

## **CORRUPTION AND ECONOMIC GROWTH IN NIGERIA: A COINTEGRATION (FM-OLS) APPROACH**

**RAYMOND ADEGBOYEGA \***

**ABSTRACT:** *Corruption as one of major factors which have slow down economic growth and development in Nigeria has also deterred political and economic reforms which have undermined efforts to improve the living standards of Nigerians and to foster democratic governance. It is evident that the majority of Nigerians see corruption as a serious problem today and most public agencies are rated low in terms of honesty and integrity. Consequently, the factors that drive corruption become pertinent. So, this study examined the effect of corruption on economic growth in Nigeria using fully modified OLS regression technique. Our empirical analysis confirms that in the long run, corruption is negatively related to economic growth which retards economic growth directly and indirectly by increasing poverty and restricting investment. The study recommends among other strategies the implementation of stiff penalties such as stringent punishment for those convicted of corrupt acts in our law courts, promotion of poverty reduction programmes and an enabling environment for inward investments.*

**KEY WORDS:** *Corruption, economic growth, FDI, Transparency International, Trade openness.*

**JEL CLASSIFICATION:** *F10, O00, O40.*

### **1. INTRODUCTION**

Corruption is a social menace that has permeated into every facet of the society and considered a strong constraint on growth and development. Corruption also deters growth because it undermines the rule of law, the legitimacy of the state, the stability of the institutions, and the moral foundations of society (Doig and Theobald, 2000). Therefore, corruption is a bane to the developmental efforts of successive government in Nigeria. Specifically, corruption is noted to have been responsible for the non-execution of projects and programmes that would have helped in reducing the

---

\* *Ph.D., Department of Banking and Finance, Faculty of Administration and Management Sciences, Olabisi Onabanjo University, Ago Iwoye, Nigeria*

sufferings of Nigerians (Bello and Lamidi 2009). Many laudable and capital-intensive projects/programmes enacted or started by preceding leaders have been disregarded or neglected by their successors in a bid to be able to assign or approve new or fresh ones due to selfish intentions for financial gains. So, corruption has been identified as the major factor responsible for Nigeria's underdevelopment.

The most topical issue in the governance of contemporary Nigerian nation is probably accountability and transparency in the handling of public funds. Accountability is a central part of governance which is characterized by foreseeable, open and enlightened policy-making (i.e. transparent process). Transparency promotes good governance and transparent decision making is crucial for the public sector in making sound decisions for better performance (Afolabi 2004). Kolade (2012) asserted that the abuse of authority and privilege of office; the absence of a culture of accountability; and the inadequacies of stakeholders' dynamism could all hinder true/good governance.

Specifically, corruption has caused huge hindrance to national development in terms of greed among the political leaders largely characterized by embezzlement and misappropriation of public funds, cheating, bribery, forgery, impersonation, rigging, hoarding of voters cards, multiple voters' registration, etc. which has constituted a huge impediment to development in Nigeria (Dagaci 2009). Corruption is one of the greatest threats to good governance today because it slows down economic growth and investment. (Iyoha, et al 2015). It is a social problem which hampers development and robs people of the chances for any significant economic as well as social advancement (Okeyim, Ejue, & Ekanem 2013).

Obasanjo (2009) also observed that since the First Republic of Nigeria the cause of political instability has been as attributed to high level of corruption which successive government tried to eradicate. Unfortunately, the situation is becoming worse every day. More so, Nigeria's external image becoming more denting, as the country remained on the lowest rung of corruption index. Economic growth and development in Nigeria for over twenty years has been soiled with misappropriation and embezzlement of funds even with the return of democracy, turning the country's economy into an underdeveloped nation with least position in international ratings (Abullahi 2009). The Corruption Perception Index (2013) published by Transparency International shows that Nigeria occupies the 144th position in the world. This plunged downward further from the 137th out of 177 countries surveyed in 2012. However, Nigeria was ranked as the 136th most corrupt country in the world in 2014, an improvement on the position of 2013 by eight places.

Furthermore, the Economic and Financial Crimes Commission (EFCC) and Independent and Corrupt Practices Commission (ICPC) are getting worried whether it will be possible to eradicate corruption in Nigeria due to the high level of lootings by political office holders, civil servants and private businessmen. With the catalog of these problems in Nigeria, this study attempts to examine the effects of corruption on economic development in Nigeria.

To achieve this broad aim, the remainder of this paper is organized as follows: section 2 is conceptual framework; section 3 outlines the empirical estimation methods while section 4 presents the results. Section 5 concludes the paper.

## **2. LITERATURE REVIEW**

For the purpose of this study, the three relevant theories discussed are extractive corruption, complex systems, and economic growth theories. Extractive corruption theory basically concerned about the relationship between the state and society. The state comprised of the elites which is being perceived as the strongest force in the state-society relationship which uses the state apparatus as its instrument to exploit the society based on new-patrimonial states. Put differently, not only the state is the strongest force in society but also many centres of powers (Okechukwu and Inya 2011), which makes all power to corrupt, and absolute power corrupts absolutely. Concentration of political power in few hands may lead to abuse of power, selfish wealth-seeking and primitive state which is detrimental to the society. The argument is that the ruling elites misuse the power by using violence, force and persuasion to command respect. They may also use sophisticated institutional arrangements like presidential, dominant-multi-single-party system, and the cooperation of rivals in order to restrict participation and power sharing. All these manifest in Nigeria. More so, the theory is also known for its new-patrimonialism characteristics, that is, a kind of political system where there is no difference between public and private pursuit, pervasive and patron-client structures, and existence of strong political weakness.

Weber (1964) stated further that there are no criteria for appointment to an office other than the ruler's favour. In other words, the classical or traditional patrimonialism is one in which the right to rule is ascribed to a person rather than an office and exercised more through the informal clienteles and nepotistic practices than strong formal routines of authority. In Nigeria, due to the misuse of state powers by the ruling elites most of the resources which are ear-marked for developmental projects are utilized for their personal gains. The underdevelopment in Nigeria was caused by the personal attitude of these small elites who are politically and economically dominating families which have established hegemonic circle to siphon the country's wealth for personal use.

Complex systems contain a large number of mutually interacting parts (Rind, 1999) which are interconnected and interwoven. A complex system is one whose evolution is very sensitive to initial conditions or to small perturbations, one in which the number of independent interacting components is large, and one in which there are multiple pathways by which the system can evolve (Whitesides and Ismagilov, 1999). In this regard, there are two key concepts in complex systems, emergence' and complexity (Bar-Yam, 1997). In line with neo-classical approach which defined corruption as abuses of public office and resources for private or group gain, acts which are produced by specific political-economic processes happening in specific socio-cultural environments, so corruption is the product of a malfunctioning system where there are multiple actors who are complex within themselves and in their relations with each other and with the system. The argument for this is that when political office holders clash for power and wealth in an environment where the legitimacy of the system is in question, multiple motivations and opportunities that exist within the structure, triggers or fuels corrupt transactions. If corrupt practices entrench and corruption is normalized in the eyes of the actors, systemic values are

eventually replaced with corrupt ones and the system itself starts enforcing the new rules of the game. To survive in the game, actors follow these rules in their interaction with the other actors and corruption entrenches more. This is common in Nigerian political, economic and social system where those that have been ruling the country since independence were actors engaged in corrupt acts.

Neoclassical counter-revolution economists used three approaches, namely the free market approach, the new political economy approach and the market-friendly approach, to counter the international dependence model. These approaches mainly argued that underdevelopment is not the result of the predatory activities of the developed countries and the international agencies but was rather caused by the domestic issues arising from heavy state intervention such as poor resource allocation, government-induced price distortions and corruption in particular (Meier 2000). Liu (1996) argue for the endogenous growth models where productive human capital or physical capital are driving forces rather than diverting resources to non-productive political capital which will lower the economy's long-term growth rate. Society is better off if the level of this investment (political capital) is lower. As a response to public sector inefficiency, economists of the counter-revolution thinking, such as Bauer (1984), Lal (1983), Johnson (1971), and Little (1982), focused on promoting free markets, eliminating government-imposed distortions associated with protectionism, subsidies and public ownership.

In line with the above, the two schools of thought which are relevant to corruption-economic growth nexus are discussed. One school of thought holds that corruption introduces efficiency in the economy and affects economic growth positively. Leff (1964), Huntington (1968), Summers (1977), and Acemoglu and Verdier (1998) who are the proponents of this school of thought argue that corruption (i.e. payment of bribery to bureaucrats in many forms) acts like catalysts that promote economic growth because it facilitates rapid process for the approval of projects. The proponents of the second school of thought including Murphy (1993), Gould and Amaro-Reyes (1983), United Nations (1990), Mauro (1995), Mo (2001), and Monte and Papagni (2001) maintain that corruption negates economic growth because it is disadvantageous to businesses and innovators, especially those that lack the necessary cash flows and established lobbying power to either bribe or lobby the bureaucrats.

Corruption can be defined as encompassing all forms of irregular, unethical, immoral and/or illegal practices and transactions, dealing and activities in the process of handling commercial or public transactions or in the performance of official duties. It is the dishonest or fraudulent conduct by those in power, typically involving bribery. It is the illegitimate use of power to benefit a private interest (Morris 1991). The World Bank (1997) defines corruption as the abuse of public office for private gains or to circumvent public policies and processes for competitive advantage and profit. Also, it can be abused for personal benefit through patronage, nepotism, the theft of state assets or diversion of state revenue.

Also, corruption is the abuse of public trust for private gain; it is a form of stealing (Todaro and Smith, 2003). In addition, Transparency International (TI, 1996) adopts a more detailed approach by describing corruption as behaviour on the part of officials in the public sector, whether politicians or civil servants, in whom they

improperly and unlawfully enrich themselves, or those close to them, by the misuse of the public power entrusted to them.

The major problem with corruption in Nigeria has been lack of good governance in the form of accountability and transparency. This position is shared by Orubu and Awopegba (2003) that good governance must, at a minimum, include accountability of those in government to the governed, transparency, due process, the rule of law, and political systems that allow for popular participation in the decision-making process. A non-adherence to these principles can, therefore, be seen as a clear route to corruption.

However, corruption is seen to be against public interest or to violate certain legal and moral laws and principles which are directly or indirectly harmful to the society. Also, it affects efficiency and the success of policy implementation, which is crucial for growth in Nigeria. More so, corruption weakens the ability of the State to promote good governance, fairness and social justice (Anderson and Tverdova, 2003) while higher corruption is associated with higher poverty and income inequality (Gupta, 1995). It distorts proper and fair competition in markets, discourages potential foreign investment (FDI) as a result of cost additions and uncertainty creation (Gastanaga, Jeffery, and Bistra, 1998; Wei, 2000; Ugwuodo, 2002; Asiedu, 2003; and Dike, 2004). Considering its impact on poverty and foreign investment, corruption became linked negatively to economic growth. In addition, reduces the resources available for economic development infrastructure (Azfar et. al., 2001). Moreover, discourages potential public donors; increases ineffective and unserviceable foreign debts (Frisch, 1996); and helps distort markets by redirecting economic activity from one sector to another, thus destroying the structure and pattern of economic development and reducing the efficiency of economic activity.

Economic growth can be defined as the increase in the monetary or market value of goods and services produced by an economy over time. According to Todaro and Smith (2009), economic growth is an expansion of the system in one or more dimensions without a change in its structure. Ajayi (1996) define economic growth as the increase in a country's real output of goods and services over a period of time. Ijirshar (2015) perceived economic growth as an increase in the capacity of an economy to produce goods and services, compared from one period of time to another which can be measured in nominal terms (including inflation) or in real terms (adjusted for inflation).

Several studies conducted over the past decade have clearly emphasized the negative impact of corruption on economic growth due to the increase transaction costs, the reduction in the efficiency of public services, the distortion of the decision-making process, and the undermining of social values. Based on the assumption that underpaid employees will tend to supplement their incomes with bribes, Rijckeghem and Weder (1997) test the relationship between public sector salaries and the level of corruption and find a negative relationship between them. Rauch and Evans (2000) test the same hypothesis, but cannot find a strong relationship. Paldam (1999) finds a negative correlation between GDP per capita and corruption levels. However, no causality between GDP and corruption can be derived from this says Lambsdorff (1999), because we cannot know if a country is poor because of corruption or it is

corrupt because of poorness. Wei (2000) hypothesizes that openness to international trade is an indication of a country's cleanliness, also a negative correlation between foreign direct investment levels and corruption and finds empirical support for his proposition. Broadman and Recatinini (2000), working on the same relationship, cannot find such strong evidence to this hypothesis. Wei and Schleifer (2000) look at local corruption and capital flows to emerging markets. They found that corruption affects both the volume and the composition of capital inflows into countries. In particular, corruption reduces inward FDI substantially. FDI is more vulnerable than other forms of capital inflows to corruption. Theoretically, this may be due to corruption having more of a direct interference with operations involving FDI.

On the other hand, there are empirical studies with mixed results on the impact of corruption on economic growth. Egger and Winner (2005) employ a panel data of 73 countries between 1995 and 1999 and find a positive relationship between corruption and foreign direct investment (FDI). The authors argue that corruption can help circumvent bureaucratic delays and thus is a stimulus for FDI, from which government officials reap a portion of the profits. In his own study, Omenka (2013) linked the causes of corruption to include poverty, pressure from families, community ethnic loyalties among others. Also, Anoruo and Braha (2015) study find that corruption retards economic growth directly by lowering productivity, and indirectly by restricting investment. Furthermore, the results of the study of Hanousek and Kochanova (2015) on whether bureaucratic corruption measured as the frequency of unofficial payments to public officials impacts the sales and labour productivity growth of firms in Central and Eastern European countries reveal a higher bribery mean retards both the real sales and the labour productivity growth of firms. Finally, Nwogu and Ijirshar (2016) examined the impact of corruption on economic growth and cultural values in Nigeria. Auto-Regressive Distributed Lag (ARDL) Model was used to test the long-run relationship among the variables. The result shows that Relatively Corruption Rank (RCR) has significant but negative influence on economic growth in Nigeria. Other corruption indices such as corruption perception Index and corruption rank which are presented in an inverse form had positive impact on the growth of the Nigerian economy.

Despite these insightful findings, a problem with this and other similar literature on the issue is that as they use several regressions to analyse the relationship between corruption and economic growth their results could be quite easily influenced by omitted variable bias as the explanatory power of other macro-level governance factors might have been captured by the results of their corruption regression models. This study tries to remove this problem by using a combined variable for the most commonly cited macro-level growth indicators as the test variable for my model. This gap is filled by including poverty and trade openness as part of the control variables using Fully Modified Ordinary Least Square (FMOLS) regression technique.

### **3. METHODOLOGY**

This study is both descriptive and quantitative type in nature. The study used GDP as the dependent variable and country scores on CPIs with a variety of economic

indicators that are considered to be related to corruption levels as independent variables. In order to obtain the long run relationship, the study used Fully Modified Ordinary Least Square (FMOLS) regression technique in analysing the secondary data collected from Central Bank of Nigeria and Transparency International from 1982-2015. The main reason for using FMOLS method of regression analysis is not only it generates consistent estimates of the  $\beta$  parameters in relatively small samples, but it controls for the likely endogeneity of the regressors and serial correlation (Ramirez, 2007).

### 3.1. Apriori Expectation

The undesirable corruption perception index and poverty index are expected to have either a positive or negative impact on economic growth, while foreign direct investment, trade openness are expected to have a positive influence on economic growth.

### 3.2. Model Specification

The study used the neoclassical growth model and in investigating the growth mechanism, the input-output relationship is characterized by a general production function:

$$Y = T f(K, L) \quad (1)$$

where, Y is the total output level, T is total factor productivity, and K and L are the capital stock and labour, respectively.

However, Eq. (1) can be interpreted according to Schumpeter's theory of economic development (Schumpeter, 1912, 1939). Using a production function approach, it states that the growth rate of output (GDP) is principally determined by the following factors: The rate of growth of gross labour; the rate of growth of gross capital input and change in technology or total factor productivity (TFP). We characterize these components as:

$$GDP = f(L, K, T) \quad (2)$$

where: GDP = Gross Domestic Product; L = labour; K = capital formation / investment; and T = technology.

Based on the literature review, this study considers Growth Rate (GR) of GDP as the proxy for economic growth. Going by the above, the model for this study is shown below by incorporating other determinants of economic activities which include the key variables to be considered in this study. These include; CPI as key variable, POV, TOPENS FDI as intervening variables. This can be represented mathematically thus:

$$GR = f(CPI, POV, TOPENS, FDI\_GDP) \quad (3)$$

Hence when the equation is presented in a generic form, we have:

$$GR_t = b_0 + b_1CPI_t + b_2POV_t + b_3TOPENS_t + b_4FDI\_GDP_t \dots + U_t \quad (4)$$

Equation (4) is formulated to account for the direct effect of corruption on economic growth. In assessing the indirect effect of corruption on economic growth through poverty, trade openness and investment, the study formulated equations (5), (6) and (7), respectively.

$$POV_t = b_0 + b_1CPI_t + b_2GDP_t + b_3TOPENS_t + b_4FDI\_GDP_t \dots + U_t \quad (5)$$

$$TOPENS_t = b_0 + b_1CPI_t + b_2POV_t + b_3GDP_t + b_4FDI\_GDP_t \dots + U_t \quad (6)$$

$$FDI\_GDP_t = b_0 + b_1CPI_t + b_2GDP_t + b_3POV_t + b_4TOPENS_t \dots + U_t \quad (7)$$

### 3.3. Definitions of the Variables

**Table 1. Variables Exposition**

Variables		Description	Sources
Dependent	GR	Change in economic growth rate and also consider as an indicator of a country's standard of living (Daferighe & Aje, 2009).	CBN Bulletin, IMF World Economic Outlook
Independents	CPI <sub>t</sub>	CPI Score for Nigeria relates to perceptions of the degree of corruption as seen by business people and country analysts and ranges between 10 (highly clean) and 0 (highly corrupt) at time t	Transparency International Corruption Perception Index
	POV <sub>t</sub>	Poverty level. Corruption is associated with higher poverty and income inequality (Gupta, 1995).	World Development Indicators
	TOPEN <sub>t</sub>	Trade openness = Exports + Imports/Gross Domestic Product. It is an indication of a country's cleanliness. Wei (2000)	CBN Bulletin
	FDI <sub>t</sub>	Foreign direct investments. Corruption distorts proper and fair competition in markets, discourages potential foreign investment (FDI) and have significant negative effects on a host of key transmission channels, such as investment (including FDI) Gastanaga et al., 1998; Wei, 2000; Ugwuodo, 2002; Asiedu, 2003; and Dike, 2004).	CBN Bulletin
	EXD <sub>t</sub>	External Debt	CBN Bulletin

## 4. ANALYSIS

### 4.1. Descriptive Statistics

The results in table 2 below reveal that that economic growth is positively correlated with corruption, poverty FDI\_GDP and trade openness. In contrast, corruption is negatively correlated with poverty, FDI\_GDP and trade openness but FDI\_GDP and trade openness are positively correlated. However, the analysis of short-run correlation relationships may be spurious. As a result, a more rigorous analysis must be undertaken to underpin the effects of corruption on economic growth. The standard deviations reveal that real poverty index (11.95) fluctuate the most and in contrast, trade openness (0.159) fluctuate the least.

**Table 2. Correlation Coefficients Descriptive Statistics of Independent Variables**

	GR	CPI	POV	FDI_GDP	TOPENS
GR	1.000000				
CPI	0.834491	1.000000			
POV	0.351836	-0.117338	1.000000		
FDI_GDP	0.068872	-0.077227	0.124066	1.000000	
TOPENS	0.428958	-0.010658	0.598086	0.279073	1.000000
Mean	3.665714	1.128286	56.36571	3.008000	0.377143
Std. Dev.	7.672715	1.090603	11.94701	2.268444	0.159366

*Author's Compilation, 2017*

### 4.2. Regression Results

In table 3 below, FMOLS method of regression was used to obtain the long run estimates for the various variables. The interpreting of the results is based on Transparency International corruption perception rating that high corruption index implies low corruption, while low corruption index indicates high corruption. Table 3 above displays the results for economic growth (GR). The results reveal that the effect of corruption on economic growth is sensitive to the inclusion of the transmission channels including poverty, FDI\_GDP, and trade openness. From column 1 of Table 3, the regression coefficient on corruption is 2.485 and shows that one-unit increase in the corruption index reduces the growth rate by 2.485 percentage points. It exceeds 1.237 and 2.037 in columns 2 and 4 respectively where the transmission channels (POV and TOPENS) were included separately. However, when all channels were included as in column 5, it decreases to 2.055. In some of the cases, the regression coefficient on corruption is statistically significant at 5 percent level. The fact that the regression coefficient on corruption fluctuated with the inclusion of the transmission channels suggests that in addition to the direct effect, corruption can also influence economic growth through poverty, FDI\_GDP trade openness. The results in Table 3 show that low corruption is associated with high economic growth. For example, using column 5 of Table 3, we infer that one standard deviation decrease in corruption translates to about 2.26 percent (found by  $1.1 \times 2.055$ ) increase in economic growth. The results

suggest that improvement in corruption engenders economic growth. For the robustness of the results obtained from the FMOLS, we re-estimate equation (4) using the generalized instrumental variable method (GIVM). The results from the GIVM corroborate those obtained from the FM-OLS relative to the effect of corruption on economic growth. The results from the GIVM are presented in column 6 of Table 3. The results again show that the regression coefficient on corruption positively but insignificant. These results suggest that improvement in corruption engenders economic growth in Nigeria which is in line with Egger and Winner (2005) study on corruption.

**Table 3. Long-Run Estimates based on Fully Modified OLS**

Regressors	Dependent Variable: Economic growth (GR)					
	GR(1)	GR(2)	GR(3)	GR(4)	GR(5)	GR(6)
						Instrumental Variables
C	0.956 (0.53)	-0.618 (-0.07)	-0.802 (-0.31)	-3.453 (-1.45)	2.574 (0.47)	-2.718 (-0.33)
CPI	2.485** (2.19)	1.237 (0.72)	2.878** (2.56)	2.037** (2.10)	2.055 (1.62)	1.830 (0.88)
POV	-	0.057 (0.35)	-	-	-0.122 (-0.99)	-0.030 (-0.16)
FDI_GDP	-	-	0.438 (0.81)	-	-0.103 (-0.26)	0.081 (0.12)
TOPENS	-	-	-	14.300** (2.17)	17.856* (2.85)	15.399 (1.50)

Notes: Absolute value of *t*-statistics are in parentheses; \* significant at 1%; \*\* significant at 5%; \*\*\*significant at 10%. GR = GDP growth rate, CPI = corruption perception index, POV = poverty, FDI\_GDP = investment percent of GDP, TOPENS = trade openness.

The results of the effects of poverty, investment and trade openness on economic growth are shown in table 4 below. The results indicate that increase in poverty has a negative and insignificant impact on economic growth. This is consistent with economic theory, which stipulates that high poverty rate reduces economic growth. As for investment, the study observes that increase in investment improves economic performance, as the regression coefficient on FDI\_GDP is positive but statistically insignificant. This finding is in line with economic theory which stipulates that investment is an important input in the process of economic growth. In terms of trade openness, the results show that trade openness has positive effect on economic growth and significant at the 10 percent level. This is also in line with the economic theory that trade openness promotes economic growth. Also, table 4 shows the results of the indirect effect of corruption on economic growth (three transmission channels)

through poverty, FDI\_GDP and trade openness. From column 2 of Table 4, the results show that corruption has a positive and significant effect on poverty at 1 percent level. These results infer that an increase in one unit of corruption raises poverty by about 8.27 percent ( $1.1 \times 7.52$ ). The results in column 3 of table 4 display that corruption has a negative but significant effect on FDI\_GDP at 1 percent level. The result shows that 1.44 percent decrease in corruption increases FDI\_GDP by about one unit. This indicates that low corruption is associated with a high investment. This finding is consistent with Tanzi and Davoodi (1997). The results reveal that trade openness has a significant effect on investment. These results indicate trade openness is an important determinant of investment because it is positively significant at 5 percent level. Finally, the results in column 4 table 4 show the indirect effect of corruption on economic growth through trade openness. The results suggest that corruption has a positive but not significant influence on trade openness. These results also reveal that economic growth and FDI\_GDP are important determinants of trade openness because they are positively significant at 10 percent level. This result implies that as trade openness increases both economic growth and FDI\_GDP rises. Overall, high level of corruption can harm growth by inhibiting inward investment.

**Table 4. Estimation for Transmission Channels based on Fully Modified OLS**

Independent Variables	Dependent Variable		
	POV	FDI GDP	TOPENS
C	39.159* (8.63)	-2.346 (-1.01)	-0.101 (0.54)
CPI	7.520* (3.92)	-1.440* (-2.84)	0.011 (0.25)
GR	-0.027 (-0.10)	0.027 (0.53)	0.007*** (1.89)
POV	-	0.082 (1.58)	0.006 (1.53)
FDI_GDP	1.227 (1.49)	-	0.024*** (1.94)
TOPENS	14.703 (1.07)	5.734** (2.12)	-

Notes: Absolute value of *t*-statistics are in parentheses ( ). \* significant at 1%; \*\* significant at 5%; \*\*\* significant at 10%. GR = GDP growth rate, CPI = corruption perception index, POV = poverty, FDI\_GDP = foreign investment percent of GDP, TOPENS = trade openness.

## 5. CONCLUSION

Empirically this study investigated the impact corruption on economic growth in Nigeria. Some control variables were included in the model in order to isolate the effect of corruption. This model suggests that corruption has a strong impact on economic growth in Nigeria. The study found that corruption is negatively related to economic growth which retards economic growth directly by increasing poverty and indirectly by restricting investment. That is, a one-unit increase in the corruption index reduces the growth rate by 2.485 percentage points. The findings from this study are

consistent with economic theory, which stipulates that corruption is detrimental to economic growth and development. Therefore, the more corrupt a country is, the slower its economic growth rate. Corruption is a stigma that destroys the reputation of the affected country, lowers investment thereby lowering economic growth of the country.

## 6. RECOMMENDATIONS

The study made the following recommends:

- The implementation of stiff penalties such as stringent punishment for those convicted of corrupt acts in our law courts, promotion of poverty reduction programmes and an enabling environment for inward investments.
- The sustained reduction of systematic corruption requires committed leadership that solves the socio-economic problems of the people and in turn gets support from the citizens and the civil society.
- Excessive regulation creates rents which are allocated at the discretion of public officials and must be eliminated
- Governments must set up accountability mechanisms and channels that get the public engaged in oversight.

## REFERENCES:

- [1]. **Abdulahi, B.F.** (2009) *Misappropriation and embezzlement of public funds in Nigeria: a critical analysis*, Lapai International Journal of Management and Social Sciences, 2(2), 180-198
- [2]. **Adegbite, E.; Nakajima, C.** (2011) *Corporate governance and responsibility in Nigeria*, International Journal of Disclosure and Governance, 8(4), 252 - 271
- [3]. **Afolabi, G.K.** (2004) *Accountability and transparency in governance*, Babcock Journal of Management and Social Sciences, 3(1), 45-60
- [4]. **Ajayi, S.I.** (1996) *Macroeconomic approach to external Debt: the case of Nigeria*, AERC
- [5]. **Acemoglu, D.; Verdier, T.** (1998) *Property Rights, Corruption and the Allocation of Talent: A General Equilibrium Approach*, Economic Journal, 108(45), 1381-1403
- [6]. **Anoruo, E.; Braha, H.** (2015) *Corruption and Economic Growth: The African Experience*, Research Gate, 43-55, <https://www.researchgate.net/publication/265497767>
- [7]. **Asiedu, E.** (2003) *Foreign Direct Investment to Africa: The Role of Government Policy, Governance and Political Stability*, Paper retrieved on August 7, 2003 from <http://people.ku.edu/~asiedu/>
- [8]. **Bello, M.L.; Lamidi, K.O.** (2009) *An assessment of poverty as a threat to Nigerian fledgling democracy*, Lapai International Journal of Management and Social Sciences, 2(2), 380-389
- [9]. **Bauer, P.T.** (1984) *Reality and rhetoric: Studies in the economics of development*, London: Weidenfield & Nicolson
- [10]. **Daferighe, E.E.; Aje, S.O.** (2009) *An impact analysis of real gross domestic product, inflation and interest rates on stock prices of quoted companies in Nigeria*, International Research Journal of Finance and Economics, 25, 53-60
- [11]. **Dagaci, A.M.** (2009) *Democracy and the leadership question: a redefinition in the Nigerian context*, Lapai International Journal of Management and Social Sciences, 2(2), 16-28

- 
- [12]. **Dike, V.E.** (2004) *Corruption in Nigeria: A New Paradigm for Effective Control*, Africa Economic Analysis, <http://www.africaeconomicanalysis.org/articles/gen/corruptiondikehtm.html> [Accessed on 7/7/2011]
- [13]. **Doig, A.; Theobald, R.** (2000) *Corruption and democratization* London: Frank Cass
- [14]. **Egger, P.; Winner, H.** (2005) *Evidence on corruption as an incentive for foreign direct investment*, European Journal of Political Economy, 21(4), 932-952
- [15]. **Frisch, D.** (1996) *The Effects of Corruption on Development*, The Courier ACP-EU, 158(2), 68-70
- [16]. **Gastanaga, V.; Jeffery, B.N.; Bistra, P.** (1998) *Host Country Reforms and FDI Inflows: How Much Difference Do They Make?* World Development, 26(7), 1299-1314
- [17]. **Gould, D.J.; Amaro-Reyes, J.A.** (1983) *The Effects of Corruption on Administrative Performance*, World Bank Staff Working Paper No. 580, Washington, DC.
- [18]. **Gyimah-Brempong, K.** (2002) "Corruption, Economic Growth, and Income Inequality in Africa," Economics of Governance, 3(5).183-209
- [19]. **Hanousek, J.; Kochanov, A.** (2015) *Bribery environment and firm performance: Evidence from Central and Eastern European Countries*, CEPR Discussion Paper 10499
- [20]. **Hoff, K.; Stiglitz, J.E.** (2000) *Modern economic theory and development*, in G. M. Meier & J. E. Stiglitz (Eds.), *Frontiers of development economics: The future in perspective* (pp. 389-485), Washington, D.C.: World Bank/Oxford University Press
- [21]. **Huntington, S.P.** (1968) *Political Order in Changing Societies*, New Heaven: Yale University Press
- [22]. **Ijirshar, V.U.** (2015) *The Empirical Analysis of Agricultural Exports and Economic Growth in Nigeria*, Journal of Development and Agricultural Economics 7(3), 113-122
- [23]. **Isaac, L.** (2014) *Corporate governance and organizational performance in the Nigerian banking industry*, European Journal of Business and Management, 6(5)110-118
- [24]. **Iyoha, F.O.; Gberevbie, D.F.; Iruonagbe, C.T.; Egharevba, M.E.** (2015) *Cost of governance in Nigeria: in whose interest?* International Journal of Social, Education, Economics and Management Engineering, 9(1)
- [25]. **Johnson, H.** (1971) *A word to the third world: A Western economist's frank advice*, Encounter, 37, 3-10
- [26]. **Kolade, C.** (2012) *The possibility of good governance in Nigeria*, [www.businessdayonline.com/NG/index.php/news/111](http://www.businessdayonline.com/NG/index.php/news/111), [Accessed on 17/7/2012]
- [27]. **Lal, D.** (1983) *The poverty of "development economics"*, London: Institute of Economic Affairs
- [28]. **Leff, N.H.** (1964) *Economic Development through Bureaucratic Corruption*, American Behavioral Scientist, 8(3), 8-14
- [29]. **Little, I.M.D.** (1982) *Economic development: Theory, policy, and international relations*, New York: Basic Books
- [30]. **Liu, F.T.** (1996) *Three Aspects of Corruption*, Contemporary Economic Policy, 14(3), 26-29
- [31]. **Mauro, P.** (1995) *Corruption and Growth*, Quarterly Journal of Economics, 109(2), 681-712
- [32]. **Meier, G. M.** (2000) *The old generation of development economists and the new*, in G.M. Meier & J.E. Stiglitz (Eds.), *Frontiers of development economics: The future in perspective* (pp. 13–50) Washington, D.C.: World Bank/Oxford University Press
- [33]. **Mo, Pak Hung** (2001) *Corruption and Economic Growth*, Journal of Comparative Economics, 29(4), 66-79
- [34]. **Morris, S.D.** (1991) *Corruption and Politics in Contemporary Mexico*, University of Alabama, Press, Tuscaloosa

- [35]. **Monte, A.D.; Erasmo, P.** (2001) *Public Expenditure, Corruption, and Economic Growth: The Case of Italy*, European Journal of Political Economy, 17(1), 1-16
- [36]. **Murphy, K. M.** (1993) *Why is Rent-Seeking So Costly to Growth?*, American Economic Review, 83(2), 409-414
- [37]. **Nwogu, J.A.; Ijirshar, V.U.** (2016) *The Impact of Corruption on Economic Growth and Cultural Values in Nigeria: A Need for Value Re-orientation*, International Journal of Economics & Management Sciences, 6(1), 1-7
- [38]. **Obasanjo, O.** (2000) *Address on the occasion of the formal signing of the Bill of a law to prohibit and punish Bribery and corruption of or by public officer and other persons*, Abuja
- [39]. **Oghojafor, B.A.; Adebisi, S.A.** (2012) *Evaluating mergers and acquisition as strategic interventions in the Nigerian banking sector: The good, bad and the ugly*, International Business Research, 5(3), 147-157
- [40]. **Okeyim, M.O.; Ejue, J.B.; Ekanem, S.A.** (2013) *Governance and corruption in Nigeria: a philo-psychological analysis*, Net Journal of Social Sciences, 1(2), 24 -32
- [41]. **Omenka, I.J.** (2013) *The Effect of Corruption on Development in Nigeria*, IOSR Journal of Humanities and Social Science (IOSR-JHSS), 15(6), 39-44, (Sep. – Oct.)
- [42]. **Orubu C.O.; Awopegba, P.O.** (2003) *Market Economies, Globalization and the Role of Good Governance in the Development Process: Challenges for the Nigerian Economy*, Paper presented at the Nigerian Economic Society Annual Conference
- [43]. **Okechukwu, E.I.; Inya, C.O.** (2011) *The Role of EFCC in Combating Political Corruption*, Arabian Journal of Business and Management Review, 1(3), 67-82
- [44]. **Ramirez, M.** (2007) *A Panel Unit Root and Panel Cointegration Test on the Complementarity Hypothesis in the Mexican Case: 1960-2001*, International Atlantic Economic Society.
- [45]. **Solow, R.M.** (1956) *A contribution to the theory of economic growth*, The Quarterly Journal of Economics, 70(1), 65-83
- [46]. **Summers** (1977) *Speech to the Summit of Eight*, Denver
- [47]. **Tanzi, Vito; Hamid Davoodi** (1997) *Corruption, Public Investment and Growth*, IMF Working Paper, WP/97/139
- [48]. **Todaro, M.P.; Smith, S.C.** (2003) *Economic Development*, Pearson Education (Singapore) Pte, Ltd.
- [49]. **Todaro, M.P.; Smith, S.C.** (2009) *External debt management: An introduction*, World Bank Technical paper, No. 245, World Bank, Washington DC
- [50]. **The World Bank** (1997) *Helping countries combat corruption: the role of the World Bank*
- [51]. **United Nations** (1990) *Corruption in Government*, New York: United Nations
- [52]. **UNDP** (1998) *Human Development Report*, Oxford: Oxford University Press
- [53]. **Ugwuodo, B.** (2002) *Odious Debts – Why Foreign Investment Eludes Nigeria – Jeter*, This Day, <http://www.odiousdebts.org/odiousdebts/index.cfm?DSP=content&ContentID=5051>, [Accessed on 2/8/2011]
- [54]. **Ujo, A.A.** (1995) *Understanding Development Administration in Nigeria*, Kaduna: Graphic Printers
- [55]. **Wei, S.J.; Shleifer, A.** (2000) *Local Corruption and Global Capital Flows*, Brookings Papers on Economic Activity, 2, 303-354