

10-28-08

- OUTSOURCING  
MODEL 1  
MODEL 2

- ~~DEES~~ ALTERNATIVE  
EXPLANATIONS FOR  
DATA ON  $L^S/L^U$  &  $w^S/w^U$

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## REVIEW :

CONS. SURPLUS  
PROD. SURPLUS

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GAINS FROM TRADE  
PARTIAL EQUILIBRIUM  
SET-UP.

DATA

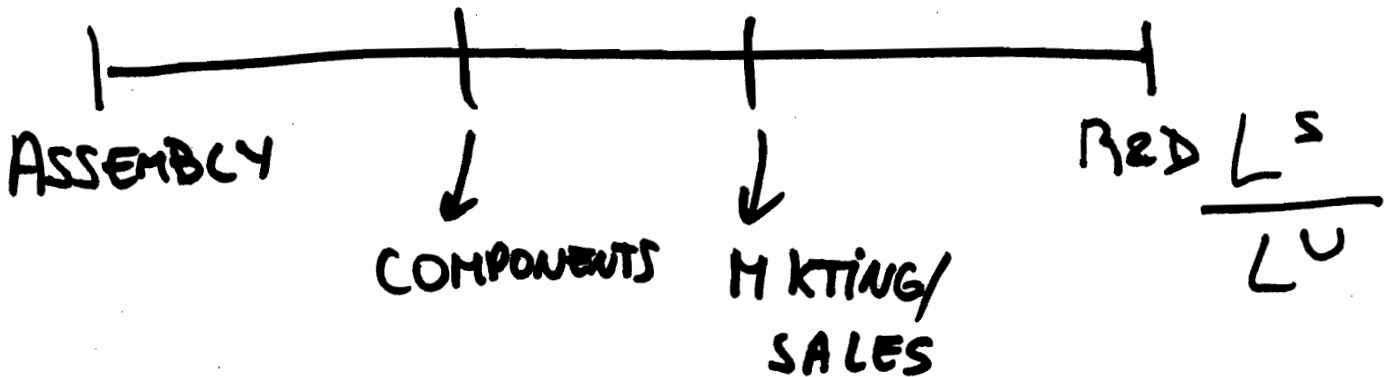
•  $\frac{W^S}{W^U}$  ↑ IN US & OTHER COUNTRIES

•  $\frac{L^S}{L^U}$  ↑ " "

MODEL 1

PRODUCTION RELATED ACTIVITIES

- R&D (RESEARCH & DEVELOPMENT)
- PROD. OF COMPONENTS
- ASSEMBLY
- MARKETING/SALES



THINK ABOUT CONTINUUM OF ACTIVITIES.

2 COUNTRIES:

HOME :  $L^S$  ABUNDANT

FOREIGN :  $L^U$  " "

HOME MORE EFFICIENT

WAGE COMPARISON

HOME

FOREIGN

$w^U$

>

$w^{U*}$

$w^S$

>

$w^{S*}$

BUT

$\frac{w^S}{w^U}$

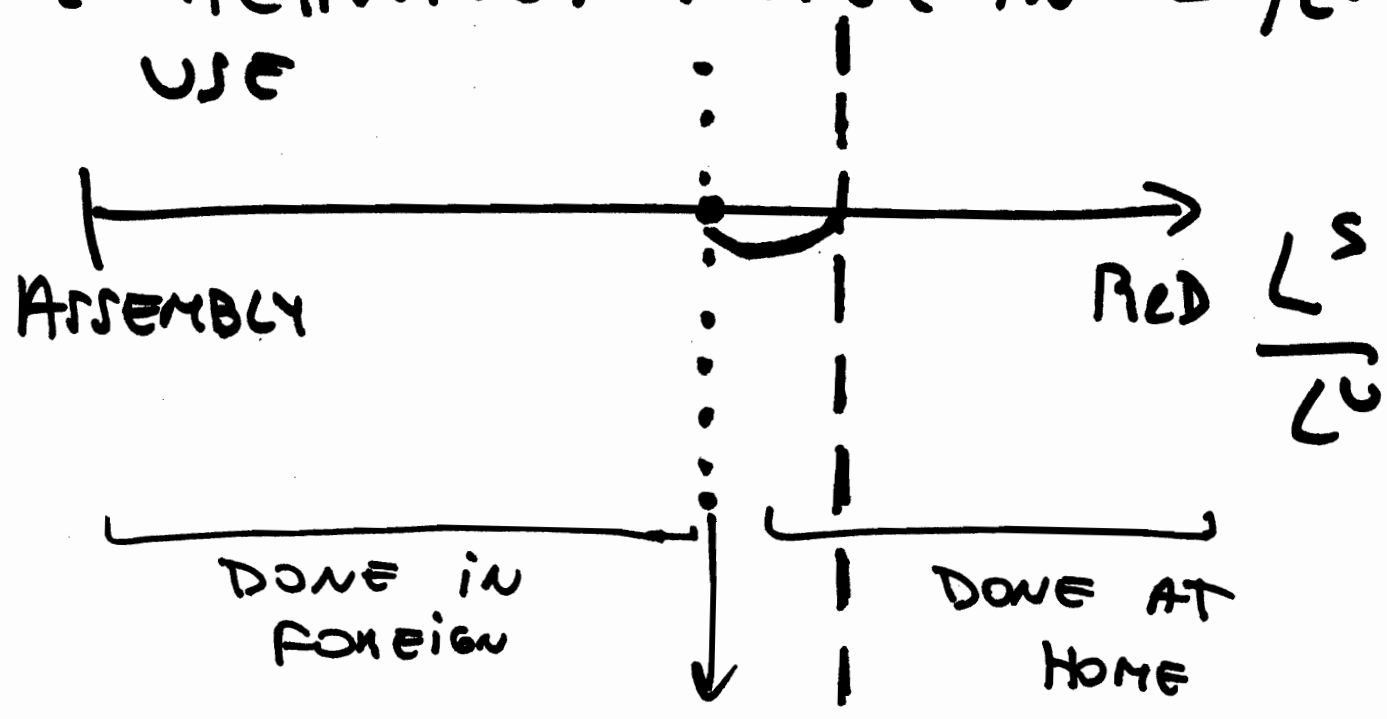
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$\frac{w^{S*}}{w^{U*}}$

i.e. UNSKILLED LABOR ( $L^U$ ) IS RELATIVELY CHEAPER IN FOREIGN & SKILLED LABOR ( $L^S$ ) AT HOME

THERE ARE POSITIVE TRADE COSTS : TARIFFS, TRANSPORT COSTS, ETC.

- TRADE COSTS UNIFORM ACROSS ACTIVITIES
- ACTIVITIES DIFFER IN  $L^S/L^H$  USE



DIVISION  
DEPENDS  
ON WAGE & PROD. DIFFERENCES  
& TRADE COSTS.

EXPERIMENT:

↓ TRADE COSTS ⇒

SHIFTS : TO THE ~~LEFT~~ RIGHT

∪ ACTIVITIES SHIFTED FROM HOME TO FOREIGN.

⇒ AVERAGE SKILL LEVEL  
AT HOME  $\neq$   $\left(\frac{L^S}{L^U}\right)$

& THE SAME IS TRUE  
IN FOREIGN -

i.e. RELATIVE DEMAND  $L^S/L^U$   
INCREASES IN BOTH  
COUNTRIES.

⇒  $\frac{W^S}{W^U} \neq$  IN BOTH  
COUNTRIES (IF  
SUPPLIES ARE FIXED)

# ALTERNATIVE EXPLANATION

FOR

$$\uparrow \frac{P_{WS}}{W_U}$$

&

$$\uparrow \frac{L_S}{L_U}$$

HIGH TECH. EQUIPMENT  
USE IN EVERY SECTOR  
OF ECONOMY

(LS BIASED TECHNOLOGICAL  
CHANGE) -

→ -

## MODEL 2

### SIMPLIFICATION

2 ACTIVITIES

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graph TD; A[2 ACTIVITIES] --> B[R (RED)]; A --> C[C (COMPONENTS)];
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1 FINAL GOOD (Y)

CONSUMERS LIKE TO CONSUME AS MUCH Y AS POSSIBLE (HAPPINESS ↑ WITH Y CONSUMPTION).

PRODUCTION OF R & C USES  $L^S, L^U$

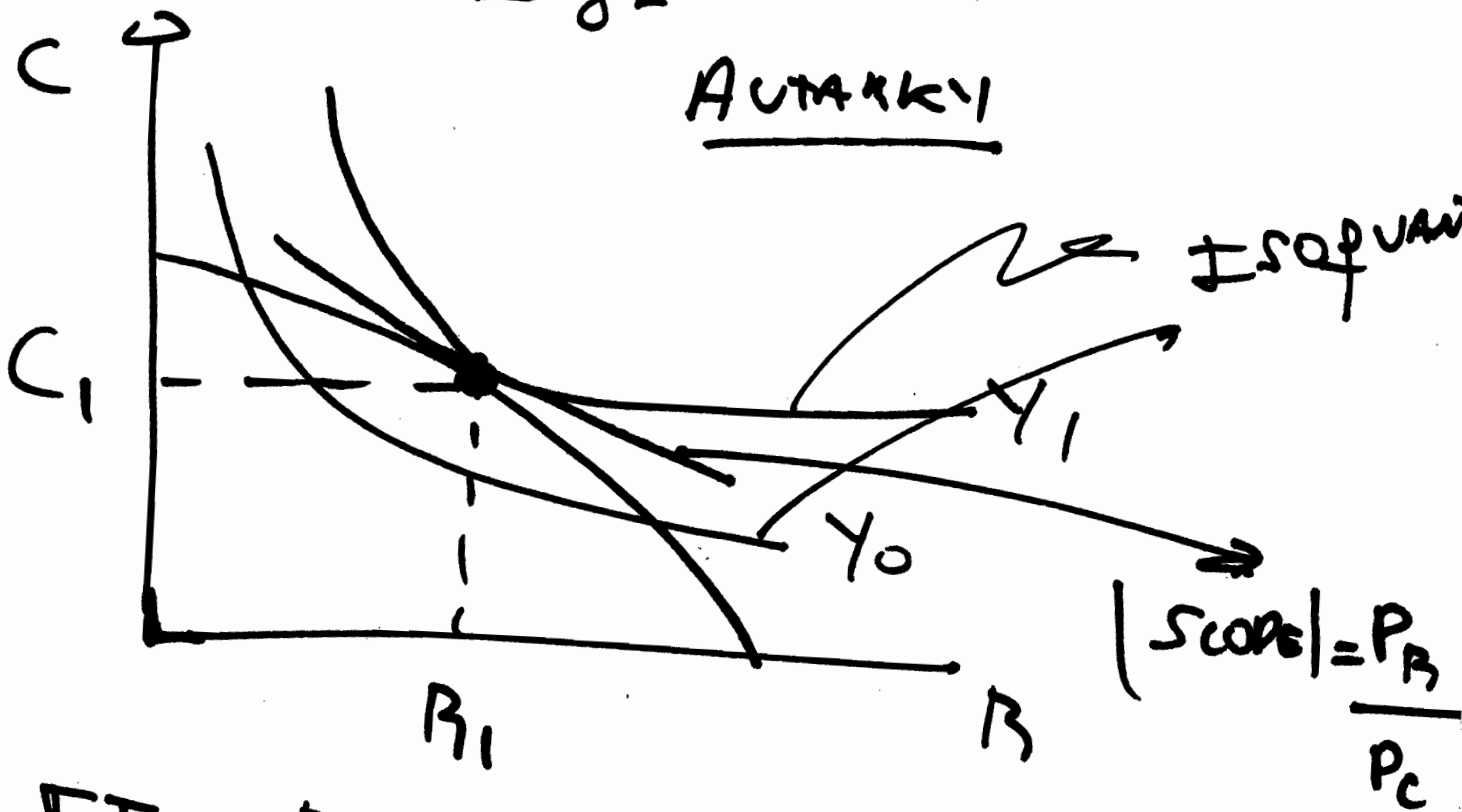
R:  $L^S$ -INTENSIVE

C:  $L^U$ -INTENSIVE

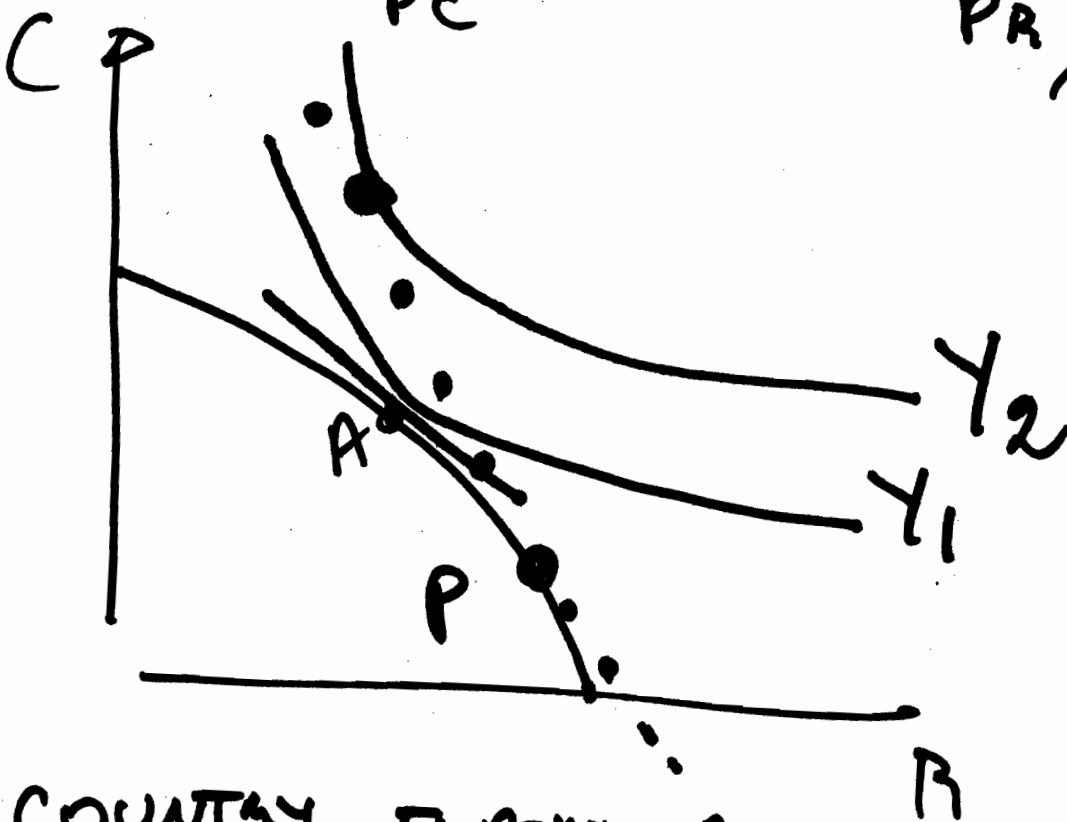
COUNTRY HAS  $\bar{L}^S, \bar{L}^U$  ENDOWMENTS

COUNTRY IS RELATIVELY ABUNDANT IN  $L^S$

- 8 -



FT:  $\uparrow \frac{P_B}{P_C}$  (or  $\downarrow \frac{P_C}{P_B}$ )



COUNTRY II

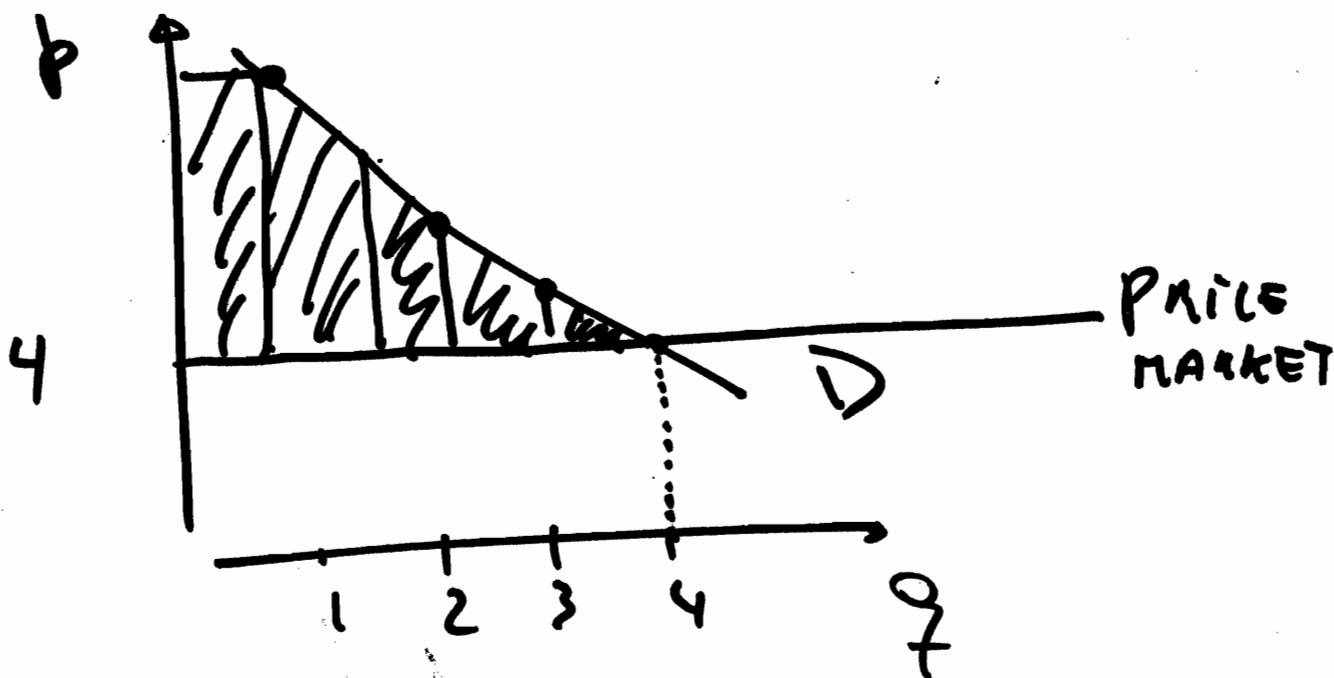
EXPORTS A  
IMPORTS C

$\Rightarrow \uparrow Y \Rightarrow$   
HAPPIER AGENTS  
GAINS FROM TRADE

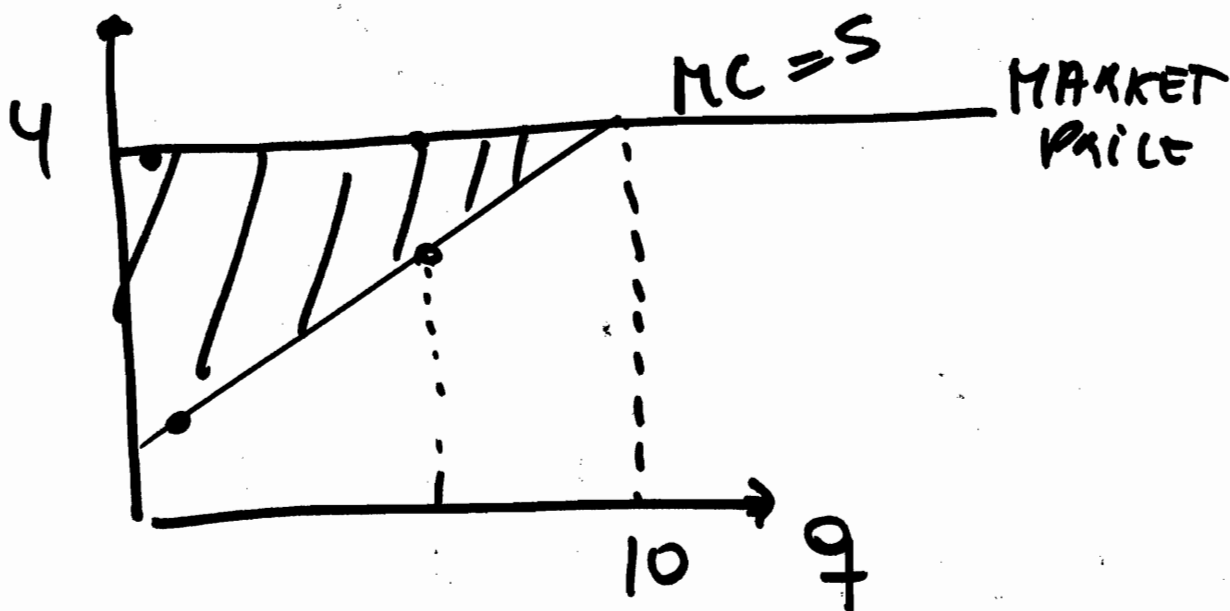
WELFARE MEASURES

PARTIAL EQUILIBRIUM

CONS. SURPLUS



PROD. SURPLUS

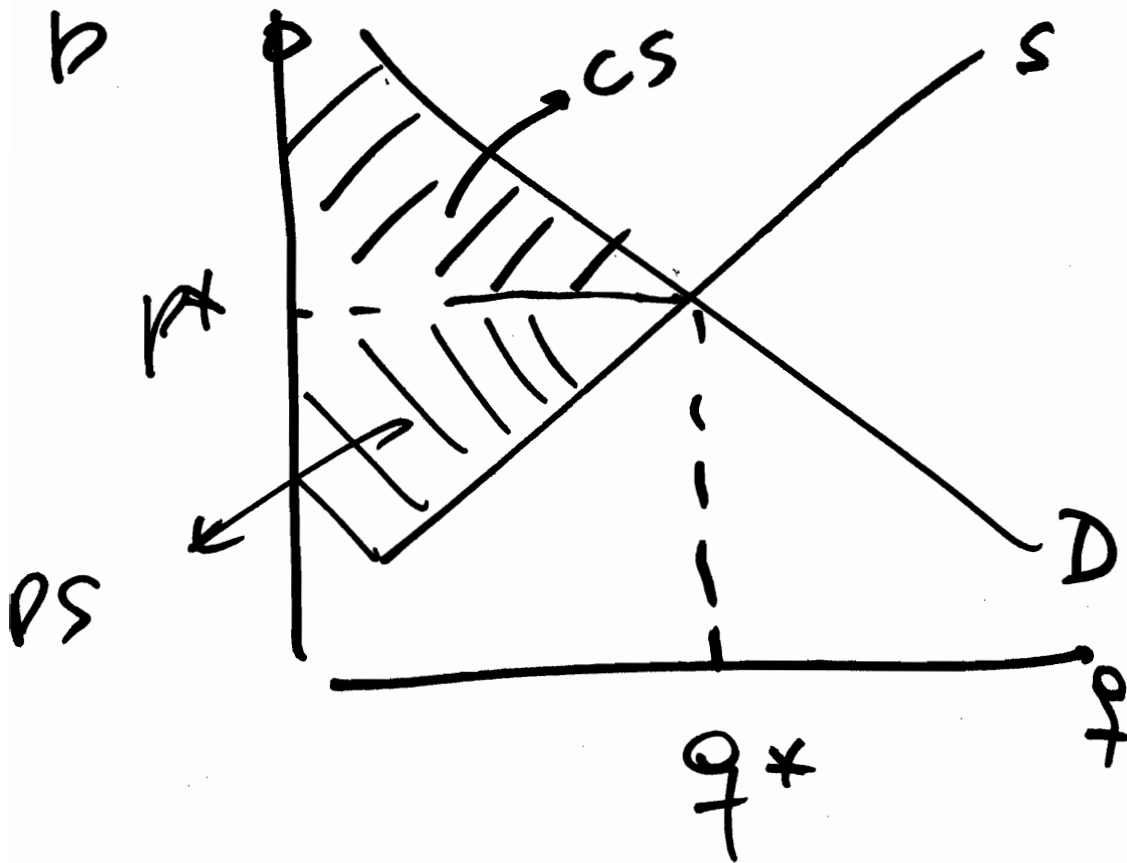


ASSUME:

$MC = MC$  SOCIETY

DEMAND = M BENEFIT FOR SOCIETY

(CLOSED) ECONOMY / P. COMPETITION



SOC. WELFARE =  $W = CS + PS$

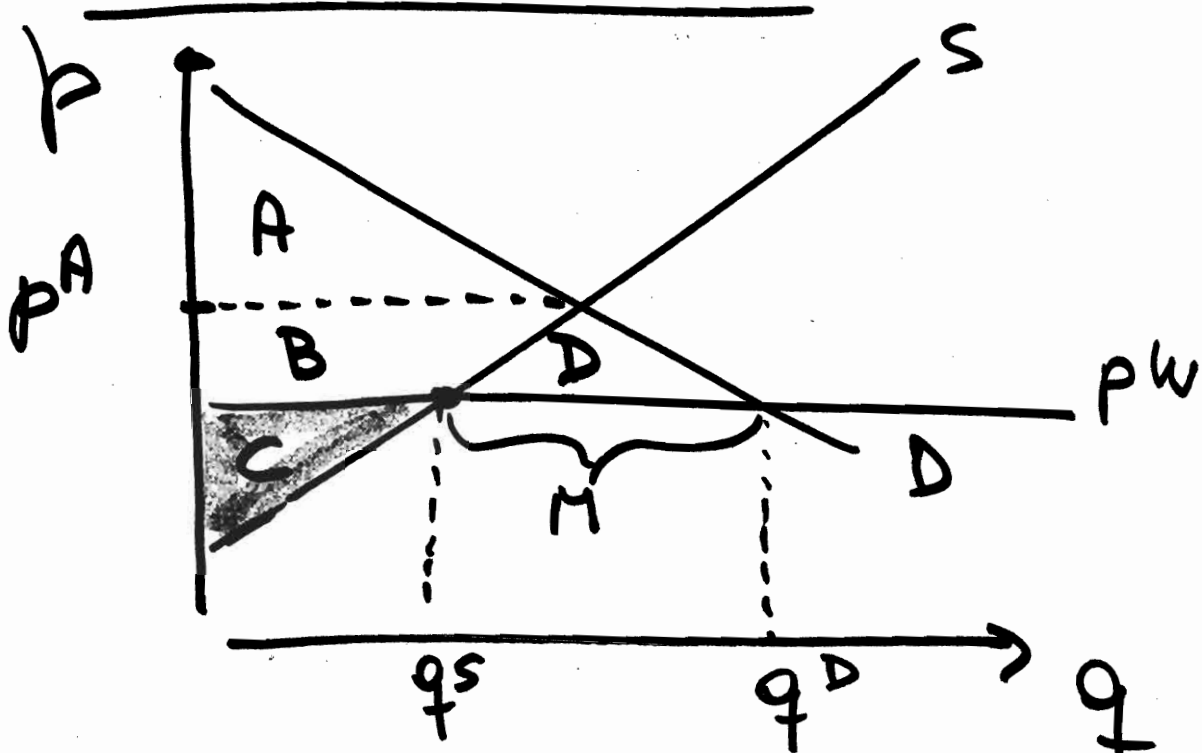
10-30-08

## PARTIAL EQUILIBRIUM

- GAINS FROM TRADE
- TARIFF }  
- QUOTA } SMALL COUNTRY
- COMPARE WITH OTHER  
POLICIES
- TARIFF : LARGE COUNTRY
- - - - -
- EXPORT SUBSIDY : SMALL  
LARGE COUNTRY

-2-

# IMPORT MARKET



FREE TRADE  $\Rightarrow P_w = P^D$  (DOMESTIC PRICE)

M = IMPORTS

AUT  $\rightarrow$  FT :  $q^D \uparrow$   $q^S \downarrow$   
 $P^D \downarrow$

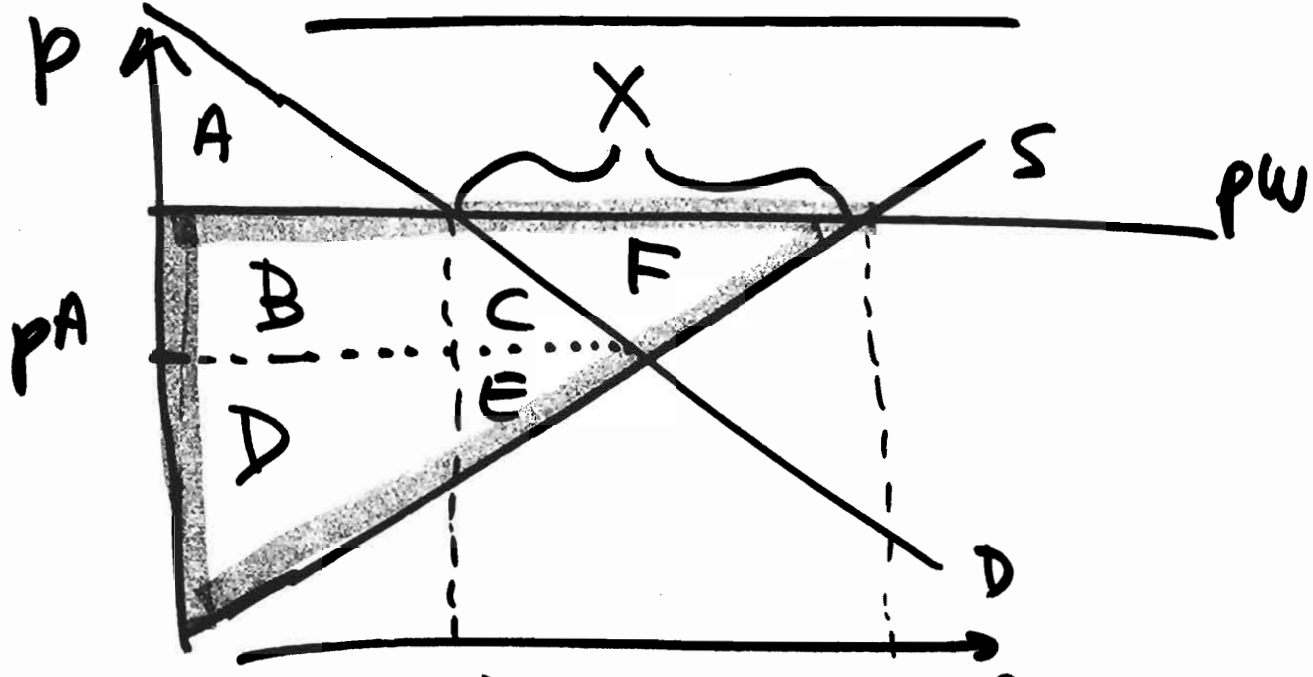
- 3 -

$W^A = A + B + C$	$\Delta CS = \cancel{B} + D$
$W^{FT} = A + B + D + C$	$\Delta PS = -\cancel{B}$
	$\Delta W = D$

$\Delta W = D$   $> 0$  GAINS FROM TRADE

CONSUMERS BETTER OFF  
PRODUCERS WORSE OFF

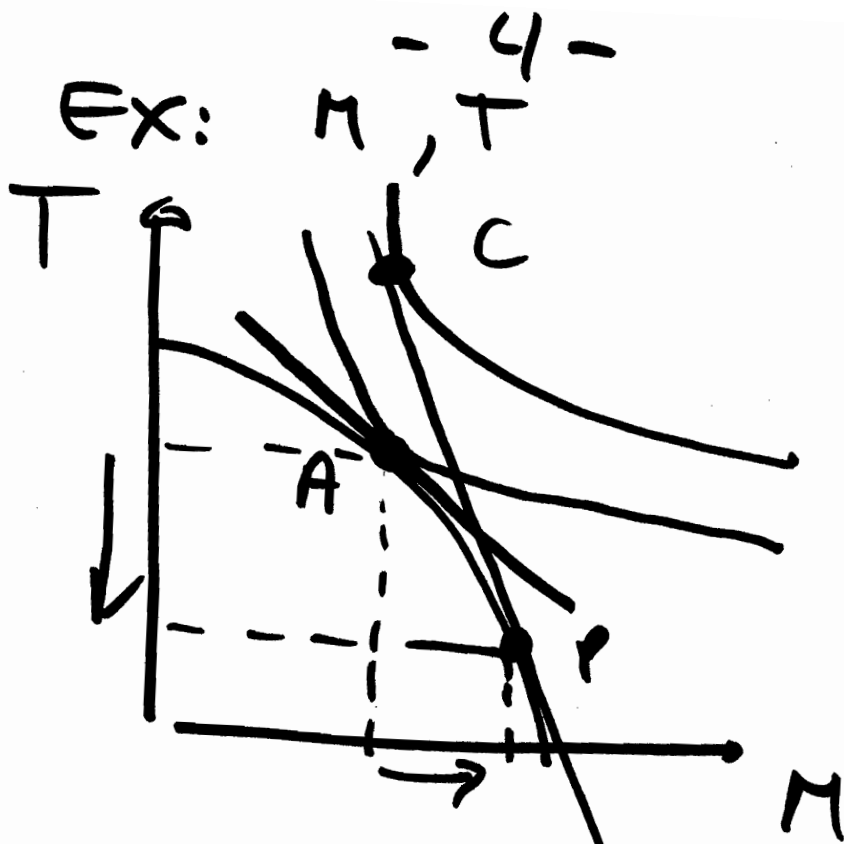
EXPORT MARKET



AUT  $\rightarrow$  FT :  $q^D \downarrow$ ,  $q^S \uparrow$ ,  $p^D \uparrow$

$\Delta CS = -\cancel{B} - \cancel{C}$
$\Delta PS = +\cancel{B} + \cancel{C} + F$
$\Delta W = F$

$\Delta W = F > 0$  GAINS FROM TRADE  
PRODUCERS GAIN, CONS. WORSE OFF.

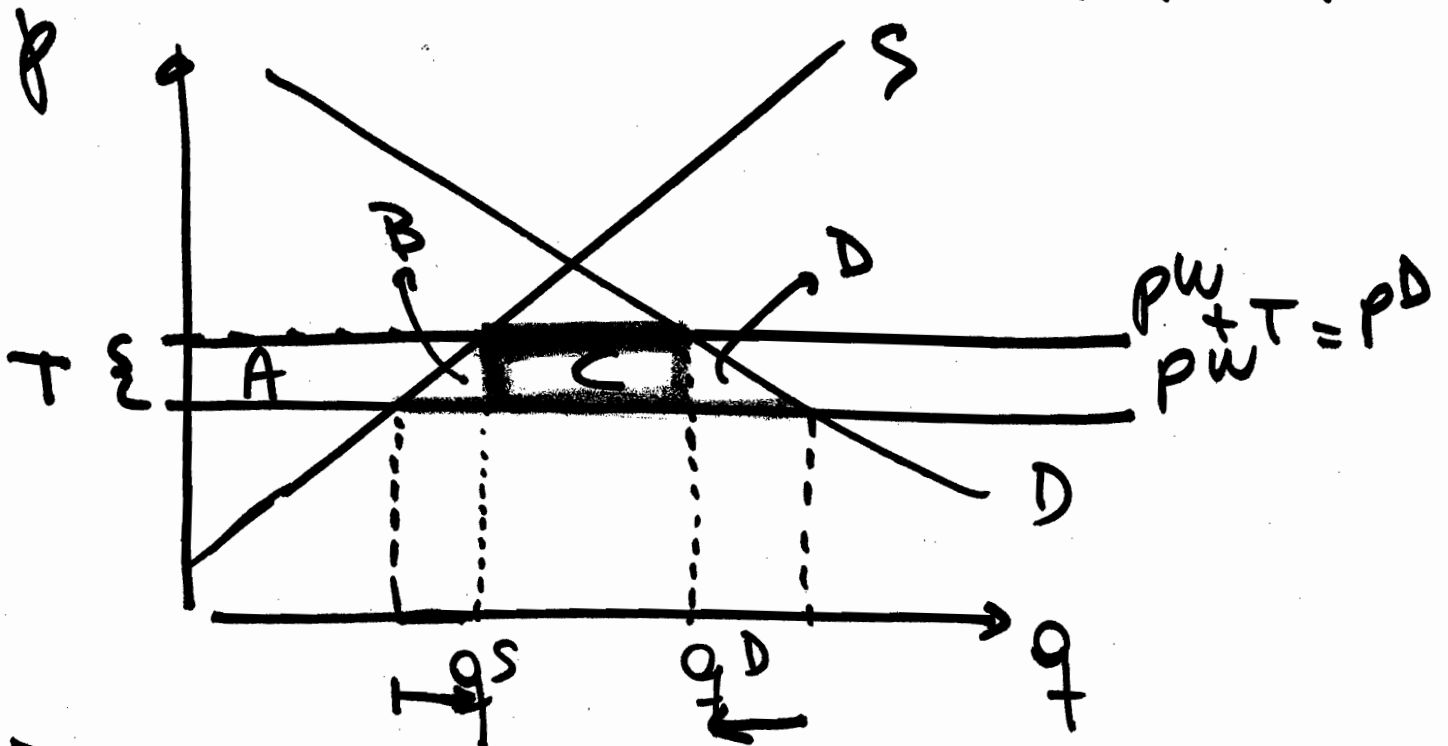


$\frac{P_M}{P_T} \uparrow$   
 ASSUME  
 $P_M \uparrow$   
 $P_T \downarrow$

$M = \text{EXPORT COMMODITY}$   
 $T = \text{IMPORT GOOD}$

TARIFF: SMALL COUNTRY  
(SPECIFIC) (PW FIXED)

$W = CS + PS + \text{GOV. BUDGET RESULT}$



FT → TARIFF T

$\Delta CS = -A - B - C - D$

$\Delta PS = +A$

$\Delta GR = C$

$P^D, Q^S \uparrow, Q^D \downarrow$

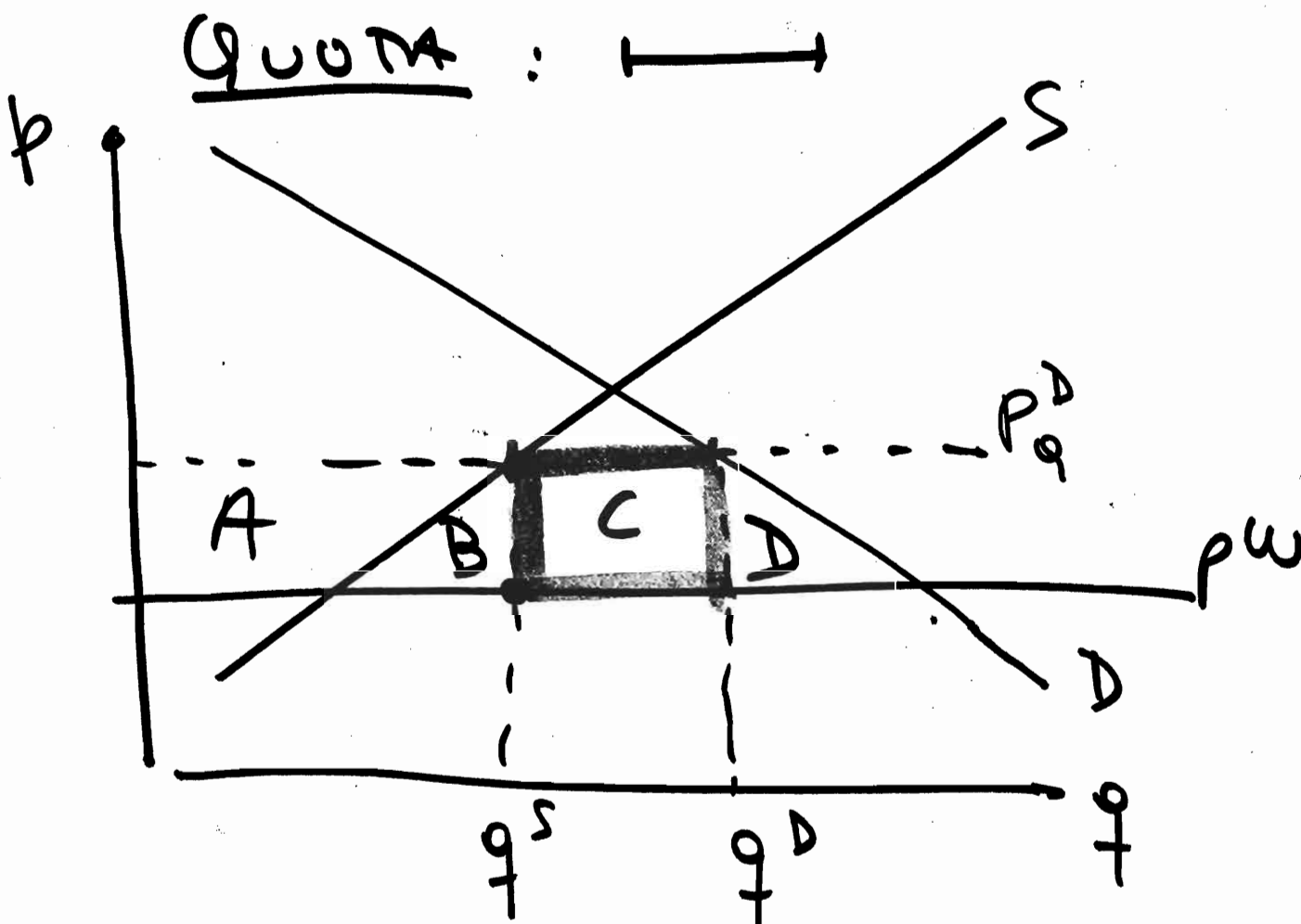
$\downarrow M$

$GR = TXM$

$\Delta W = -B - D < 0$

CONSUMERS WORSE OFF  
PRODUCERS BETTER OFF  
GOV. BETTER OFF.

OPENING OR TRADE LIBERALIZATION  
MEANS  $\downarrow$  T TO EITHER  
ZERO (FT) OR TO A LOWER  
LEVEL.



CASE 1/2/3  
≠ ALLOCATION  
OF QUOTA

$$C = \text{QUOTA RENT}$$

CASE 1: QUOTA GIVEN TO  
A DOMESTIC AGENT

CASE 2: GOV. AUCTIONS OFF  
QUOTA

CASE 3: QUOTA GIVEN TO  
FOREIGN COUNTRY

CASE 1 :

$$\Delta CS = -A - B - C - D$$

$$\Delta PS = +A$$

$$\Delta GN = 0$$

$$\Delta \text{OTHER} = C$$

DOMESTIC AGENT

CASE 2

$$-A - B - C - D$$

$$+A$$

$$+C$$

$$0$$

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$$\Delta W = -B - D < 0$$

CASE 3:

$$\Delta CS = -A - B - C - D$$

$$\Delta PS = +A$$

$$\Delta GN = 0$$

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$$\Delta W = -B - C - D < 0$$

VOLUNTARY EXPORT RESTRAINTS

VER