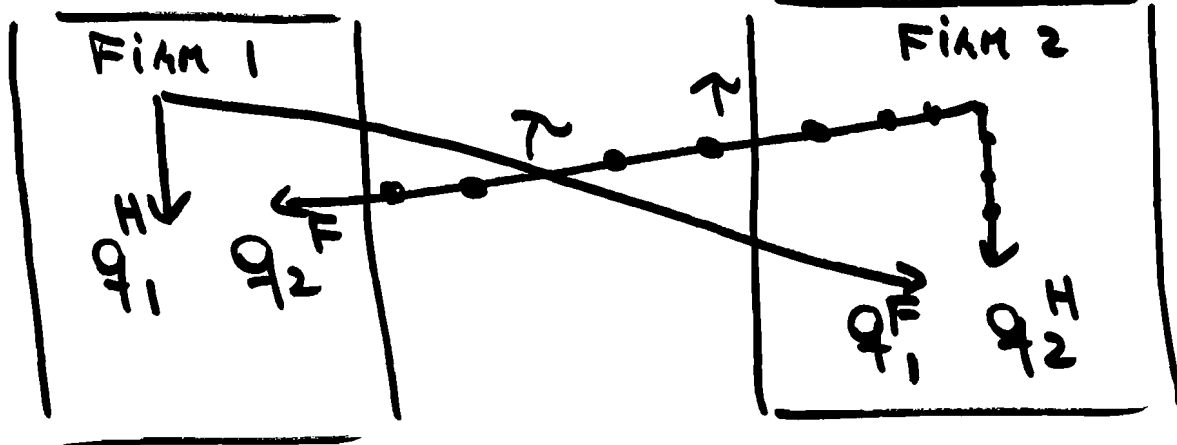
(c) • (a)  $\Rightarrow$  BOTH FIRMS ARE ENGAGING IN "DUMPING" SINCE  $p^H + \tau > p^F$

(4)

# BRANDEN-KRUGMAN SIMPLIFIED VERSION

COUNTRY 1

COUNTRY 2



QUANTITY

$$q_1 = q_1^H + q_2^F$$

$$q_2 = q_2^H + q_1^F$$

INV. DEMAND

$$p_1 = a - b q_1$$

$$p_2 = a - b q_2$$

MC

$$MC_1 = 0$$

$$MC_2 = 0$$

TASK:

NE  $q$ 's

NE  $q$ 's

RESULT

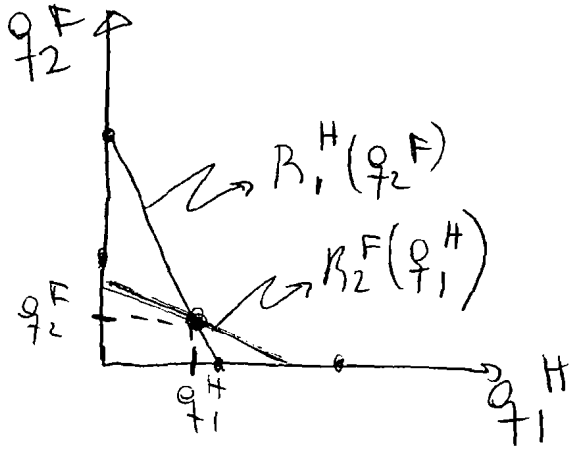
$p_1$

=

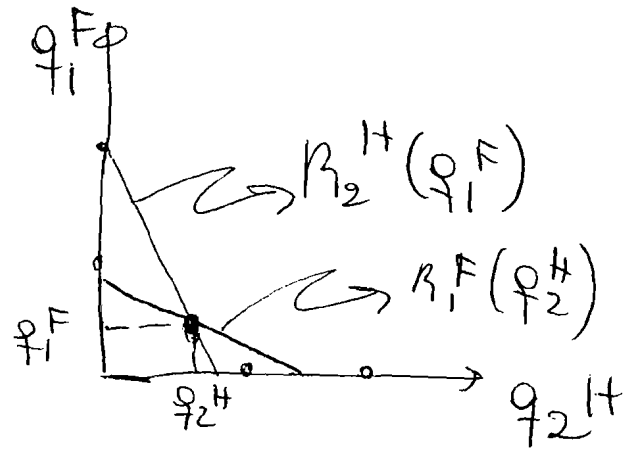
$p_2$

(5)

BE CAUSE MC'S ARE  
CONSTANT  $\Rightarrow$  THE 2  
NE CAN BE FOUND  
INDEPENDENTLY



$$q_1^H > q_2^F$$



$$q_2^H > q_1^F$$

STEP 1:

CALCULATE REACTION  
FUNCTIONS MAX  $\pi_1$

&  $\pi_2$

$\Rightarrow$  4 EQ.

STEP 2:

SOLVE 4 EQ (TWO AT  
TIME)

$$\text{MAX}_{q_1^H, q_1^F} \pi_1(\cdot) = p_1 q_1^H + p_2 q_1^F - \tau q_1^F \quad (6)$$

$$= [a - b q_1^H - b q_2^F] q_1^H + [a - b q_1^F - b q_2^H - \tau] q_1^F$$

$$= [a - b q_1^H - b q_2^F] q_1^H + [(a - \tau) - b q_1^F - b q_2^H] q_1^F$$

$$(1) \frac{\partial \pi_1}{\partial q_1^H} = 0 = -b q_1^H + [a - b q_1^H - b q_2^F] = 0$$

$$(2) \frac{\partial \pi_1}{\partial q_1^F} = 0 = -b q_1^F + [(a - \tau) - b q_1^F - b q_2^H] = 0$$

$$\text{MAX}_{q_2^H, q_2^F} \pi_2 = p_2 q_2^H + p_1 q_2^F - \tau q_2^F$$

$$(3) \frac{\partial \pi_2}{\partial q_2^H} = 0 = -b q_2^H + [a - b q_2^H - b q_1^F] = 0$$

$$(4) \frac{\partial \pi_2}{\partial q_2^F} = 0 = -b q_2^F + [(a - \tau) - b q_2^F - b q_1^H] = 0$$

$\pi_f$  (4) :  $q_2^F, q_1^H$   
 (1) :  $q_2^F, q_1^H$

SOLVE FOR  
 $q_1^H, q_2^F$   
 COUNTRY 1

$\pi_f$  (2) :  $q_1^H, q_2^F$   
 (3) :  $q_1^H, q_2^F$

SOLVE FOR  
 $q_2^F, q_1^H$   
 COUNTRY 2

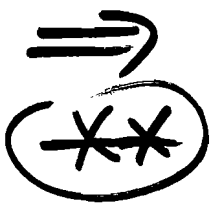
(1)      (1)      &      (4)  
 $0 = a - 2bq_1^H - 6q_2^F = 0$

(X)   


$$q_1^H = \frac{a - 6q_2^F}{2b}$$

$R_1^H(q_2^F)$

(4)  $0 = (a - \tau) - 2bq_2^F - 6q_1^H = 0$

(X\*)   


$$q_2^F = \frac{(a - \tau) - 6q_1^H}{2b}$$

$R_2^F(q_1^H)$

⑧

SOLVING (1) & (2)

$$q_1^H = \frac{Q + \tau}{36}$$

$$q_2^F = \frac{Q - 2\tau}{36}$$

$$p_1 = \frac{Q + \tau}{3}$$

$$q_1 = q_1^H + q_2^F = \frac{2Q - \tau}{36}$$

SOLVING (2) & (3)

$$q_2^H = \frac{Q + \tau}{36}$$

$$q_1^F = \frac{Q - 2\tau}{36}$$

$$q_2 = \frac{2Q - \tau}{36}$$

$$p_2 = \frac{Q + \tau}{3}$$

WELFARE?