



COGNOME E NOME	RITIRATO L'ELABORATO
NUMERO DI MATRICOLA	ALLE ORE
FACOLTÀ DI	FIRMA
LAUREA IN	VOTAZIONE FINALE
ANNO IN CORSO	OTTENUTA
COMPITO SCRITTO DI	FIRMA
DATA	

TLOG (ONOLINEA LINEARE NEI PREZZI DEI FATTORI) (E ONOTERICO)

$$S_K = \alpha_K + \gamma_{KK} \ln P_K + \gamma_{KL} \ln P_L + \gamma_{KE} \ln P_E + \gamma_{KN} \ln P_N + \gamma_{Ky} \ln y$$

$$S_L = \alpha_L + \gamma_{LK} \ln P_K + \gamma_{LL} \ln P_L + \gamma_{LE} \ln P_E + \gamma_{LN} \ln P_N + \gamma_{Ly} \ln y$$

$$S_E = \alpha_E + \gamma_{EK} \ln P_K + \gamma_{EL} \ln P_L + \gamma_{EE} \ln P_E + \gamma_{EN} \ln P_N + \gamma_{Ey} \ln y$$

$$S_N = \alpha_N + \gamma_{NK} \ln P_K + \gamma_{NL} \ln P_L + \gamma_{NE} \ln P_E + \gamma_{NN} \ln P_N + \gamma_{Ny} \ln y$$

RESTRIZIONI : $\alpha_K + \alpha_L + \alpha_E + \alpha_N = 1$

SIMMETRIA

$$\gamma_{KK} + \gamma_{KL} + \gamma_{KE} + \gamma_{KN} = 0$$

$$\gamma_{LK} + \gamma_{LL} + \gamma_{LE} + \gamma_{LN} = 0$$

$$\gamma_{EK} + \gamma_{EL} + \gamma_{EE} + \gamma_{EN} = 0$$

$$\gamma_{NK} + \gamma_{NL} + \gamma_{NE} + \gamma_{NN} = 0$$

$$\gamma_{Ky} = \gamma_{Ly} = \gamma_{Ey} = \gamma_{Ny} = 0$$

ONOLINEA
LINEARE

ONOTERICITÀ

$$\gamma_{KL} = \gamma_{LK}$$

$$\gamma_{KE} = \gamma_{EK}$$

$$\gamma_{KN} = \gamma_{NK}$$

$$\gamma_{LE} = \gamma_{EL}$$

$$\gamma_{LN} = \gamma_{NL}$$

$$\gamma_{EN} = \gamma_{NE}$$

3 Equations (3n Equations)

$$\alpha_n = 1 - \alpha_K - \alpha_L - \alpha_E$$

$$Y_{Kn} (= Y_{nK}) = -Y_{KK} - Y_{KL} - Y_{KE}$$

$$Y_{Ln} = -Y_{LK} - Y_{LL} - Y_{LE}$$

$$Y_{En} = -Y_{EK} - Y_{EL} - Y_{EE}$$

$$Y_{Mn} = -Y_{MK} - Y_{ML} - Y_{ME}$$

$$\left\{ \begin{aligned} S_K &= \alpha_K + Y_{KK} \text{ loh } \frac{P_K}{P_n} + Y_{KL} \text{ loh } \frac{P_L}{P_n} + Y_{KE} \text{ loh } \frac{P_E}{P_n} \\ S_L &= \alpha_L + Y_{LK} \text{ loh } \frac{P_K}{P_n} + Y_{LL} \text{ loh } \frac{P_L}{P_n} + Y_{LE} \text{ loh } \frac{P_E}{P_n} \\ S_E &= \alpha_E + Y_{EK} \text{ loh } \frac{P_K}{P_n} + Y_{EL} \text{ loh } \frac{P_L}{P_n} + Y_{EE} \text{ loh } \frac{P_E}{P_n} \end{aligned} \right.$$



3 EQUAZIONI (RISOLUZIONE DI SE)

$$\alpha_E = 1 - \alpha_K - \alpha_L - \alpha_N$$

$$\gamma_{KE} = -\gamma_{KK} - \gamma_{KL} - \gamma_{KN}$$

$$\gamma_{LE} = -\gamma_{LK} - \gamma_{LL} - \gamma_{LN}$$

$$\gamma_{NE} = -\gamma_{NK} - \gamma_{NL} - \gamma_{NN}$$

$$\gamma_{KE} = -\gamma_{KK} - \gamma_{KL} - \gamma_{KN}$$

$\gamma_{EN} \quad \gamma_{KN} \quad \gamma_{LN}$

$$\left\{ \begin{aligned} S_K &= \alpha_K + \gamma_{KK} \text{ lob } \frac{P_K}{P_E} + \gamma_{KL} \text{ lob } \frac{P_L}{P_E} + \gamma_{KN} \text{ lob } \frac{P_N}{P_E} \\ S_L &= \alpha_L + \gamma_{LK} \text{ lob } \frac{P_K}{P_E} + \gamma_{LL} \text{ lob } \frac{P_L}{P_E} + \gamma_{LN} \text{ lob } \frac{P_N}{P_E} \\ S_N &= \alpha_N + \gamma_{NK} \text{ lob } \frac{P_K}{P_E} + \gamma_{NL} \text{ lob } \frac{P_L}{P_E} + \gamma_{NN} \text{ lob } \frac{P_N}{P_E} \end{aligned} \right.$$