

# Estimazione di Coase

a. MKT (CP)

$$TC = 5Q + 0.25Q^2$$

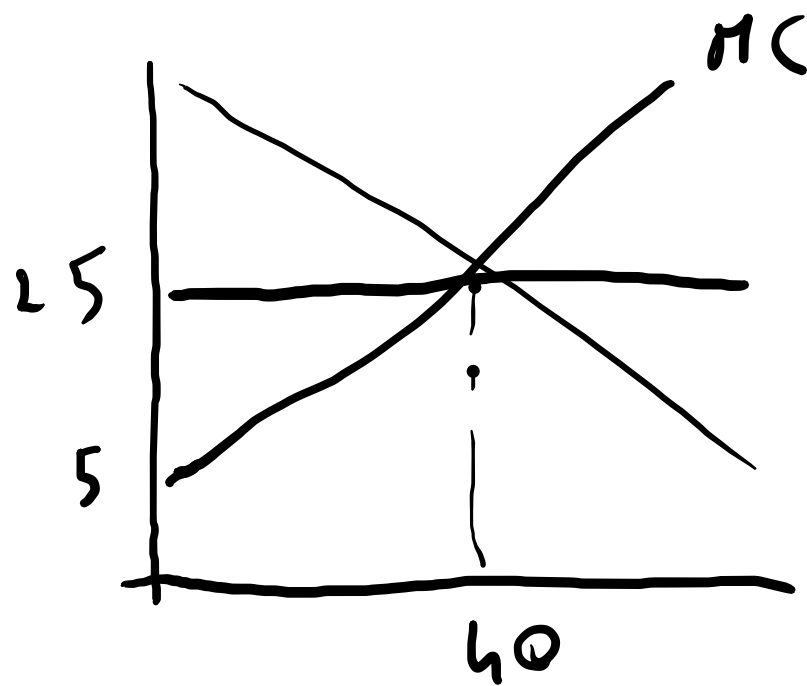
$$P = 25$$

$$MC = 5 + 0.5Q$$

$$25 = 5 + 0.5Q$$

$$Q^* = 40$$

$$\begin{aligned} \pi &= 25 \cdot 40 - 5 \cdot 40 - \frac{1}{4} 40^2 \\ &= 400 \end{aligned}$$



## 2) EXT E SOLUZIONI

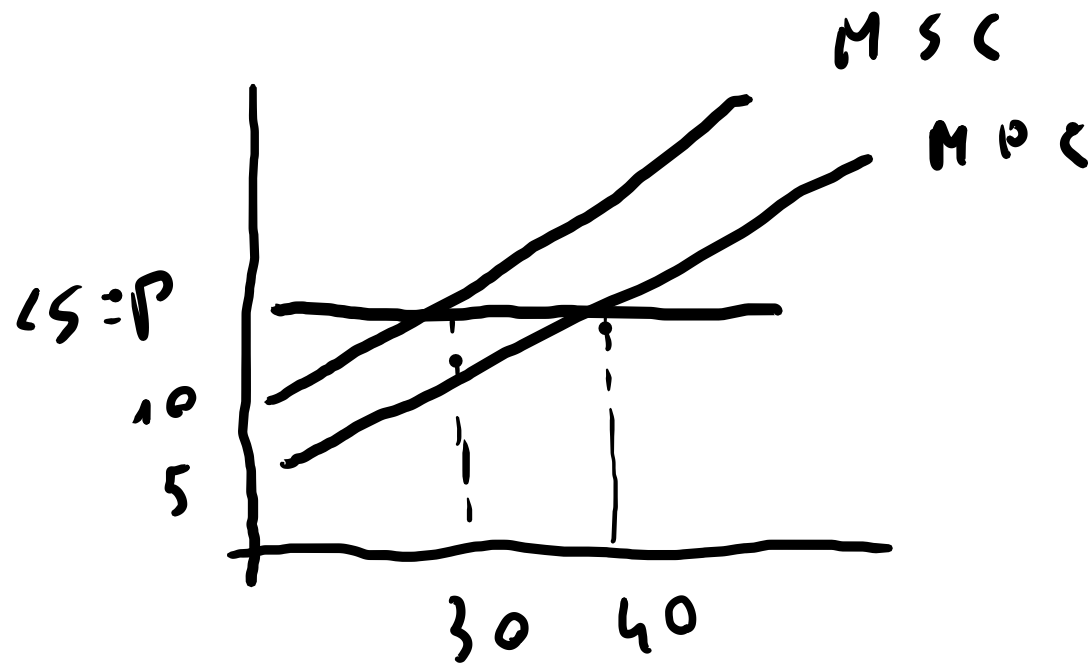
$$EC = 5Q$$

$$MSC = 10 + 0.5Q$$

$$TSL = 5Q + 5Q + 0.25Q^2$$

$$25 = 10 + 0.5Q$$

$$Q^{**} = 30$$



$$\begin{aligned}\pi &= 25 \cdot 30 - 5 \cdot 30 - \frac{1}{4} 30^2 \\ &= 375\end{aligned}$$

$$EC = 5 \cdot 30 = 150$$

$$\underline{\underline{225}}$$



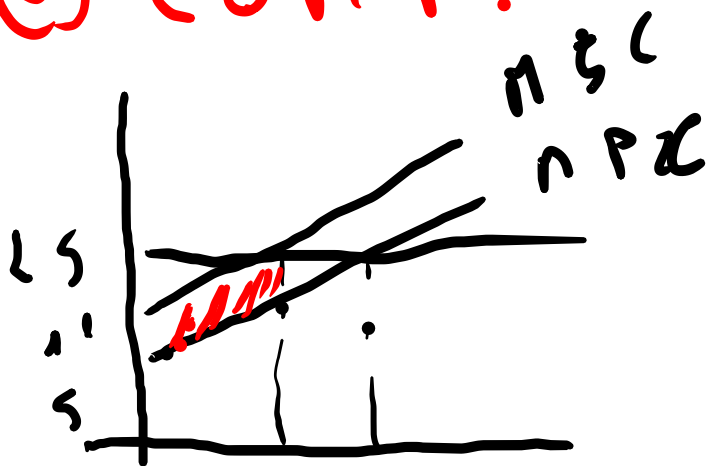
**(a) REGO 12.**

$Q^* = 30$

$P = 37.5$

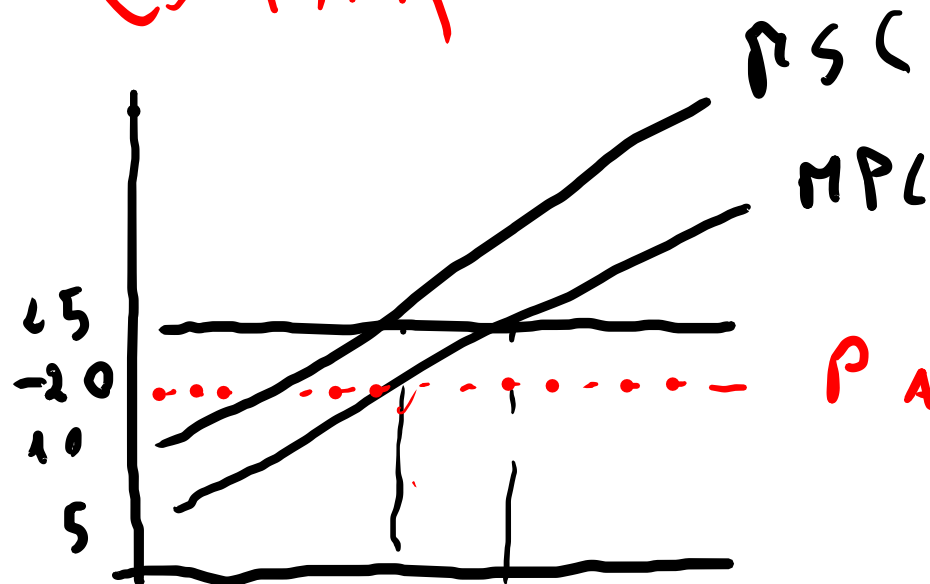
$EC = 150$

**(c) COMP.**



$C = 150 (15 \cdot 30)$

**(b) TAX**



$Q^S$	$Q^*$
30	40

$P$  after Tax

$5 + 0.5Q = P - X$

$5 + 0.5 \cdot 30 = 25 - X$

$X = 5$



M C L

REG	375	0	0
Tax	225	150	0
Comp	225	0	150

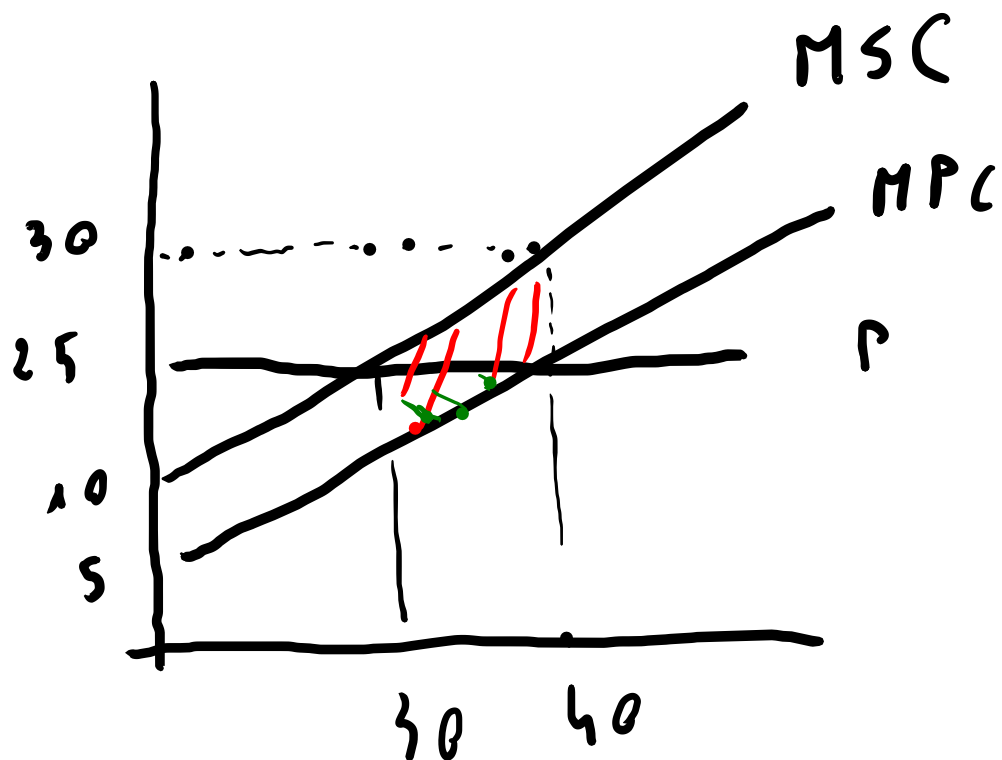
### 3. COASE

a) IMP ha il DIRITTO

$$P_{MAX}^L = 5 \cdot 10 = 50$$

$$10 + 0.5 Q = 30$$

$$P_{MIN}^{IMP} = \frac{5 \cdot 10}{2} = 25$$



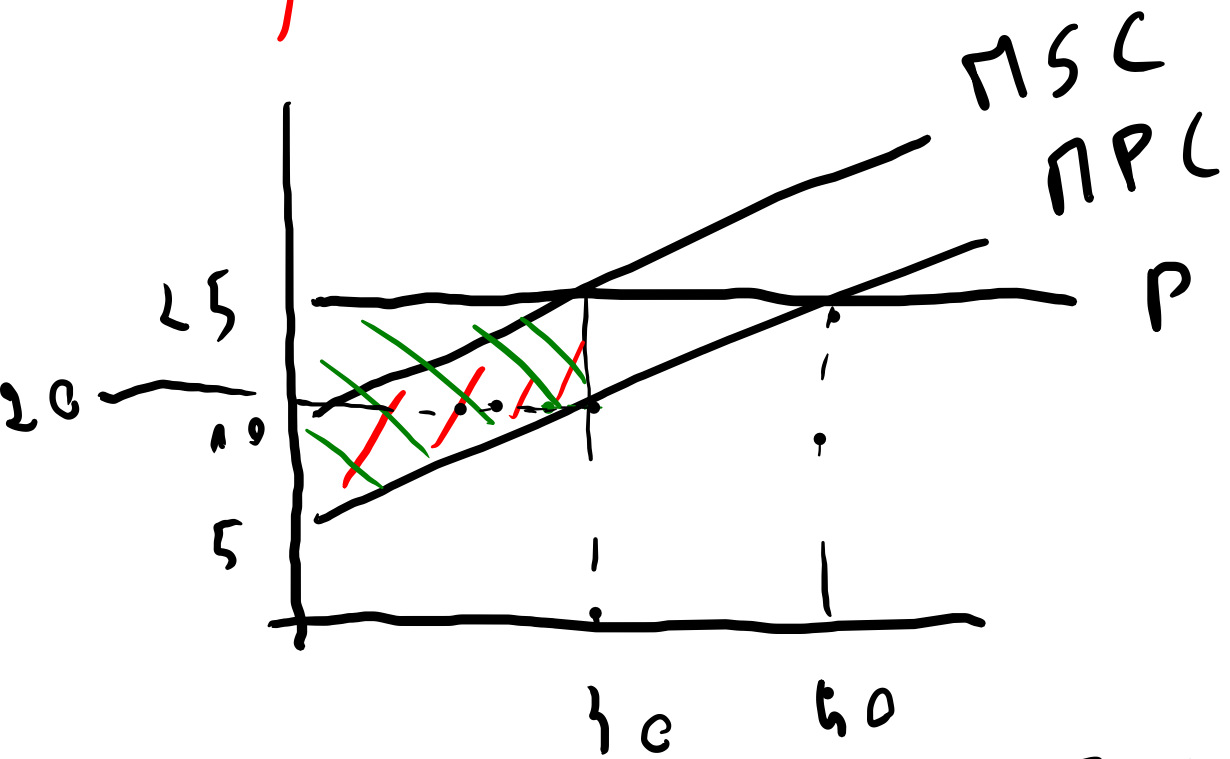
$$50 - x = x - 25$$

$$2x = 75 \quad x = 37.5$$

$$\hat{\pi}^{IMP} = 375 + 37.5 = 412.5 > 400$$

$$\hat{\pi}^L = -150 - 37.5 = -187.5 < 200$$

b) LAGHETTO LE IDIRITTI



$$375 - x = x - 150$$

$$x = 262,5$$

$$5 \cdot 30 = 150$$

$$\frac{15 \cdot 30}{2} = \frac{450}{2} = 225$$

$$P_{MIN}^L = 5 \cdot 30 = 150$$

$$P_{MAX}^I = 375$$

$$MPC(Q=30) = 5 + 0.5 \cdot 30 = 20$$

$$\pi^I = 375 - 262,5$$

$$\pi^L = 262,5 - 150$$