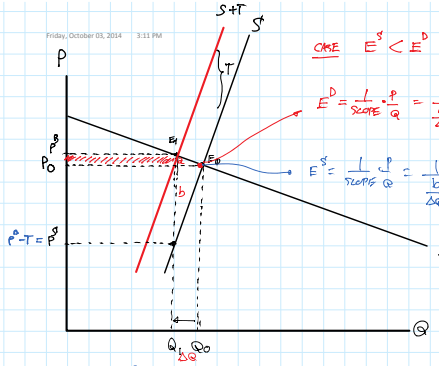


CASE $E^S < E^D$

$E^D = \frac{1}{\text{SLOPE}} \cdot \frac{P}{Q} = \frac{1}{\frac{a}{\Delta Q}} \cdot \frac{P_0}{Q_0}$ — ①

$E^S = \frac{1}{\text{SLOPE}} \cdot \frac{P}{Q} = \frac{1}{\frac{b}{\Delta Q}} \cdot \frac{P_0}{Q_0}$ — ②

② ÷ ① ⇒ $\frac{E^S}{E^D} = \frac{a}{b}$

IN THIS CASE: $a < b$

OR $\frac{a}{b} < 1$

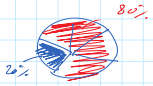
SO $\frac{E^S}{E^D} < 1 \Rightarrow E^S < E^D$.

$t_B = \frac{P^B - P_0}{T}$ $\quad t_S = \frac{P^0 - (P^B - T)}{T}$

EX: $P^B = 42$, $P_0 = 40$, $P^B - T = P^S = 32$

$t_B = \frac{42-40}{10} = \frac{2}{10} = \frac{1}{5} \Rightarrow 20\%$

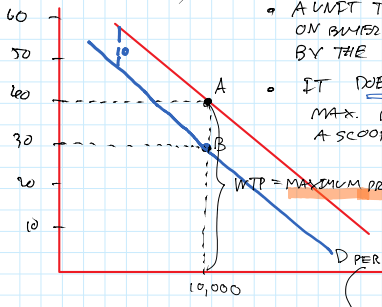
$t_S = \frac{40-32}{10} = \frac{8}{10} = \frac{4}{5} \Rightarrow 80\%$



VERIFY THAT $t_B + t_S = 1$. (DIY)

A UNIT TAX ON BUYERS

A 10 BAHT OF UNIT TAX IS IMPOSED ON BUYERS



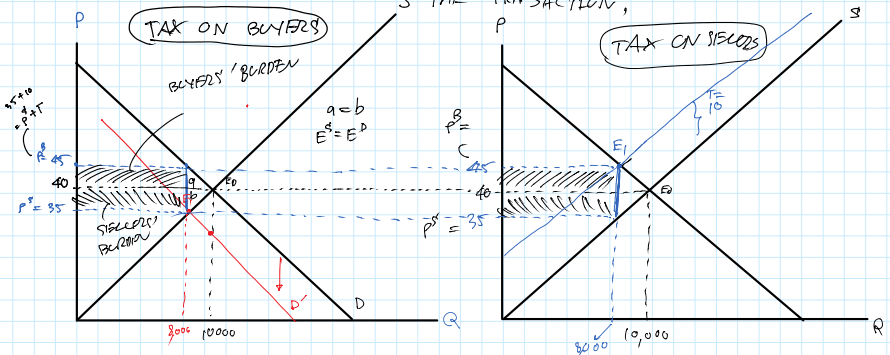
- A UNIT TAX SHIFTS THE DEMAND CURVE DOWNWARD ON BUYERS BY THE SIZE OF THE TAX (T=10)
- IT DOES NOT CHANGE WTP OF THE BUYERS*** MAX. PRICE A BUYER WANT TO PAY TO GET A SCOOP IS STILL = 40 BAHT/SCOOP → GIVE 30 TO SELLERS, PUT 10 INTO THE TAX BOX

WTP = MAXIMUM PRICE BUYERS ARE WILLING TO PAY FOR A SCOOP OF ICECREAM

D PERCEIVED BY SELLERS

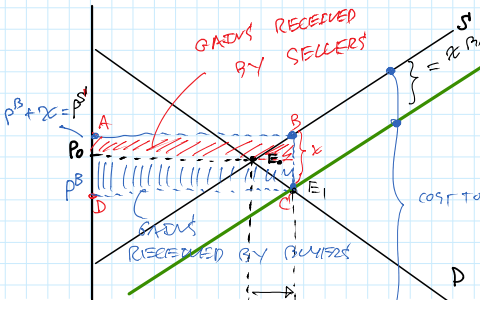
Q (# SCOOPS / WK)

TO TELL SELLERS THAT HOW MUCH HE ACTUALLY GET FROM "WTP OF 40" OR FROM S^T THE TRANSACTION,



- REGARDLESS OF WHO IS LEGALLY RESPONSIBLE TO PUT MONEY INTO THE TAX BOX, OUTCOMES ARE EQUIVALENT !!! eg b

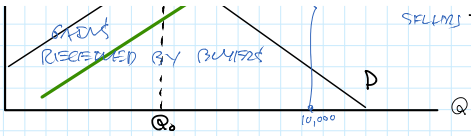
SUBSIDY ON SELLERS



SUPPOSE GOVT. GIVES S+ SUBSIDY TO SELLERS:

SUBSIDY FOR EVERY UNIT SELLERS PRODUCE AND SELL, SELLERS GET x BAHT/UNIT.

THE SUPPLY CURVE SHIFTS DOWNWARD BY THE SIZE OF SUBSIDY (HERE, x BAHT/UNIT)



SELLING THE SUPPLY CURVE SHIFTS DOWNWARD BY THE SIZE OF SUBSIDY (HERE, X BAHT/UNIT)

ABCD = GOVT. BUDGET USED TO IMPLEMENT THIS POLICY.

	B/F	A/F	Δ
CS	e	g	.
PS	f	g	.
TS	f	g	.

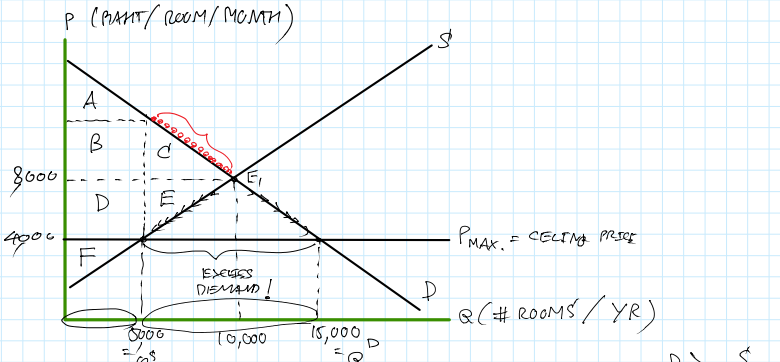
PRICE CEILING : A LEGALLY MAXIMUM PRICE SELLERS CAN CHARGE TO BUYERS

THE POLICY INTENDS TO HELP BUYERS TO BE ABLE TO BUY THE GOOD.

CONSIDER MARKET FOR APARTMENTS AROUND THA PRACHAN CAMPUS. ASSUME THAT THE MARKET IS PERFECTLY COMPETITIVE.

ON DEMAND SIDE : STUDENTS, TENANTS

ON SUPPLY SIDE : LANDLORDS



RESULT#1 PRICE CEILING CREATES EXCESS DEMAND: $Q^D > Q^S$ (15,000) (5000)

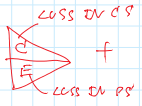
RESULT#2 ROOMS WILL BE ALLOCATED BY NON-PRICE MECHANISMS :

- FIRST COME FIRST SERVED
- LUCKY DRAW
- DISCRIMINATION
  - BY RACE
  - BY GENDER
  - BY APPEARANCE
  - ETC.

RESULT#3 QUALITY OF ROOMS GETS WORSE IN THE MEDIUM AND LONG TERM.

RESULT#4 (ON WELFARE ANALYSIS) WHO GAINS / WHO LOSES ?

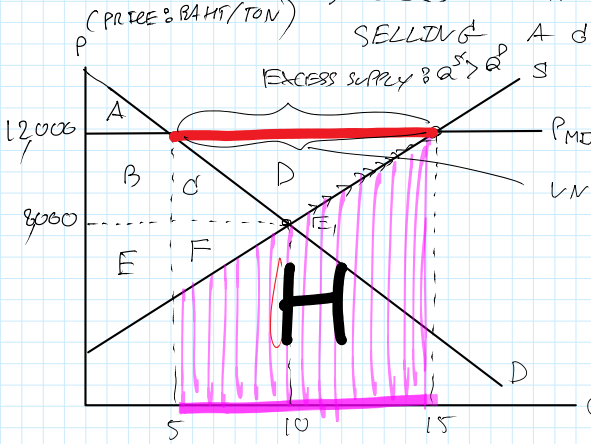
	FREE MKT	W/PRICE CEILING	Δ
CS	A+B+C	A+B+D	+D−C ⋛ 0 ☺☹ BETTER OFF / WORSE OFF
PS	D+E+F	F	−D−E < 0 ☹
TS	A+B+C+D+E+F	A+B+D+F →	=−C−E



DEADWEIGHT LOSS: LOSS TO THE SOCIETY AS A WHOLE.

NO ONE GETS IT

PRICE FLOOR : A LEGALLY MINIMUM PRICE SELLERS MUST GET WHEN SELLING A GOOD.



CONSIDER MARKET FOR PADDLE RICE.

UNSOLD QUANTITY OF RICE = 15 − 5 = 10 MILLION TON

RESULT #1 PRICE FLOOR CREATS EXCESS SUPPLY: $Q^S > Q^D$ AT THE $P = 12{,}000$.

RESULT #2

ΔCS = NEW CS − OLD CS

= A − (A+B+C)

= −B − C

CONSUMERS ARE WORSE OFF.

ΔPS = NEW PS − OLD PS

= (B+E) − (E+F)

= B − F

IF B − F > 0, PRODUCERS ARE BETTER OF

IF B − F < 0, PRODUCERS ARE WORSE OFF ☹

UNDER THE CASE THAT FARMER PRODUCES ONLY 5 MILLION TON !

WHAT IF FARMERS PRODUCES 15 MILLION TONS ?

ΔPS = NEW PS − OLD PS

= (B+E−H) − (E+F)