

ภาคผนวก ก

การทดสอบความมีเสถียรภาพของข้อมูล (Stationary)

โดยการทดสอบ Unit Root

ตารางผนวกที่ 1 ผลการทดสอบ Unit Root ของตัวแปร CS

Null Hypothesis: CS has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic based on SIC, MAXLAG=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.650349	0.0913
Test critical values: 1% level	-3.596616	
5% level	-2.933158	
10% level	-2.604867	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(CS)

Method: Least Squares

Date: 03/14/06 Time: 21:36

Sample(adjusted): 1994:3 2004:4

Included observations: 42 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CS(-1)	-0.160720	0.060641	-2.650349	0.0116
D(CS(-1))	0.534803	0.134372	3.980020	0.0003
C	0.513718	0.416321	1.233948	0.2246
R-squared	0.328954	Mean dependent var	-0.065238	
Adjusted R-squared	0.294541	S.D. dependent var	2.749554	
S.E. of regression	2.309394	Akaike info criterion	4.580597	
Sum squared resid	207.9988	Schwarz criterion	4.704716	
Log likelihood	-93.19254	F-statistic	9.559109	
Durbin-Watson stat	2.224749	Prob(F-statistic)	0.000418	

ตารางผนวกที่ 2 ผลการทดสอบ Unit Root ของตัวแปร G

Null Hypothesis: G has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic based on SIC, MAXLAG=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.448816	0.0050
Test critical values: 1% level	-4.186481	
5% level	-3.518090	
10% level	-3.189732	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(G)

Method: Least Squares

Date: 03/14/06 Time: 21:37

Sample(adjusted): 1994:2 2004:4

Included observations: 43 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
G(-1)	-0.699951	0.157334	-4.448816	0.0001
C	2.997557	5.409907	0.554087	0.5826
@TREND(1994:1)	-0.135019	0.216483	-0.623692	0.5364
R-squared	0.333700	Mean dependent var		0.403488
Adjusted R-squared	0.300385	S.D. dependent var		20.40821
S.E. of regression	17.07003	Akaike info criterion		8.579740
Sum squared resid	11655.44	Schwarz criterion		8.702615
Log likelihood	-181.4644	F-statistic		10.01651
Durbin-Watson stat	1.993121	Prob(F-statistic)		0.000297

ตารางผนวกที่ 3 ผลการทดสอบ Unit Root ของตัวแปร R

Null Hypothesis: R has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 3 (Automatic based on SIC, MAXLAG=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.272778	0.0084
Test critical values: 1% level	-4.205004	
5% level	-3.526609	
10% level	-3.194611	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R)

Method: Least Squares

Date: 03/14/06 Time: 21:39

Sample(adjusted): 1995:1 2004:4

Included observations: 40 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R(-1)	-0.631046	0.147690	-4.272778	0.0001
D(R(-1))	0.606235	0.155557	3.897190	0.0004
D(R(-2))	0.037977	0.157816	0.240639	0.8113
D(R(-3))	0.344327	0.155922	2.208327	0.0341
C	3.499628	0.851610	4.109428	0.0002
@TREND(1994:1)	-0.087221	0.021715	-4.016572	0.0003
R-squared	0.434697	Mean dependent var	-0.145250	
Adjusted R-squared	0.351565	S.D. dependent var	1.059170	
S.E. of regression	0.852902	Akaike info criterion	2.657136	
Sum squared resid	24.73301	Schwarz criterion	2.910468	
Log likelihood	-47.14273	F-statistic	5.228953	
Durbin-Watson stat	1.823253	Prob(F-statistic)	0.001149	

ตารางผนวกที่ 4 ผลการทดสอบ Unit Root ของตัวแปร W

Null Hypothesis: W has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.200323	0.0982
Test critical values: 1% level	-4.192337	
5% level	-3.520787	
10% level	-3.191277	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(W)

Method: Least Squares

Date: 03/14/06 Time: 21:40

Sample(adjusted): 1994:3 2004:4

Included observations: 42 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
W(-1)	-0.370656	0.115818	-3.200323	0.0028
D(W(-1))	0.322873	0.148563	2.173300	0.0361
C	0.409406	1.391523	0.294214	0.7702
@TREND(1994:1)	0.017177	0.055896	0.307308	0.7603
R-squared	0.231962	Mean dependent var		0.015238
Adjusted R-squared	0.171328	S.D. dependent var		4.693100
S.E. of regression	4.272196	Akaike info criterion		5.832526
Sum squared resid	693.5630	Schwarz criterion		5.998018
Log likelihood	-118.4830	F-statistic		3.825583
Durbin-Watson stat	2.115784	Prob(F-statistic)		0.017282

ตารางผนวกที่ 5 ผลการทดสอบ Unit Root ของตัวแปร CS

Null Hypothesis: I has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.341205	0.4036
Test critical values: 1% level	-4.192337	
5% level	-3.520787	
10% level	-3.191277	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(I)

Method: Least Squares

Date: 03/14/06 Time: 21:40

Sample(adjusted): 1994:3 2004:4

Included observations: 42 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
I(-1)	-0.222154	0.094889	-2.341205	0.0246
D(I(-1))	0.242840	0.159202	1.525360	0.1355
C	3.780373	1.815679	2.082071	0.0441
@TREND(1994:1)	-0.085630	0.045519	-1.881194	0.0676
R-squared	0.138587	Mean dependent var	-0.169286	
Adjusted R-squared	0.070580	S.D. dependent var	2.203187	
S.E. of regression	2.124013	Akaike info criterion	4.434884	
Sum squared resid	171.4344	Schwarz criterion	4.600377	
Log likelihood	-89.13257	F-statistic	2.037850	
Durbin-Watson stat	2.081469	Prob(F-statistic)	0.124875	

ตารางผนวกที่ 6 ผลการทดสอบ Unit Root ของตัวแปร CS

Null Hypothesis: M has a unit root

Exogenous: None

Lag Length: 0 (Automatic based on SIC, MAXLAG=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.537463	0.0124
Test critical values: 1% level	-2.619851	
5% level	-1.948686	
10% level	-1.612036	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(M)

Method: Least Squares

Date: 03/14/06 Time: 21:41

Sample(adjusted): 1994:2 2004:4

Included observations: 43 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
M(-1)	-0.269316	0.106136	-2.537463	0.0150
R-squared	0.132834	Mean dependent var		0.171395
Adjusted R-squared	0.132834	S.D. dependent var		16.94987
S.E. of regression	15.78401	Akaike info criterion		8.378853
Sum squared resid	10463.67	Schwarz criterion		8.419812
Log likelihood	-179.1454	Durbin-Watson stat		2.268980

ตารางผนวกที่ 7 ผลการทดสอบ Unit Root ของตัวแปร CS

Null Hypothesis: T has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic based on SIC, MAXLAG=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.293212	0.1788
Test critical values: 1% level	-3.596616	
5% level	-2.933158	
10% level	-2.604867	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(T)

Method: Least Squares

Date: 03/14/06 Time: 21:41

Sample(adjusted): 1994:3 2004:4

Included observations: 42 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
T(-1)	-0.144751	0.063121	-2.293212	0.0273
D(T(-1))	0.437992	0.142974	3.063443	0.0040
C	0.741435	0.377118	1.966055	0.0564
R-squared	0.238282	Mean dependent var		0.029286
Adjusted R-squared	0.199219	S.D. dependent var		1.522186
S.E. of regression	1.362149	Akaike info criterion		3.524753
Sum squared resid	72.36252	Schwarz criterion		3.648872
Log likelihood	-71.01981	F-statistic		6.100022
Durbin-Watson stat	1.976182	Prob(F-statistic)		0.004954