

## **APPENDIX**

### **UNIT ROOT TEST RESULTS**

ADF Test Statistic	-3.622324	1% Critical Value*	-3.8572
		5% Critical Value	-3.0400
		10% Critical Value	-2.6608

\*MacKinnon critical values for rejection of hypothesis of a unit root.

#### Augmented Dickey-Fuller Test Equation

LS // Dependent Variable is D(G,2)

Date: 01/02/96 Time: 22:46

Sample: 1981 1998

Included observations: 18

Excluded observations: 0 after adjusting endpoints

Variable	Coefficient	Std. Error	T-Statistic	Prob.
D(G(-1))	-1.572331	0.434067	-3.622324	0.0025
D(G(-1),2)	0.071147	0.243353	0.292362	0.7740
C	-0.003887	0.030095	-0.129156	0.8989
R-squared	0.759358	Mean dependent var	0.015500	
Adjusted R-squared	0.727272	S.D. dependent var	0.242508	
S.E. of regression	0.126648	Akaike info criterion	-3.981713	
Sum squared resid	0.240587	Schwartz criterion	-3.833317	
Log likelihood	13.29452	F-statistic	23.66662	
Durbin-Watson stat	1.955928	Prob(F-statistic)	0.000023	

#### Augmented Dickey-Fuller Unit Root Test on D(GL)

ADF Test Statistic	-4.237713	1% Critical Value*	-3.8572
		5% Critical Value	-3.0400
		10% Critical Value	-2.6608

\*MacKinnon critical values for rejection of hypothesis of a unit root.

#### Augmented Dickey-Fuller Test Equation

LS // Dependent Variable is D(GL,2)

Date: 01/02/96 Time: 01:48

Sample: 1981 1998

Included observations: 18

Excluded observations: 0 after adjusting endpoints

Variable	Coefficient	Std. Error	T-Statistic	Prob.
D(GL(-1))	-1.797719	0.424219	-4.237713	0.0007
D(GL(-1),2)	0.274304	0.254630	1.077264	0.2984
C	-0.003808	0.027319	-0.139396	0.8910
R-squared	0.717640	Mean dependent var	0.006111	
Adjusted R-squared	0.679992	S.D. dependent var	0.204424	
S.E. of regression	0.115641	Akaike info criterion	-4.163515	
Sum squared resid	0.200593	Schwartz criterion	-4.015119	
Log likelihood	14.93074	F-statistic	19.06181	

### Augmented Dickey-Fuller Unit Root Test on D(LNPIY)

ADF Test Statistic	-2.817473	1% Critical Value*	-3.8572
		5% Critical Value	-3.0400
		10% Critical Value	-2.6608

\*MacKinnon critical values for rejection of hypothesis of a unit root.

#### Augmented Dickey-Fuller Test Equation

LS // Dependent Variable is D(LNPIY,2)

Date: 01/02/96 Time: 02:09

Sample: 1981 1998

Included observations: 18

Excluded observations: 0 after adjusting endpoints

Variable	Coefficient	Std. Error	T-Statistic	Prob.
D(LNPIY(-1))	-1.014699	0.360145	-2.817473	0.0130
D(LNPIY(-1),2)	0.031248	0.251524	0.124236	0.9028
C	-0.058233	0.048107	-1.210480	0.2448
R-squared	0.495326	Mean dependent var		-0.003101
Adjusted R-squared	0.428036	S.D. dependent var		0.244261
S.E. of regression	0.184731	Akaike info criterion		-3.226703
Sum squared resid	0.511880	Schwartz criterion		-3.078307
Log likelihood	6.499430	F-statistic		7.361067
Durbin-Watson stat	2.014023	Prob(F-statistic)		0.005924

### Augmented Dickey-Fuller Unit Root Test on D(LNPIY1)

ADF Test Statistic	-2.695611	1% Critical Value*	-3.8877
		5% Critical Value	-3.0521
		10% Critical Value	-2.6672

\*MacKinnon critical values for rejection of hypothesis of a unit root.

#### Augmented Dickey-Fuller Test Equation

LS // Dependent Variable is D(LNPIY1,2)

Date: 01/02/96 Time: 01:41

Sample: 1982 1998

Included observations: 17

Excluded observations: 0 after adjusting endpoints

Variable	Coefficient	Std. Error	T-Statistic	Prob.
D(LNPIY1(-1))	-1.008439	0.374104	-2.695611	0.0174
D(LNPIY1(-1),2)	0.029209	0.260332	0.112199	0.9123
C	-0.059798	0.050544	-1.183094	0.2565
R-squared	0.491576	Mean dependent var		-0.008721
Adjusted R-squared	0.418945	S.D. dependent var		0.250576
S.E. of regression	0.191007	Akaike info criterion		-3.152109
Sum squared resid	0.510769	Schwartz criterion		-3.005072
Log likelihood	5.670976	F-statistic		6.768049
Durbin-Watson stat	2.009052	Prob(F-statistic)		0.008782

### Augmented Dickey-Fuller Unit Root Test on D(LNGX)

ADF Test Statistic	-4.649593	1% Critical Value*	-3.8572	
		5% Critical Value	-3.0400	
		10% Critical Value	-2.6608	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation LS // Dependent Variable is D(LNGX,2) Date: 01/02/96 Time: 07:44 Sample: 1981 1998 Included observations: 18 Excluded observations: 0 after adjusting endpoints				
Variable	Coefficient	Std. Error	T-Statistic	Prob.
D(LNGX(-1))	-1.936884	0.416571	-4.649593	0.0003
D(LNGX(-1),2)	0.325552	0.243505	1.336942	0.2012
C	-0.096328	0.272681	-0.353263	0.7288
R-squared	0.758795	Mean dependent var	0.014031	
Adjusted R-squared	0.726634	S.D. dependent var	2.202536	
S.E. of regression	1.151583	Akaike info criterion	0.433286	
Sum squared resid	19.89214	Schwartz criterion	0.581682	
Log likelihood	-26.44047	F-statistic	23.59387	
Durbin-Watson stat	2.158851	Prob(F-statistic)	0.000023	

### Augmented Dickey-Fuller Unit Root Test on D(LNTTL)

ADF Test Statistic	-5.277635	1% Critical Value*	-3.8572	
		5% Critical Value	-3.0400	
		10% Critical Value	-2.6608	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation LS // Dependent Variable is D(LNTTL,2) Date: 01/02/96 Time: 11:41 Sample: 1981 1998 Included observations: 18 Excluded observations: 0 after adjusting endpoints				
Variable	Coefficient	Std. Error	T-Statistic	Prob.
D(LNTTL(-1))	-1.672546	0.316912	-5.277635	0.0001
D(LNTTL(-1),2)	0.476003	0.208126	2.287085	0.0371
C	-0.003247	0.011229	-0.289152	0.7764
R-squared	0.686349	Mean dependent var	-0.002352	
Adjusted R-squared	0.644529	S.D. dependent var	0.079802	
S.E. of regression	0.047579	Akaike info criterion	-5.939717	
Sum squared resid	0.033956	Schwartz criterion	-5.791322	
Log likelihood	30.91656	F-statistic	16.41190	
Durbin-Watson stat	2.114013	Prob(F-statistic)	0.000167	

Augmented Dickey-Fuller Unit Root Test on D(LNREXL)

ADF Test Statistic	-2.955342	1% Critical Value*	-3.8572	
		5% Critical Value	-3.0400	
		10% Critical Value	-2.6608	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation LS // Dependent Variable is D(LNREXL,2) Date: 01/02/96 Time: 02:00 Sample: 1981 1998 Included observations: 18 Excluded observations: 0 after adjusting endpoints				
Variable	Coefficient	Std. Error	T-Statistic	Prob.
D(LNREXL(-1))	-1.373692	0.464817	-2.955342	0.0098
D(LNREXL(-1),2)	0.546385	0.400387	1.364642	0.1925
C	0.019110	0.031720	0.602458	0.5559
R-squared	0.473764	Mean dependent var	0.003098	
Adjusted R-squared	0.403599	S.D. dependent var	0.172509	
S.E. of regression	0.133223	Akaike info criterion	-3.880444	
Sum squared resid	0.266227	Schwarz criterion	-3.732049	
Log likelihood	12.38310	F-statistic	6.752157	
Durbin-Watson stat	2.112278	Prob(F-statistic)	0.008107	