Augmented Dickey-Fuller Unit Root Test on INVEST

Null Hypothesis: INVEST has a unit root Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on AIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fu Test critical values:	iller test statistic 1% level 5% level 10% level	-0.730833 -4.161144 -3.506374 -3.183002	0.9647

^{*}MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(INVEST) Method: Least Squares Date: 02/16/23 Time: 17:28

Sample (adjusted): 1966 2013 Included observations: 48 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INVEST(-1) C @TREND("1965")	-0.053683 13223883 27963928	0.073454 2.38E+08 19362694	-0.730833 0.055599 1.444217	0.4687 0.9559 0.1556
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.090652 0.050237 7.20E+08 2.33E+19 -1045.529 2.243003 0.117877	Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion Hannan-Quinn criter. Durbin-Watson stat		2.99E+08 7.39E+08 43.68873 43.80568 43.73292 2.053789

Augmented Dickey-Fuller Unit Root Test on INVEST

Null Hypothesis: INVEST has a unit root

Exogenous: Constant

Lag Length: 5 (Automatic - based on AIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fu Test critical values:	ller test statistic 1% level 5% level 10% level	2.433190 -3.592462 -2.931404 -2.603944	1.0000

^{*}MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(INVEST) Method: Least Squares Date: 02/16/23 Time: 17:29

Sample (adjusted): 1971 2013 Included observations: 43 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INVEST(-1)	0.118500	0.048701	2.433190	0.0201
D(INVEST(-1))	-0.238766	0.178918	-1.334502	0.1904
D(INVEST(-2))	-0.140547	0.159240	-0.882615	0.3833
D(INVEST(-3))	0.070949	0.186700	0.380013	0.7062
D(INVEST(-4))	-0.502944	0.186734	-2.693369	0.0107
D(INVEST(-5))	-0.360534	0.204426	-1.763642	0.0863
С	-2.84E+08	3.09E+08	-0.920453	0.3635
R-squared	0.259728	Mean depen	dent var	3.36E+08
Adjusted R-squared	0.136349	S.D. dependent var		7.73E+08
S.E. of regression	7.18E+08	Akaike info criterion		43.76962
Sum squared resid	1.86E+19	Schwarz criterion		44.05633
Log likelihood	-934.0468	Hannan-Quinn criter.		43.87535
F-statistic	2.105129	Durbin-Watson stat		1.954584
Prob(F-statistic)	0.076708			

Augmented Dickey-Fuller Unit Root Test on INVEST

Null Hypothesis: INVEST has a unit root

Exogenous: None

Lag Length: 0 (Automatic - based on AIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fu Test critical values:	ller test statistic 1% level 5% level 10% level	3.259445 -2.614029 -1.947816 -1.612492	0.9996

^{*}MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(INVEST) Method: Least Squares Date: 02/16/23 Time: 17:30

Sample (adjusted): 1966 2013 Included observations: 48 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INVEST(-1)	0.040924	0.012556	3.259445	0.0021
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood Durbin-Watson stat	0.048190 0.048190 7.21E+08 2.44E+19 -1046.625 2.155361	Mean depend S.D. depende Akaike info cr Schwarz crite Hannan-Quin	ent var riterion rion	2.99E+08 7.39E+08 43.65103 43.69001 43.66576

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

Null Hypothesis: D(INVEST) has a unit root

Exogenous: None

Lag Length: 3 (Automatic - based on AIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fu Test critical values:	ller test statistic 1% level 5% level 10% level	-2.595557 -2.618579 -1.948495 -1.612135	0.0106

^{*}MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation Dependent Variable: D(INVEST,2)

Method: Least Squares Sample (adjusted): 1970 2013 Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INVEST(-1)) D(INVEST(-1),2) D(INVEST(-2),2) D(INVEST(-3),2)	-0.642859 -0.232731 -0.136483 0.248333	0.247677 0.243306 0.216520 0.183234	-2.595557 -0.956537 -0.630350 1.355281	0.0131 0.3445 0.5321 0.1829
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood Durbin-Watson stat	0.499729 0.462209 7.95E+08 2.53E+19 -962.0495 1.980355	Mean depen S.D. depend Akaike info c Schwarz crit Hannan-Quii	ent var criterion erion	23599225 1.08E+09 43.91134 44.07354 43.97149