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Socioeconomic Determinants of Corruption in Nigeria: 1981 - 2016

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Abstract

Most empirical studies on the determinants of corruption are cross country studies. Furthermore, studies related to corruption are on corruption and economic growth while those on the determinants of corruption in Nigeria were not empirical hence; this paper adopted the error correction mechanism and data from 1981 - 2016 to examine the socio-economic determinants of corruption in Nigeria. The findings revealed that all the variables were difference stationary and there exists long run relationship among the variables. It was found that inflation rate and income inequality affect corruption positively in Nigeria while per capita income was found to have significant negative impact on corruption. Unemployment rate and population density were found to have insignificant impact on corruption. The study then recommends that government should ensure that inflation is brought under check through various policy formulations as this would reduce corrupt tendencies among the citizens. Policy makers should enhance per capita income as well as ensure equitable income distribution among the citizens as this may reduce corruption to its barest minimum in Nigeria.

Keywords: Corruption, inequality, per capita income and socioeconomic determinants
JEL Codes: D7, D73.

1. Introduction

Generally, corruption is the use of public office for private gain (Gray and Kaufmann, 1998). Ijewereme (2015) identified electoral corruption, nepotism, favouritism, budgeting corruption, ghost–workers phenomenon, procurement scam among others as the various forms of corruption in the Nigerian public sector. Corruption has been the bane of Nigeria's development since independence. Obasanjo (2014) noted that corruption remains a major bane of the Nigeria society and despite the fact that it is present in every society; attempts should be made not to condone it as it carries with it the threat to annihilate a country that is ingrained with corruption. Similarly, Aluko (2002) posited that societies ridden with corruption will not survive or develop in an orderly fashion.

The perception people have about corruption can also be a determining factor for getting involved in corrupt practices. In this vein, Travits (2010) found that for citizens and public officials, the decision whether to engage in corruption is mostly affected by individuals' definitions of corruption and personal perceptions of how widespread corruption is. Thus, Ghulam and Abdul (2014) asserted that it is essential to consider corruption as a social deviation instead of defining it as an individualistic action and that human behaviour is influenced by the sophisticated relations among social, political, economic and cultural structures of the society.

There has been an increasing interest in the alarming rate of corruption in Nigeria, hence, the need to reduce or eliminate it completely. For example, Gbadamosi (2006) opined that Nigeria has been consistently rated as one of the most corrupt nations in the world since 2001 by the Transparency International Corruption Perception Index. Out of 174 surveyed countries in 2014, Nigerian ranked 136 while in 2015, out of the 168 countries surveyed, Nigeria was ranked 136 (Transparency International, 2016). In 2017, Nigeria was ranked 148th out of 180 countries surveyed by the corruption perception index (Transparency International, 2018).

In Nigeria, most empirical studies like Nageri, Gunu and Abdul (2013), Odubunmi and Agbelade (2014), Chiam (2015), Enofe, Oriaifoh, Akolo and Oriaifoh (2016), Ighodaro and Mogbolu (2017) are on the impact of corruption on economic growth. On the other hand, Moyosore (2015), Ezenagu (2018), Nigeria Finder (Undated) identified some causes/determinants of corruption in Nigeria as poverty, acceptance of poverty by the populace, weak government institutions, greed, and poor education and illiteracy. These may be the root causes of corruption in Nigeria; however, these were not empirically tested by the authors. Furthermore, most empirical studies on determinants of corruption are not country specific studies but cross country studies. As a result, the objective of this study is to examine the socio-economic determinants of corruption in Nigeria. Following this, section 2 presents literature review and theoretical framework while section 3 is methodology and model specification. Section 4 is analysis and interpretation of results while section 5 provides the conclusion and recommendations.

2.0 Literature review and theoretical Framework

Social Disorganization Theory

Social disorganization theory originated as part of the Chicago School, a body of work focusing on urban sociology in the 1920s and 30s (Bernard, Snipes, and Gerould, 2010). The theory is based on the assumption that behaviour is influenced primarily by one's environment, and that corruption and other deviant and criminal behavior are a result of weakened mechanisms of social control (Steenbeek and Hipp, 2011). The theory has been applied to how antisocial attitudes develop in individuals, families, and communities, and how those attitudes conflict with larger social norms (Johnson, 1998).

The theory posits that dysfunctional behavior has cultural, political, and economic causes (Akers & Sellers, 2009). Established communities experience increases in deviance and crime when their way of life and the established order change. Disorganized communities such as the case of Nigeria experience crime because informal social controls break down, resulting in the emergence of deviance and criminal cultures. Such communities lack the collective efficacy to fight crime and disorder (Hochstetler & Copes, 2008; Vito, Maahs & Homes, 2007). The theory predicts that more crime will occur in neighborhoods with fraying social structures, such as failing schools, vacant or vandalized buildings, changing ethnicity, and high unemployment (Steenbeek & Hipp, 2011).

The sociological perspective of behaviour does not consider specific behavior as a problem of an individual but instead considers individual behavior as reflecting the social order in which an individual lives. This assumption agrees with Durkheim's notion that all behavior is socially generated. In this view, a particular social problem such as corruption must be addressed by focusing on a society, not a particular individual's behavior (Steenbeek & Hipp, 2011). Johnson (1998) used social disorganization theory to argue that in many nations corruption is embedded in the overall society. In these countries, economic and political processes perpetuate corruption rather than resist it. Consistent with the assumptions of social disorganization theory, corruption can be reduced by developing enhanced criminal justice, political, social, and economic

institutions, which will bring about social empowerment (Colombatto, 2003)

Social Learning Theory

The theory of social learning is based on the assumption that a similar learning process can produce both deviance and conformity. The theory identified four variables as determinants of social behavior. They include: definitions, differential association, modeling, and reinforcement. The interaction of these variables predisposes one to either conforming or deviant behaviour (Singer and Hensley, 2004).

According to social learning theory, behavior is influenced by standards of legal and illegal behavior, peers, and positive or negative reinforcement. A key variable is differential association, or peer influence. Definitions of deviance are developed in interactions with peers and are reinforced, positively or negatively, by rewards and punishments. Those definitions affect attitudes and behavior in many areas such as: sexual behavior, substance use and white-collar crime (Akers and Sellers, 2009).

Bernard, Snipes, and Gerould (2010) characterized social learning theory as acknowledgement that learning involves interplay of environmental, behavioral, and cognitive influences. Criminal or deviant behavior, then, results in part from the observation of consequences that particular behaviors have for other people (Akers & Sellers, 2009). Although social learning theory addresses potential influences on criminal behavior, it does not address the particular environments that create such behavior. Bernard et al. (2010) suggested that social structure affects crime because it affects one's exposure to norms and the consequences of violating norms. Social leaning theorists argue that behavior is influenced by one's self-concept, one's social role, and how one perceives a social situation (Sandholtz and Taagepera, 2005). Each of this in turn is the product of the socialization that occurs at the institutional level (Meng and Friday, 2010). A social problem such as corruption, then, is affected not only by material incentives but also by cultural orientations, which are the result of socialization (Sandholtz & Taagepera, 2005; Travits, 2010).

In empirical review, the prevalence of corruption in the society has been attributed to socio-economic factors amongst others factors. Empirical findings of studies such as Ali and Isse, (2003); Brunetti and Weder (2003) reported a negative relationship between human capital and corruption. Saha and Gounder, (2013) found that higher level of educational attainment intensively discourage the corrupt activities through increasing employment opportunities and equal income distribution. They also investigated this relation in non-linear framework using Gini coefficient as a measure of income inequality and concluded that higher income inequality contributes positively to the level of corruption. Treisman (2000) showed that exposure to democracy for a long period reduces perceived levels of corruption. Chowdhury (2004), Brunetti and Weder (2003) and Lederman *et al*. (2005) found that press freedom reduces corruption.

Most studies on corruption in Nigeria are with respect to corruption and economic growth as noted earlier with little or no emphasis on the determinants of corruption, though; most of these papers are not country specific papers. There are a large number of published papers that examine the socio-economic determinants of corruption. For example, Serra (2004) examined the determinants of corruption using sensitivity analysis for sixty two countries developing and developed countries. The author examined four economic variables, five socio-cultural variables and seven political variables. The findings revealed that five variables are robustly related to corruption. Corruption is lower in richer countries, where democratic institutions have been preserved for a long continuous period, and the population is mainly Protestant. Corruption is instead higher where political instability is a major problem. Finally, a country's colonial heritage appears to be a significant determinant of corruption.

Seldadyo and De Haan (2006) analyzed the determinants of corruption with the use of seventy economic and non-economic determinants. They used factor analysis technique and found that regulatory capacity can be concluded as the most robust determinant of corruption. The authors found that population density had positive relationship with corruption, ethnic tension, government wage, portion of population with no religion have positive relationship while and portion of female in labor force has negative link with corruption. In a similar study, Serra (2006) conducted a sensitivity analysis on the determinants of corruption. The result showed that out of twenty eight variables used, only five variables (country's level of development, the age of democratic institutions to exert corruption, political stability, and prevalent protestant countries) were found to be negatively significant in the determination of perceived corruption.

Shabbir and Anwar (2007) examined the determinants of corruption in forty one developing countries. They found that almost all of the economic determinants were significant in determining corruption in developing countries except for income distribution. Economic freedom, globalization, and economic development all have negative relationship towards corruption. It signifies that as the three variables increase, there will be a decline in corruption. On the other side, the education level variable has a positive relationship towards corruption. It denotes that the rise in education level in a country will also increase the perceived level of corruption. In the non-economic determinants model, they found out that degree of democracy, press freedom and religion in share of total population did not have significant impact towards the perceived level of corruption. Thus, they concluded that the social-political and religious norms are meager and unable to affect the level of corruption in developing countries.

Ghulam and Abdul (2014) empirically investigated socioeconomic determinants of corruption using panel data set of developing eight countries and GMM estimation method. The results suggested that economic development, government size, income inequality, urbanization and education have statistically significant impact on corruption. An increase in economic development, government size and education level lowers the corruption, whereas, skewed income distribution and urbanization enhance its level. However, inflation, economic competition and female labor force participation were found statistically insignificant. The study recommended that economic managers should focus on the policies that promote education, economic development, less skewed income distribution and government size to control the corruption in the country.

Nafi and Fithra (2017) analyzed various political, social and economic determinants, measured through development indicators and various indexes, upon the perceived level of corruption indicated by corruption perception index in nine two observed countries for the year of 2014. The results showed that level of development, degree of democracy, economic freedom, level of education, political stability and religion have significant impact on the perceived level of corruption. Yet, there are differences in significant variables between the developing and developed countries groups.

3. Methodology

The paper adopts the co-integration analysis and Error Correction Modelling approach. The scope of the study covered the period 1981to 2016. The Error Correction Model (ECM) is used to establish the short-run dynamics between corruption perception index and its socioeconomic determinants in Nigeria. Hence, following the works of Shabbir and Anwar, 2007; Ghulam and Abdul, 2014; as well as Nafi and Fithra, 2017, the functional model specification used in this paper is:

$$CPI = f(INFL, PCI, UNEMP, POPD, GINIC). \quad 3.1$$

Where:
CPI = Corruption perception index
INFL = Inflation rate
PCI = Per capita income

UNEMP = Unemployment rate
POPD = Population density
GINIC = Income inequality

Accordingly, from a priori considerations, inflation rate, unemployment rate, population density and income inequality are expected to be positively related to corruption while per capita income is expected to be negatively related to corruption. Equation (1) can be expressed in log-linear form as:

$$CPI_t = \beta_0 + \beta_1 LNGINIC_t + \beta_2 LNINFL_t + \beta_3 LNPCI_t + \beta_4 LNPODP_t + \beta_5 LNUNEMP_t + \beta_6 LNCPI(-1) + \mu_t \quad \text{..... 3.2}$$

Where LN before a variable is the log of that variable; β_i are parameters and β_i, $(for\ i = 1, 2, \dots, 5)$ are the long run parameters to be estimated and μ_t is the stochastic error term. Equation (2) is estimated using the Ordinary Least Squares (OLS) technique. Since the variables are co-integrated, the next step is to obtain the short run dynamic parameters by estimating an Error Correction Model (ECM) associated with the long run estimates. This is specified as:

$$CPI_t = \beta_0 + \beta_1 LNGINIC_t + \beta_2 \Delta LNINFL_t + \beta_3 \Delta LNPCI_t + \beta_4 \Delta LNPODP_t + \beta_5 \Delta LNUNEMP_t + ECM(-1) + \mu_t \quad \text{..... 3.3}$$

The order of integration of the variables that were used in the estimation was first tested to ascertain the time series property using the (Dickey and Fuller, 1979, 1981) Augmented Dickey Fuller (ADF) test based on the estimation of the following equations (with only intercept as well as with intercept and trend).

$$\Delta LNY_t = \gamma_0 + \gamma_1 LNY_{t-1} + \sum_{i}^{k} \gamma_2 \Delta LNY_{t-i} + \varepsilon_t \dots\dots\dots 3.4$$

$$\Delta LNY_t = \gamma_0 + \lambda_t + LN\gamma_1 Y_{t-1} + \sum_{i}^{k} \gamma_2 \Delta LNY_{t-i} + \omega_t \dots\dots\dots 3.5$$

Where:

γ_0, γ_1 and γ_2 are coefficients to be estimated while LNY is the variable whose time series properties are considered while ε_t and ω_t are the white –noise error terms of both models with intercept only as well as intercept and trend. $\gamma_1 = 0$ implies the series is non – stationary (the null hypothesis). $\gamma_1 \prec 0$ implies the series is stationary (the alternative hypothesis). Lag length is automatic and it is based on Schwarz Information Criterion.

The Engle and Granger (1987) suggest a co integration test which consists of estimating the co integration regression equation by ordinary least squares, obtaining the residual $\hat{\mu}_t$ and applying unit root test for $\hat{\mu}_t$ using the equation below:

$$\mu_t = y_t - \hat{\phi} x_t \quad \text{.....3.6}$$

where $\hat{\mu}_t$ follows an autoregressive process;

$$\mu_t = \hat{\rho}\, \mu_{t-1} + \hat{\omega}_t, \text{ with } \hat{\omega}_t \sim iid(0, \sigma^2). \quad \text{.....3.7}$$

4. Analysis and Interpretation of Results

In this section of the paper, the results are presented in the order of unit root results, Co-integration results and Estimated Error Correction model.

Unit Root Result

The results of the ADF tests are presented in Table 1 below:

Table 4.1: Augmented Dickey-Fuller Unit Root Test at Levels and First Difference – Intercept only and Intercept and Trend

	Intercept Only			Intercept and Trend		
Variable	ADF Test Statistic	Test Critical Value	Remark	ADF Test Statistic	Test Critical Value	Remark
LNCPI	-2.8326	-4.2000	NS	-7.1431	-5.5218	I(0)
D(LNCPI)	-4.4661	-3.3209	I(1)	-	-	
LNGINIC	-2.2291	-3.7529	NS	-3.7964	-4.4163	NS
D(LNGINIC)	-7.5608	-3.7695	I(1)	-7.6292	-4.4407	I(1)
LNINFL	-3.3348	-3.6329	NS	-3.2957	-4.2436	NS
D(LNINFL)	-5.4411	-3.6394	I(1)	-5.3294	-4.2528	I(1)
LNPCI	-0.1747	-3. 6329	NS	-2.2326	-4.2435	NS
D(LINPCI)	-5.4134	-3.6394	I(1)	-5.3098	-4.2528	I(1)
LNUNEMP	-1.9975	-3.7529	NS	-0.3991	-4.4407	NS
D(LNUNEMP)	-7.0985	-3.7695	I(1)	-8.1849	-4.4407	I(1)
LNPOPD	-2.4043	-2.9810	NS	-3.0729	-3.5875	NS
D(LNPOPD)	-3.4464	-2.9810	I(1)	-3.8605	-4.3560	I(1)

Notes: Eviews, 7.0 ; i. The test critical values of all the variables at 1% level of significance except population density at 5% level of significance; ii. D denotes first difference of the variable; iii. The null hypothesis is that there is a unit root.

From the results, as revealed in Table 1, all the variables are non-stationary at levels except corruption perception index (CPI) which has mixed results. It was I(1) when only trend was used in the model but I(0) when both trend and intercept were used.

Co integration Test

Having established the time series properties of the data, the paper proceeded to conduct the Engel Granger residual based co integration test. The results of the test are reported in Table 2 below.

Table 4.2: The Engle and Granger Two Steps Procedure

Variable	ADF Test Statistic	Test Critical Value	Remark
Residual	-3.680584	-2.847250	I(0)

The null hypothesis is that the residual has a unit root and the lag length is automatic based on Schwartz Information Criterion (SIC).

Based on the ADF unit root test, since the residual is stationary at level, the Engle and Granger two steps procedure reveals that there is long run relationship among the variables in the model.

Results of the Estimated Model

The results of the models (2) and (3) estimated are shown in Table 3 below:

pTable 4.3: Estimated Coefficients of the Long Run and Short Run Models

Depended Variable (LNCPI) Long Run Model		Depended Variable D(LNCPI) Short Run Model	
Constant	-0.507684	*Constant*	*4.375461*
	(-0.091142)		*(2.648556)*
LNGINIC	-0.502689	*D(LNGINIC)*	*0.185254*
	(-4.776506)		*(2.166810)*
LNINFL	0.228786	*D(LNINFL)*	*0.140672*
	(8.586423)		*(5.211158)*
LNPCI	-0.228786	*D(LNPCI)*	*-0.104105*
	(-4.920609)		*(-2.014133)*
LNPOPD	2.077277	*D(LNPOPD)*	*-161.4817*
	(4.057802)		*(-2.599361)*
LNUNEMP	-1.718994	*D(LNUNEMP)*	*-1.708740*
	(-0.857906)		*(-0.553506)*
LNCPI(-1)	-0.531426	*ECM(-1)*	*-0.903058*
	(-4.846459)		*(-5.252621)*
R-squared	0.988558	*0.977122*	
Adjusted R-squared	0.954231	*0.908489*	
F-statistic	28.79845	*14.23685*	

Figures in the parentheses are the t-statistics
Source: Author's computation using E views 9.0

For the long run model, the coefficient of determination (R^2) whose value is 0.99 indicates that about 99% of the variations in corruption perception index are explained by the explanatory variables. The adjusted R-squared (0.95) shows that about 95% of the systematic variations in corruption perception index are accounted for by the independent variables in the long run model. The F-statistic (28.798) indicates that the whole model is significant at the 5% level. The regression results revealed that income inequality coefficient is negative and significant at the 5% level. The relationship between corruption and income inequality is interesting because this suggests that low income inequality breeds corruption in the long run in Nigeria. A positive and statistically significant relationship was found between inflation rate and corruption perception index in the long run. Inflation rate coefficient is 0.23 with a t-statistic of 8.59. It is significant at the 5% level. Hence, inflation rate has a positive significant effect on corruption in the long run in Nigeria. Also, the estimated coefficient of per capita income is negative and significant at the 5% level of significance. Thus, per capita income has a significant negative impact on corruption in the long run in Nigeria. The estimated coefficient of population density is positive and significant at the 5% level of significance. It means that population density has a significant positive impact on corruption in the long run in Nigeria. However, the coefficient of unemployment turned out negative but insignificant at the 5% level. This indicates that unemployment has an insignificant effect on corruption in the long run.

For the short run model, the R^2 is 0.98 showing that about 98% of the systematic variations in corruption perception index are accounted for by the explanatory variables. Similarly, the adjusted R^2 whose value is 0.91 which denotes that about 91% of the variations in corruption perception index are determined by the independent variables in the short run model. The F-statistic indicates that the overall short run model is significant at the 5% level. Also, the error correction coefficient is statistically significant and negative. This suggests that it will rightly act to correct any deviation of the dependent variable from its long-run equilibrium value.

In the short run, the results revealed that income inequality has a significant positive

impact on corruption. This shows that high income inequality breeds corruption in the short run in Nigeria. Also, a significant positive relationship was found between inflation rate and corruption perception index. This implies that inflation rate has a significant positive effect on corruption in the short run in Nigeria. Again, the estimated coefficient of per capita income is negative and significant at the 5% level of significance. Thus, per capita income has a significant negative impact on corruption in the short run in Nigeria. In this same vein, the estimated coefficient of population density was found to have a significant negative relationship with corruption perception index. This reveals that high population density will reduce corruption in the short run in Nigeria. However, the coefficient of unemployment turned out negative but insignificant at the 5% level. This signifies that unemployment has an insignificant influence on corruption in the short run.

5. Conclusion and Recommendations

This paper used the Error Correction Model technique to capture the short run dynamics between corruption perception index and the socioeconomic determinants of corruption. The Augmented Dickey-Fuller test revealed that all the variables are difference stationary. Also, there exists a long run relationship among the variables. It was discovered that inflation rate has a significant positive effect on corruption both in the short run and long run in Nigeria. Therefore, inflation rate is a determining factor of corruption in Nigeria.

The implication is that high inflation can induce individuals to get involved in corrupt practices. As a result, individuals may be induced to get involved in corrupt practices so as to augment the fall in the value of money arising from inflationary pressure. Thus, government should ensure that inflation is brought under check which will in turn help reduce corrupt tendencies among the citizens.

Also, per capita income was found to have a negative significant effect on corruption both in the short run and long run. Hence, high per capita income will discourage corruption in Nigeria. To this end, there is a need for government to enhance per capita income as this will discourage corruption in Nigeria.

In addition, population density was found to have a significant negative effect on corruption in the short run whereas in the long run, population density has a significant positive impact on corruption in Nigeria. This can be interpreted to mean that there may be high pressure on available resources resulting to corrupt practices in the long run as a result of fear of not having a grab of it.

Furthermore, in the short run, income inequality was found to have a positive significant impact on corruption in Nigeria. This shows that high income inequality fuels corruption in Nigeria in the short run. But surprisingly, income inequality was found to have a negative significant impact on corruption in the long run. This result is somewhat counterintuitive in that low income inequality breeds corruption in the long run in Nigeria. A possible explanation for this finding might be that if corruption is not reduced to its barest minimum it will become so endemic and entrenched in the system that even when the income gap between the rich and the poor is low, people won't consider the need to refrain from engaging in corrupt practices. Thus, there is the need for government to ensure equitable income distribution among the citizens as well as reduce corruption to its barest minimum in Nigeria.

Last, rate of unemployment was discovered not to be a contributing factor to corruption in Nigeria both in the short run and long run. As a result, government should make efforts to reduce unemployment either through provision of incentives to go into farming or basic infrastructure that may aid self employment in Nigeria.

References

Akers, R. L., & Sellers, C. S. (2009). Criminology theories (5th ed.). NY: Oxford University Press.

Ali, M. A & Isse, H.S. (2003), Determinants of Economic Corruption: A Cross-

Country Comparison. *Cato Journal* 22(3), 449-466.

Aluko, M. A. O. (2002). The institutionalization of corruption and its impact on political culture and behavior in Nigeria. *Nordic Journal of African Studies*, 11(3), 393-402.

Bernard, T. J., Snipes, J. B., & Gerould, A. L. (2010). Vold's theoretical criminology (6th ed.). York, NY: Oxford University Press.

Brunetti, A & Weder, B. (2003). A Free Press is Bad News for Corruption. *Journal of Public Economics* 87, 1801-1824.

Chiam, C.C. (2015). "Empirical Studies: Corruption and Economic Growth". *American Journal Of Economics* 5(2), 183-188

Chowdhury, S. (2004). The effect of democracy and press freedom on corruption: An empirical test. *Economics Letters*. 85(1), 93 – 101.

Colombatto, E. (2003). Why is corruption tolerated? *Review of Australian Economics*, 16(4), 363-379.

Enofe, A.O; Oriaifoh, A.; Akolo, I. and Oriaifoh, C.L. (2016). "Corruption and Nigeria Economic Growth". *International Journal Of Advanced Academic Research, Social And Management Sciences.* 2(4), 26 - 35

Ezenagu, J. (2018). 15 Causes of corruption in Nigeria. *Information Guide, Nigeria*. Available at: https://infoguidenigeria.com/causes-corruption-nigeria/. Assessed 16th September, 2018.

Gbadamosi, G. (2006). Corruption perception and sustainable development: Sharing Botswana's anti-graft agency experiences. *South Africa Journal of Economics and Management Studies*, 9(2), 262-276.

Ghulam, S., & Abdul, R. B. (2014). Socioeconomic determinants of corruption: A Cross Country Evidence and Analysis. *Forman Journal of Economic Studies*,10, 79-104

Gray, W.C. & Caufmann, D. (1998). Corruption and Development. *Finance and Development*.
Available at: https://www.imf.org/external/pubs/ft/fandd/1998/03/pdf/gray.pdf. Assessed 14th September, 2018.

Hochester, A., & Copes, H. (2008). Where I'm from: Criminal predators and their environment. Boston, MA: Jones and Bartlett.

Ighodaro, C.A. & Mogbolu, F. (2017). What do data say about the link between corruption and economic growth in Nigeria? Ilorin Journal of Administration and Development. 3(1), 56 – 68.

Ijewereme, O.B. (2015). Anatomy of Corruption in the Nigerian Public Sector: Theoretical Perspectives and Some Empirical Explanations. *SAGE Journals*. Available at: http://journals.sagepub.com/doi/full/10.1177/2158244015581188. Assessed 14th September, 2018.

Johnson, M. (1998). Fighting systemic corruption: Social foundations for institutional reform. European Journal of Research, 10(1), 85-105.

Meng, Q., & Friday, P .C. (2010). Corruption in transitional China: A theoretical conceptualization. In V. Konarska, & J. Lachowski (Eds.), Major problems of contemporary criminal law, criminology and victimology. Wolterskluwer Publishing Office, Polish Branch.

Moyosore, S.O. (2015). Corruption in Nigeria: Causes, Effects and Probable Solutions. Journal of Political Science and Leadership Research. 1(8), 22 – 36.

Nageri, K. I.; Gunu, U. and Abdul F. A. (2013). Corruption and Economic Development: Evidence From Nigeria. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 3(2) 46-56.

Nafi, G., & Fithra, F. H. (2017). Political, social and economic determinants of corruption. *International Journal of Economics and Financial Issues*, 7(4), 144-149.

Nigerian Finder (Undated). *Top five causes of corruption in Nigeria*. Available at: https://nigerianfinder.com/causes-of-corruption-in-nigeria/. Assessed 17th September, 2018

Obasanjo, O. (2014). My watch: Now and then. Nigeria: Kachifo Limited.

Odubunmi, A.S. and Agbelade, L.I. (2014). "Corruption and Economic Growth in Nigeria" *Journal of Economics and Sustainable Development*. 5(6), 45 – 56.

Saha, S., & Gounder, R. (2013). Corruption and Economic Development Nexus: Variations Across Income Levels in a Non-linear Framework. *Economic Modelling*, *31*, 70–79.

Sandholtz, W., & Taagepera, R. (2005). Corruption, culture, and communism. International Review of Sociology, 15(15), 109-131.

Seldadyo, H., & De Haan, J. (2006), The determinants of corruption: A reinvestigation. EPCS-2005 Conference, Durham, England.

Serra, D. (2004). Empirical determinants of corruption: A sensitivity analysis. Global Poverty Research Group working paper 12.

Serra, D. (2006), Empirical determinants of corruption: A sensitivity analysis. *Public Choice*, 126(1), 225-256

Shabbir, G., & Anwar, M. (2007), Determinants of corruption in developing countries. *The Pakistan Development Review*, 46, 751-764.

Singer, S. D., & Hensley, C. (2004). Applying social learning theory to childhood and adolescent fire-setting: Can it lead to serial murder? *International Journal of Offender Therapy and Comparative Criminology*, 48, 461. Available at http://www.ijo.sagepub.com

Steenbeek, W., & Hipp, J .R. (2011). A longitudinal test of social disorganization theory: Feedback effects among cohesion, social control, and disorder. *Criminology*, 49(3), 833-871.

Transparency International (2016). Corruption Perception Index. Available at: https://www.transparency.org/news/feature/corruption_perceptions_index_2016. Assessed 12th September, 2018.

Transparency International (2018). *Corruption perception Index 2017*. https://www.transparency.org/country/NGA. Assessed 28th August, 2018.

Travits, M. (2010). Why do people engage in corruption? The case of Estonia. *Social Forces*, 88(3), 1257-1279.

Treisman, Daniel. (2000), "The Causes of Corruption: A Cross-National Study". *Journal of Public Economics* 76: 399-457.

Vito, G., Maahs, J., & Homes, R. (2007). Criminology: Theory, research, and policy (2nd ed.). Boston, MA: Jones and Barrlett. Hochester, A., & Copes, H. (2008). Where I'm from: Criminal predators and their environment. Boston, MA: Jones and Bartlett.