

THE EFFECT OF CORRUPTION ON ECONOMIC SUSTAINABILITY AND GROWTH IN NIGERIA

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Abstract

Corruption in contemporary era has dent growth and economic sustainability in developed and especially developing economies. Such is evidence in the Nigerian context. In 2013 cum 2014 the economy was rated one of the fastest growing in relation to her vision 2020:20. The reverse is the case owing to corruption undermining economic growth and sustainability in Nigeria. This study then, scrutinize the extent upon which corruption have undermine economic growth proxide by (GDP) as its prime objective. The study adopts the Classical Linear Regression Model (CLRM) by means of secondary data from 1999-2016 with an array of other universal/customary and analytical tests. The R^2 of the CLRM result shows that 94% of the variation in GDP is explained by the prime regressors. Corruption, and exchange was established positive and significant affiliation, while unemployment, and inflation rate negative and non-significant affiliation. The above therefore conforms to empirical and conventional theoretical viewpoint to corruption undermining growth and sustainability habitually and globally.

Keywords: *Corruption, economic growth, sustainability, model stability*

INTRODUCTION

Empirical and conceptual literature acknowledged corruption to be a universal quandary for both the developing and the developed economies. The United Nations Global programme against corruption (UNGPAC) equally acknowledged corruption to be “abuse of power for private gain”. The government of the Federal Republic of Nigeria in 2014 in instituted that, corruption and its constituents constitute a basic challenge to the growth and sustainability of the Nigerian economy. Researchers theoretically and empirically defined, corruption based upon the political, cultural and advancement of the society of which it strives (Olatunji & Muhammed, 2013). Dike as cited in Ola, Mohammed and Audi (2015) stipulate that, economic and financial corruption is not only a product of democratic and dictatorial politics, but also imbalances in religious structure. World Bank report domicile corruption at over \$1 trillion per year accounting for about 12% of the GDP in Nigeria, Kenya and Venezuela (Nwabuzor as cited in (Ola, Mohammed & Audi 2015). CBN report in 2013 alleged that gigantic sums are lost by means of fraud and forgery.

According to Olawunmi, (2014), World Bank report in recent time's rank Nigeria among the five poorest states. In absolute terms 80 percent of corrupt practices in Nigeria is a product of miscarry or flop socioeconomic, socio-cultural and socio-political institutions in Nigeria (Todaro and Smith as cited in Shuaib, Augustine and Ogedengbe 2016). Transparency International rank Nigeria among the top three most corrupt nations (Ribadu, as cited in Ajie, and Wokekoro, 2012). The authentication of such claims is found in numerous corruption cases investigated by the anti-corruption agencies (EFCC and ICPC) in Nigeria running from millions to billions of Naira and in dollars.

Therefore, corruption has not been explicitly defined and identify in traditional economic growth theories. But intercontinentally is acknowledged as policy variable in developing economies. Notwithstanding, efforts made by governments globally to combat and curtail corrupt practices, corruption however, has being on a constant increase from 65.93% to 66.28% in 2011 and 2012 respectively and 66.45% in 2013 (World Bank Indicator, 2016). Such degree of corruption has the potency to hamper the realization of the 13.8% average growth rate and per capita income of 4,000 USD of Nigeria by the year 2020:20 (National Planning Commission, 2010). In the light of the above, there is therefore a need to scrutinize the effect cum bond between corruption and sustainable economic growth in Nigeria. This study therefore depart from previous study by means of embracing the effect and affiliation rather than studying just the impact on sustainable economic growth.

Statement of Problem

Economist accredit the contemporary economic recession in Nigeria to be a product of long-term ills financial and economic corrupt practices in the nation economic and financial climate, which therefore undermine its growth. Even in the face of the anti-corruption agencies set up in the country.

Objective of the Study

The elementary goal of this study is to analyse the effects and affiliation of corruption on sustainable economic growth in Nigeria spanning from 1999 to 2016. The justification for the based year 1999 plays host to power transition from the military to the civilian with its prime objective to fight corruption and ensure sustainable economic growth in Nigeria.

REVIEW OF RELATED LITERATURE

The persistent decline and proportional increase of corruption in Nigeria even in the face the anti-corruption agencies have bred a lot of controversy, to the effectiveness and efficiency of the anti-corruption agencies in the fight against corrupt practices in Nigeria that has undermine economic growth and sustainability. The effect of corruption globally has remained unresolved in both theoretical and empirical researches. The economic and financial crime commission in 2005 report perceives corruption as a major cancer that has reduced development in all sectors of the economy (Nwankwo, 2014). McMullan (1961), Myrdal (1968), Krueger (1974), Alam (1989), Vishny (1993), Mauro (1995), Tanzi (1997), Aliyu and Elijah (2008), as cited in Ibrahim and Okunade, (2015), recognized corrupt practices as rudimentary foundation to pitiable economic and financial growth in Nigeria even in the face of numerous natural and human resources. Empirical studies ascertain a positive and significant affiliation between corruption and economic growth. Rotini, Obasaju, Lawal, and Ise (2013) stipulate that, there is no correlation between corruption and economic growth in real output.

Foundational Causes of Corruption in Nigeria

A reasonable number of factors have been acknowledged for ordaining corrupt practices in Nigeria. These include; The fragile political and soci-cultural climate.

The dysfunctional legal institutions.

The poor working conditions.

Lack of incentives to encourage efficient and effective performance.

The slow budget procedures.

Lack of transparency.

Inadequate strategic vision and weak monitoring mechanisms, are strong incentives in support of corrupt practices (I.M.F, 2005 as cited Ola, Mohammed and Audi, 2015).

According to, Imohe as cited in Ola, Mohammed and Audi (2015) corruption is so obvious and widespread therefore wearing a legalized look in Nigeria. Goodling, as cited in Ola, Mohammed and Audi (2015) sustain that “since 1996, Nigeria has been tag as the most corrupt nation three times: running from 1996, 1997, and 2000 and fourth in 1998, second in 1999, 2001, 2002 and 2003. Transparency International and Goettingen University report in 1996 under the military era Nigeria was tag most corrupt nation, among 54 nations listed (Kaufman, as cited in Ola, Mohammed and Audi, 2015). In 1999 the civilian era Transparency International Annual Corruption Index (CPI) tag 99 nations in order of perceived levels of corruption with Nigeria tag 98. In 2004 Corruption Index, by Transparency International rank Nigeria as the third most corrupt country in the world till date. Which therefore has effect on the Nigeria economy with more than 60 percent of the citizen living below two dollars per day which shows absolute poverty (I.M.F 2016).

Corruption in the Fourth Republic Effect on Sustainable Economic Growth

The transition of power from military to civilian in 1999 and the election of Chief Olusegun Obasanjo along with the establishment of the anti-corruption agencies the Independent Corrupt Practices Commission (ICPC) and Economic and Financial Crime Commission (EFCC) in Nigeria injected a new blood and hope to boost and sustainable growth.Eight years later the Western diplomats in 2007 alleged that about \$4 billion and \$8 billion per year are lost to corruption in Nigeria under the Obasanjo’s administration (HRW, 2007 as cited in Usman Mohammed 2013). Ogundiya (2012) holds that, in theFourth Republic corruption become a norm.

Corruption cases of the Fourth Republic

Lawmakers were indicted, found guilty and impeach for corruption such is evidence in the case of; Chief Evans Enwerem, Chuba Okadigbo, Adolphos Nwabara, Senator Chuba Okadigbostreet light project inflation of N173 million, Okadigbo endorsement of N372 million to equip his residence with a sum estimated aboveN25millionamong others indictment (Ogundiya, 2012).

Senate President, Adolphous Wabara, indicted and found guilty of bribe ofN55 million from Professor Osuji (the former Education Minister) budget inflation to the Education Ministry. Senator Chimaroke Nnamani indicted on 124 count charges and money laundering amounting

to about N5.4 billion naira (Vanguard Newspaper, Saturday, 2008 as cited in Usman Mohammed 2013).

Patricia Olubunmi Etteh, Speaker House of Representatives misappropriation of funds in multiple contracts of N628 million Naira (\$5 million) for the repairs of her official residence and 12 official cars purchase.

The Former Vice President Alhaji Atiku Abubakar, indicted and found guilty of diverting the sum of \$145 million Petroleum Technology Development Fund (Ogundiya, 2012).

State Government Corrupt Cases

The former Delta State Governor, James Ibori, indicted and found guilty of money laundering over N9.1 billion.

Orji Uzor Kalu, the former Governor of Abia state, indicted for looting of N3.1 billion to fund SLOK Airline and two banks in the Gambia and Sierra Leone (Ademola, cited in Usman Mohammed 2013).

Ex-Governor, Saminu Turaki of Jigawa state, indicted for spending N36 millions to acquire oil blocks.

Ex-Governor Reverend Jolly Nyame of Taraba state, indicted for N1.6 billion state fund,

Lucky Igbinedion, Ayo Fayose, Peter Odili and Chimaroke Nnamani and two of his Commissioners, Peter Mba and Spine Ejiofor, indicted for N5.6 billion frauds and other, indictment (Ademola, cited in Usman Mohammed 2013).

Babachir Lawal grass cutting contract of N1.3billion in 2017, Maina 2017N195billion pension scam, Sambo Dauki \$2.1billion arm deals, Patrick Akpobolokemi N12billion loot from the Nigeria Maritime Administration and Safety Agency 2017, Alhaji Abdullahi Dikko N40billion loot from the Nigeria Customs Service.

The Effect on the Economy

The constant increase in the degree of corruption in Nigeria established a proportional effect on the economic growth translating to a declining in real growth from 5.41% to 4.98% in 2006 and 2010 accordingly and to 2.60% in 2013. Since 2010, unemployment rate is on a constant increase year on year, with current standing at 23percent, with an overwhelming above 50percent of youth unemployment rate.

The Benefits of Anti-Corruption Instruments in Nigeria

The since the establishment of (EFCC and ICPC) in Nigeria positive and remarkable results has being witness among such are; N84 billion recover late Sani Abacha family loot in 2001, and

between May 2003 and June 2004, about \$700 million, was recover in money and assets and £3million through the British Government and \$242 million Brazil bank fraud in 2005.

Ribadu, as cited in Ola, Mohammed and Audi (2015) about 350 EFCC cases are at an advanced stage of prosecution and about 5,000 people have been arrested over the past three years with 91 convictions and assets worth over \$55 billion confiscated. The above result in turn increased the nation revenue profile by about 20% from 2006 – 2000.

The positive result coming-out of the operation of the federal Inland Revenue service and the seaports, have curtail and curbed oil bunkering in the Niger Delta, from about 300,000 – 500,000 daily to less than 50,000 barrels with the Prosecution of over 20 persons involved in the vandalism of oil pipelines (Imohe, as cited in Ola, Mohammed and Audi (2015). The corruption war has boost the nation growth rate to about 7.1 percent annually from 2003 to 2006 as against 2.3% in the 1990s, with acceleration in the non-oil sectors of the economy at 8.2 percent in 2005 with agricultural output increased at 7percent, up from 6.2percent in 2004 (CBN, 2015). Inflation declined from 39.3% to 21.88 percent in 2003 to 10 percent in 2004 with a slight increased to 12.2 percent at the end of 2006 equally Naira appreciated against international currencies. Unemployment rate declined from 18% in the 1990s to 5.3% in 2006 with percentage of the population living below poverty line from 70% in the 1990s to 54% in 2004.

THEORETICAL FRAMEWORK

Policy-Oriented Theory

Teveik, Albert and Charles in 1986, propounded the Policy-Oriented theory probing and clarifying the role of government in the fight against corruption. The theory thus state that; the recurrent incident of corruption in government and private sectors in both developing and developed economies has a resultant effect on economic and financial growth of a nation and for the war against administrative corruption to embrace a theoretical and less descriptive method, models, framework and methodology ought to be developed to measure its effect on economic growth.

EMPIRICAL FRAMEWORK

The materialization of corruption indices such as business international index, international country risk guide index, global competitiveness report index and transparency international indices has aid scholars to effectively study the causes and consequences of corruption on economic growth with the results establishing corruption to be the key factor sustaining poor economic growth, investment, increasing poverty rate.

Mauro (1995, 1997) as cited in Ibrahim and Okunade, (2015) conducted the first econometric analysis on corruption impact on economic growth and investment across countries. Data's from sample of developed and developing economies, employing OLS and Instrumental Variables (IV) as estimating techniques. The finding shows that corruption has a negative and significant impact on economic growth with a major impact on decreasing investment in physical capita.

Rotini, Obasaju, Lawal and Ise, (2013) employ ordinary least square (OLS) and granger causality to determine the correlation between corruption and economic growth in Nigeria. The finding of the study established that corruption weakens economic growth and equally fails to establish the movement either positive or negative in relation to the degree and impact.

Adewale, (2011) effects of corruption in Nigeria employing parsimonious error correction mechanism and experimental research approach for data analysis. The findings shows negative relationship between corruption and output growth in Nigeria with recommendation for introduction of national re-orientation to eradicate corruption in all sectors of Nigeria economy and socio-political system.

Akinpelu, Ogunseye, Bada, and Agbayangi (2013) Socio- Economic Determinants of corruption in Nigeria employing co-integration and vector error correction model. The findings shows a long-run relationship between conception and the social economic variables in Nigeria, failing to establish the movement either positive or negative with the degree of impact.

Mnhuda (2013) the relationship between corruption, poverty and economic growth in Nigeria employing OLS method and granger causality test. The findings shows the existence of co-integration and a long run causality relationship between corruption, poverty and economic growth in Nigeria.

Nageri et al (2013), investigated the impact of corruption on economic development in Nigeria using OLS technique. The findings shows that corruption has a significant negative effect on economic growth and development.

Egunjobi (2013), empirically examine the corruption impact on economic growth in Nigeria 1980-2009 using OLS analysis, granger causality test along with the impulse response function. Result reveals that corruption on per worker exercises negative influence on output directly and indirectly on foreign private investment, education expenditure and capital expenditure on per worker. The study however indicates mixed and conflicting results which can be accredited problems in methodology.

METHODOLOGY

Ex-post facto analytical research design was adopted for this study. The data is of secondary nature annualized time series from CBN and Transparency International index form 1999-2016.

The justification for the based year play host to power transition from the military to civilian in relation to the new civilian government resolution to fight corruption that was a norm in the military dictatorial government. Study cuddles a combination of descriptive statistics and OLS, and Augmented Dickey Fuller (ADF) test used for unit root test with an array of diagnostic tests was carried out on the regression model to ensure that the key assumptions underlying Linear Regression Model (LRM) are not violated.

Model specification

This study adopted the Linear Regression Model according Ajie, and Wokekoro (2012) where the following variables were adopted:

$$CRPT = f(GDP, UR, DS, GE, POST) \dots \dots \dots (1)$$

To contribute to knowledge, the above variables where modify as such;

$$GDP = f(CRPT, UNER, EXTR, INFR) \dots \dots (2)$$

Real gross domestic product = (RGDP), Corruption = (CRPT),

Unemployment rate = (UNER), Inflation rate = (INFR),

Exchange rate = (EXTR), u = error term,

B1, β2, = coefficients of the parameter estimates or the slopes

β_0 =Intercept of the regression equation

ANALYSIS

Data Description

Basic descriptive statistics as they concern the variables under study are presented in table 1.

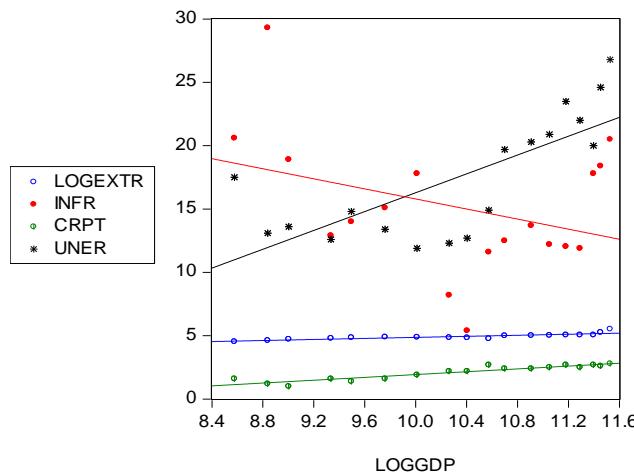
Table 1: Description of the Characteristics of the Variables under Study

Variable	Mean	Median	Skewness	Kurtosis	Standard Deviation	No. of Obs.
LOGGDP	10.32	10.48	-0.40	1.86	0.96	18
LOGEXTR	4.93	4.88	0.71	3.92	0.23	18
INFR	15.15	13.85	0.69	3.92	5.41	18
CRPT	2.11	2.30	-0.53	1.91	0.57	18
UNER	17.47	16.20	0.42	1.83	4.81	18

The Table 1 above shows aggregative averages of mean, median along measures of spread and variation like standard deviation. Skewness measures degree of symmetry and kurtosis

degree of peakedness of the observation. The results on skewness and kurtosis suggest a departure from normality. The results above are not strong enough to discredit the goodness of the data for analyses. Hence, to estimate the analytical affiliation of the variables, a scatter plot with fitted regression lines is presented in (Fig. 1) below. According to the slope of the regression line, a positive linear relationship is inferred between economic growth proxy by (LOGGDP), Corruption, and exchange rate respectively. Inflation and unemployment rates show a negative linear relationship with economic growth.

Figure 1: Scatter Plot of economic growth and corruption index and other variables under Study



Tests for Unit Root

To ensure dataset are stationary enough to allow for meaningful analyses, the variables were subjected to a unit root test of Augmented Dickey Fueler Statistics in the form discussed in Section 3 and the result is presented in table 2 below.

Table 2: Summary of ADF Unit Root Tests

S /No	Variable	ADF Stat	Critical Values			Prob.	Order of Integration @ 5%
			1%	5%	10%		
1.	LOGEXTR	-1.58	-2.71	-1.96	-1.60	0.104	I(1)
2.	INFIR	-4.68	-2.71	-1.96**	-1.60**	0.001	I(1)
3.	CRPT	-5.15	-2.71**	-1.96**	-1.60**	0.000	I(1)
4.	UNER	-4.25	-4.66	-3.73**	-3.31**	0.02	I(1)
5.	LOGGDP	-4.66	-3.88**	-3.05**	-2.66**	0.002	0(0)

** Suggests Stationarity at the given level of Significance

Table 2 above reports the test for stationarity properties of the series following the Augmented Dickey Fueler statistics. All the variables were found to be stationary at order 1 and 0. At the first difference and levels as reported, the ADF statistics for the respective variables were more negative than the critical values at 5% level of significance. The reported p-values are all less than 0.05 for which cause, the null hypothesis of the presence of unit root in all the variables is convincingly rejected. This test essentially assures that the regression result would not be spurious.

Estimation of the Regression Model

The result as contained in the model below follows the form specified in equation I in consistency with the linear regression model. The model has all the coefficients of the parameter estimates duly fitted. The standard errors and the t-statistics for the parameter estimates are correspondingly shown.

$$\text{LOGGDP} = 0.337 - 1.786\text{LOGEXTR} - 0.0147\text{INFR} + 0.997\text{CRPT} - 0.002\text{UNER} \dots \text{eq.II}$$

$$\text{SE} = (1.99) (0.466) (0.014)(0.203)(0.025)$$

$$T = (-0.16) (3.82) (-1.00) (4.97) (-0.09)$$

$$\text{Expectation} = (+) \quad (-) \quad (+) \quad (-)$$

It is essential however, to discuss the diagnostic tests contained in Table 3 before analyzing the significance of the Regression estimates. This is to ensure that there is no violation of the assumptions of the regression model as any of such assumptions casts doubts on the validity and reliability of the regression model.

Table 3: DIAGNOSTICS TESTS FOR THE REGRESSION MODEL

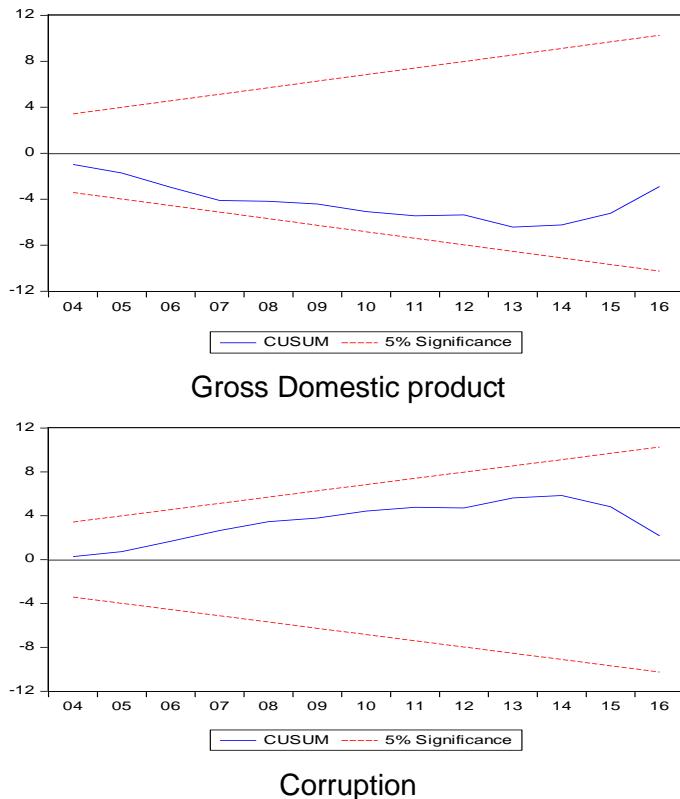
R ²	F-Stat	DW	BG-F	x ² (HET)	RESET-F
0.94	58	1.5	0.329	0.302	0.21

From Table 3, it can be established that the model has goodness of fit as the R² of 94% suggests. This shows that 94% of the variation in the dependent variable is accounted for by the independent variables with an unexplained variation of about 6%. Therefore, exchange rate (EXTR) and corruption index (CRPT) establish a positive and significant affiliation with economic growth. This is consistent with apriori expectation. A negative and non-significant affiliation was found between unemployment and inflation. This is departure from our expected sign and direction. The F-statistics of 58 and the corresponding probability value of 0.000, indicates that the overall regression is statistically significant and can be used for meaningful analyses. The Durbin Watson Statistics of 1.5, creates a suspicion of the possible existence a

first order positive autocorrelation for which cause a higher order serial correlation test was conducted. The Breusch Godfrey Lagrange Multiplier Serial Correlation Test was used and the result of the F-stat with a p-value of 0.329 rules out the existence of autocorrelation thereby overriding the result posted by the DW Stat (with its inherent limitation). In addition, a test for heteroskedasticity was carried out on the model to ensure that the assumption of homoskedasticity was not violated. From the result obtained, the x^2 and F-stat all indicate that the model is homoscedastic. The regression error specification test as reported clearly shows that the model does not have an inclusion of any irrelevant variable neither does it have an omission of a relevant variable.

More so, Fig.2 below contains the cumulative sum of squares graph following the recursive estimates. This is a measure of the stability of the models adopted for each of the variables under study. Evidently the model is BLUE (Best Linear Unbiased Estimator) and lies intact between the lower and the upper bounds. This clearly points to the stability of the model.

Figure 2: Cumulative Sum of Squares Stability test (MODEL STABILITY)



SUMMARY, RECOMMENDATIONS AND CONCLUSION

This paper analyses the effect of corruption on economic growth in Nigeria by means of dataset covering an 18years period. The ordinary Least Square Regression method represents the

prime method of estimation. The motivation is the effect and the degree of affiliation between corruption and economic growth in Nigeria. The R2 explains that 94% of variation in economic growth in the model is explained by the prime explanatory variables. Corruption and exchange rate were found to be positive and significant to economic growth, while Inflation and unemployment rate negative and non-significant. This is consistent with our apriori expectation as it is evident that increase in corruption and exchange rate will lead to a decrease in economic growth and increase cost of living translating to poverty, unemployment, crime and youth restiveness.

There is therefore a strong recommendation and advocacy for all-round review of anti-corruption agencies modus operandi, revitalization of citizens via attitudinal re-orientation, economic diversification and true federalism should be embrace as a key realistic attainment of vital and sustainable development in the face of the current sectorial struggle for growth and development which corruption has dent over time.

The above recommendations however, are sine qua non in the Nigeria context if the vision 20:2020 must be realized, which its prime objective is to place Nigeria among the league of developed or fast developing economies by 20;2020 and equally embrace the sustainable development goals SDG.

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