ECONOMIA APPLICATA M – LEZIONE 2h

(NOTE AGGIUNTIVE)

Titolo nota ~~21/11/2017~~

REGRESSIONE PARTIZIONATA (UN INCISO) 2/12/19

$$y = X\beta + u = X_1\beta_1 + X_2\beta_2 + u$$

$(T \cdot 1)$ $(T \cdot 1)$

$T \cdot K$ $(K \cdot 1)$

X_1 X_2

$T \cdot (K-G)$ $T \cdot G$

β_1 β_2

$(K-G) \cdot 1$ $(G \cdot 1)$

STIMATORE OLS

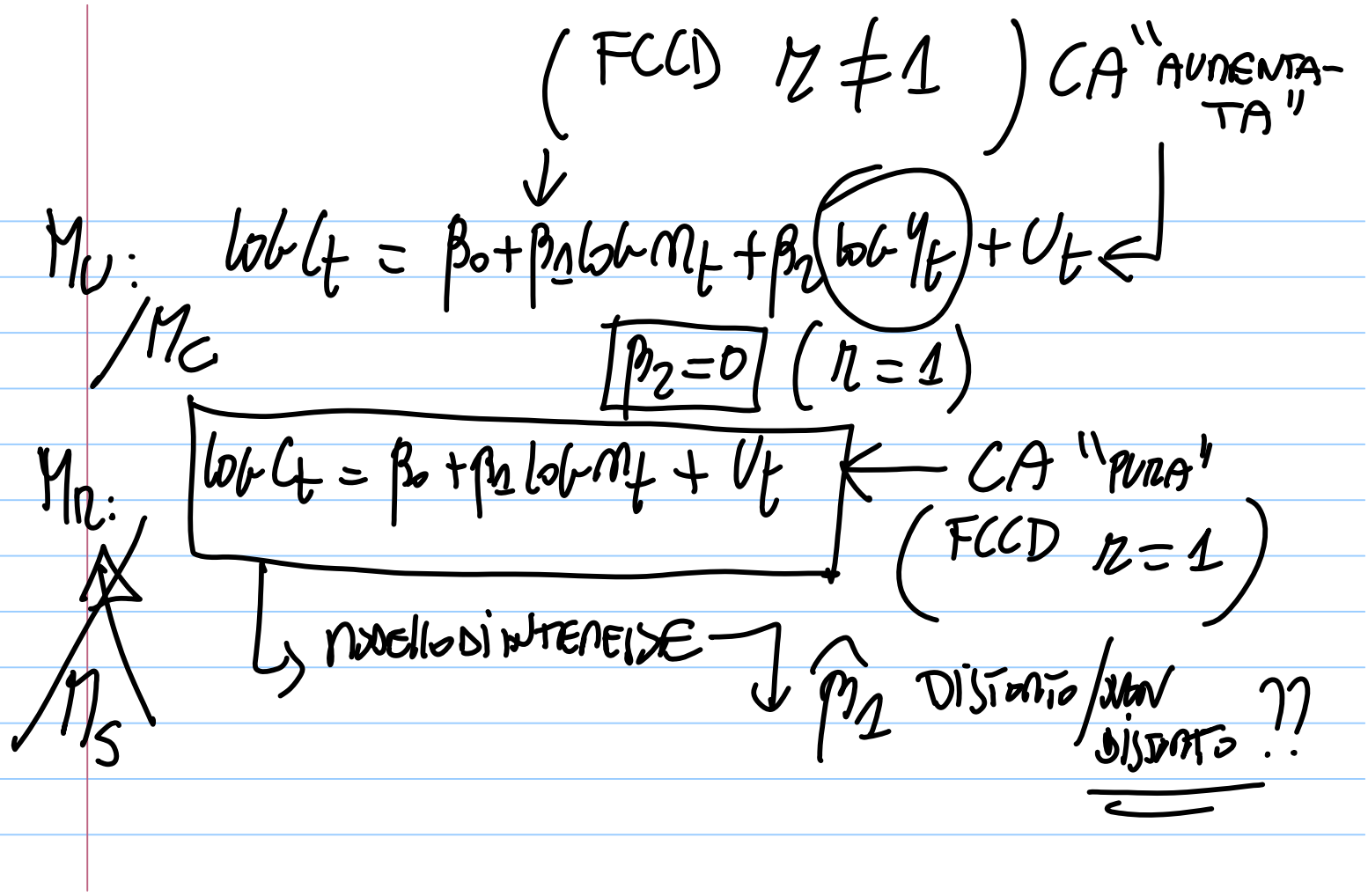
$$\hat{\beta} = (X'X)^{-1} X'y$$

$$\hat{\beta}_1 = (X_1' M_2 X_1)^{-1} X_1' M_2 y$$

$$\hat{\beta}_2 = (X_2' M_1 X_2)^{-1} X_2' M_1 y$$

DOVE $M_1 = I_T - X_1 (X_1'X_1)^{-1} X_1'$

$M_2 = I_T - X_2 (X_2'X_2)^{-1} X_2'$


(FCCD $n \neq 1$) CA "AUMENTATA"
H_0: $\log C_t = \beta_0 + \beta_1 \log m_t + \beta_2 \log y_t + u_t$
$\beta_2 = 0$ ($n = 1$)
H_1:
$\log C_t = \beta_0 + \beta_1 \log m_t + u_t$
CA "PURA"
(FCCD $n = 1$)
H_2:
H_3:
↳ modello di interesse
$\hat{\beta}_1$ distorto / non distorto ??

BIAS associato a $\hat{\beta}_1$ è : $\hat{\delta}_1 \cdot \hat{\beta}_2$

DOVE $\hat{\beta}_2$ DA Π_U

$\hat{\delta}_1$ DA : $\Pi_A : \ln y_t = \delta_0 + \delta_1 \ln m_t + \eta_t$