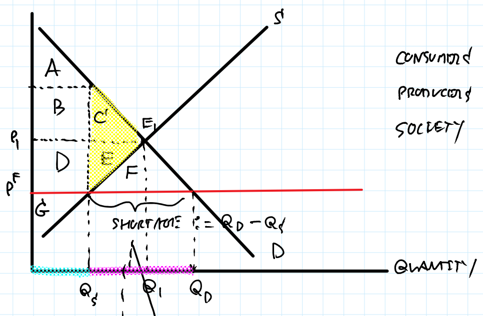
Friday, January 16, 2015 11:27 AM

APPLICATIONS

- PRICE CEILING
- PRICE SUPPORTS
- IMPORT TARIFFS
- IMPORT QUOTAS
- EXPORT SUBSIDIES

PRICE CEILINGS : A LEGALLY MAXIMUM PRICE SELLERS CAN CHARGE FROM BUYERS

INTENTION : TO HELP BUYERS — SUCCESS / FAILED ?

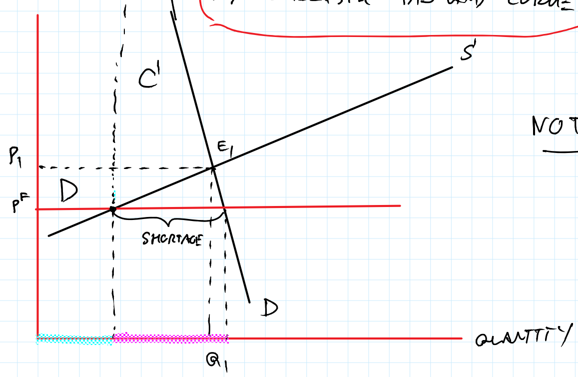


	FREE MKT B/F	PRICE CEILING A/F	Δ	
CONSUMERS	A+B+C'	A+B+D	+D−C'	BETTER OFF
PRODUCERS	D+E+G	G	−D−E	WORSE OFF
SOCIETY	~~A+B+C'+D+E+G~~	~~A+B+D+G~~	−C−E	

−C−E WELFARE LOSS TO THE SOCIETY

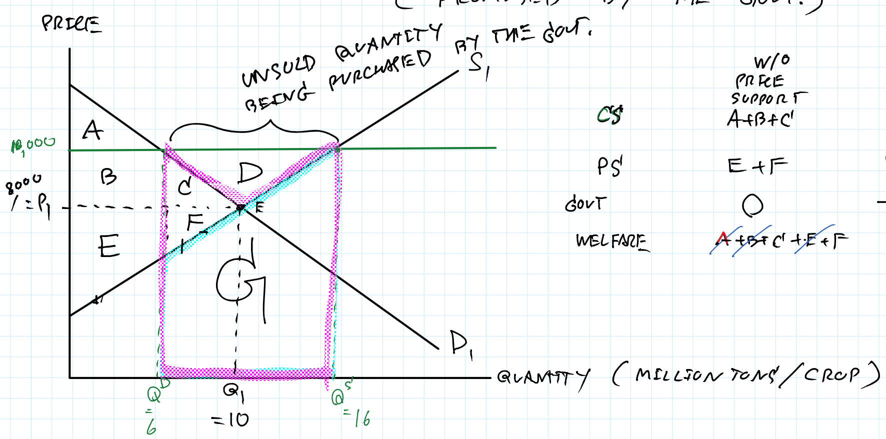
∴ GAINS OBTAINED BY THE GROUP OF BUYERS IS "SMALLER THAN" LOSSES INCURRED BY THE GROUP OF SELLERS.

W/ INELASTIC DEMAND CURVE



NOTICE THAT C' > D. SO " GROUP OF THE BUYERS SUFFERS FROM THE POLICY.

- PRICE SUPPORTS : A MINIMUM PRICE THAT SELLERS COULD RECEIVE WHEN THEY SELL THEIR GOODS. (PROMISED BY THE GOVT.)



	W/O PRICE SUPPORT	W/ PRICE SUPPORT	CHANGE	
CS	A+B+C'	A	−B−C	" WORSE OFF "
PS	E+F	B+C+D+E+F	+B+C'+D	" BETTER OFF "
GOVT	0	−C−D−F−G	−C−D−F−G	
WELFARE	~~A+B~~+C'+~~E~~+F	~~A~~+B ~~+E~~ −G	−G −C' −F	

= DEADWEIGHT LOSS

- APPLICATIONS ON INTL' TRADE

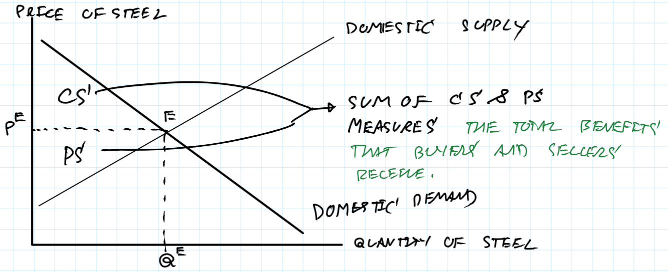
- WHAT DETERMINES WHETHER A COUNTRY IMPORTS OR EXPORTS A GOOD ? (EE451 → THEORY OF COMPARATIVE ADVANTAGE)
IN SHORT, IF COUNTRY A HAS A RELATIVELY LOWER OPPORTUNITY COST OF PRODUCING GOOD X THAN COUNTRY B

A GOOD "Y" (EE451 → THEORY OF COMPARATIVE ADVANTAGE)

IN SHORT, IF COUNTRY A HAS A RELATIVELY LOWER OPPORTUNITY COST OF PRODUCING GOOD X THAN COUNTRY B, A SHOULD EXPORT THE GOOD X.

- WHO GAINS AND WHO LOSES FROM FREE TRADE AMONG COUNTRIES?

EQUILIBRIUM W/O TRADE...



- DOMESTIC PRICE ADJUSTS TO "BALANCE" DEMAND AND SUPPLY.

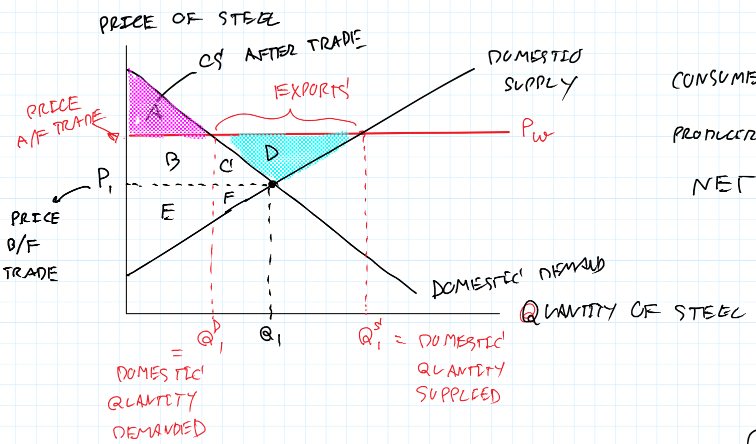
NOW, LET'S ALLOW FOR INTL' TRADE...

Q: IF THIS COUNTRY DECIDES TO ENGAGE IN INTL' TRADE, WILL IT BE AN IMPORTER OF AN EXPORTER OF STEEL?

A: COMPARE "DOMESTIC PRICE OF A GOOD W/O TRADE" AND "THE WORLD PRICE OF THE GOOD"

IF A COUNTRY HAS A COMPARATIVE ADVANTAGE, THEN THE DOMESTIC PRICE WILL BE BELOW THE WORLD PRICE, AND THE COUNTRY WILL BE AN EXPORTER OF THE GOOD.

IN SHORT, IF $P_{DOM} < P_{WORLD}$, THEN "EXPORTER OF THE GOOD."



	GAIN	LOSS
CONSUMERS		B C'
PRODUCERS	BCD	
NET	D	

⇒ INCREASE IN TOTAL WELFARE

NEW TS − OLD TS) = [A+B+C'+D+E+F] − (A+B+C'+E+F)

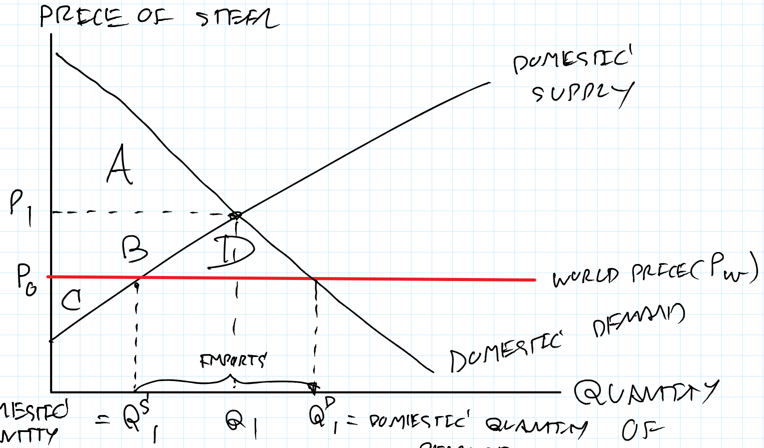
FREE TRADE IMPROVES TOTAL WELFARE OF A COUNTRY.

OR

"GAINS FROM TRADE"

IF THE WORLD PRICE OF STEEL IS LOWER THAN THE DOMESTIC PRICE, THE COUNTRY WILL BE "AN IMPORTER"

OF STEEL WHEN TRADE IS PERMITTED.



DOMESTIC QUANTITY SUPPLIED = Q_1^S

Q_1^D = DOMESTIC QUANTITY OF STEEL DEMANDED.

P_1 = PRICE B/F TRADE

P_0 = PRICE A/F TRADE

	W/O TRADE	W/TRADE	Δ
CS	A	A+B+D	+B+D
PS	B + C'	C'	−B
TS	A+B+C'	A+B+C'+D	+D

"GAINS FROM TRADE"

WK2 (20.1.15)

Wednesday, January 21, 2015 11:13 AM

DEMAND, SUPPLY, AND APPLICATIONS (CONTINUED)

- PRICE CEILING
- PRICE SUPPORT
- IMPACT OF FREE TRADE ON AN EXPORTING COUNTRY
- " ——————— " AN IMPORTING COUNTRY → TODAY
- IMPACT OF TRADE RESTRICTIONS ON WELFARE OF STAKEHOLDERS
  - DOMESTIC CONSUMERS
  - DOMESTIC PRODUCERS
  - GOVERNMENTS
  - LICENSE HOLDERS (IN IMPORT QUOTA CASE)

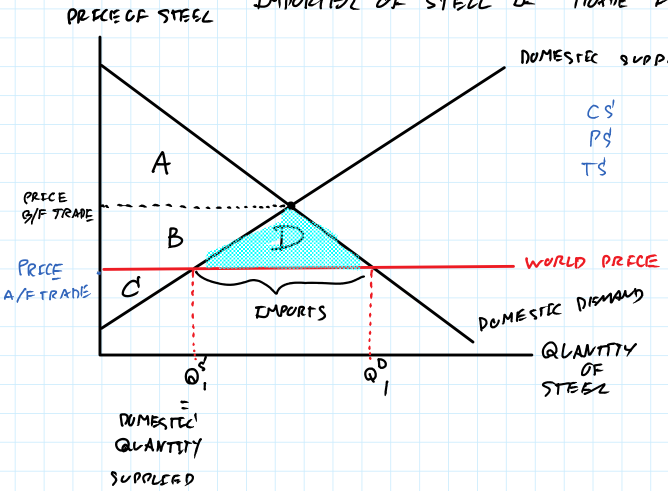
  - IMPORT TARIFFS
  - IMPORT QUOTA
  - EXPORT SUBSIDY

  } → TODAY

INTERNATIONAL TRADE AND THE IMPORTING COUNTRY

BASIC IDEA: IF THE WORLD PRICE IS LOWER THAN THE DOMESTIC PRICE, THE COUNTRY WILL BE AN IMPORTER OF STEEL IF TRADE IS PERMITTED.

X201T at 21-Jan-15 11:40 AM



	B/F TRADE	A/F TRADE	IMPACT OF FREE TRADE
CS	A	A+B+D	+B+D
PS	B+C	C	−B
TS	A+B+C	A+B+C+D	(+D)

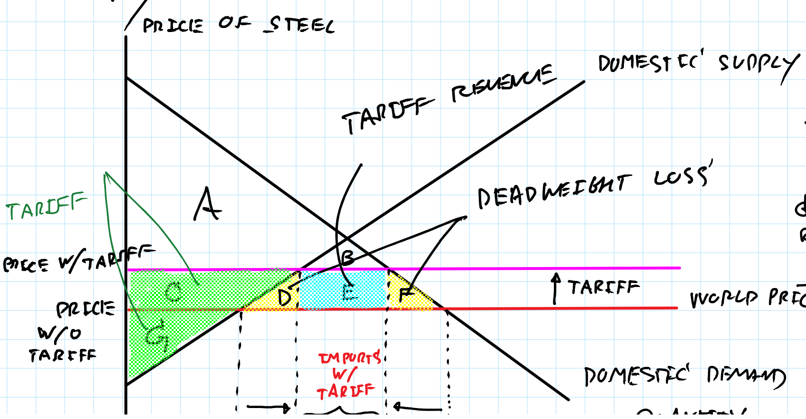
SHOWS THE INCREASE IN TOTAL SURPLUS AND IT REPRESENTS "GAINS FROM TRADE"

CONCLUSION: ① W/ FREE TRADE, EITHER FOR EXPORTING COUNTRY OR FOR IMPORTING COUNTRY, SOME GROUPS LOSE AND SOME GROUPS GAIN.

② THE NET CHANGE IN TOTAL SURPLUS IS "POSITIVE" IN BOTH CASES
- EXPORTING COUNTRY CASE
- IMPORTING COUNTRY CASE.

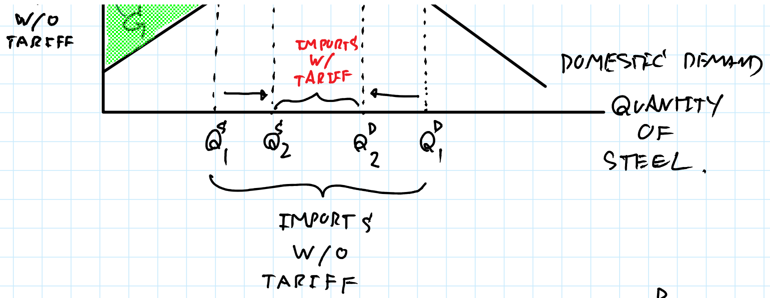
IMPACT OF IMPORT TARIFFS

TARIFFS ARE TAXES ON IMPORTED GOODS. TARIFFS RAISE THE PRICE OF IMPORTED GOOD ABOVE THE WORLD PRICE BY THE AMOUNT OF THE TARIFF.



	B/F TARIFF	A/F TARIFF	IMPACT OF TARIFF
CS	A+B+C+D+E+F	A+B	−(C+D+E+F)
PS	G	G+C	+C
GOVT. REVENUE	0	E	+E
TS	~~A+B+C+D+E+F+G~~	~~A+B+G+C~~+E	−D−F

"SHOWS THE FALL IN TOTAL SURPLUS AND REPRESENTS



SHOWS THE "FALL" IN TOTAL SURPLUS AND REPRESENTS THE DEADWEIGHT LOSS OF TARIFF.

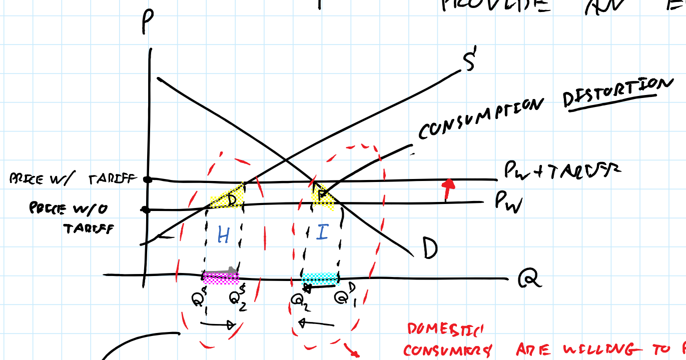
W/O TARIFF : DOMESTIC BUYERS BUY Q_1^D AND DOMESTIC PRODUCERS PRODUCE AND SELL Q_1^S. AMOUNT OF IMPORTS $= Q_1^D - Q_1^S$.

W/ TARIFF : DOMESTIC BUYERS DECREASE THEIR PURCHASE FROM Q_1^D TO Q_2^D IN RESPONSE TO HIGHER PRICE ($= P_w$ + TARIFF)
DOMESTIC PRODUCERS INCREASE THEIR PRODUCTION FROM Q_1^S TO Q_2^S WHEN THEY RECEIVE A HIGHER PRICE.
AMOUNT OF IMPORTS NOW IS $Q_2^D - Q_2^S$ WHICH IS "SMALLER" THAN THE AMOUNT OF IMPORT W/O TARIFF. $(= Q_1^D - Q_1^S)$.

IMPACT OF A TARIFF :
- DOMESTIC CONSUMERS LOSE. (WORSE OFF)
- DOMESTIC PRODUCERS GAIN. (BETTER OFF)
- GOVERNMENT GAINS TARIFF REVENUE (= AREA E)
- DWL OF TARIFF $= (-D-F)$ = "FALL" IN TOTAL SURPLUS

ADDITIONAL CONSIDERATION

WHY DEADWEIGHT LOSS OCCURS ? PROVIDE AN ECONOMIC INTUITION.



W/ TARIFF, DOM. PRODUCERS INCREASE THEIR PRODUCTION FROM Q_1^S TO Q_2^S.

- COST OF PRODUCING $Q_1^S Q_2^S$ WOULD BE ONLY H IF IT IS PRODUCED BY THE REST OF THE WORLD
- HOWEVER, THE COST OF PRODUCING THIS AMOUNT BY DOMESTIC PRODUCER IS H + D !!!

WHICH IS CLEARLY HIGHER.

FROM EFFICIENCY VIEWPOINT, WE SHOULD IMPORT THIS AMOUNT FROM THE REST OF THE WORLD INSTEAD OF PRODUCING DOMESTICALLY.

SO, AREA D REPRESENTS "DWL THAT ARISES FROM INEFFICIENCY IN PRODUCTION".
WE CAN CALL "PRODUCTION DISTORTION".

DOMESTIC CONSUMERS ARE WILLING TO PAY F + I WANT TO RECEIVE THE QUANTITY $Q_D^2 Q_1^D$

THE COST OF PRODUCING THIS AMOUNT IS ONLY AREA I.

NOW THE PROPSPECTIVE SURPLUS OF F JUST DISAPPEARED B/C OF THIS TARIFF
(i.e, CONSUMERS ARE NOT ABLE TO BUY THIS AMOUNT. SO NO BENEFITS RECEIVED.

[= CONSUMPTION DISTORTION]

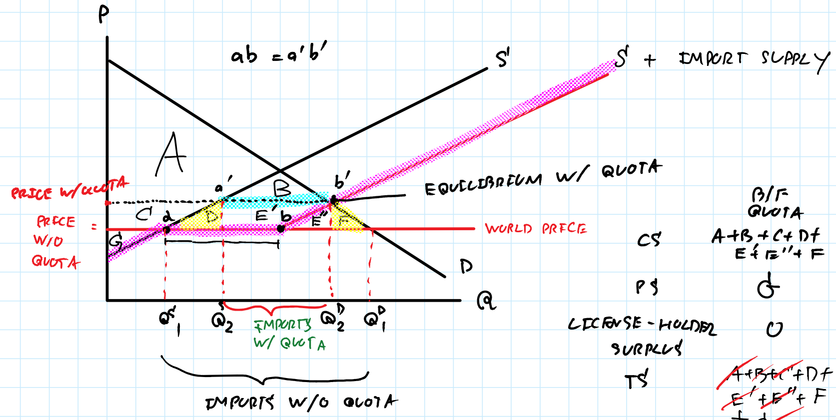
"DWL THAT ARISES FROM INEFFICIENCY IN PRODUCTION."
WE CAN CALL "PRODUCTION DISTORTION".

$$\boxed{DWL = \underbrace{-D}_{\text{FROM PRODUCTION DISTORTION}} \underbrace{-F}_{\text{FROM CONSUMPTION DISTORTION}}}$$

IMPACT OF IMPORT QUOTA

AN IMPORT QUOTA IS A DIRECT RESTRICTION ON THE QUANTITY OF SOME GOOD THAT MAY BE IMPORTED.

AN IMPORT QUOTA WILL RAISE DOMESTIC PRICE BY THE SAME AMOUNT AS A TARIFF THAT LIMITS TO THE SAME LEVEL.

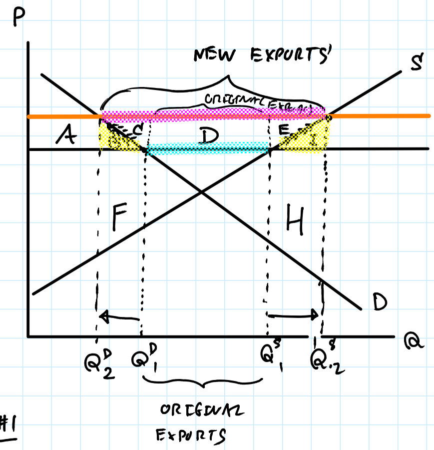


	B/F QUOTA	A/F QUOTA	IMPACT OF QUOTA
CS	A+B+C+D+E'+E''+F	A+B	−C−D+E'+E''+F
PS	G	G+C	+C
LICENSE-HOLDER SURPLUS	0	E'+E''	+(E'+E'')
TS	~~A+B+C+D+E'+E''+F+G~~	~~A+B+G+C+E'+E''~~	(−D−F)

SHOWS THE FALL IN TOTAL SURPLUS AND REPRESENTS DWL OF QUOTA.

EXPORT SUBSIDY

AN EXPORT SUBSIDY IS A GOVERNMENT PAYMENT TO A FIRM THAT SHIPS A GOOD ABROAD, SO DOMESTIC PRODUCERS RECEIVE THE WORLD PRICE PLUS THE SUBSIDY FOR EACH UNIT OF A PRODUCT SHIPPED ABROAD, THEREFORE SHIFTING SALES FROM DOMESTIC TO FOREIGN MARKETS.



SUBSIDY PER UNIT

$P_w + S = 100 + 10$ BAHT

$P_w = 100$ BAHT

	GAIN	LOSS
CONSUMER		AB
PRODUCER	ABCDE	
GOVERNMENT		BCDEI
	~~ABCDE~~	~~AB~~ + B~~CDE~~I
NET		BI

FACT#1

GIVEN P_w, DOMESTIC PRODUCERS PRODUCE Q^S_1.
DOMESTIC CONSUMERS PURCHASE Q^D_1.
QUANTITY OF EXPORTS = $Q^S_1 - Q^D_1$

FACT#2

WHEN EXPORT SUBSIDY IS INTRODUCED, (SUBSIDY/UNITS, SAY $S = 10$ BAHT/UNIT.)
IT WILL RAISE THE DOMESTIC PRICE TO $P_w + S$.

- DOMESTIC CONSUMERS REDUCE THEIR CONSUMPTION TO Q^D_2.

- DOMESTIC PRODUCERS INCREASE THEIR PRODUCTION TO Q^S_2.
- NEW EXPORTS = $Q^S_2 - Q^D_2$ (HIGHER THAN ORIGINAL AMOUNT OF EXPORTS)

FACT#3

CONSUMERS LOSE.
LOSS IN CONSUMER SURPLUS = AB

PRODUCERS GAIN.
GAIN IN PRODUCER SURPLUS = ABC'D E

INCREASE IN PS FOR THOSE FIRMS THAT WERE PRODUCING B/F THE SUBSIDY

INCREASE IN PS FOR THOSE FIRMS THAT ARE INDUCED TO PRODUCE THE AMOUNT OF $Q^S_2 - Q^S_1$.

NET ? → WELFARE LOSS = BI
(OR DWL)

LET'S SEE WHY DWL OF BI ARISES...

$\boxed{\text{ECONOMIC INTUITION}}$

LET'S CONSIDER THE B FIRST.

NEW EXPORT REVENUE OF $Q^D_1 Q^D_2$ = F

LOSS OF BENEFITS DOMESTIC CONSUMERS WHEN THIS AMOUNT OF $Q^D_1 Q^D_2$ ARE BEING SOLD TO FOREIGN CONSUMERS = BF

NET B

FORGONE BENEFITS BEYOND THE NEW EXPORT REVENUE RECEIVED!

NEXT, LET'S CONSIDER THE DWL OF I

NEW EXPORT REVENUE THAT AMOUNT OF $Q^S_1 Q^S_2$ GENERATED WHEN THIS AMOUNT IS SOLD ABROAD = H

TOTAL PRODUCTION COST = HI

i.e., AREA UNDER THE SUPPLY CURVE FROM Q^S_1 TO Q^S_2

NET I

SHOWS "INEFFICIENCY IN PRODUCTION (WHY?)

B/C COST OF PRODUCING THESE UNITS ($= Q^S_1 Q^S_2$) EXCEEDS TRUELY REVENUE THE PRODUCERS EARN FROM SELLING THIS AMOUNT!

NOTE WE DO NOT TAKE INTO A/C THE CHECK OF 10 BAHT THAT PRODUCERS GET B/C THIS PART OF REVENUE IS JUST A TRANSFER FROM TAXPAYERS → GOVERNMENT → POCKETS OF

PRODUCERS

$\boxed{\text{HW1}}$ EVALUATE WELFARE OF ALL STAKEHOLDER IN AN EXPORTING COUNTRY WHERE EXPORT TAX IS INTRODUCED, i.e, WHEN EXPORTING A UNIT OF GOOD, DOMESTIC PRODUCERS MUST PAY t BAHT/UNIT. FULLY EXPLAIN W/ DIAGRAM.

DUE DATE: WED 28 JAN 2015 (BEFORE CLASS BEGIN)

REMARK : BE AWARE OF "PLAGIARISM".