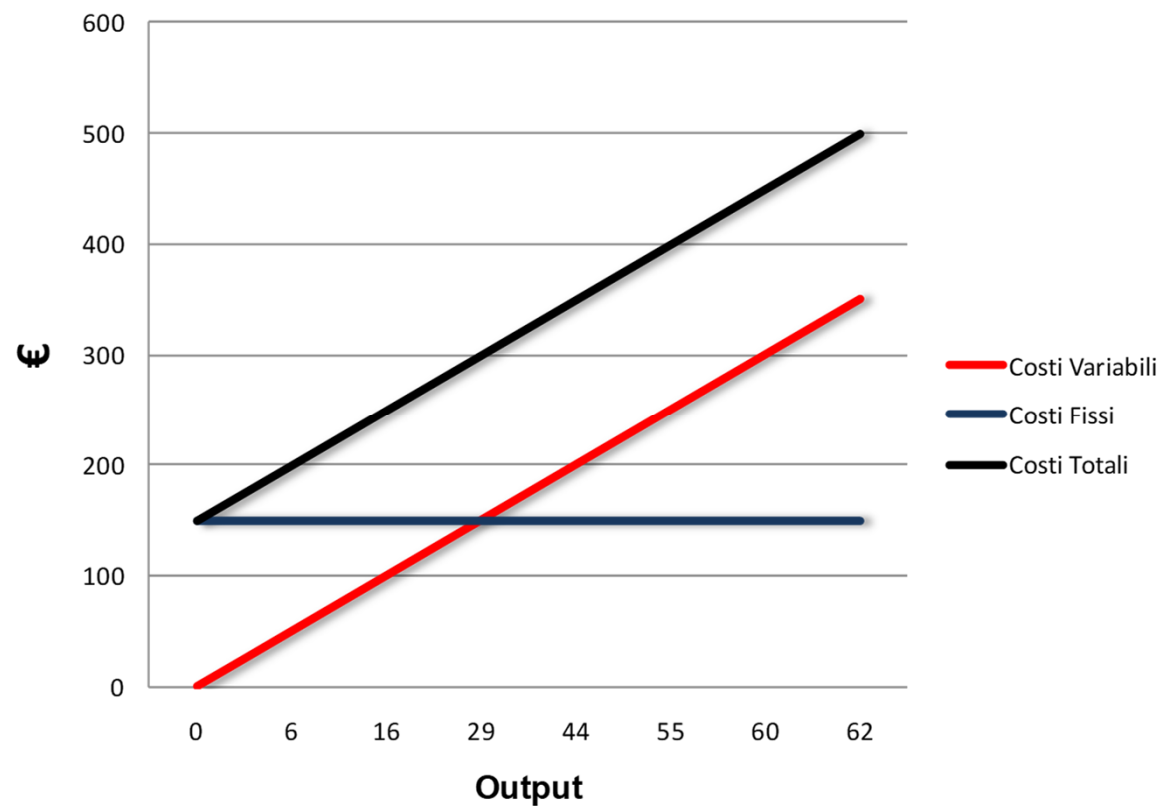


# Principi

Prof. Edoardo Mollona

# I costi: fissi e variabili



# I costi: la funzione di costo medio nel breve periodo

Costi medi fissi (CMF)

$$\frac{CF}{Q}$$

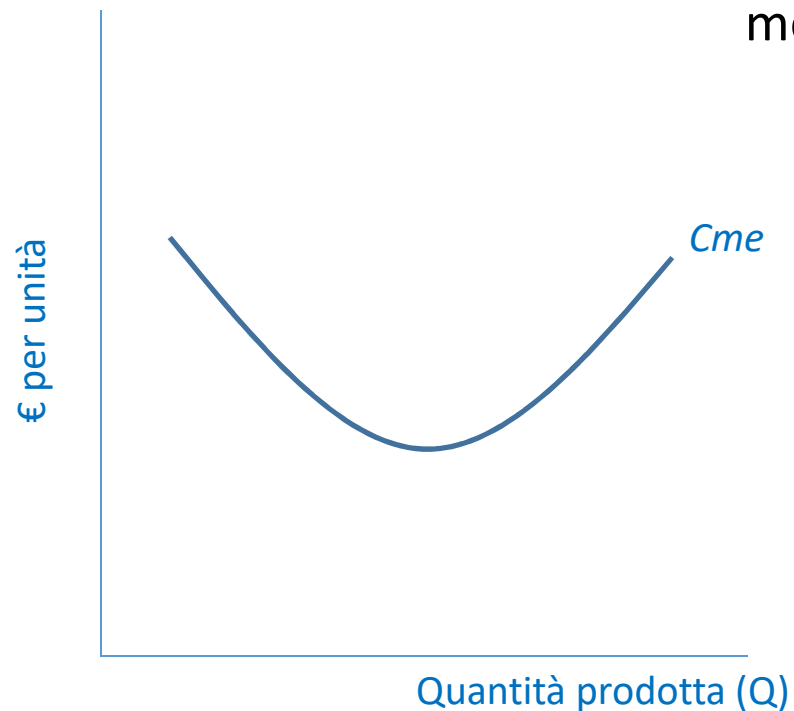
Costi medi variabili (CMV)

$$\frac{CV_t}{Q}$$

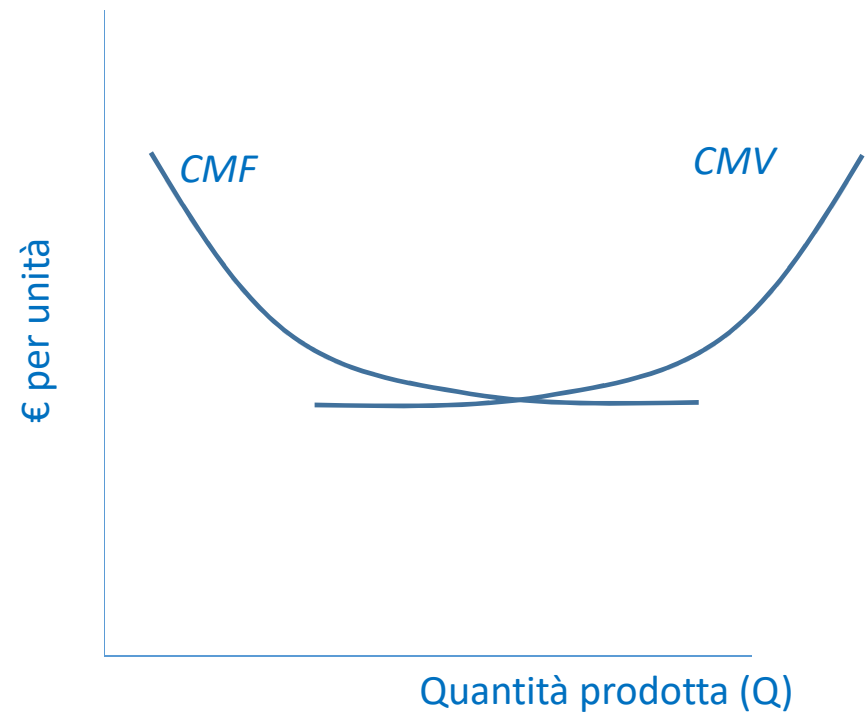
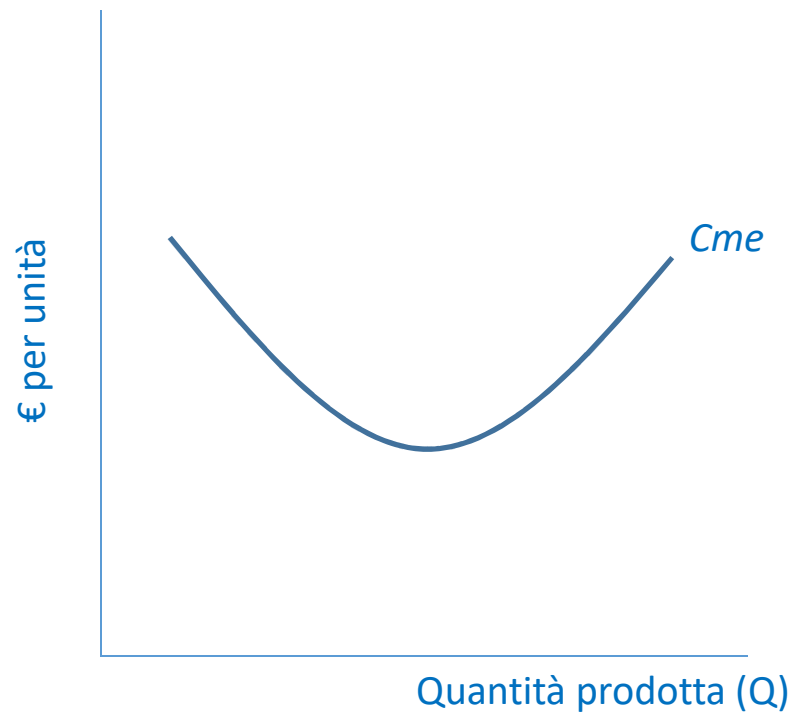
# I costi: la funzione di costo medio

La funzione di costo medio:

$$Cme(Q) = \frac{CT(Q)}{Q}$$



# I costi: la funzione di costo medio nel breve periodo



# I costi marginali

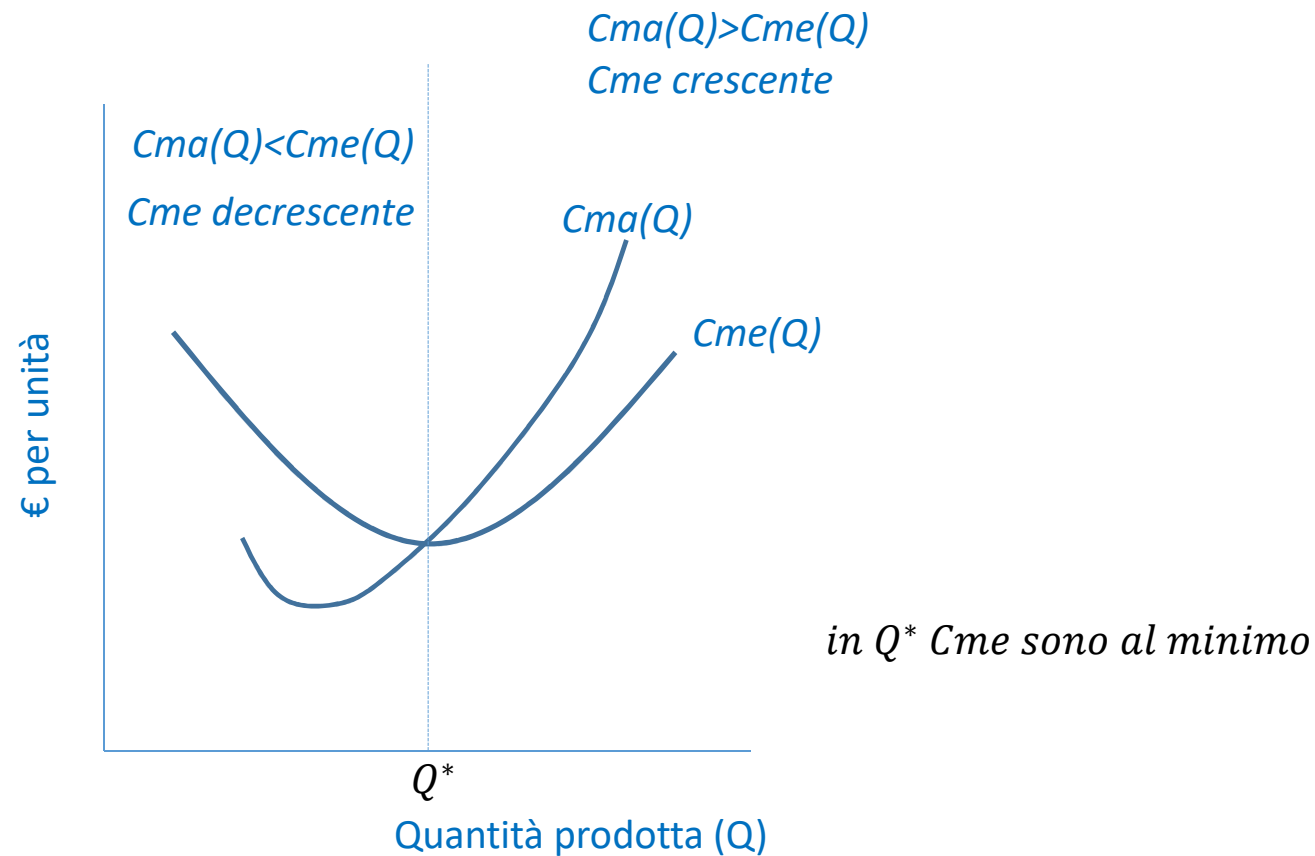
La funzione di costo  
medio:

$$Cme(Q) = \frac{CT(Q)}{Q}$$

La funzione di costo  
marginale:

$$Cma(Q) = \frac{CT_{Q_0 + \Delta Q} - CT_{Q_0}}{\Delta Q}$$

# Relazione tra funzione di costo medio e marginale



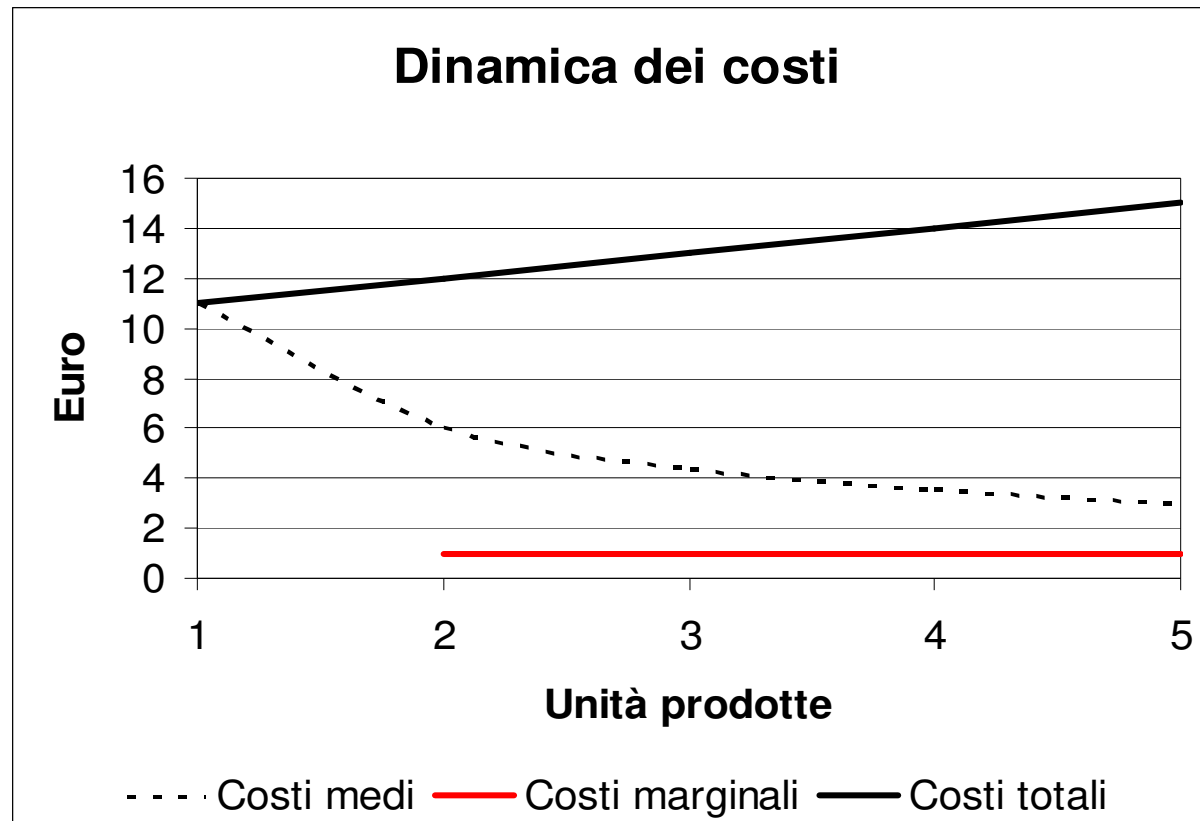
# I costi: Relazione tra Costi medi e Costi marginali

Caso 1

|                 |    |    |      |     |    |
|-----------------|----|----|------|-----|----|
| unità prodotte  | 1  | 2  | 3    | 4   | 5  |
| costo marginale |    | 0  | 0    | 0   | 0  |
| costo medio     | 10 | 5  | 3,33 | 2,5 | 2  |
| costo fisso     | 10 | 10 | 10   | 10  | 10 |
| costo variabile | 0  | 0  | 0    | 0   | 0  |
| costi totali    | 10 | 10 | 10   | 10  | 10 |



# Andamento dei costi.

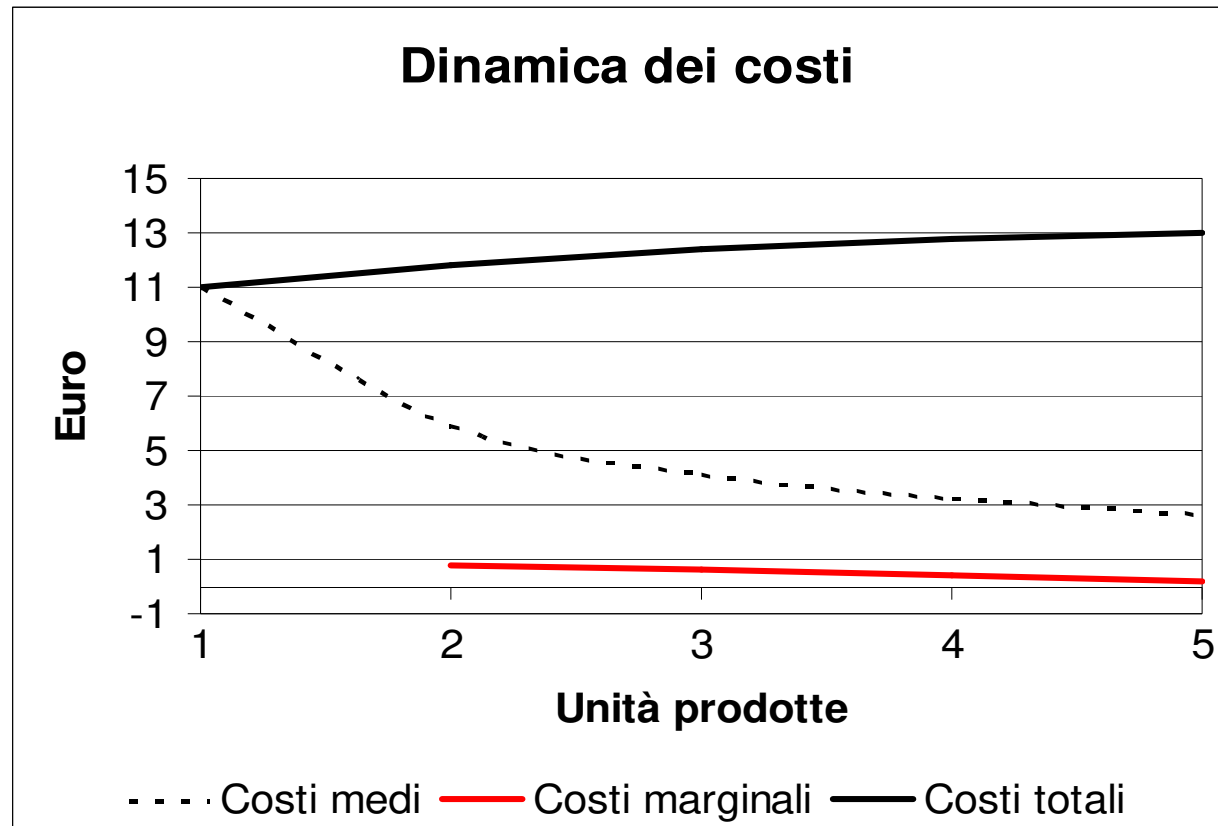


# I costi: Relazione tra Costi medi e Costi marginali

Caso 2

|                 |    |    |      |     |    |
|-----------------|----|----|------|-----|----|
| unità prodotte  | 1  | 2  | 3    | 4   | 5  |
| costo marginale |    | 1  | 1    | 1   | 1  |
| costo medio     | 11 | 6  | 4,33 | 3,5 | 3  |
| costo fisso     | 10 | 10 | 10   | 10  | 10 |
| costo variabile | 1  | 1  | 1    | 1   | 1  |
| costi totali    | 11 | 12 | 13   | 14  | 15 |

# Andamento dei costi.

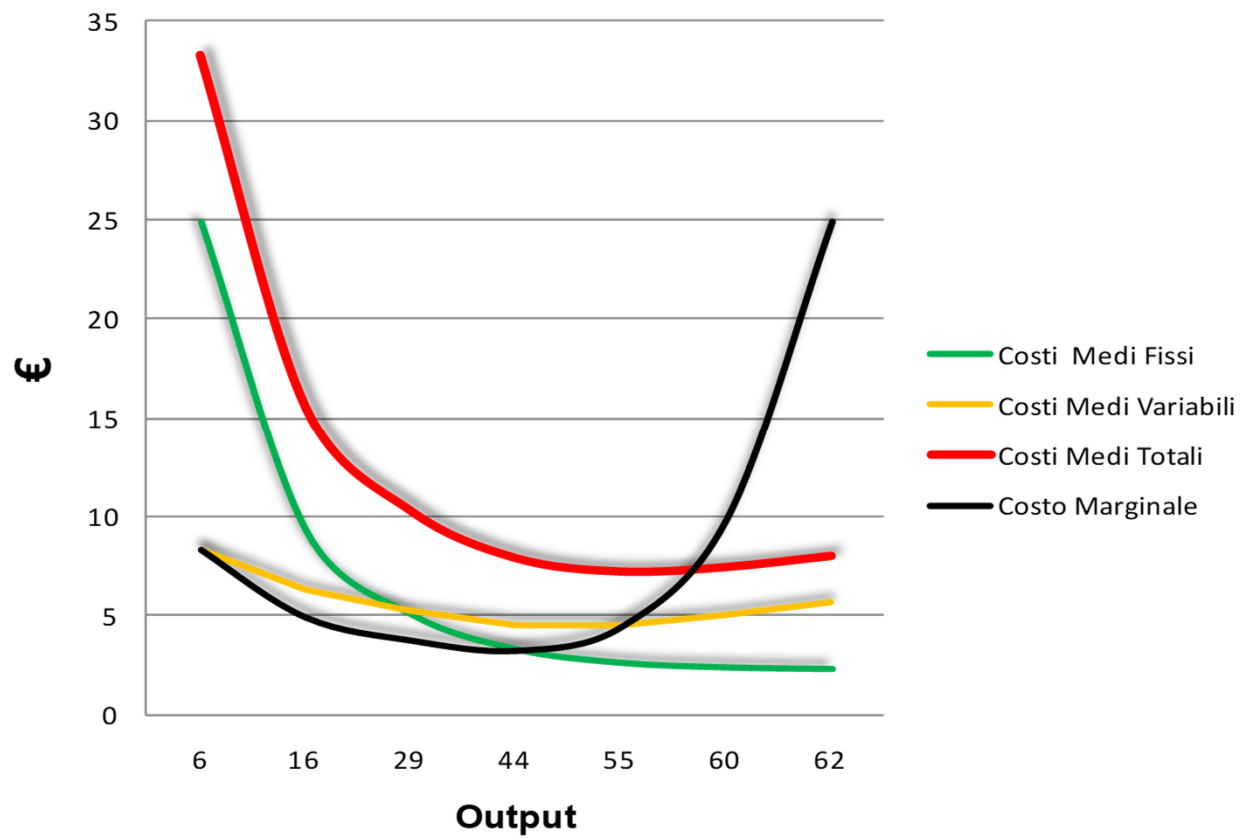


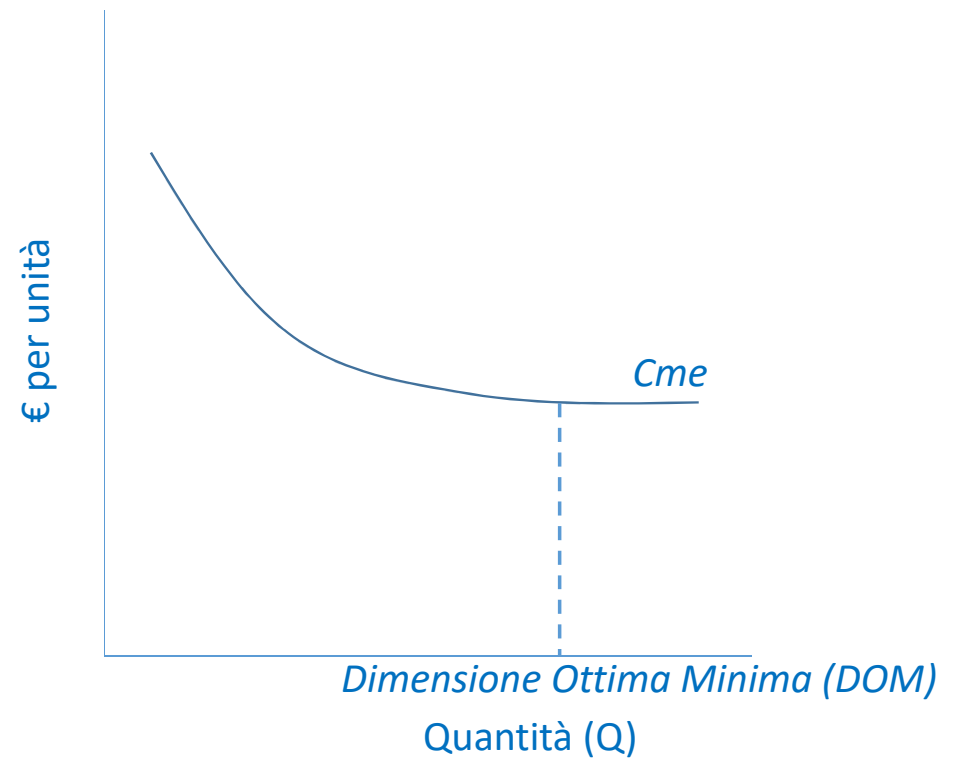
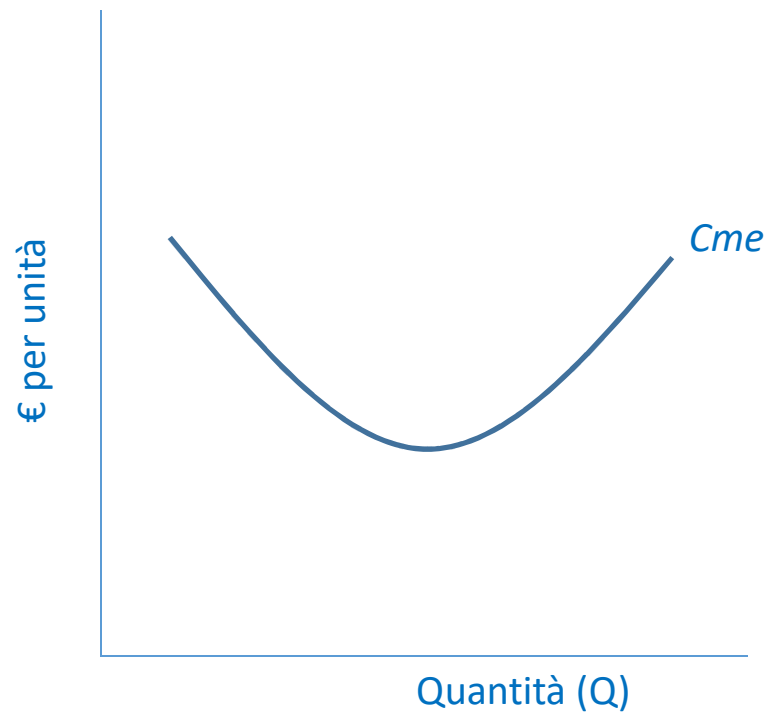
# Andamento dei costi.

| Output | Costo variabile | Costo fisso | Costo totale | Costi fissi medi | Costi medi variabili | Costi totali medi |              |
|--------|-----------------|-------------|--------------|------------------|----------------------|-------------------|--------------|
| 0      | 0               | 150         | 150          | -                | -                    | -                 | -            |
| 6      | $50 \cdot 1$    | 150         | 200          | 25               | 8,33                 | 33,33             | $50/6=8,33$  |
| 16     | $50 \cdot 2$    | 150         | 250          | 9,38             | 6,25                 | 15,63             | $50/10=5$    |
| 29     | $50 \cdot 3$    | 150         | 300          | 5,17             | 5,17                 | 10,34             | $50/13=3,85$ |
| 44     | $50 \cdot 4$    | 150         | 350          | 3,41             | 4,55                 | 7,95              | $50/15=3,33$ |
| 55     | $50 \cdot 5$    | 150         | 400          | 2,73             | 4,55                 | 7,27              | $50/11=4,55$ |
| 60     | $50 \cdot 6$    | 150         | 450          | 2,5              | 5                    | 7,5               | $50/5=10$    |
| 62     | $50 \cdot 7$    | 150         | 500          | 2,42             | 5,65                 | 8,06              | $50/2=25$    |

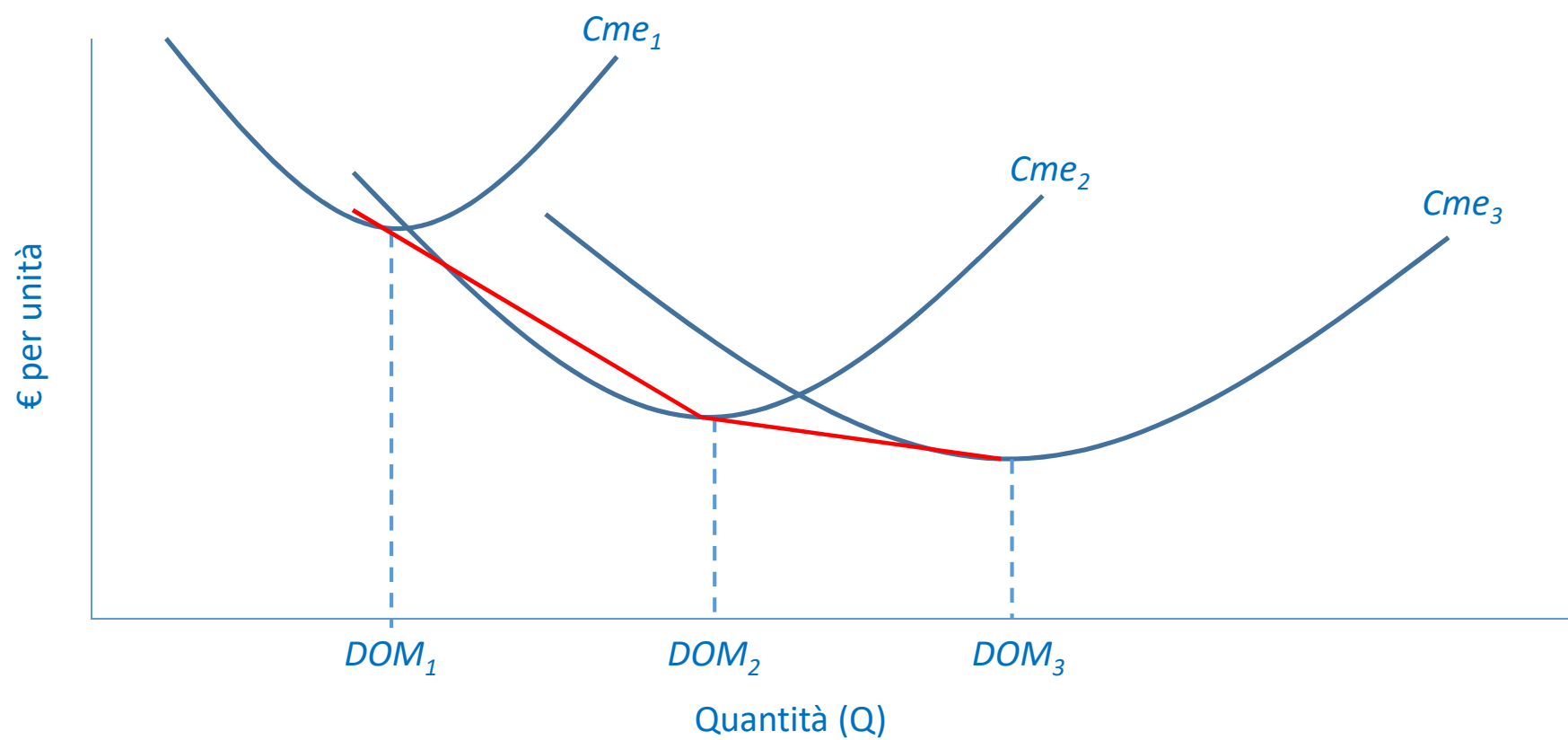
Costo variabile unitario=50

# Andamento dei costi.

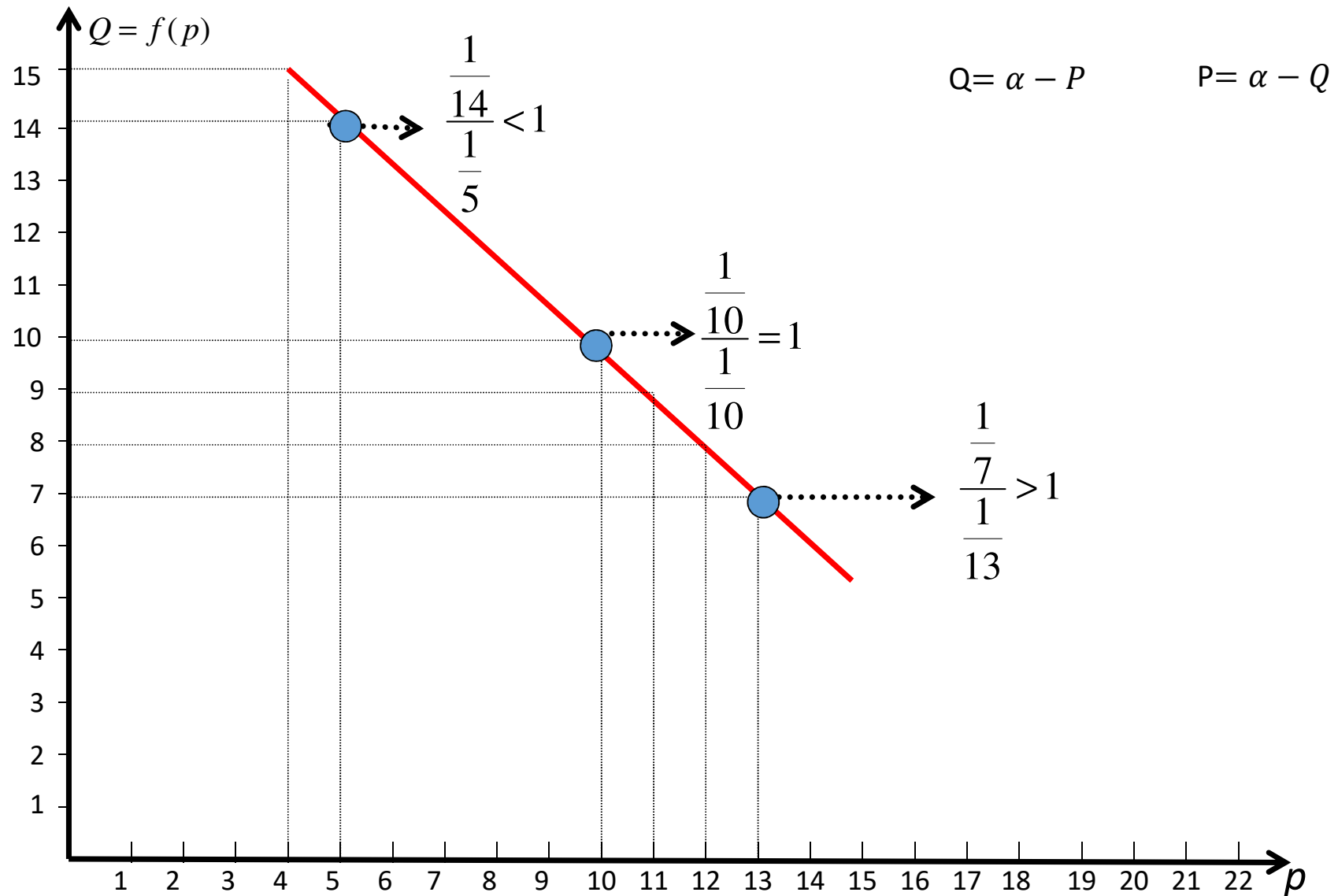




# Curve di costo di lungo periodo




# Il concetto di elasticità




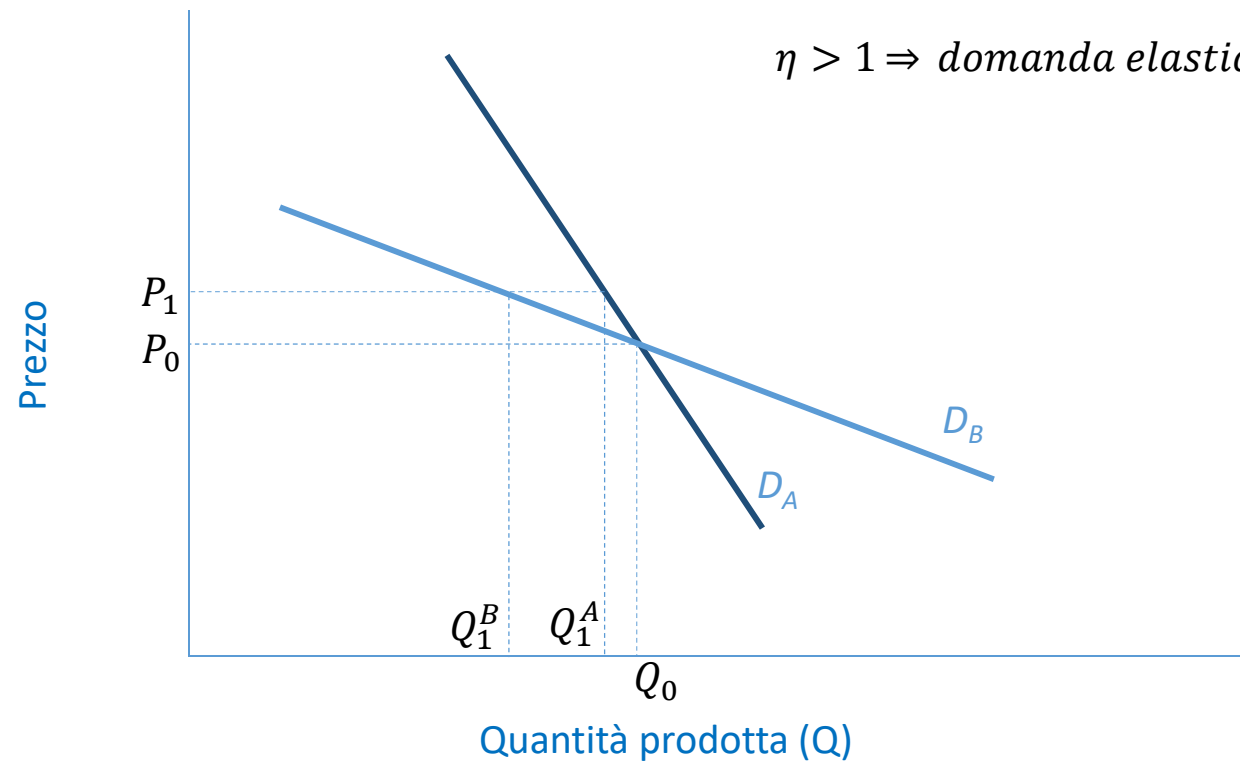


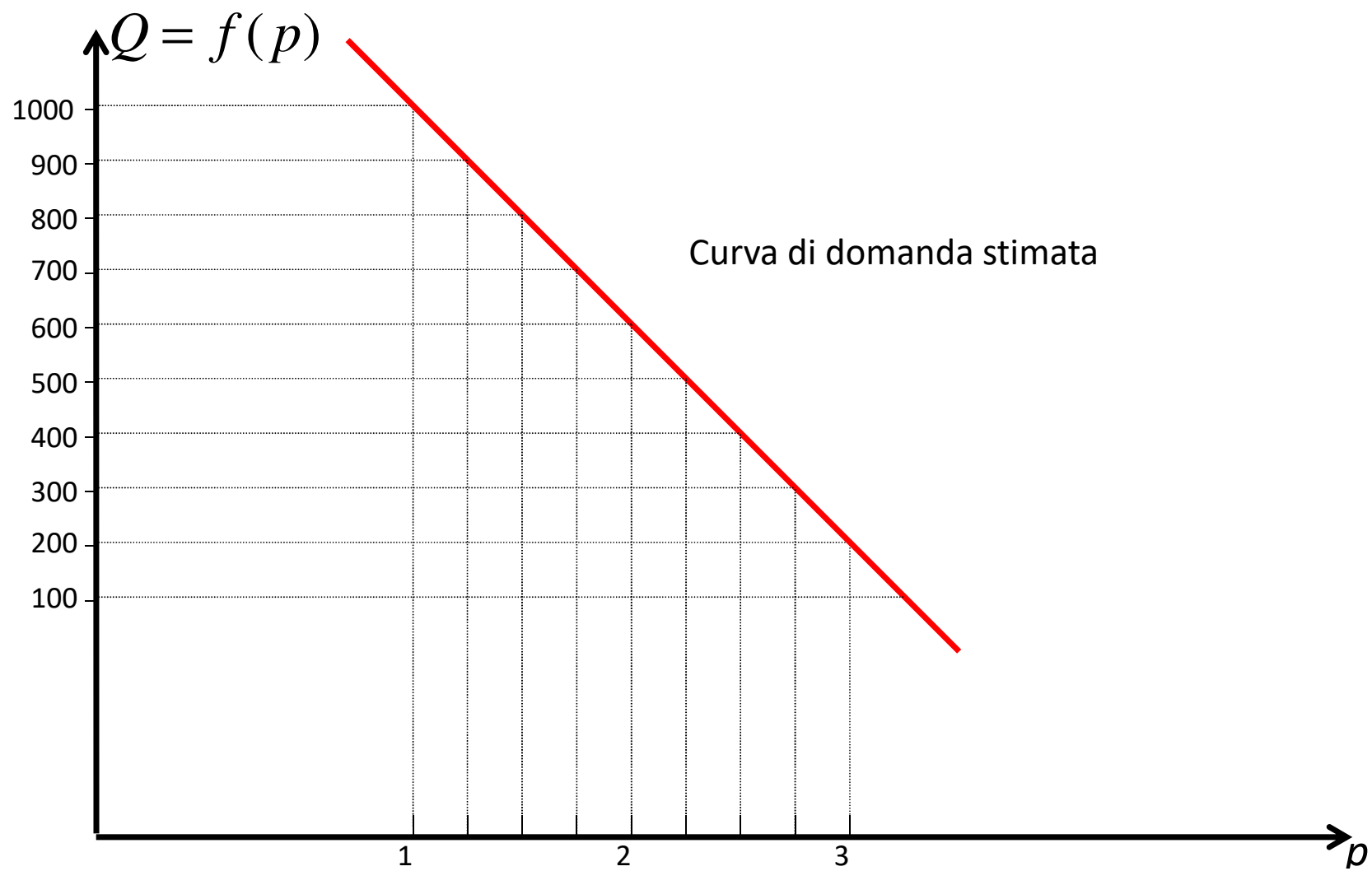
# Il concetto di elasticità

$$\eta = - \frac{\Delta Q / Q_0}{\Delta P / P_0}$$

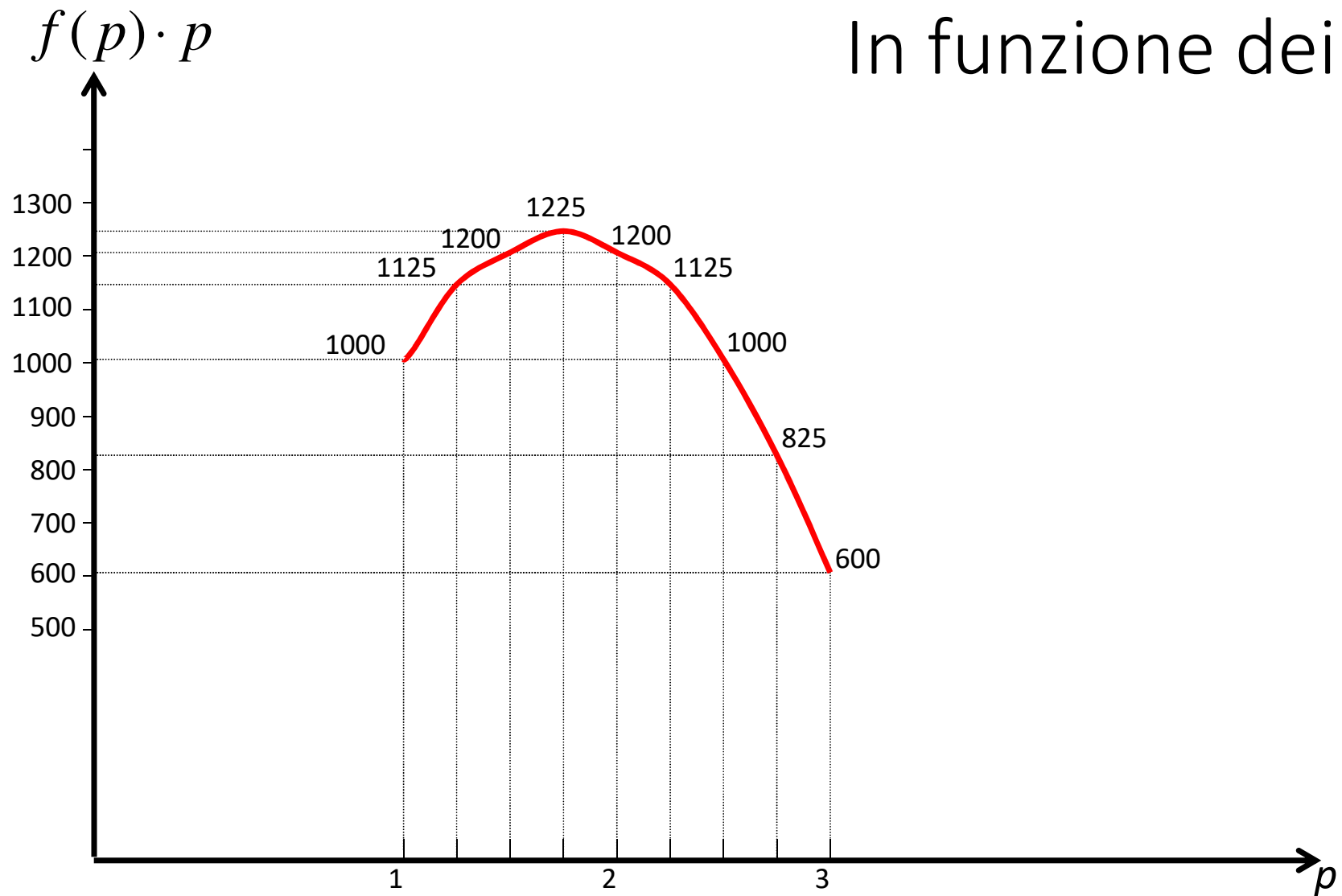
$\eta < 1 \Rightarrow$  *domanda anelastica*   $D_A$

$\eta > 1 \Rightarrow$  *domanda elastica*   $D_B$

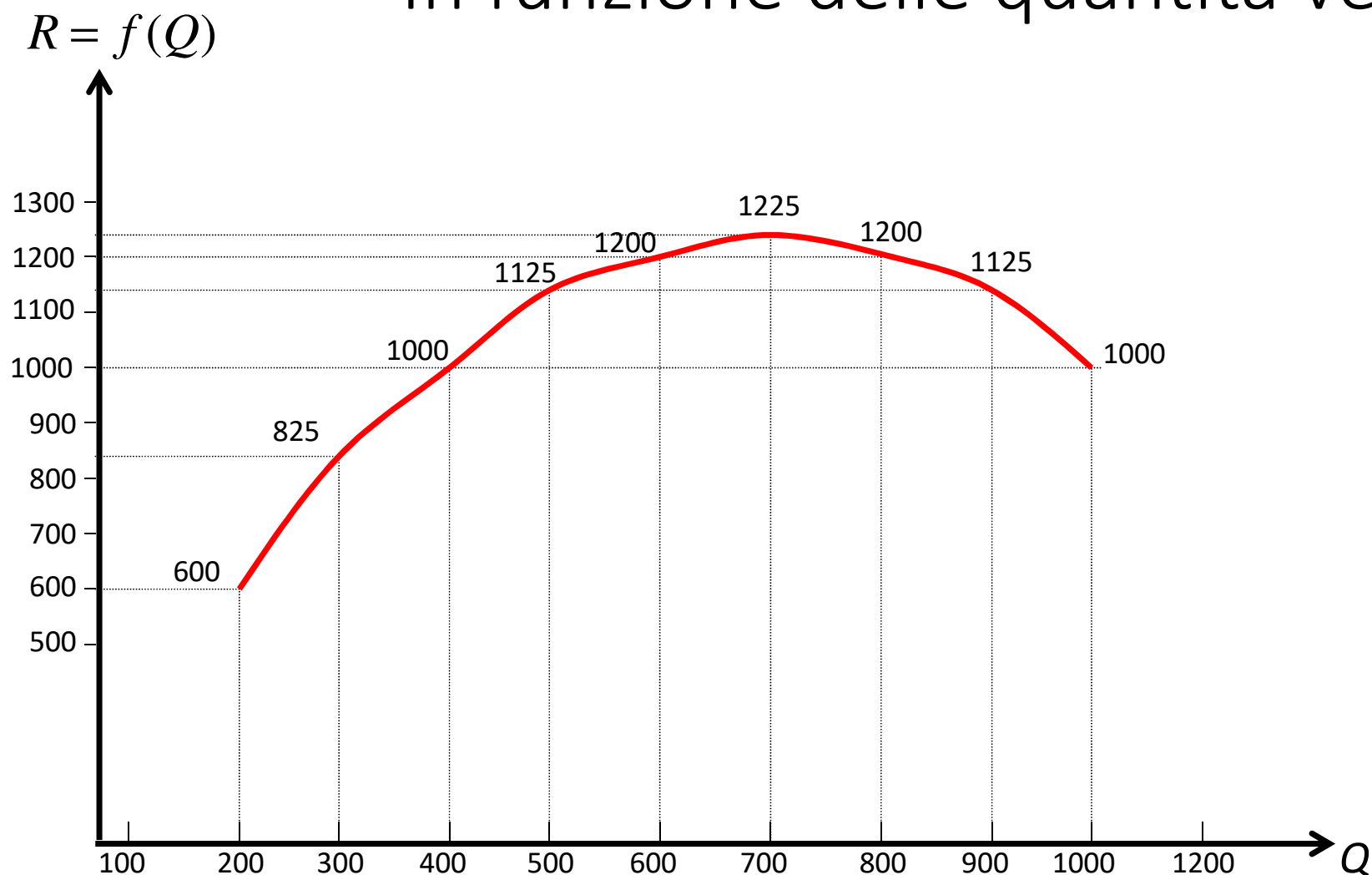




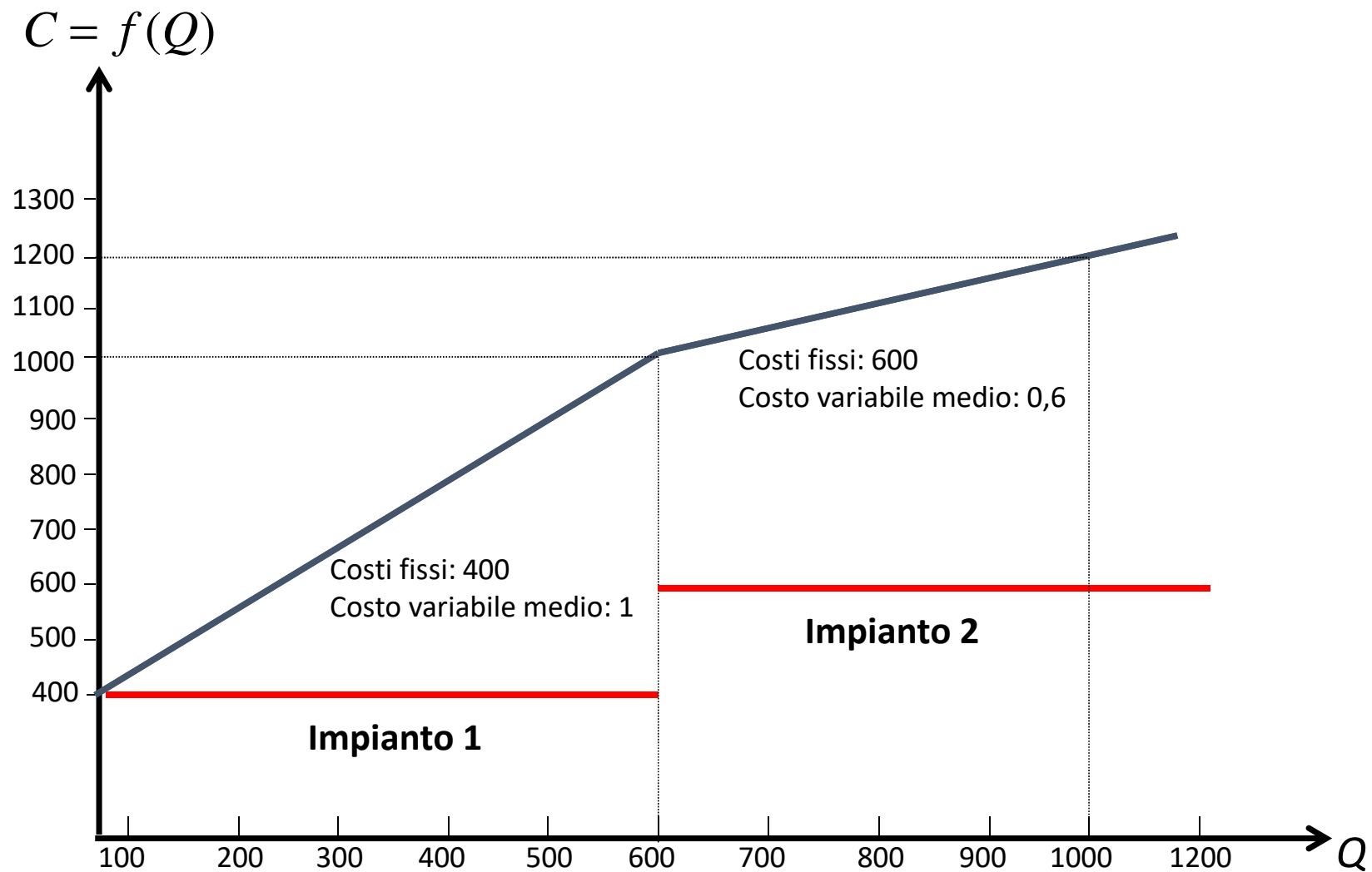
La curva dei ricavi.  
In funzione dei prezzi.



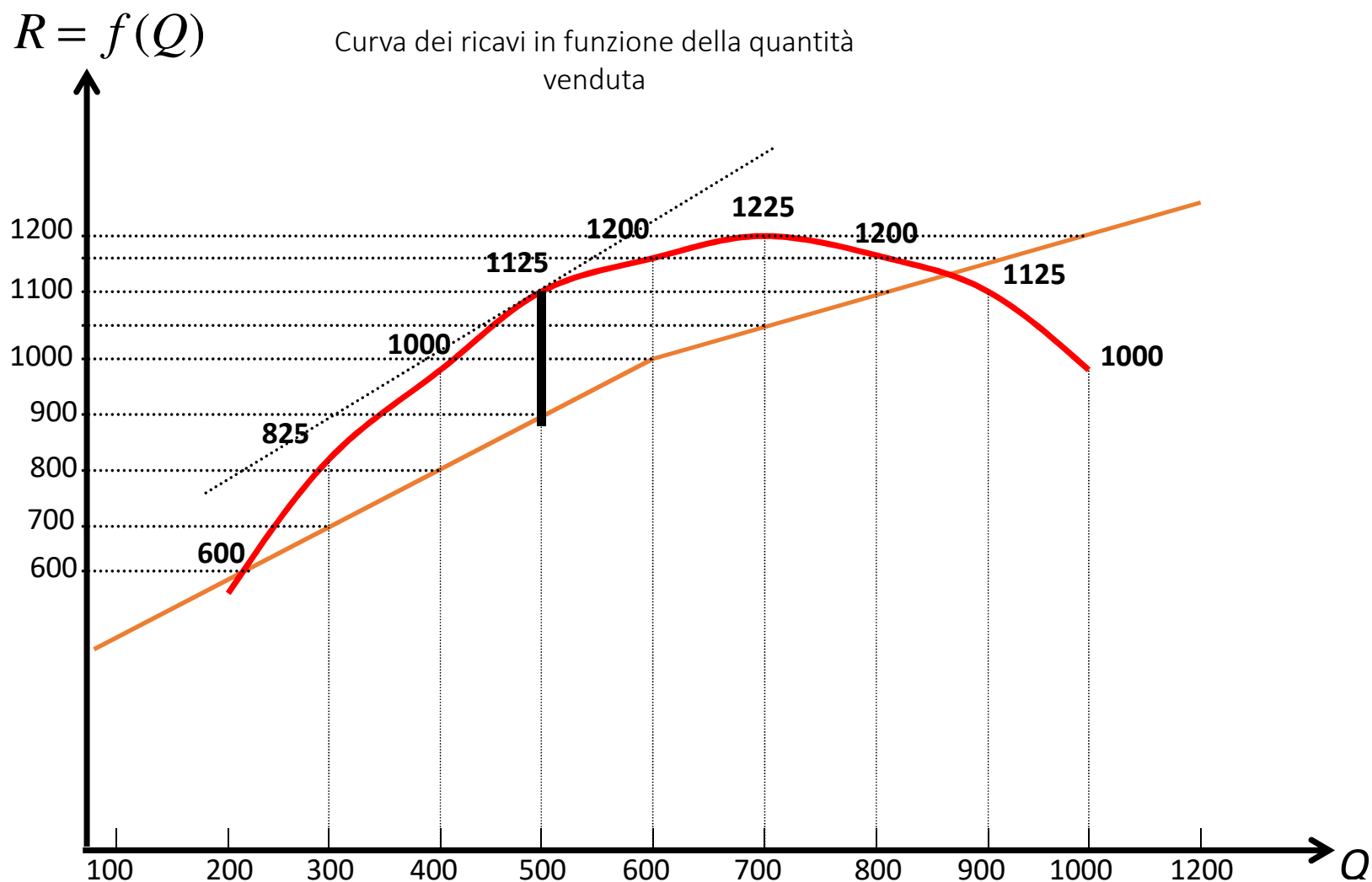
La curva dei ricavi.  
In funzione delle quantità vendute.



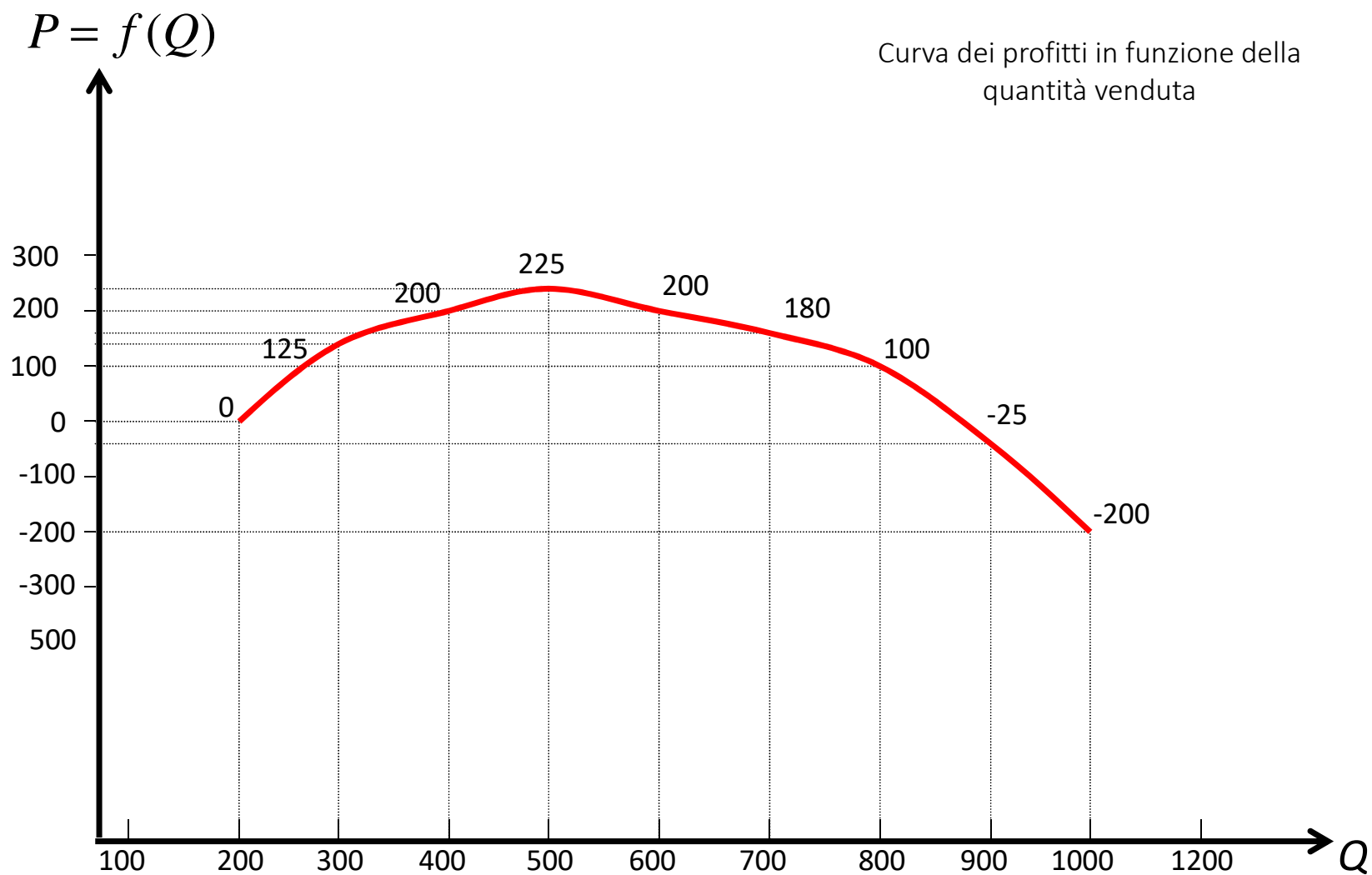
# La curva dei costi totali.



# Analisi dei profitti.



# Analisi dei profitti.



# Il concetto di profitto.

- *Profitto Contabile = Ricavi - costi contabili*
- *Profitto Economico = Ricavi – costo economici (costi opportunità)*
  - *EVA (Economic Value Added) = NOPAT – WACC \* CI*
    - *NOPAT = Net Operating Profit after Taxes*
    - *WACC = Weight Average Cost of Capital*
    - *CI = Capitale Investito*