

ECONOMIA APPLICATA M - LABORATORIO 4

14/1/20

USE KLEM.DTA

DES

TASET YEAR

K, L

$$\text{GEN } LQK = \log(RK)$$

$$\text{GEN } LQL = \log(QL)$$

$$\text{GEN } LPK = \log(PK)$$

$$\text{GEN } LPL = \log(PL)$$

$$\text{GEN } LY = \log(QY)$$

## Modeli di domanda di K e L

$$1) L_{RKT} = \beta_1 + \beta_2 L_{PKT} + \beta_3 L_{PLT} + \beta_4 L_{Yt} + U_{Kt}$$

$$2) L_{ALF} = \gamma_1 + \gamma_2 L_{PKT} + \gamma_3 L_{PLT} + \gamma_4 L_{Yt} + U_{Lt}$$

I) STIMA DI 1) E 2) con OLS

II) STIMA DI 1) E 2) con SURGE

REG LQK LPK LPL LY

REG LQL LPK LPL LY

SUREG(LQK LQL = LPK LPL LY), CORR

$$\beta_4 = \sqrt{\delta_4}$$

CONSTRAINT 1  $[LQK]LY = [LQL]LY$

CONSTRAINT 2  $[LQK]LPL = [LQL]LPL$

$$\beta_3$$

SUM OF  $LQK LQL = LPK LPL LY$ , CONSTRAINT (1,2)  
CORE

$$3) LQK_t = \beta_1 + \beta_2 LPK_t + \beta_3 LPL_t + \beta_4 LY_t + \underbrace{+\beta_5 LQK_{t-1}} + UK_t$$

$$4) LRL_t = \gamma_1 + \gamma_2 LPK_t + \gamma_3 LPL_t + \gamma_4 LY_t + \underbrace{+\gamma_5 LRL_{t-1}} + UL_t$$

STIMULI 3) E 4) CAS SUNE  $\rightarrow$

SWEET (LQK LPK LPL L.LQK)  
(LQL LPK LPL L.LQL), can

SWEET (LQK LPK LPL L.LQK L.LQL)  
VPRX (LQL LPK LPL L.LQK L.LQL), can