

12-13-11

BoP

$$CA \approx -FA$$

CAPITAL INFLOWS

SHOWS AS +FA - CA

CAPITAL OUTFLOWS

SHOWS AS -FA +CA

QUESTION: CAUSALITY?

OR CA \rightarrow FA
OR FA \rightarrow CA ?

QUESTIONS:

EFFECT OF TRADE POLICY
 \rightarrow ON CURRENT ACCOUNT (CA)?

\rightarrow EFFECT OF EXCHANGE RATE POLICY
ON CURRENT ACCOUNT / FA ?
(LATER)

NET EXTERNAL WEALTH OR NET FOREIGN WEALTH

$$= \text{ROW ASSETS OWNED} - \text{COUNTRY HOME ASSETS OWNED}$$

↓
 REST OF WORLD

BY A
 COUNTRY
 HOME

BY ROW

NOTICE:

$$CA = \Delta \text{ NET EXTERNAL WEALTH}$$

NATIONAL ACCOUNT IDENTITIES

CLOSED - NO GOV.

$$Y = C + I$$

OPEN - NO GOV.

$$Y = C + I + \underbrace{X - M}_{CA}$$

⇒

$$\underbrace{Y - C}_{\text{SAVINGS (S)}} = I + CA$$

⇒

$$\boxed{S - I = CA}$$

OPEN - GOV.

$$Y = C + I + X - M + G - T + T$$

G = GOV. EXPENDITURES

$$\Rightarrow \underbrace{Y - C - T}_{\text{PRIVATE SAVINGS (SP)}} = I + \underbrace{X - M}_{\text{CA}} + \underbrace{G - T}_{\text{GOV. DEFICIT}}$$

OR

$$SP = I + \underbrace{X - M}_{\text{CA}} - \underbrace{(T - G)}_{\text{GOV. BALANCE}}$$

$$\boxed{SP - I = \underbrace{X - M}_{\text{CA}} + \underbrace{G - T}_{\text{GOV. DEFICIT}}}$$

$$\boxed{\underbrace{X - M}_{\text{CA}} = (SP - I) - (G - T)}$$

DATA SHOWS AS % GDP.

$$\frac{CA}{Y} = \frac{SP - I}{Y} - \frac{(G - T)}{Y}$$

- 4 -
"TWIN DEFICITS"

US DATA

81-82: P G-T

BUT CA DID NOT
CHANGE THAT MUCH

United States (percentage of GNP)

Year	CA	SP	I	G - T
1981	0.3	19.1	18.2	1.0
1982	-0.1	19.4	15.8	3.4
1983	-1.0	18.7	15.9	4.1
1984	-2.5	19.5	18.9	2.9
1985	-2.9	18.1	17.6	3.1
1986	-3.3	16.9	16.8	3.4
1987	-3.4	16.1	16.5	2.5
1988	-2.4	16.3	16.2	2.0
1989	-1.7	15.6	15.8	1.5
1990	-1.4	15.5	14.5	2.5
1991	0.1	16.3	13.0	3.2
1992	-0.9	16.3	13.1	4.3
1993	-1.5	15.8	13.9	3.4
1994	-2.1	15.7	15.4	2.0

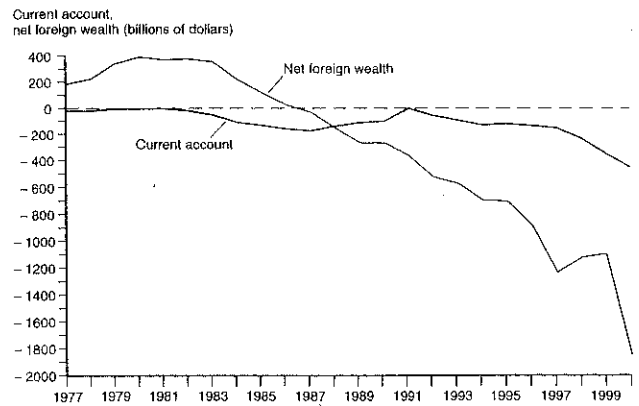
Source: *Economic Report of the President*, February 1995, and U.S. Department of Commerce Survey of Current Business, April 1995.

European Union (percentage of GNP)

Year	CA	SP	I	G - T
1995	0.6	25.9	19.9	-5.4
1996	1.0	24.6	19.3	-4.3
1997	1.5	23.4	19.4	-2.5
1998	1.0	22.6	20.0	-1.6
1999	0.2	21.8	20.8	-0.8

Source: Organization for Economic Cooperation and Development, *OECD Economic Outlook 68* (December 2000), Annex Tables 27, 30, and 52 (with investment calculated as the residual).

Current Account and Net Foreign Wealth Position, 1977-2000



A string of current account deficits in the 1980s reduced America's net foreign wealth until, by the decade's end, the country had accumulated a substantial net foreign debt.

Source: U.S. Government Printing Office, *Economic Indicators*, March 1998, April 2001.

Table 12-2 U.S. Balance of Payments Accounts for 1997 (billions of dollars)

	Credits	Debits
Current Account		
1) Exports	+1,414.9	
Of which:		
Merchandise	+773.3	
Services	+296.2	
Income receipts	+345.4	
(2) Imports		-1,797.1
Of which:		
Merchandise		-1,222.8
Services		-215.2
Income payments		-359.1
(3) Net unilateral current transfers		-53.2
Balance on current account		-435.4
[(1) + (2) + (3)]		
Capital Account		
(4)	+0.7	
Financial Account		
(5) U.S. assets held abroad		-553.3
(increase -)		
Of which:		
Official reserve assets		-0.3
Other assets		-553.0
(6) Foreign assets held in U.S.	+952.4	
(increase +)		
Of which:		
Official reserve assets	+35.9	
Other assets	+916.5	
Balance on financial account	+399.1	
[(5) + (6)]		
Statistical discrepancy	+35.6	
[sum of (1) through (6) with sign reversed]		

Source: U.S. Department of Commerce, *Survey of Current Business*, April 2001. Totals may differ from sums because of rounding.

Table 12-2 U.S. Balance of Payments Accounts for 1997 (billions of dollars)

	Credits	Debits
Current Account		
(1) Exports	+1,167.6	
Of which:		
Merchandise	+678.3	
Investment income received	+236.0	
Other services	+253.2	
(2) Imports		-1,295.5
Of which:		
Merchandise		-877.3
Investment income paid		-250.3
Other services		-167.9
(3) Net unilateral transfers		-38.5
Balance on current account		-166.4
[(1) + (2) + (3)]		
Capital Account		
(4) U.S. assets held abroad		-426.9
(increase -)		
Of which:		
Official reserve assets		-1.0
Other assets		-425.9
(5) Foreign assets held in U.S.	+690.5	
(increase +)		
Of which:		
Official reserve assets	+18.2	
Other assets	+672.3	
Balance on capital account	+263.6	
[(4) + (5)]		
Statistical discrepancy		-97.1
[sum of (1) through (5) with sign reversed]		

Source: U.S. Department of Commerce, *Survey of Current Business*, April 1998. Totals may differ from sums because of rounding.

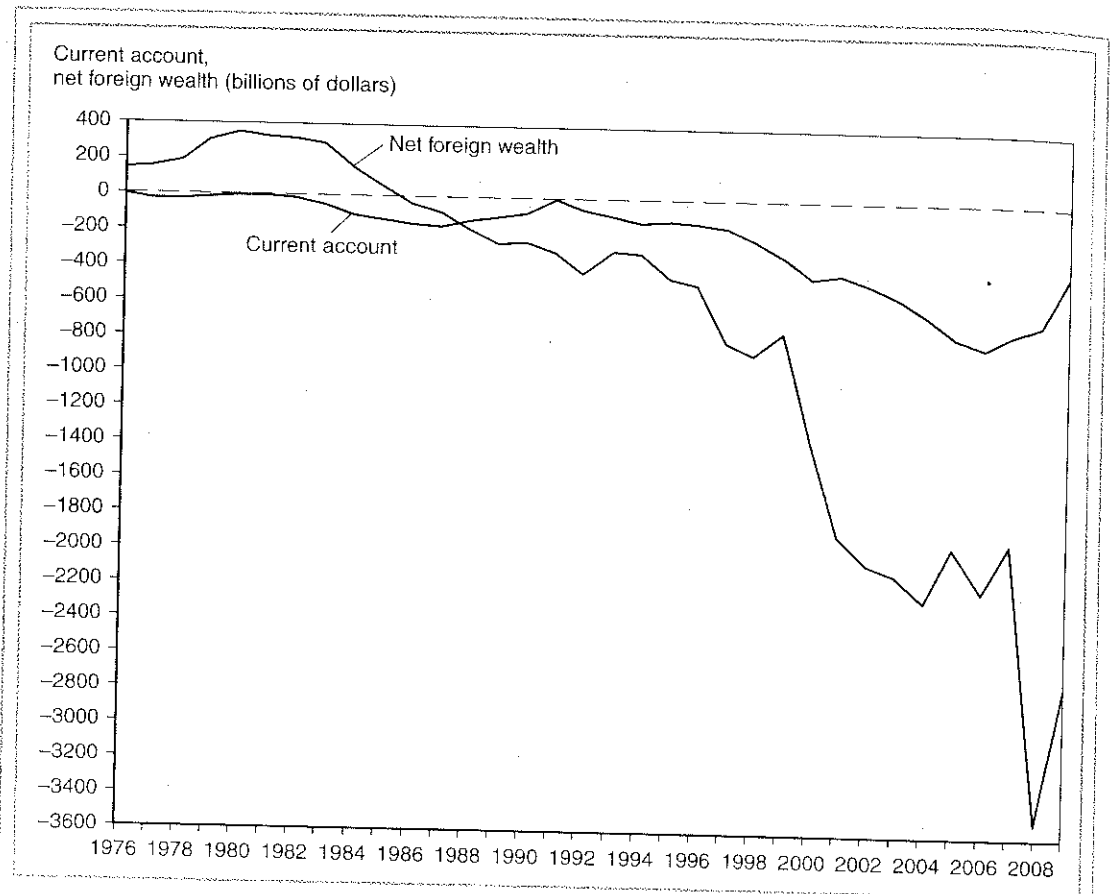


Figure 13-2

The U.S. Current Account and Net Foreign Wealth Position, 1976–2009

A string of current account deficits starting in the 1980s reduced America's net foreign wealth until, by the early 21st century, the country had accumulated a substantial net foreign debt.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Saving and the Current Account

Simple as it is, the GNP identity has many illuminating implications. To explain the most important of these implications, we define the concept of **national saving**, that is, the portion of output, Y , that is not devoted to household consumption, C , or government purchases, G .⁶ *In a closed economy, national saving always equals investment.* This tells us that the closed economy as a whole can increase its wealth only by accumulating new capital.

Let S stand for national saving. Our definition of S tells us that

$$S = Y - C - G.$$

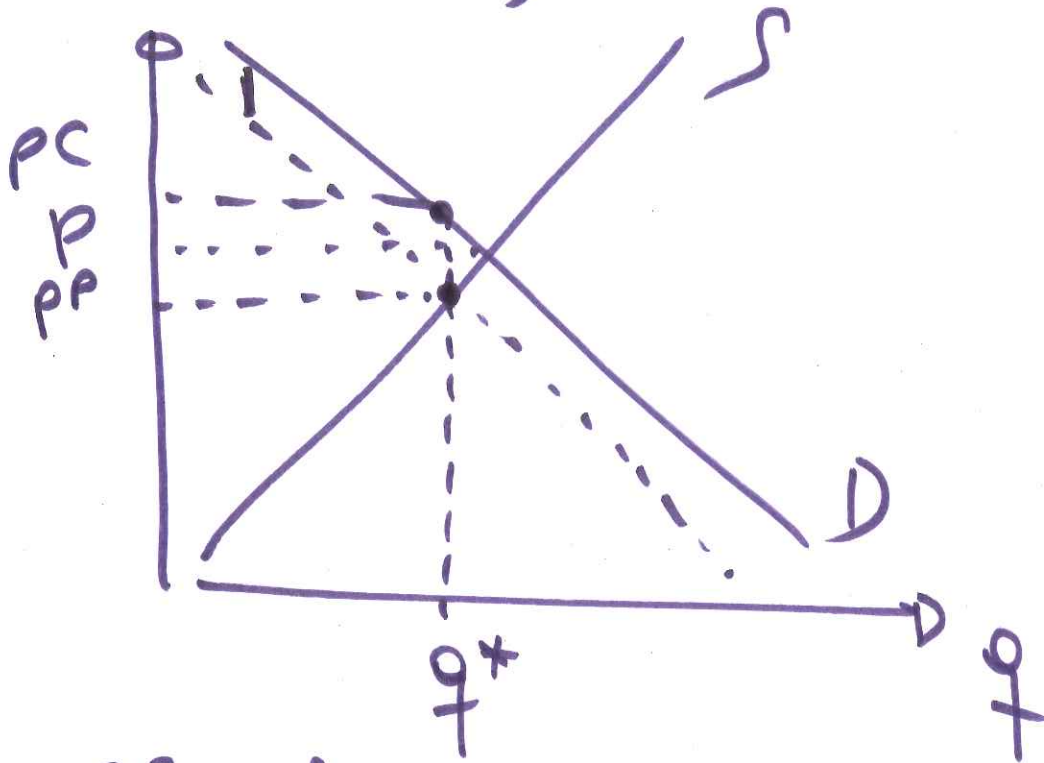
⁶The U.S. national income accounts assume that government purchases are not used to enlarge the nation's capital stock. We follow this convention here by subtracting *all* government purchases from output to calculate national saving. Most other countries' national accounts distinguish between government consumption and government investment (for example, investment by publicly owned enterprises) and include the latter as part of national saving. Often, however, government investment figures include purchases of military equipment.

DOMESTIC TAXES /
SUBSIDIES

12-15-11

CLOSED ECONOMY

TAXES ON CONSUMPTION
(SPECIFIC)

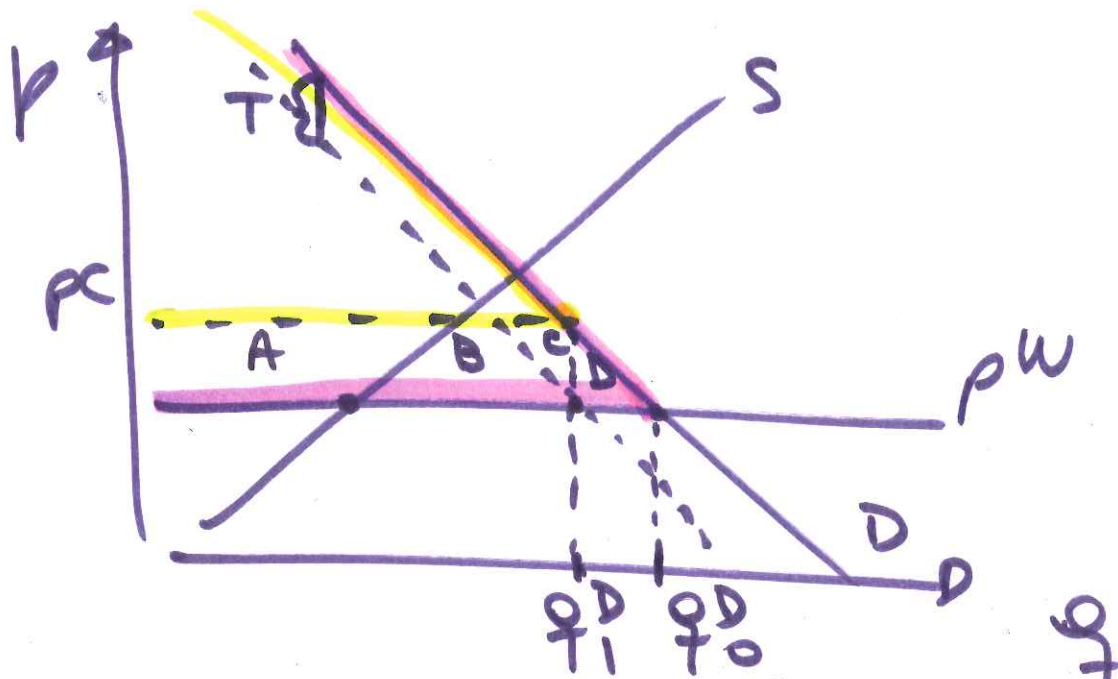


$$P^C = P^P + T$$

$\downarrow Q^P$, $\downarrow Q^C$, $\uparrow P^C$, $\downarrow P^P$

IMPORT MARKET

SMALL COUNTRY



BEFORE TAX: $P_w = P_D = P^P = P_C$

AFTER
CONST. TAX T : $P^P = P_w$
 $P_C = P_w + T$

$Q^D \downarrow$, $Q^P =$, $\pi \downarrow$
 $P_C \uparrow$

-28

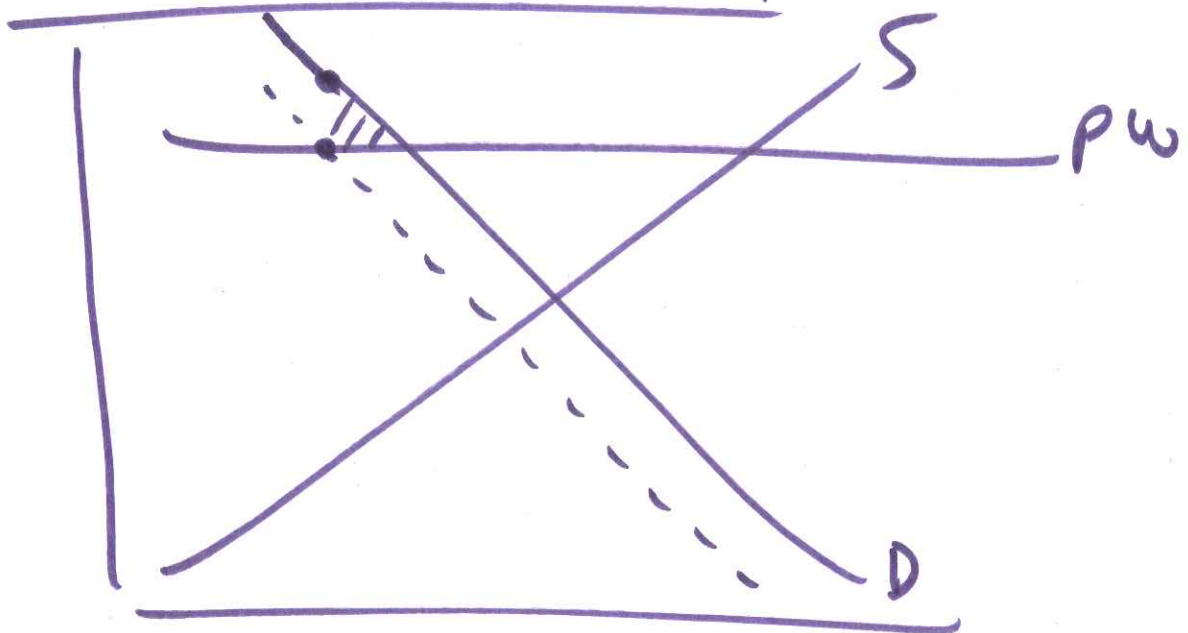
$$\Delta CS = -A - B - C - D$$

$$\Delta PS = 0$$

$$\Delta G^* = A + B + C$$

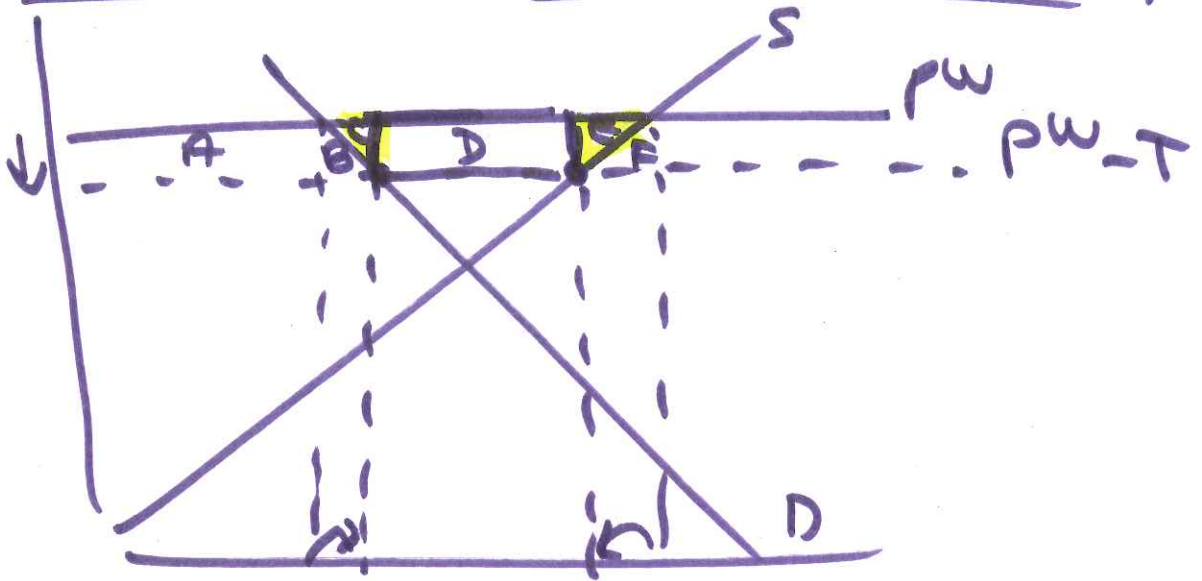
$$\Delta W = \boxed{-D}$$

EXPORT MARKET / SMALL COUNTRY



CONS. TAX : $P_C \uparrow$ $P^D \downarrow$
 $P_P =$
 Q^P SAME
 $X \uparrow$

EXPORT TAX : SMALL COUNTRY



$$P_D = P_{W-T} \quad X \downarrow$$

$$Q^D \downarrow, \quad Q^S \downarrow$$

$$P_D \downarrow$$

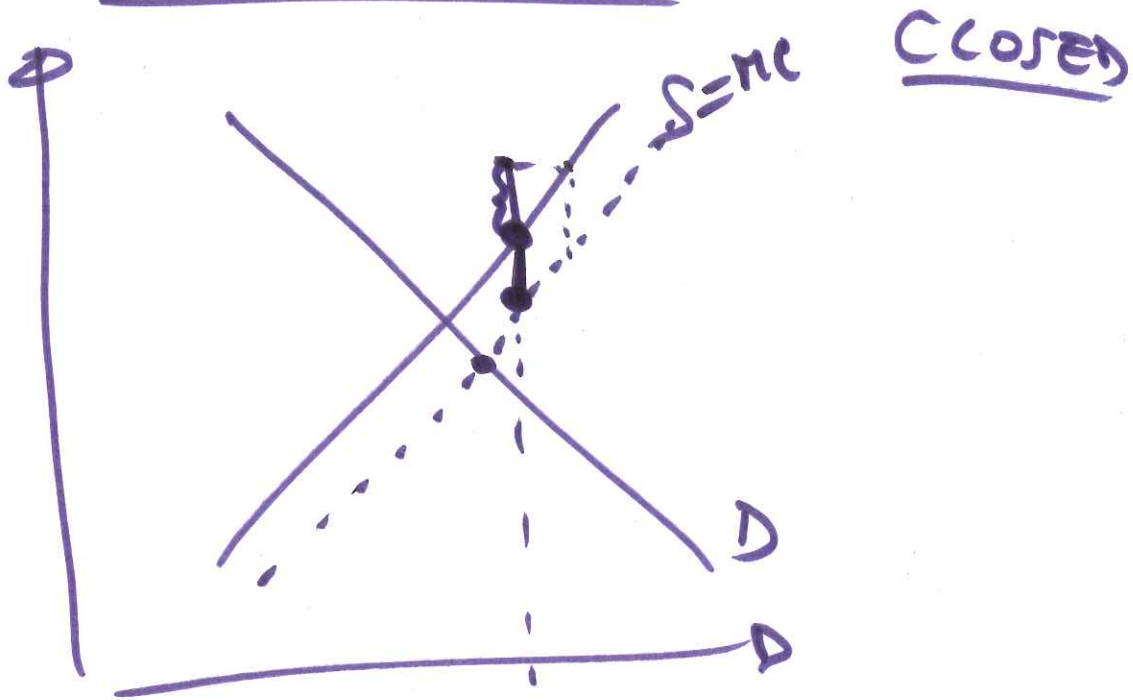
$$\Delta CS = +A + B$$

$$\Delta PS = [A + B + C + D + E]$$

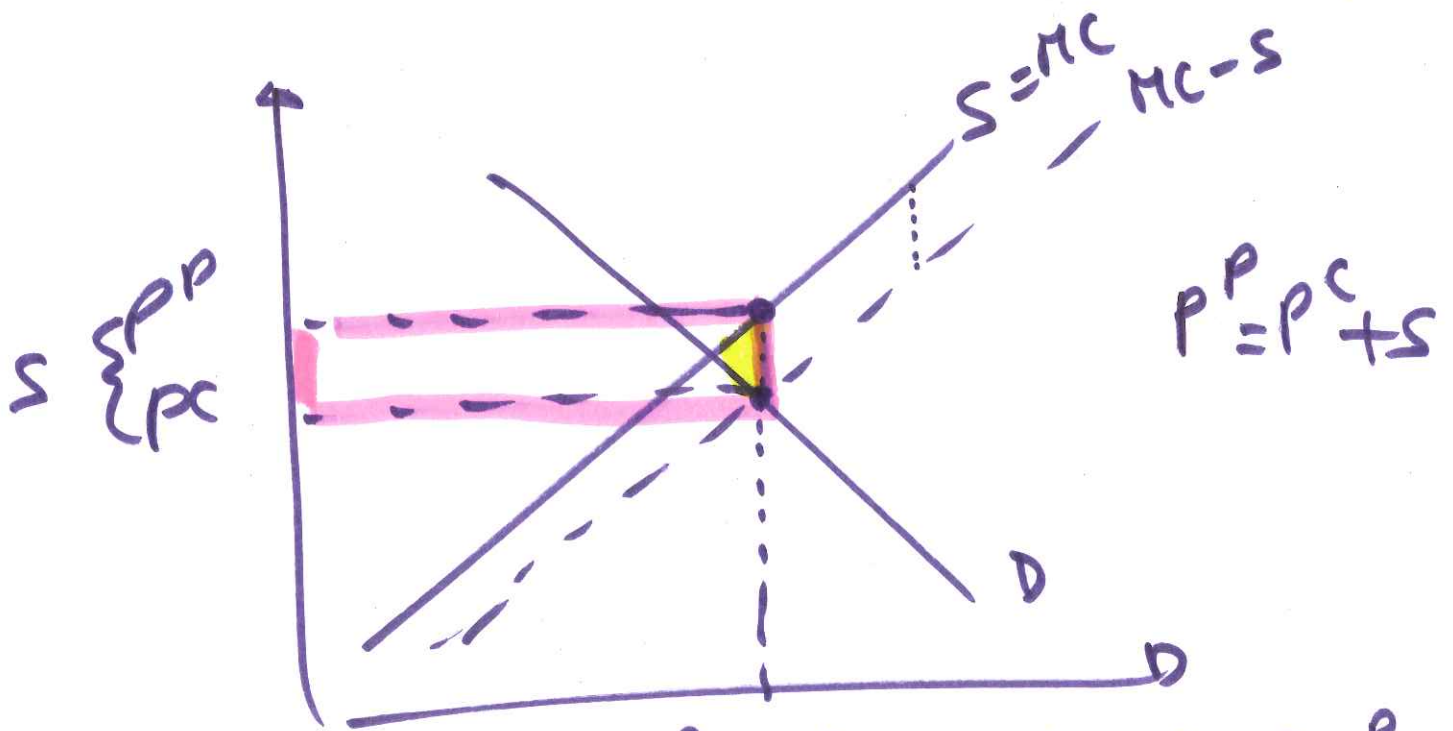
$$\Delta GA = +D$$

$$\Delta W = -C - E$$

- 4 -
PROD. SUBSIDY



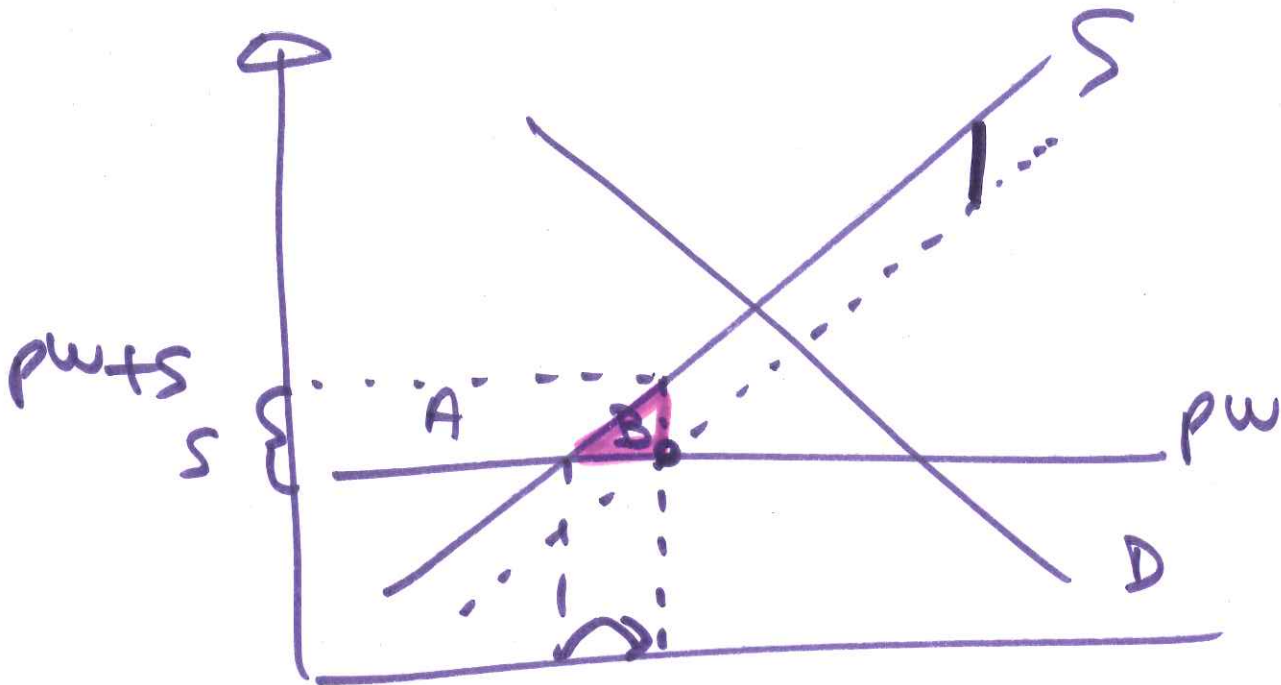
SPECIFIC: S PER UNIT PRODUCED



$\uparrow Q^P = Q^C$, $\downarrow P^C$, $\uparrow P^P$
 Gov. EXP = CHANGE = $Q^P \times S$

- 5 -

OPEN SMALL COUNTRY PROD. SUBSIDY



$$P^D = P^W \quad \text{CONSTANT}$$

$$Q^D \text{ SAME}, \quad P^C = P^D = P^W = \text{SAME}$$

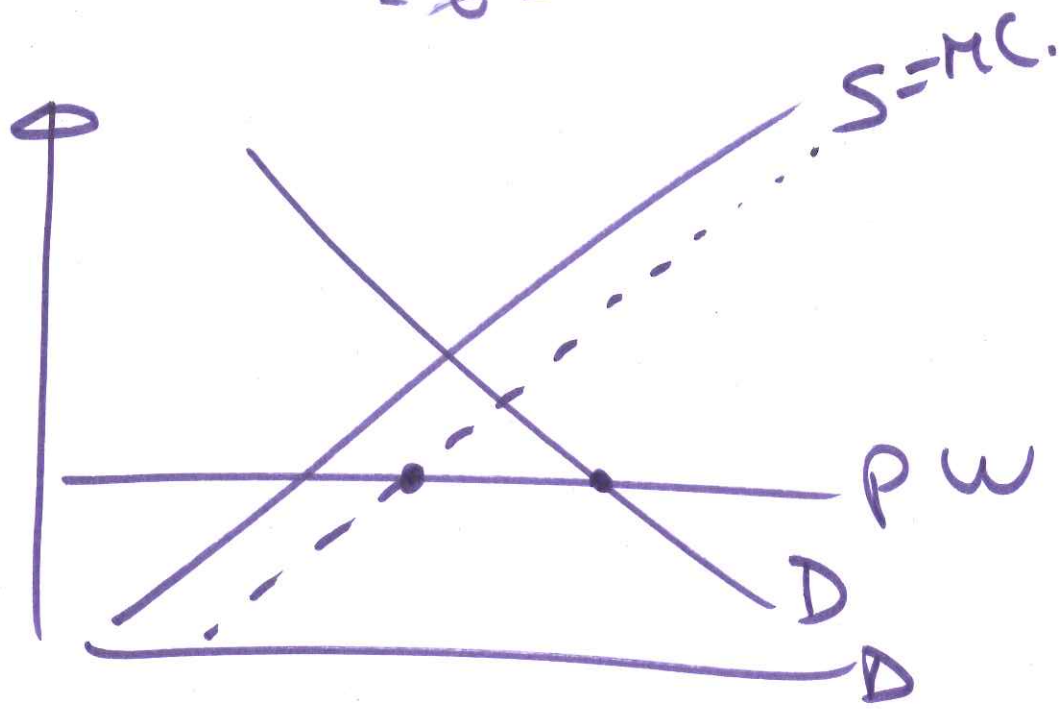
$$P^P = P^W + s = P^D + s$$

$$\Delta CS = 0$$

$$\Delta PS = +A$$

$$\Delta GA = -A - B$$

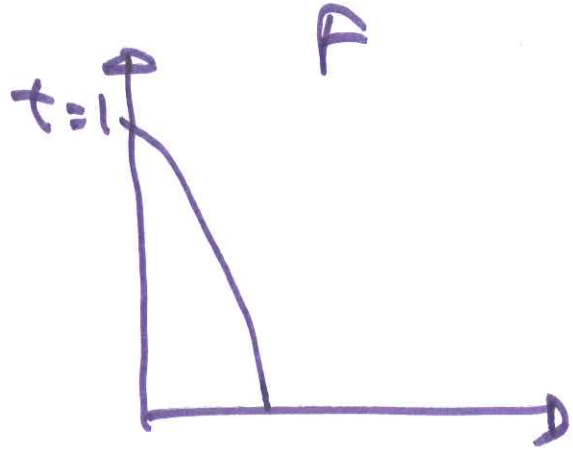
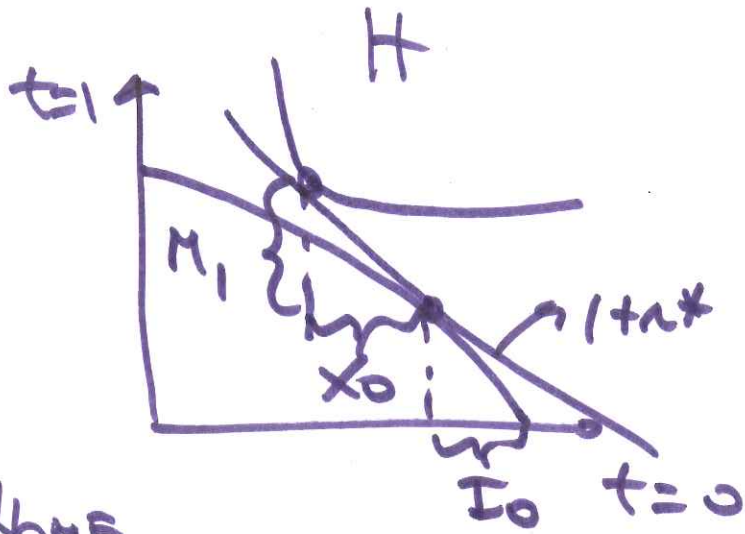
$$\Delta W = \underline{\underline{-B}}$$



↓ ENV. STANDARDS

⇒ ↓ Q

→ -



HOME

$$\underbrace{x_0}_{CA_0} (1+r^*) = \underbrace{M_1}_{-CA_1}$$

$t=0$

$$x_0 > 0 \quad M_0 = 0 \Rightarrow CA_0 > 0$$

RECEIVES FOU'S FROM FOREIGN \Rightarrow

↑ HOME OWNER HAS HELD ABROAD

(-) in S : $FA_0 < 0$

$t=1$

$$x_1 = 0 \quad M_1 > 0 \Rightarrow CA_1 < 0$$

RETURNING FOU'S FROM FOREIGN

↓ HOME OWNED \Rightarrow ASS.....

(+) in S : $FA_1 > 0$