



EFFECT OF EASE OF DOING BUSINESS ON ECONOMIC GROWTH IN NIGERIA

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Abstract

The study examined the effect of ease of doing business on economic growth in Nigeria for the period 2007-2018. The study employed ease of doing business dimensions ranking as independent variables, while Gross Domestic Product at constant prices is applied as the dependent variable and corruption perception index ranking was used as control variable. Multiple regression and correlation analysis were used for data analysis. The study found that individually Getting Credit, Protecting Investors, Trading Across Borders, and Registering Property do not insignificantly affected GDP, while starting a business negatively but insignificantly affects GDP. However, the measures of ease of doing business jointly significantly affected economic growth. Thus, the study rejects the null hypothesis that ease of doing business do not significantly affect economic growth. The study therefore concludes that ease of doing significantly affects economic growth in Nigeria. The study recommends that that economic policy makers should not just continue to ease requirement that promote businesses, but evolve efficient and transparent regulations that promote businesses and at the same time take into considerations public interest.

Keywords: Corruption Perception Index, Ease of Doing Business, Gross Domestic Product
JEL Classification: F18

Introduction

To propel economic growth through vibrant private driven sectors, policy makers in Nigeria have continued to evolve and implement wide-ranging structural, economic and financial reforms. These reforms are aimed at improving the economic functioning of markets and diversifying the economy, which are expected to culminate into inflows of investments and economic growths. A pivotal instrument of these reforms is economic regulations, the absence of these reforms though may be perceived as insignificant, there is a growing consensus that the quality of business regulation and the institutions that enforce it are a major determinant of prosperity and malfunctioning of economic regulations can hinder economic growth (Heyman, Norbäck & Persson, 2015; Haidar2012). However, regulations too have been found to be capable of constituting a clog to economic progress, where they are not well thought out or when wrongly applied. In these cases, they strangle rather than support growth of the economy.

The World Bank developed measures to determine annually how regulatory reforms for ease of doing business has enhanced or constrict business activity. The Doing Business project, launched in 2002, examines local small and medium-size firms and measures the regulations applying to them through their life cycle (Doing Business Report, 2018). Ease of Doing Business framework encapsulates varying important dimensions of regulatory environment of local firms. Presently the ease of doing business framework rank economies based on quantitative indicators on regulation for starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency (Doing Business Report, 2018). Doing Business also measures features of labour market regulation. Although Doing Business does not present rankings of economies on the labour market regulation indicators or include the topic in the aggregate distance to frontier score or ranking on the

ease of doing business, it does present the data for these indicators. The Doing Business report contains data in four aggregate forms, the economies distance to frontier score, indicators distance to frontier score, economies and indicators ease of doing business ranking.

Nigeria business environment has continued to experience regulatory reforms, especially in the early 2000's aimed principally at easing and strengthening private sectors participation in economic activities. The drive for private sectors engagement is premise on the expectations that it will increase inflow of investments, employment, productivity and standards of living, which will culminate in economic growth. Additionally, in 2016 when the Nigeria economy fell into recession after three consecutive quarters of GDP decline, to put the economy back on track of economic recovery, Nigeria government evolved wide-ranging economic reforms. These reforms were anchored on regulations aimed at ease of doing business to attract investors, which are expected to boost economic activities. Study conducted by World Bank has shown that domestic structural impediments have contributed significantly to the recent slowdown in productivity growth in many emerging market economies (Didier et al. 2015). Thus, it has been opined that the slowdown in growth combined with unfavourable socio-political uncertainty, will continue to weigh on growth (Hintošová, Kubíková and Ručinsk, 2016). Thus, the study seeks to determine whether ease of doing business affect economic growth.

Despite the conflicting empirical evidences on the efficacy regulatory reforms on economic activity, governments have continued to evolve these reforms for ease of doing business. The divergence in conclusion drawn may be attributed to period of the study, dimensions of ease of doing business employed and methodology applied for analysis. This study differs from previous studies, while other studies use cross-country data with varying characteristics, this study focus on a single emerging economy with high prospects and potentials to explore. The study did not only look at connection between ease of doing business and economic growth but also incorporate CPI as control variables. The study uses the World Bank Doing Business indicators ranking as proxies of business regulations and CPI as control variable. This study seeks to adjust the periodic context and dimensions to determine the how economic growth will correspondingly adjust to variations made. Therefore, the study seeks to determine the effect of ease of doing business on economic growth in Nigeria. This is aimed at testing the following null hypothesis with is stated, thus:

H₀₁: Ease of Doing Business does not significantly affect Economic Growth in Nigeria

The study is expected to broaden the horizon of body of literature on the subject matter of the study, thus serving as a reference point for further research. It is also expected to serve as input on how economic policy makers should evolve economic reforms measure to catalyse economic growth and prosperity. The study is confined to period 2007-2018, using data drawn only from ease of doing business reports, CPI reports, Central Bank of Nigeria and World Bank websites.

In achieving this objective, the study is divided into five parts. This is an introduction, followed by literature review as the second part. The third part is methodology and the fourth part is result and analysis, while the last part is conclusion and policy implication.

Literature Review

Studies have been conducted on the connection between ease of doing business and economic growth in varying economies and periods. These studies encompass those conducted in both developed and emerging markets with varying business environments. Thus, literature on ease of doing business and some economic indicators are reviewed.

Study conducted by Adepoju (2017) examined the impact of ease of doing business on the growth rate of GDP per capita in Nigeria, controlling for business climate and economic growth. The result shows that ease of doing business has an overall statistically significant effect on the annual growth rate of GDP per capita. However, the estimated coefficients of the Doing Business indicators for the full sample are statistically not significant with no effect on the annual growth rate of GDP per capita, while the indicators for the subsamples have a statistically significant effect. Furthermore, the result of subsamples based on country income groups' classifications showed conflicting results. Thus, the study concluded that ease of doing business plays a significant role in economic growth, but that the effect varies across groups of countries.

In addition, Pere and Hashorva (2015) investigated the regulation and administrative facilitation aspects of doing business in Western Balkans Countries, to determine whether it led to the development of private business and economic growth. The results of statistical analysis of the effect of administrative facilities and the rules for doing business on economic growth in the Western Balkan countries suggests that there is positive and statistically significant correlation between these variables. In

addition, it was observed that economic growth is strongly influenced by from credit's facilitation, while the impact of other factors such as power supply, the ease of registering property, fiscal procedures, the implementation and the possibility of settlement of contracts etc. positively but did not significantly affects economic growth. The results also show that this effect is not delay but manifest immediate within a year.

Furthermore, Ani (2015) examined the effect of ease of doing business on economic growth of some economies in Asia. Ease of doing business is represented by ten Doing Business indicators (DBI), while Gross Domestic Product (GDP) was used as the proxy variable for economic growth. Data were analysed using multiple regression. The result of the study indicates that Singapore has the best regulatory performance in Starting Business, Registering Property, Protecting Investors, Trading Across Borders, and Enforcing Contracts. In addition, China showed the highest economic growth. The study found out that the variations in ease of doing business was explained by dealing with construction permits, getting credit, registering property and trading across borders. Dealing with construction permits and getting credit have negative effect to Gross Domestic Product while registering property and trading across borders have positive effect. Trading across borders greatly affect gross domestic product among selected countries in Asia.

Also, Karama (2014) investigated the impact of corruption and rule of law on ease of doing business, GDP growth and GDP per capita using the countries from the Bribe Payers Index. The result of analysis shows negative effect of corruption, bribery and rule of law have on the ease of doing business in a country at macro level. It also shows that there is positive significant effect of corruption, bribery, and rule of law have on a country's economy on the micro level. Thus, it could be inferring that corruption, bribery, and rule of law indices weigh heavily and have a higher magnitude effect on ease of doing business and GDP per capita than on GDP growth.

Furthermore, Saleh (2013) analysed Egypt performance on the doing business on investment and economic growth for the period 2004 to 2010. The study found that rules affecting the scope, accessibility and quality of credit information available through either public or private credit registries are positively correlated to GDP increase. The amount of taxes and mandatory contributions payable by the business in the second year of operation, expressed as a share of commercial profits were found to correlate negatively. In addition, bureaucratic measure of the effect of an

increase or decrease in the average number of documents required to export goods was found to negatively correlate to economic growth. Finally, the study also found a positive correlation between increase in the average days it takes to complete a procedure to get a permit will increase the growth in GDP.

Another widely cited literature is Haidar (2012) who examined the impact of business regulatory reforms on economic growth rates, using cross-country differences in business regulatory reforms data from the World Bank Doing Business project and variables of macroeconomic dynamics. The study found that there is statistically significant evidence, across 172 countries, for economic growth response to business regulatory reforms. Also, there is fairly robust evidence of positive impacts of regulatory reforms and these estimated impacts are sizeable and plausibly large. However, the extent to which economic growth has decreased differed among countries that reformed at least one area during the 3 years that preceded the recent financial crisis to those that did not. Thus, the study concluded that reforms, which improved business and investment climate, might have helped to mitigate the effects of the 2008 global slump in economic growth. Furthermore, countries with more business regulatory reforms enjoyed higher economic growth rates.

Furthermore, Mongay and Filipescu (2012) conducted correlation analysis of 172 countries data to establish the relationship between corruption and ease of doing business variables using a bivariate correlation analysis. The 172 countries were analyzed by comparing their positions in the Corruption Perception Index (CPI) ranking and the ease of doing business ranking. The study concludes that there is a high degree of interdependency between the two variables analyzed. Thus, conclude that corrupt nations are inclined to make business more difficult and complex for local or foreign investors and vice versa.

Eifert (2009) assessed the impact of regulatory reform on investment and GDP growth using an Arellano-Bond dynamic panel estimator to control for unobserved cross-country heterogeneity and the correlation between reform timing and the business cycle over the period 2003 to 2007. The study shows a positive impact of regulatory reforms in countries with relatively poor condition of governance and relatively well-governed condition on income. In addition, the results show a significant increase in investment in both subgroups of countries investment in the subsequent year.

One of the pioneer studies in the area of ease of point business report is Djankov, McLiesh and Ramalho

(2006) examined the link between regulations governing business activity and the economic growth of countries. The study uses the 2004 Doing Business single cross-section data created by the World Bank to measure the business regulations for 135 countries, and the average annual growth rate of GDP per capita between 1993 and 2002 as their dependent variable. They establish that the relationship between better regulations and higher growth rates is consistently significant. In addition, the results indicate that the effects of improvements in primary school enrolment, secondary education, government consumption, and inflation are significantly lower than the impact of business regulations on the economic growth rate.

Methodology

The study employed regression analysis to determine the effect of ease of doing business on economic growth. The ease of doing business ranking for each dimension was used to represent the independent variables; Corruption Perception Index(CPI) country ranking is applied as control variable, while economic growth proxy by GDP at current prices represents the dependent variables.

Even though there are presently ten (10) ease of doing business dimensions as employed by World Bank, only eight were initially adapted based on availability of data for the periods of study. Multicollinearity problem was identified among some independent variables, thus additional four (4) dimensions were eliminated, and four (4) dimensions were used for analysis. The CPI was introduced to control for suspected rent extraction by government bureaucrats.

The measures of independent variable used in the study include Starting a Business (STB), Getting Credit (GTC), Protecting Investors (PIN) and Paying Taxes (PTX). Secondary data drawn from annual World Bank ease of doing business reports, Transparency International CPI reports and World Bank website for the period 2007-2018 was analysed using multiple regressions analysis. The regression model was subjected to diagnostic tests for multicollinearity, serial correlation, heteroskedasticity and normality to ensure the validity of the models. The econometric model is stated thus:

$$\text{LOGGDPCON} = \alpha + \beta_1\text{LOGSTB} + \beta_2\text{LOGGTC} + \beta_3\text{LOGPIN} + \beta_4\text{LOGPTX} + \beta_5\text{LOGCPI} + \varepsilon \dots\dots\dots (1)$$

Where:

- α = slope
- LOGGDPCON = GDP at Constant Prices
- LOGPTX=Paying Taxes
- LOGGTC=Getting Credit
- ε = Error Term

- β=regression coefficient
- LOGSTB= Starting a Business
- LOGPIN=Protecting Investors
- LOGCPI=Corruption Perception Index

Result Discussion

Results of descriptive statistics diagnostic tests conducted to check for the presence of stationarity, serial correlation, heteroskedasticity, normality and

multicollinearity, in addition the results of correlation and multiple regression analysis are explained in this section.

Table 1: Descriptive Statistics

	LOGGDPCON	LOGCPI	LOGGTC	LOGPIN	LOGPTX	LOGSTB
Mean	11.59574	2.137273	1.741336	1.700955	2.155345	2.066245
Median	11.606	2.13	1.8921	1.7559	2.1399	2.0719
Maximum	11.6668	2.17	1.9494	1.8451	2.2601	2.243
Minimum	11.4788	2.08	1.1139	1.301	2.0212	1.9031
Std. Dev.	0.067067	0.027236	0.274359	0.163479	0.089287	0.088868
Skewness	-0.49361	-0.60258	-1.34361	-1.52641	-0.19238	0.058515
Kurtosis	1.880829	2.828882	3.553123	4.320418	1.670525	3.265917
Jarque-Bera	1.020781	0.679117	3.44991	5.070661	0.877957	0.038687
Probability	0.600261	0.712085	0.178181	0.079236	0.644695	0.980842
Sum	127.5531	23.51	19.1547	18.7105	23.7088	22.7287
Sum Sq. Dev.	0.044979	0.007418	0.752728	0.267255	0.079721	0.078976
Observations	12	12	12	12	12	12

Source: E-Views Output, 2019

The result of descriptive statistical analysis in table 1 shows a mean value of 11.59574 for LOGGDPCON and a standard deviation of 0.067067, while LOGCPI has a mean value of 2.137273 and a standard deviation of 0.027236, in addition LOGGTC has a mean value of 1.741336

and a standard deviation of 0.274359. Furthermore, LOGPIN has a standard deviation of 0.163479 but a mean score of 1.700955, LOGPTX and LOGSTB have a mean value of 2.155345, 2.066245, a standard deviation of 0.089287 and 0.088868 respectively.

Table 2: Results of Diagnostic Tests

Variables	Statistics	P-Value
Normality	0.391619	0.822169
Serial Correlation	0.31695	0.8587
Heteroskedasticity	9.723481	0.0835
Ramsey Reset test	1.467261	0.2162

Source: Extracts from E-Views Outputs, 2019.

The result of test for normality in the distribution in table 2 shows the probability of the Jarque- Bera is 0.822169, which is greater than 0.05 at 5% level of significance. Therefore, the data employed for analysis is normally distributed. To verify if autocorrelation exists, the study used Breush-Godfrey Serial Correlation LM Test; the p value derived is 0.8587, which is greater than 0.05 at 5% level of significance. Thus, the null hypothesis of no autocorrelation is accepted. Additionally, the study tested the occurrence of Heteroskedasticity using

Harvey Heteroskedasticity test, the P value derived is 0.0835, which is also greater than 0.05 at 5% level of significance. This indicates that there is no heteroskedasticity in the model. Lastly, the study tested the model specification of error, using the Ramsey-reset Test to determine whether the findings can be used for policymaking. The p value of result derived from Ramsey Reset test is 0.2162, which is greater than 0.05. This means that the error does not exist and can be used for policymaking.

Table 3: Correlation Matrix

VARIABLES	LOGCPI	LOGGTC	LOGPIN	LOGPTX	LOGSTB
LOGCPI	1				
LOGGTC	-0.17731	1			
LOGPIN	-0.05878	-0.20337	1		
LOGPTX	0.275157	-0.59587	-0.27905	1	
LOGSTB	0.536652	-0.32677	-0.58245	0.778798	1

Source: E-Views Output, 2019

Table 3 presents the correlation coefficient of the variables used in the study to determine possible collinearity problem between the independent variables. The result shows no excessive presence of multicollinearity was found in the Doing Business indicators dataset as the correlation coefficients for the four Doing Business indicators and CPI are all less than 0.8. The strongest relationship exists

between LOGSTB and LOGPTX with a coefficient of 0.7787, which is below threshold of 0.8 and above for existence of high multicollinearity problem between independent variables as suggested by Gujarati (2003) and Rumsey (2007). Thus the result confirms that there is no multicollinearity problem between the explanatory variables.

Table 4: Estimation of Ease of Doing Business and Economic Growth Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.862441	0.347480	28.38280	0.0000
LOGCPI	-0.053347	0.187565	-0.284421	0.7875
LOGGTC	0.013823	0.018457	0.748962	0.4876
LOGPIN	0.058174	0.035718	1.628683	0.1643
LOGPTX	0.798386	0.085212	9.369370	0.0002
LOGSTB	0.001691	0.110789	0.015260	0.9884
R-squared	0.9859			
Adjusted R-squared	0.9717			
S.E. of regression	0.0113			
F-statistic	69.6801			
Prob(F-statistic)	0.000127			

Source: E-Views Output, 2019

Table 4 shows the regression result for the effect of Ease of Doing Business on economic growth proxied by GDP. The result shows that individually GTC, PIN and STB had no significantly affected GDP, while PTX positively and significantly affected GDP. This indicates that individually the variables had no influence on GDP, which is similar to findings of Jayasuriya (2011), Adepoju (2017) and Ani (2015), while an increase in STB reduces GDP. However, the measures of ease of doing business cumulatively significantly affected economic growth as the with the F-statistics of 69.6801 with P-value of 0.000127 derived which is less than the critical value of 0.05 at 5% level of significance. Therefore, the null hypothesis that ease of doing business does not significantly affect economic growth was rejected. The adjusted R square of 0.9717 indicates that the variables used in the study are 97% likely to explain the variation in GDP. The findings may not be surprising as the doing business rank is made up of several sub-rankings that are in turn determined by many individual variables. Some of these are likely to be more relevant to FDI decisions than others. The Standard Error (SE) of regression at 0.011 indicates the prediction of the model is reliable.

Conclusions and Recommendations

The study examined the effect of ease of doing business on economic growth in Nigeria. The

fundamental empirical findings in this study show that cumulatively the ease of doing business indicators coefficients are statistically significant. However, the individual tests of significance for the estimated coefficients of the doing business indicators had no significant effect on GDP in Nigeria. That is, based on the finding of the study, the measure of ease of doing business individually did not significantly affect economic growth as measured by GDP. However, ease of doing business measures employed had a cumulative significant effect on economic growth for the period of the study. Therefore, it could be inferred that the right mix of ease of doing business reforms affects economic growth in Nigeria. The conclusion drawn is in conformity with that of Pere and Hashorva (2015), Ani (2015) and Haidar (2012) that ease of doing business do significantly affect economic growth. The negative relationship between starting a business and economic growth suggests that simplifying business registration procedure may lead to proliferation of business enterprises with little impact on economic growth.

Therefore, the study recommends that economic policy makers should not just continue to ease requirement that promote businesses, but evolve efficient and transparent regulations that promote businesses and at the same time take into considerations public interest.

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APPENDICES

Dependent Variable: LOGGDPCON

Method: Least Squares

Sample: 2007 2018

Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.862441	0.347480	28.38280	0.0000
LOGCPI	-0.053347	0.187565	-0.284421	0.7875
LOGGTC	0.013823	0.018457	0.748962	0.4876
LOGPIN	0.058174	0.035718	1.628683	0.1643
LOGPTX	0.798386	0.085212	9.369370	0.0002
LOGSTB	0.001691	0.110789	0.015260	0.9884
R-squared	0.985852	Mean dependent var		11.59574
Adjusted R-squared	0.971704	S.D. dependent var		0.067067
S.E. of regression	0.011282	Akaike info criterion		-5.828825
Sum squared resid	0.000636	Schwarz criterion		-5.611792
Log likelihood	38.05854	Hannan-Quinn criter.		-5.965635
F-statistic	69.68025	Durbin-Watson stat		1.813014
Prob(F-statistic)	0.000127			

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.011559	Prob. F(1,4)	0.9196
Obs*R-squared	0.031695	Prob. Chi-Square(1)	0.8587

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Sample: 2007 2018

Included observations: 12

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.021956	0.438406	0.050082	0.9625
LOGCPI	-0.011339	0.234462	-0.048362	0.9637
LOGGTC	0.000763	0.021794	0.035015	0.9737
LOGPIN	-0.001150	0.041285	-0.027845	0.9791
LOGPTX	-0.001479	0.096122	-0.015386	0.9885
LOGSTB	0.002942	0.126678	0.023226	0.9826
RESID(-1)	0.079341	0.737976	0.107512	0.9196
R-squared	0.002881	Mean dependent var		-9.23E-16
Adjusted R-squared	-1.492797	S.D. dependent var		0.007977
S.E. of regression	0.012595	Akaike info criterion		-5.649893
Sum squared resid	0.000635	Schwarz criterion		-5.396687
Log likelihood	38.07441	Hannan-Quinn criter.		-5.809504
F-statistic	0.001926	Durbin-Watson stat		1.852048
Prob(F-statistic)	1.000000			

Heteroskedasticity Test: Harvey

F-statistic	7.617183	Prob. F(5,5)	0.0219
Obs*R-squared	9.723481	Prob. Chi-Square(5)	0.0835
Scaled explained SS	7.926226	Prob. Chi-Square(5)	0.1603

Test Equation:
 Dependent Variable: LRESID2
 Method: Least Squares
 Sample: 2007 2018
 Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-56.39308	31.21348	-1.806690	0.1306
LOGCPI	-8.478528	16.84866	-0.503217	0.6362
LOGGTC	8.880053	1.657946	5.356058	0.0030
LOGPIN	8.700930	3.208505	2.711833	0.0422
LOGPTX	-0.386999	7.654480	-0.050559	0.9616
LOGSTB	16.61361	9.951958	1.669381	0.1559

R-squared	0.883953	Mean dependent var	-10.75728
Adjusted R-squared	0.767906	S.D. dependent var	2.103553
S.E. of regression	1.013412	Akaike info criterion	3.166974
Sum squared resid	5.135016	Schwarz criterion	3.384008
Log likelihood	-11.41836	Hannan-Quinn criter.	3.030164
F-statistic	7.617183	Durbin-Watson stat	2.738331
Prob(F-statistic)	0.021894		

Ramsey RESET Test
 Equation: UNTITLED
 Specification: LOGGDPCON C LOGCPI LOGGTC LOGPIN LOGPTX LOGSTB
 Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	1.467261	4	0.2162
F-statistic	2.152855	(1, 4)	0.2162
Likelihood ratio	4.736841	1	0.0295

F-test summary:

	Sum of Sq.	Df	Mean Squares
Test SSR	0.000223	1	0.000223
Restricted SSR	0.000636	5	0.000127
Unrestricted SSR	0.000414	4	0.000103
Unrestricted SSR	0.000414	4	0.000103

LR test summary:

	Value	Df
Restricted LogL	38.05854	5
Unrestricted LogL	40.42696	4

Unrestricted Test Equation:
 Dependent Variable: LOGGDPCON
 Method: Least Squares
 Sample: 2007 2018
 Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	148.1524	94.25091	1.571893	0.1911
LOGCPI	-1.889510	1.262793	-1.496294	0.2089
LOGGTC	0.475594	0.315155	1.509077	0.2058
LOGPIN	2.020757	1.337971	1.510315	0.2055
LOGPTX	27.87623	18.45485	1.510510	0.2054
LOGSTB	0.072687	0.110976	0.654976	0.5482
FITTED^2	-1.465188	0.998587	-1.467261	0.2162
R-squared	0.990802	Mean dependent var		11.59574
Adjusted R-squared	0.977005	S.D. dependent var		0.067067
S.E. of regression	0.010170	Akaike info criterion		-6.077629
Sum squared resid	0.000414	Schwarz criterion		-5.824423
Log likelihood	40.42696	Hannan-Quinn criter.		-6.237240
F-statistic	71.81423	Durbin-Watson stat		1.952165
Prob(F-statistic)	0.000501			

	LOGGDPCON	LOGCPI	LOGGTC	LOGPIN	LOGPTX	LOGSTB
Mean	11.59574	2.137273	1.741336	1.700955	2.155345	2.066245
Median	11.606	2.13	1.8921	1.7559	2.1399	2.0719
Maximum	11.6668	2.17	1.9494	1.8451	2.2601	2.243
Minimum	11.4788	2.08	1.1139	1.301	2.0212	1.9031
Std. Dev.	0.067067	0.027236	0.274359	0.163479	0.089287	0.088868
Skewness	-0.49361	-0.60258	-1.34361	-1.52641	-0.19238	0.058515
Kurtosis	1.880829	2.828882	3.553123	4.320418	1.670525	3.265917
Jarque-Bera	1.020781	0.679117	3.44991	5.070661	0.877957	0.038687
Probability	0.600261	0.712085	0.178181	0.079236	0.644695	0.980842
Sum	127.5531	23.51	19.1547	18.7105	23.7088	22.7287
Sum Sq. Dev.	0.044979	0.007418	0.752728	0.267255	0.079721	0.078976
Observations	12	12	12	12	12	12