The Impact of Foreign Direct Investment on Economic Growth: Nigeria Experience

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Abstract

This study investigated the impact of foreign direct investment on economic growth in Nigeria. Secondary source of data was employed in this study from 1986 to 2017 which were sourced from Central Bank of Nigeria Statistical Bulletin (2017) published in 2018 and World Development Indicator published in 2019. Descriptive and regression analyses were used as the estimation techniques. The findings of the study revealed that the coefficient value of LFDI is 0.633506 and its p-value is 0.0002 implying that a unit increase in LFDI will increase LGDP with the value of 0.633506. The coefficient value of RINTR is 0.004127 with p-value of 0.310 indicating that a unit increase in real interest rate will increase gross domestic product, but it is not significant. Also, LDI coefficient value is 1.758036 with p-value of 0.0688 implying that a unit increase in domestic investment will increase gross domestic product positively with the value of 1.758036 which is significant at 10% but not significant at 5% alpha level. The coefficient value of exchange rate is 0.835206 with the p-value of 0.0000 signifying that exchange rate is positive and significant to economic growth. It was concluded that foreign direct investment was positive and significant to economic growth of Nigeria while the domestic investment was also positive but not significant at 5% alpha level.

Keywords

FDI, Economic Growth, Exchange Rate and Domestic Investment

1. Introduction

The role of foreign direct investment on economic growth has been hotly debated in the literature. Some studies are of the view that foreign direct investment contributes positively to the growth of the economy [1]-[6], while some are of the view that FDI only contributes small and it is not significant [7] [8]. How-

ever, the attributes of FDI in any economy of the world cannot be over-emphasized. Foreign direct investment (FDI) refers to an investment made by an investor either corporate bodies or individuals in a country other than the domestic country of origin of the investor in creating business or buying an asset in the country. [5] opined that foreign direct investment is seen as a process of moving technology and capital from a nation either developed or developing countries to another nation. [9] opined that foreign direct investment refers to the package of technology, capital, management, and entrepreneurship that firm uses to operate and provide goods and services in a foreign market. In Africa, Nigeria is the third host economy for FDI, behind Egypt and Ethiopia. Some of the investing countries in Nigeria are the USA, United Kingdom, China, the Netherlands and France [10]. Nigeria FDI flows in 2017 dropped by 21% to reach 3.5 billion USD which could be as a result of political instability, lack of transparency widespread corruption and poor quality of infrastructure [10]. However, this study tends to re-examine the impact of foreign direct investment on economic growth in Nigeria.

2. Literature Review

[11] examined foreign direct investment and growth on sectors using cross-country data from 1981 to 1999. The findings showed that total FDI exerts an unclear effect on growth. Foreign direct investments in the primary sector have a negative effect on growth, in the manufacturing a positive was found while in the service sector, the finding is ambiguous. [7] studied the impact of foreign direct investment on economic growth in Nigeria from 1970-2001 using Error Correction Model. The findings revealed that private capital and foreign capital have little effect on the economic growth and it's not statistically significant and financial development showed a significant negative effect on growth based on the findings which could be as a result of high capital flight it generates.

[12] investigated the relationship between foreign direct investment (FDI) and growth from 1980 to 2004 for 58 countries using panel VAR model and GMM analyses. The result of the study revealed that no definite evidence on the growth-effects of FDI and the factors that cause GDP and FDI may be different in relation to the level of income of the country. [8] examined the impact of foreign direct investment on economic growth in Jordan from 1990 to 2009 using co-integration and error correction mechanism. The result shows that foreign direct investment inflows do not exert an independent influence on economic growth.

[2] investigated the impact of foreign direct investment on economic growth using South Korea as a case study from 1980 to 2009. Multiple regression was employed as the estimation technique and the result found that there exist a strong and positive impact of foreign direct investment on economic growth in South Korea during the study period. [3] examined the impact of foreign direct investment (FDI) on Economic Growth in Nigeria from 1986-2007 using mul-

tiple regression models. From the analysis, it was found that FDI has the potential to positively impact upon the economy though its contribution to GDP was very low within the period under review.

[13] wrote on the causal interactions between FDI, and economic growth: a case study of 65 countries using panel co-integration and Granger causality tests. The results show a unidirectional causality from foreign direct investment to gross domestic product while the panel cointegration revealed a disparity result during the study period. [4] studied impact of foreign direct investment on Nigeria economic growth from 1999 to 2013 using ordinary least square regression method. The result of the findings showed that inflow of foreign direct investment is positive and statistically significant to economic growth of Nigeria.

[5] wrote on the effect of foreign direct investment on economic growth in Nigeria spans from 1981 to 2015 using multiple regression technique. The study found that foreign direct investment in Nigeria has a positive and significant effect on economic growth proxied with gross domestic product. It was also found that exchange rate has a positive but not significant effect on gross domestic product. [6] studied the impact of foreign direct investment (FDI) on the economic growth of Pakistan from a period of 1991-2015. Correlation and regression analysis techniques analysis were used in the study. Their findings revealed that FDI exists a positive impact on the economic growth of Pakistan.

Conclusively, the empirical review from previous researchers has showed different results using different methodology and time period in the literature both in developed and developing countries of the world. Based on the researcher's knowledge, there exist few studies in Nigeria on foreign direct investment and its impact on economic growth, which inspires the researcher to examine the subject matter.

3. Methodology

In order to achieve the broad objective of this study, the model of [5] was adapted. In his study of the effect of foreign direct investment on economic growth in Nigeria, the model was specified as:

$$GDP = f (FDI, EXR)$$

where:

GDP = Gross Domestic Product

FDI = Foreign Direct Investments

EXR = Exchange Rate

This study adapted the above model by extending the variables and the time covered. However, this study model is presented as:

$$RGDP = f (FDI, INT, REXR, DI)$$

where

GDP = Gross Domestic Product

FDI = Foreign Direct Investment

INT = Interest Rate

REXR = Real Exchange Rate

DI = Domestic Investment

The econometric form of the functional model is specified as:

$$\text{GDP} = \mu_0 + \mu_1\text{FDI} + \mu_2\text{INT} + \mu_3\text{REXR} + \mu_4\text{DI} + \varepsilon_t$$

where

μ_0 = Constant

μ_1 - μ_4 = Shift Parameters

Time series of the econometric form is presented as:

$$\text{GDP}_t = \mu_0 + \mu_1\text{FDI}_t + \mu_2\text{INT}_t + \mu_3\text{REXR}_t + \mu_4\text{DI}_t + \varepsilon_t$$

t = time series

The log-linearity form is used in order to have the same unit of values for the variables and the mathematical form is stated as:

$$\text{LGDP}_t = \mu_0 + \mu_1\text{LFDI}_t + \mu_2\text{LINT}_t + \mu_3\text{LREXR}_t + \mu_4\text{LDI}_t + \varepsilon_t$$

L = log

4. Result and Discussion

4.1. Descriptive Analysis

Table 1 shows the descriptive result of the variables employed. The result reveals the mean, median, maximum, minimum and standard deviation and the skewness, Kurtosis and Jarque Bera statistics. It reveals that the average value of log of gross domestic product is 12.90291, log of foreign direct investment is 9.313595, real interest rate is 2.287485, log of domestic investment is 10.72790 while log of exchange rate is 1.727817. The median result shows that LGDP is 12.98819, LFDI is 9.273962, RINTR is 4.997936, LDI is 10.72849 and LEXTR is 2.060034. The maximum, minimum and standard deviation were equally presented in the above table. However, the skewness statistics reveals that all the variables

Table 1. Descriptive result.

	LGDP	LFDI	RINTR	LDI	LEXTR
Mean	12.90291	9.313595	2.287485	10.72790	1.727817
Median	12.98819	9.273962	4.997936	10.72849	2.060034
Maximum	14.06032	9.946507	18.18000	10.84983	2.485647
Minimum	11.29694	8.286041	−31.45257	10.57654	0.305480
Std. Dev.	0.880819	0.426065	10.53346	0.070572	0.604637
Skewness	−0.365705	−0.297041	−1.080016	−0.146531	−0.809609
Kurtosis	1.851657	2.413428	4.597050	2.547906	2.401062
Jarque-Bera	2.471533	0.929335	9.621740	0.387033	3.974128
Probability	0.290612	0.628344	0.008141	0.824056	0.137097
Sum	412.8930	298.0350	73.19952	343.2929	55.29015
Sum Sq. Dev.	24.05110	5.627484	3439.565	0.154392	11.33317
Observations	32	32	32	32	32

Source: Eviews 9.0.

such LGDP, LFDI, RINTR, LDI and LEXTR are negatively skewed with the values of −0.365705, −0.297041, −1.080016, −0.146531 and −0.809609 respectively. The Kurtosis statistics reveal that LGDP, LFDI, LDI and LEXTR are platykurtic that is, they are less than 3 while RINTR is leptokurtic that is, more than 3. The Jarque-Bera statistics through its probability reveal that all the variables are normally distributed except RINTR which is not normally distributed during the study period.

4.2. Unit Root Result

The unit root results are presented in the appendix. However, the order of integration was presented in Table 2 and the result reveals that LGDP and RINTR are stationary at level while the other variables such as LFDI, LDI and LEXTR are stationary after converting them to first difference. This implies that all the variables used in this study were stationary during the study period.

4.3. Regression Analysis

The regression result revealed in Table 3 shows the constant of −13.30987 with

Table 2. Order of integration.

Variable	@Level		@First Difference		Order of Integration
	t-statistic	P-value	t-statistic	P-value	
LGDP	−3.281005	0.0246	-	-	I(0)
LFDI	−2.642153	0.0957	−9.856287	0.0000	I(1)
LDI	−1.753739	0.3949	−9.151749	0.0000	I(1)
RINTR	−3.379988	0.0196	-	-	I(0)
LEXTR	−2.621088	0.0996	−5.643297	0.0001	I(1)

Source: Author's computation (2019).

Table 3. Regression result.

Dependent Variable: LGDP				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	−13.30987	9.737832	−1.366821	0.1830
LFDI	0.633506	0.148892	4.254810	0.0002
RINTR	0.004127	0.003914	1.054527	0.3010
LDI	1.758036	0.927383	1.895696	0.0688
LEXTR	0.835206	0.131672	6.343062	0.0000
R-squared	0.950369	Mean dependent var		12.90291
Adjusted R-squared	0.943016	S.D. dependent var		0.880819
F-statistic	129.2529	Durbin-Watson stat		1.108331
Prob (F-statistic)	0.000000			

Source: Eviews 9.0.

p-value of 0.1830 indicating that when all variables such as LFDI, RINTR, LDI and LEXTR are being held constant, there will be negative variation up to the tune of 13.30987 with an insignificant direction. The coefficient value of LFDI is 0.633506 and its p-value is 0.0002 implying that a unit increase in LFDI will increase LGDP with the value of 0.633506 that is, foreign direct investment exhibits a positive and significant impact on economic growth of Nigeria. The coefficient value of RINTR is 0.004127 with p-value of 0.310 indicating that a unit increase in real interest rate will increase gross domestic product but it is not significant that is, RINTR is positive but not significant to economic growth during the study period. Also, LDI coefficient value is 1.758036 with p-value of 0.0688 implying that a unit increase in domestic investment will increase gross domestic product positively with the value of 1.758036 which is significant at 10% but not significant at 5% alpha level. The coefficient value of exchange rate is 0.835206 with the p-value of 0.0000 signifying that exchange rate is positive and significant to economic growth.

More so, the coefficient of multiple determinant which is also known as goodness of fit (R^2) value is 0.950369 and adjusted R^2 is 0.943016. This implies that the independent variables have above 95% variation in the dependent variable (economic growth). The F-statistic value is 129.2529 and its p-value is 0.0000000 indicating that all the independent variables (LFDI, RINTR, LDI and LEXTR) can jointly influence the dependent variable during the study period.

5. Conclusion and Recommendations

This study investigated the impact of foreign direct investment on economic growth in Nigeria from 1986 to 2017. Several reviews were been done based on the existing literature relating to the subject matter. From the findings, this study concluded that foreign direct investment was positive and significant to economic growth of Nigeria while the domestic investment was also positive but not significant at 5% alpha level. It was equally concluded that real interest rate and exchange rate were both positive, and real interest rate was not significant, but exchange rate was significant to influence economic growth of Nigeria. This study recommended that the government and the policy makers should create more avenues to attract foreign investors which will enhance technology transfer, and more job opportunities, and increase productivity into the economy. It is also recommended that the domestic investors need not to be ignored in formulating policy that could attract and motivate existing and potential domestic investors in Nigeria.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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Appendix

Data

Year	LGDP	LFDI	RINTR	LDI	LEXTR
1986	11.29694	8.28604	4.31029	10.60448	0.30548
1987	11.3886	8.78572	−4.7696	10.57654	0.604
1988	11.49916	8.57826	−2.9627	10.60464	0.65674
1989	11.6179	9.27514	−6.6124	10.63206	0.86874
1990	11.69429	8.76929	17.4662	10.68822	0.90514
1991	11.7709	8.85271	0.99085	10.6828	0.99605
1992	11.95714	8.95262	−14.987	10.68502	1.23801
1993	12.0994	9.12884	−7.0525	10.71657	1.34343
1994	12.24768	9.29208	−15.92	10.70576	1.34017
1995	12.49139	9.03313	−31.453	10.6759	1.34017
1996	12.61131	9.20234	−5.2608	10.70445	1.34017
1997	12.6453	9.18736	12.1266	10.72912	1.34017
1998	12.68171	9.02174	11.4847	10.73513	1.92328
1999	12.73897	9.00213	6.04725	10.7466	1.9654
2000	12.84897	9.05697	−1.1409	10.77714	2.00347
2001	12.91564	9.07577	12.1387	10.6594	2.04932
2002	13.06075	9.27279	3.02354	10.70155	2.08271
2003	13.13216	9.30219	9.93571	10.7858	2.11204
2004	13.25826	9.27278	−2.6048	10.68924	2.12548
2005	13.36402	9.69745	−1.5937	10.69929	2.11939
2006	13.48252	9.68613	−5.628	10.84662	2.10511
2007	13.54003	9.78075	9.18717	10.7393	2.09556
2008	13.60156	9.91358	6.68491	10.72786	2.07075
2009	13.6381	9.93221	18.18	10.76895	2.16849
2010	13.73729	9.78005	1.06774	10.78603	2.17264
2011	13.80027	9.94651	5.68558	10.74866	2.18278
2012	13.85945	9.84942	6.22481	10.7596	2.19296
2013	13.90854	9.7453	11.2016	10.79248	2.19244
2014	13.9549	9.66759	11.3562	10.84719	2.19585
2015	13.97854	9.49656	13.5962	10.84983	2.28398
2016	14.01104	9.64788	6.68623	10.81988	2.48459
2017	14.06032	9.54372	5.79057	10.80675	2.48565

Source: WDI 2019 & CBN 2017

Unit Root Result

GDP @ Level

		t-Statistic	Prob.*
Null Hypothesis: LGDP has a unit root			
Exogenous: Constant			
Lag Length: 0 (Automatic-based on SIC, maxlag = 7)			
Augmented Dickey-Fuller test statistic		−3.281005	0.0246
Test critical values:	1% level	−3.661661	
	5% level	−2.960411	
	10% level	−2.619160	

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

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D (LGDP)				
Method: Least Squares				
Date: 04/17/19 Time: 10:55				
Sample (adjusted): 1987 2017				
Included observations: 31 after adjustments				
LGDP(−1)	−0.029871	0.009104	−3.281005	0.0027
C	0.473449	0.117389	4.033146	0.0004
R-squared	0.270715	Mean dependent var		0.089141
Adjusted R-squared	0.245568	S.D. dependent var		0.049905
S.E. of regression	0.043346	Akaike info criterion		−3.376850
Sum squared resid	0.054488	Schwarz criterion		−3.284335
Log likelihood	54.34118	Hannan-Quinn criter.		−3.346693
F-statistic	10.76499	Durbin-Watson stat		1.406351
Prob (F-statistic)	0.002696			

LFDI @ Level

		t-Statistic	Prob.*
Null Hypothesis: LFDI has a unit root			
Exogenous: Constant			
Lag Length: 0 (Automatic-based on SIC, maxlag = 7)			
Augmented Dickey-Fuller test statistic		−2.642153	0.0957
Test critical values:	1% level	−3.661661	
	5% level	−2.960411	
	10% level	−2.619160	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D (LFDI)

Method: Least Squares

Date: 04/17/19   Time: 10:56

Sample (adjusted): 1987 2017

Included observations: 31 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LFDI(−1)	−0.234024	0.088573	−2.642153	0.0131
C	2.218434	0.825131	2.688584	0.0118
R-squared	0.194018	Mean dependent var		0.040570
Adjusted R-squared	0.166226	S.D. dependent var		0.228989
S.E. of regression	0.209093	Akaike info criterion		−0.229737
Sum squared resid	1.267873	Schwarz criterion		−0.137222
Log likelihood	5.560921	Hannan-Quinn criter.		−0.199579
F-statistic	6.980974	Durbin-Watson stat		2.700983
Prob (F-statistic)	0.013140			

LFDI @ First Difference

Null Hypothesis: D (LFDI) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic-based on SIC, maxlag = 7)

			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			−9.856287	0.0000
Test critical values:	1% level		−3.670170	
	5% level		−2.963972	
	10% level		−2.621007	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D (LFDI, 2)

Method: Least Squares

Date: 04/17/19   Time: 10:57

Sample (adjusted): 1988 2017

Included observations: 30 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (LFDI(−1))	−1.486495	0.150817	−9.856287	0.0000
C	0.047351	0.034974	1.353905	0.1866
R-squared	0.776262	Mean dependent var		−0.020128

Continued

Adjusted R-squared	0.768271	S.D. dependent var	0.390236
S.E. of regression	0.187853	Akaike info criterion	−0.441978
Sum squared resid	0.988080	Schwarz criterion	−0.348565
Log likelihood	8.629675	Hannan-Quinn criter.	−0.412095
F-statistic	97.14639	Durbin-Watson stat	1.873769
Prob (F-statistic)	0.000000		

LDI @ Level

		t-Statistic	Prob.*
Null Hypothesis: LDI has a unit root			
Exogenous: Constant			
Lag Length: 2 (Automatic-based on SIC, maxlag = 7)			
		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		−1.753739	0.3949
Test critical values:	1% level	−3.679322	
	5% level	−2.967767	
	10% level	−2.622989	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(LDI)

Method: Least Squares

Date: 04/17/19 Time: 10:57

Sample (adjusted): 1989 2017

Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LDI(−1)	−0.228373	0.130220	−1.753739	0.0917
D (LDI(−1))	−0.401444	0.156966	−2.557532	0.0170
D (LDI(−2))	−0.589516	0.149331	−3.947715	0.0006
C	2.466826	1.396926	1.765896	0.0896
R-squared	0.550800	Mean dependent var		0.006969
Adjusted R-squared	0.496896	S.D. dependent var		0.053861
S.E. of regression	0.038203	Akaike info criterion		−3.564343
Sum squared resid	0.036487	Schwarz criterion		−3.375751
Log likelihood	55.68297	Hannan-Quinn criter.		−3.505278
F-statistic	10.21817	Durbin-Watson stat		1.974045
Prob (F-statistic)	0.000142			

LDI @ First Difference

Null Hypothesis: D(LDI) has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic-based on SIC, maxlag = 7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		−9.151749	0.0000
Test critical values:	1% level	−3.679322	
	5% level	−2.967767	
	10% level	−2.622989	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D (LDI, 2)

Method: Least Squares

Date: 04/17/19 Time: 10:58

Sample (adjusted): 1989 2017

Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (LDI(−1))	−2.191882	0.239504	−9.151749	0.0000
D (LDI(−1), 2)	0.671792	0.147320	4.560084	0.0001
C	0.017017	0.007643	2.226443	0.0349
R-squared	0.806469	Mean dependent var		−0.001422
Adjusted R-squared	0.791582	S.D. dependent var		0.086959
S.E. of regression	0.039699	Akaike info criterion		−3.517284
Sum squared resid	0.040976	Schwarz criterion		−3.375839
Log likelihood	54.00061	Hannan-Quinn criter.		−3.472985
F-statistic	54.17285	Durbin-Watson stat		1.958519
Prob (F-statistic)	0.000000			

RINTR @ Level

Null Hypothesis: RINTR has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic-based on SIC, maxlag = 7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		−3.379988	0.0196
Test critical values:	1% level	−3.661661	
	5% level	−2.960411	
	10% level	−2.619160	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D (RINTR)

Method: Least Squares

Date: 04/17/19 Time: 10:58

Sample (adjusted): 1987 2017

Included observations: 31 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RINTR(−1)	−0.566449	0.167589	−3.379988	0.0021
C	1.279485	1.799329	0.711090	0.4827
R-squared	0.282610	Mean dependent var		0.047751
Adjusted R-squared	0.257872	S.D. dependent var		11.38826
S.E. of regression	9.810622	Akaike info criterion		7.467149
Sum squared resid	2791.201	Schwarz criterion		7.559665
Log likelihood	−113.7408	Hannan-Quinn criter.		7.497307
F-statistic	11.42432	Durbin-Watson stat		1.940476
Prob (F-statistic)	0.002086			

LEXTR @ Level

Null Hypothesis: LEXTR has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic-based on SIC, maxlag = 7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		−2.621088	0.0996
Test critical values:	1% level	−3.661661	
	5% level	−2.960411	
	10% level	−2.619160	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D (LEXTR)

Method: Least Squares

Date: 04/17/19 Time: 10:59

Sample (adjusted): 1987 2017

Included observations: 31 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LEXTR(−1)	−0.091454	0.034892	−2.621088	0.0138
C	0.226108	0.062882	3.595768	0.0012
R-squared	0.191527	Mean dependent var		0.070328
Adjusted R-squared	0.163649	S.D. dependent var		0.125036

Continued

S.E. of regression	0.114348	Akaike info criterion	−1.436799
Sum squared resid	0.379189	Schwarz criterion	−1.344283
Log likelihood	24.27038	Hannan-Quinn criter.	−1.406641
F-statistic	6.870103	Durbin-Watson stat	2.125516
Prob (F-statistic)	0.013811		

LEXTR @ First Difference

Null Hypothesis: D(LEXTR) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic-based on SIC, maxlag = 7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		−5.643297	0.0001
Test critical values:	1% level	−3.670170	
	5% level	−2.963972	
	10% level	−2.621007	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D (LEXTR, 2)

Method: Least Squares

Date: 04/17/19 Time: 10:59

Sample (adjusted): 1988 2017

Included observations: 30 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (LEXTR(−1))	−1.008749	0.178752	−5.643297	0.0000
C	0.063357	0.025746	2.460879	0.0203
R-squared	0.532139	Mean dependent var		−0.009916
Adjusted R-squared	0.515429	S.D. dependent var		0.174928
S.E. of regression	0.121769	Akaike info criterion		−1.309039
Sum squared resid	0.415177	Schwarz criterion		−1.215625
Log likelihood	21.63558	Hannan-Quinn criter.		−1.279155
F-statistic	31.84680	Durbin-Watson stat		1.981700
Prob (F-statistic)	0.000005			