

ผนวก ค

ผลการประมาณค่าพารามิเตอร์ ด้วยวิธี Maximum Likelihood

System: SYS01

Estimation Method: Full Information Maximum Likelihood (Marquardt)

Date: 05/15/07 Time: 01:32

Sample: 1999 2004

Included observations: 140

Total system (balanced) observations 280

Convergence achieved after 23 iterations

	Coefficient	Std. Error	z-Statistic	Prob.
C(1)	11.72031	4.486219	2.612515	0.0090
C(2)	0.645344	0.044420	14.52830	0.0000
C(3)	-0.523485	0.491886	-1.064240	0.2872
C(4)	-0.078108	0.509541	-0.153292	0.8782
C(5)	0.013878	0.001172	11.83692	0.0000
C(6)	0.127249	0.034037	3.738583	0.0002
C(7)	-0.078582	0.036237	-2.168563	0.0301
C(8)	0.111261	0.051609	2.155838	0.0311
C(9)	0.013145	0.003218	4.084721	0.0000
C(10)	-0.009394	0.003232	-2.906313	0.0037
Log Likelihood	-2529.220			
Determinant residual covariance	0.000119			

$$\begin{aligned} \text{Equation: } \text{LOG}(\text{COST}) = & C(1) + C(2) * \text{LOG}(W1) + (1 - C(2)) * \text{LOG}(W2) + C(3) \\ & * \text{LOG}(Y1) + C(4) * \text{LOG}(Y2) + C(5) * (\text{LOG}(W1) * \text{LOG}(W2) + (-1/2) \\ & * (\text{LOG}(W1) * \text{LOG}(W1) + \text{LOG}(W2) * \text{LOG}(W2))) + (1/2) * C(6) * \text{LOG}(Y1) \\ & * \text{LOG}(Y1) + C(7) * \text{LOG}(Y1) * \text{LOG}(Y2) + (1/2) * C(8) * \text{LOG}(Y2) * \text{LOG}(Y2) \\ & + C(9) * (\text{LOG}(W1) * \text{LOG}(Y1) - \text{LOG}(W2) * \text{LOG}(Y1)) + C(10) * (\text{LOG}(W1) \\ & * \text{LOG}(Y2) - \text{LOG}(W2) * \text{LOG}(Y2)) \end{aligned}$$

Observations: 140

R-squared	0.928262	Mean dependent var	19.74504
Adjusted R-squared	0.923296	S.D. dependent var	1.672357
S.E. of regression	0.463168	Sum squared resid	27.88815
Durbin-Watson stat	1.451761		

$$\begin{aligned} \text{Equation: } S = & 1 - C(2) + C(5) * (\text{LOG}(W2) - \text{LOG}(W1)) - C(9) * \text{LOG}(Y1) - C(10) \\ & * \text{LOG}(Y2) \end{aligned}$$

Observations: 140

R-squared	0.402598	Mean dependent var	0.051544
Adjusted R-squared	0.389420	S.D. dependent var	0.039192
S.E. of regression	0.030625	Sum squared resid	0.127551
Durbin-Watson stat	1.426311		