# Corruption Impact on Private Sector Performance in Nigeria: An Empirical Study (1999-2018)

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Abstract: - Corruption has long co-existed with human race. It is as old as reality and remains one of most endless socio economic vice globally both in developed and developing economies with devastating consequences. This notion has attracted scholars from different discipline to examine the subject with mixed ends. This paper tends to bridge an identified gap in existing literature by employing an econometric approach for empirical findings of the studied subject (corruption impact on private sector performance in Nigeria). The study findings reveal as evidenced from the outcome of the error correction mechanism (ECM) that: Corruption has a linear and significant impact on private sector performance in Nigeria for the period under study. Hence, the paper recommends an enlightenment programmes to be jointly design by the arms of Government (Executive, Legislative and Judiciary) in respect to conceived patterns and believes about corruption as to discourage its excessive abuse, and most importantly anchoring it on the habit of desisting from extreme wealth acquisition and the culture of get rich quick syndrome for all. The paper further recommends that, the phenomenon "corruption" should be ascribed with embedded economic benefits rather than individual self-enthroned enrichment.

## Keywords: Corruption, Economy, Private Sector, Performance

## I. INTRODUCTION

Entrepreneurship is the linchpin of any country's economic equation in such a way that their good or bad performance generally affects economic performance. Their ideas and innovations triggers productivity and improve livelihood of citizenry. History has it that some countries have witnessed remarkable booms in innovation and performance triggered by the presence of some conditions. Good governance is perhaps the most important of these conditions, in particular when we consider of governance as a body of institutions. Precisely, the World Bank (WB) defines governance as the traditions and institutions by which set authorities in a given country is exercised for the common betterment. This includes the process by which those in authority are chosen, monitored and replaced, the capacity of the government to effectively manage its resources and implement sound policies, and the respect of citizens and the state for the institutions that govern economic and social transmission among them.

In retrospect, successive governments in Nigeria have applied different measures targeted at managing the economy with the aim of ensuring a high level of economic performance that would leverage the livelihood of its citizens. The various measures seem to have been unsuccessful as success times were often reversed. The outcome of policies had been the inability of socio-economic development policies and measures to achieve their stated aims consistently and improve the standard of living of the people, especially the weak and the poor.

The failure of these strategic measures to fine tune the economy to bring about the needed relative development had been attributed to so many reasons by analysts, researcher and academies at all levels. Among the reasons pin pointed as being responsible for the gloomy performance of the various strategies adopted is "corruption". Corruption as a phenomenon, is a worldwide problem, and thus, exists in varying degrees in different countries (Agbu, 2004). Corruption is not only found in democratic and autocratic settings, but also in socialist, capitalist and feudal economies. Muslim, Buddhist, Hindu, and Christian cultures are equally leveled by corruption (Dike, 2006). Corrupt practices is as old as existence itself, it is not a most recent development (Lipset and Gabriel, 2000). In Nigeria, it is one of the many undecided issues that have critically hobbled and staged development (Ayobolu, 2006). It remains a major long-term economic and political challenge for Nigeria (Sachs, 2007). It is a cankerworm that has eaten deep into the nation's fabrics.

The consistency of corruption has eroded basic social economic values of the nation. As a result, reforming public institutions and governance is paramount but poverty, which is a product of corruption, inhibits variety of options. However, decision makers reached a possible end of proffering solution to lingering problems only after with a good understanding of corruption's impact on the systems efficiency (Nwaobi, 2005).

Aterido et al. (2008) found that corruption inhibits growth of employment in small and medium scale enterprises. This is affirmed regardless of whether corruption is measured as incidence of bribes, bribes as rate of sales, incidence of gifts to top government officials, or gifts as rate of government contracts. In same vain, in terms of incidence of bribes, corruption tends to increase the performance of micro enterprises (enterprises with less than 10 employees). This could be explained by the fact that micro enterprises may benefit from operating in the informal sector. In affirming this, recent paper by Seker and Yang (2012) analyzed data from Latin America and the Caribbean, which they found that bribery significantly, inhibit firm performance. Specifically they found that corruption is more damaging for tender and low revenue realizing firms. De Rosa et al (2010) using enterprise data for the economies of Central and Eastern Europe and the Commonwealth of Independent States (CIS), examine the effects of corruption on productivity. They found that bribes have a significant negative impact on firm level productivity. In addition they also conducted a study for European Union (EU) membership and found that bribery is more harmful in non-European Union (EU) countries. This provides basis that bribery is more damaging for firm level productivity in countries with higher levels of aggregate corruption and weaker legal frameworks.

Considering from the above view points, the argument of Nigerian context of corruption role on private sector performance remains unanswered. Therefore this study aimed critically to examine Nigerian context of corruption impact on private sector performance. However, specifically the study will consider:

- Corruption perception index effect on private sector performance in Nigeria and
- Corruption perceived rating effect on private sector performance in Nigeria.

## Research Hypotheses

The research hypotheses in this study are formulated below in the null form in order to achieve set objectives.

**H0**<sub>1</sub>: Corruption perception index has no significant impact on private sector performance in Nigeria.

**H0<sub>2</sub>:** Corruption perceived rating has no significant impact on private sector performance in Nigeria.

The rest of this study is organized as: Review of related literature, methodology, data analysis and discussion of findings and finally, concluding remarks with recommendations.

# II. REVIEW OF RELATED LITERATURES

## Conceptual Framework

# a. The Concept of Corruption

Corruption as a social vice continues to increase despite several measures employed by successive governments to curtail the blight. Thus, it is a universal phenomenon and is without a uniform definition. Corruption has become the order of the day in Nigeria happening among the youths, old, civil servants, politicians and the nonpolitician as well as military and the para-military. The unstoppable social economic scourge has suggested different meanings to different scholars from different schools of thought.

Transparency International (1997) defined corruption as the over-use of entrusted authorities for personal enrichment, they further differentiates between according to "rule corruption and against the rule corruption". Thus, facilitate payments where a bribe is offered to receive special treatment for something that the bribe receiver is required to do by law, constitute the former. The latter, on the other hand is a bribe offered to oblation services to bribe receiver is forbidden from providing. Gray and Kaufmann (1998) conceptualized corruption to include extortion and bribery that is been carried out at least with the involvement of two parties and other malfeasances that a public official can carry out alone including fraud and embezzlement. To them it shows up in government activities through the appropriation of public properties for private use and embezzlement of public funds by public office holders.

Obayelu (2007) separated terms used to describe corruption and the environment within which corruption in Nigerian system strive to include bribery and extortion, dash, gratifications, browns envelopes, greasing, softening the ground, inducements, sub-payments, side payments irregular payments, payment under the table, undocumented extra payments, facilitation payments, mobilization fees, revised estimate, padded contracts, over invoicing, cash commission, Kickbacks, payoffs covert, shady deals, cover-ups collusion, and let's keep our secrete as one.

Salisu (2000) simply defined corruption as the misapplication of public funds to personal ends. This among others include the public office holders collecting bribes for issuing permits licenses for authorizing roots of goods at sea and airports, international passports or visa, awarding contracts or for enacting regulations designed to create artificial scarcity, and awarding undeserved score or grades to students.

The definitions of corruption considered above, it becomes obvious that corruption is a social systematic vice compromises of individuals, societies or nations that reflects enrichment, nepotism tribalism, sectionalism, undue favoritism, misuse of power, position and derivation of undue gains and wealth.

#### b. The Evolution of Corruption and Its Associated Types

Corruption as a social vice is as old as existence in its entirety. The first record of corruption was in the bible when the serpent (devil) in the Garden of Eden interfaced Eve (Adam's wife). She was undoubtedly the first human being to succumb to corrupt influence of the devil by eating the prohibited fruit. Thereafter, Adam was induced by his wife Eve to have a share of the prohibited fruit. It would therefore appear that from the biblical view of evolution, it was corruption that led to the fall of man (Umoh, 2003).

The magnitude and types of corruption have varied between historical epochs and across countries. In contemporary times, its frequency, variance and sophistication have reached unprecedented levels, especially in less developed countries; hence, the analytical attention has attracted scholars in different disciplines (Peter, Eko and Sunday, (2012).

However, the origin of corruption in Nigeria might not really be associated with a particular period. Nevertheless, Benjamin (2007) asserted that corruption in Nigeria can be traced back to the pre-colonial era when Nigerians were bribed with different foreign commodities in exchange for our primary products including human (slaves).

Sowunmi (2010) opined that the history of corruption in Nigeria is strongly rooted in over twenty nine (29) years of the military rule, out of 59 years of her statehood since 1960. Ribadu (2006) asserted that successive military regimes seepage the rule of law, facilitated the wanton looting of the public funds, decapitated public institutions and free speech and instituted a secret and opaque culture in the running of government. Corruption became the dominant guiding principle for running affairs of state. The period witnessed a total reversal and destruction of every good thing in the country and indeed, the military took corruption to its highest levels. The system has been such that corruption is used to check corruption by corrupting the system all the more. The illegitimate taking over of government by the various military regimes via coup d'état were often justified by pervasive corruption. This tends to use corruptly armed measures to check and making the economy worse.

# Types of Corruption

The following are major corruption types identified within the national and global boundaries.

*1. Political Corruption:* This is an illegal unauthorized, unethical and exploitative means one use in public office for personal enrichment. Thus, many at times it takes in form of bureaucracy.

2. *Electoral Corruption:* This entails the act of fraudulent practices in the electoral process such as: election rigging, ballot papers stuffing, registration of under age and outright declaration of manipulated results.

*3. Moral Corruption:* This is exhibited in sexual pervasiveness, greed especially i.e. uncontrollable tongue such leak of classified information, indecent dressing etc.

4. *Economic Corruption:* This involves misuse of power in the form of money or authority to achieve certain self-goals illegally resulting to the manufacturing of fake and adulterated drugs, drinks, piracy etc.

Corruption can also be classified as: educational corruption, religious corruption as witnessed in various bodies as well as in the family certain.

## c. Triggering Factors of Corruption

Salient triggering factors of corruption, Bryce (1921) as quoted by Otite (1998) euphemized the triggering factors of corruption to include inequality in the distribution of wealth, using political offices as the primary means of self-

enrichment, conflict between changing morality, weakness of social and government enforcement mechanisms and government contracts. It is on the basis of these triggering factors that corruption has been classified to include political, electoral, economical, bureaucratic, and moral corruption (Umoh, 2003). In Nigeria these triggering factors to include: The nature of Nigeria's political economy, weak institutions of government and dysfunctional legal system. The absence of well-defined laws, rules and ethical values leads to abuse of power and makes most Nigerian vulnerable to corrupt practices. The country also has a culture of affluent and showy display life style, extended family pressures, village/ethnic loyalties, and competitive ethnicity makes them to expect much from the rich class Maduagwe (1996).

The country is also one of the very few countries in the world where a person source of wealth is of no importance to his family, peer group, office colleagues, neighbours, and the government. Once the person is able to flaunt out money, both religious and societal groups celebrate him or her, him or her is adorned with all titles and considered superior in all ramifications. The message to those who have not made it is crystal clear, "just be rich" the ways and means are irrelevant (Ubeku, 1991).

Low civil service salaries and poor working conditions, with few incentives and rewards for efficient and effective performance, are also considered as strong triggering factors to corruption in Nigeria. Other factors are: ineffective governmental projects with crippling pace of budgeting procedures, non-transparency and accountability, inadequate strategic vision and weak follow-up mechanisms has automatically make Nigeria a fertile environment for corrupt practice. The overall culture of governance has also played an important role. Most of Nigeria leaders and top bureaucrats are setting bad precedence of self-enrichment or ambiguity over public ethics thereby promoting the lower level officials and members of the public into corrupt practices, (I.M.F, 2005).

Informal rules are found to supersede formal rules, thereby making stringent legal principles and procedures to lose their authority. Hence, bribery and corruption have been taken by many Nigerians as norm even in the face of anticorruption crusades intended to support good governance. Corruption and inefficiency are characteristics of service delivery in Nigeria, although private companies seem to perform more efficiently and less corruptly than public enterprises (Amadi, 2004). Corruption has become so blatant and widespread that it appears as if it has been legalized in Nigeria (Imohe, 2005). As Goodling (2003) notes, "since 1996, Nigeria was labeled the most corrupt nation three times: 1996, 1997, and 2000: and placed in the bottom five four more times: fourth from the bottom in 1998 and second in 1999, 2001, 2002 and 2003".

The 1996 Study of Corruption by Transparency International and Goettingen University ranked Nigeria as the most corrupt nation, among 54 nations listed in the study, with Pakistan as the second highest (Kaufman, 1998). As this was not too bad enough, the 1998 Transparency International corruption perception index (CPI) of 85 countries, Nigeria was 81 out of the 85 countries pooled. In 1999 Transparency International (TI) released its annual Corruption perceptions Index (CPI) ranking 99 countries in order of their perceived levels of corruption with number one being the least corrupt, Nigeria at number 98, was only one rank above its neighbor Cameroon.

In 2001 corruption perception index (CPI), the position remained unchanged as the second most corrupt nation in the World (ranked 90, out of 91 countries pooled) with Bangladesh coming first. In October 2003 reports released in London, Nigeria at number 132 was still only one rank above Bangladesh, even though the number of countries in the latter poll had increased to 133 countries, (Knack, 1995).

## d. Private Sector Performance

Private sector performance can be interpreted in different ways. Developed and developing countries around the globe acknowledge the fact that economic growth depends largely on a sound and competitive private sector that provides opportunities for jobs and wealth creation. The private sector is usually understood to be the part of economic sector not owned by government. Typically, it refers to formal or informal economic units or enterprises that are owned directly or indirectly by private citizens.

One gray area concerns enterprises that governments and non-governmental organizations partially own or control are often referred to as commercial enterprises that are expected to earn profits on invested funds by providing goods and services in a competitive market. If it's profit oriented rather than ownership, it is classified as private sector, then the scope of the private sector would be much larger. On this basis private sector will be defined in this study by ownership.

Private sector generally operates as individual enterprises within an industry in an economy with specific business conditions. This setup can be separated into four levels:

- 1. Individual enterprises.
- 2. All enterprises within an industry.
- 3. All enterprises within an economy.
- 4. Business conditions within which private enterprises are created and operate.

Business conditions can have a major impact on whether private enterprises performance grows, merge, shrink, or fail. The term can refer to circumstances that apply globally or nationally for example, trade regulations that affect the ability of an enterprise to export. Within the country, the enabling environment can encompass national and local circumstances, such as labor laws, infrastructure, and banking regulations. The first three levels usually are termed the "private sector", while the fourth level is described as "private sector performance". Private sector performance is also referred to as developing an enabling business environment or investment climate. Whatever the label, this refers to the many external factors that private enterprises need to operate and grow. Government at all levels typically is responsible for private sector performance. Federal, state and local governments need to develop and apply their visions, policies, strategies, laws, and regulations to enable firms to conduct business whether it entails registering their operations, hiring staff, shipping goods, borrowing money, using utility services, or enforcing their contracts.

In many developing countries, one of the national development goals is to increase the private sector's contribution to the economy. A prerequisite for achieving that development impact is an economic environment conducive in carrying out their business operations. On this note, private sector performance is a means to an end, rather than an end in itself. As a result, a corruption bedeviled system is most likely to hamper if not extremely difficult for private sector to strive. This is because these ranges of outputs are needed to enhance the business environment within the system.

## Theoretical Frame Work

This study rests on the theoretical linkage between behavioral patterns and fraud, which is appropriate from corruption and private sector performance, as it was rightly established by: Cressey's (1950) fraud triangle and Wolfe and Hermanson (2004) fraud diamond theories.

## The Fraud Triangle Theory

The peak of this theory argued that there must be a purpose behind everything individuals do. The questions of why individuals indulge in fraudulent activities formed the basis for Cressey. And it was premised on: Firstly, individuals are accepting responsibilities of trust in good faith, and secondly, circumstances make them violate the trust. He opined three in triggering factors (pressure, opportunity, and rationalization) must be present for an offense to take place. Cressey further states that: Trust violators, when they conceive of themselves as having a financial problem that is non-shareable and have knowledge or awareness that this problem can be secretly resolved by a violation of the position of financial trust. And also capable of applying to their own conduct in that situation, verbalizations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property"(Crassey 1953).

The three triggering factors of fraud as identified by Cressey are briefly discussed.

*Perceived Pressure*: Perceived pressure in this context refers to the factors that lead to unethical behaviors. Every individual who perpetrate fraud faces some kind of pressure unethically to do (Abdullahi and Mansor, 2015). These kinds of pressures could either be financial or non-financial pressures. Albrecht et al. (2006) pointed out that, since the pressure to commit fraud may not be real it is important to use the word perceived. If the perpetrators believed that they were pressurized, this belief could lead to fraud.

Perceived pressure can exist in various ways, especially in non-sharable financial need. Financial pressure is recognized as the most common factor that lead an entity to engage in an unethical action. Specifically, over 95% of all fraudulent activities have been perpetrated due to the fraudster's financial pressures (Albrecht et al., 2006). Lister (2007). States that pressure is a significant factor to perpetrate fraud. He determines three types of pressure which are personal, employment stress, and external pressure. Vona (2008) further examines personal and corporate forces as motivations' proxies for fraud commitment. Examples of perceived pressure include greed, living beyond one's means, large expenses or personal debt, family financial problem, drug addiction and gambling.

*Perceived Opportunity:* Created opportunity by ineffective governance system that allows individuals to perpetrate organizational fraud. In finance literature, this is termed as internal control weaknesses. The concept of perceived opportunity suggests that people will take advantage of circumstances available to them (Kelly and Hartley, 2010). The nature of perceived opportunity is like perceived pressure in the sense that the opportunity does not have to be real too. However, the opportunity exists in the perception and belief of the perpetrator. In most cases, the lower the risk of being caught, the more likely it is that fraud will take place (Cressey 1953).

Several factors lead to the existence of an opportunity to commit fraudulent activities in an organization such as negligence of employee's breach of policies and lack of disciplinary action (Sauser, 2007). Wilson (2004) explains "opportunity" as the ability to override fraud controls. Rae and Subramanian (2008) alarm that opportunity refers to the ability and power of an employee to realize the weaknesses of the organizational system and taking advantage of it by making fraud possible. Furthermore, Srivastava, Mock and Turner (2005) and Hooper et, al. (2010) argue that, even when the pressure is extreme, financial fraud cannot occur unless an opportunity is present.

An opportunity has two aspects: (i) the inherent susceptibility of the organization to manipulation, and (ii) the organizational conditions that may warrant a fraud to occur. For example, if there is an inadequate job division, weak internal control, irregular audit, and the like, then the conditions will be favorable for the employee to perpetrate fraud.

*Rationalization:* Rationalization is difficult to notice, as it is impossible to read the mind of the fraud perpetrator. Individuals who perpetrate fraud possess a particular mind-set that allows them to justify their fraudulent actions (Hooper and Pornelli, 2010).

Rationalization indicates that the perpetrator must formulate some morally acceptable idea to him before engaging in an unethical behavior. Rationalization refers to the justification and excuses that the immoral conduct different from criminal activity. If an individual cannot justify dishonest actions, it is unlikely that he or she will engage in fraud. Some examples of rationalizations of fraudulent behavior include "I was only borrowing the money", "I was entitled to the money because my employer is short paying me." Additionally, some fraudster excuses their action as "I had to collect additional to provide for my family", "some people did it and I'm not exceptional" (Cressey, 1953).

## The Fraud Diamond Theory

The theory maintained that opportunity opens the gate way to fraud and perceived pressure and rationalization lead the individual towards the gate. However, capability enables the individual to recognize the key to open the gate as an opportunity to take advantage by walking through it repeatedly.

In this theory, an additional triggering factor of fraud "capability" has been added to the initial three fraud components. Wolfe and Hermanson (2004) argued that although perceived pressure might coexist with an opportunity and a rationalization, it is unlikely for fraud to take place unless the fourth factor is present. In other words, the potential perpetrator must have the skills and ability to perpetrate fraud.

Capability in this context refers to a situation of having the necessary traits or skills and abilities for an individual to perpetrate fraud. It is where the fraudster recognized the particular fraud opportunity and ability to turn it into reality. Intelligence, ego, coercion, deceit, and position, are the supporting ingredients of capability (Wolfe and Hermanson 2004).

## Empirical Review

Corruption has been pin pointed as the causal factor for the existence of large private sectors in developing economies. Such economies are usually characterized by excessive imposition of regulations on firms, prohibitively high costs of entry that can only be avoided in exchange of a bribe. However, the following are empirical findings from different scholars on the studied subject.

Campos et al. (2010) develop a new data set for the Brazilian economy in which they can differentiate between the impact of corruption on firm-entry and firm-growth. Approximately 70% of the business in Brazil identifies corruption as a major obstacle for firm entry. In contrast, more than 30% of firms find that corruption is a major obstacle for growth. It is interesting to notice that taxes and regulations and uncertainty are the most important obstacles to firm growth in Brazil. Perhaps the most interesting contribution of Campos et al. (2010) is the finding that corruption seems to help incumbent firms in relative terms and hamper potential entrants. Hence, corruption seems to act as a mechanism to twat competition.

Friedman et al. (2000) using the International Country Risk Guide (ICRG) corruption index show that corruption fosters informality. They argue that irrespective of a country's level of GDP per capita, a one-point improvement in the corruption index is associated with a 9.7% reduction in the size of the informal sector. Similar results were reported by Johnson et al. (1999) for the case of Latin America, the Organization for Economic Co-operation and Development (OECD) and some transition economies and Djankov et al (2002) using a dataset that was the basis for the World Bank's Doing Business Project find that countries with heavier regulation of entry have higher corruption and larger unofficial economies.

Mahagaonkar (2010) using data for African firms from the World Bank's Enterprise Survey finds a strong and significant negative link between corruption and product innovation. That is firms that can innovate can boost their productivity and increase profits.

The above empirical reviewed studies globally exclude Nigerian context of corruption impact on private sector performance, hence it becomes imperative to examine. Therefore, this study is designed to bridge this obvious identified gap in literature.

#### III. METHODOLOGY

This study adopts the *ex-post facto* research design. Thus, it is considered appropriate because it is impossible to select, control and manipulate variables employed in the study by the researcher.

#### Required Data and Sources

Data required in this study is to enable us carried out analysis with basic econometric tools such as: Test of stationarity using Augmented dickey-fuller (ADF), Cointegration test using Johansen approach, Ordinary Least Square(OLS) regression method and Error Correction Mechanism (ECM). Corruption perception index (CPI) and corruption perceived rating (CPR) as proxies for corruption, (explanatory variables)while credit to the private sector ratio to Gross domestic product(CPS/GDP) as proxy for private sector performance,(explained variable)within the given study rage of.

Secondary source of data (time series) are employed for this study. The data were sourced from Central Bank of Nigeria (CBN) annual statistical bulletin, 2018 and transparency international report, 2018.

## Model Specification

To achieve set objectives in this study, the model will be built as: Credit to the private sector ratio to Gross domestic product(CPS/GDP) as determinant for private sector performance, corruption perception index (CPI) and corruption perceived rating (CPR) as measure for corruption.

The specification of econometric model is based on economic theory relating to the studied phenomenon and as such, basic steps are required:

- 1. Determination of the explained and explanatory variables.
- 2. Theoretical apriori expectation and signs of functional parameters relationships.
- 3. Determination of the mathematical form of model (Gujarati, 2004).

We adopt and modified an empirical model of Abula, Ben and Ozovehe (2016). Their model was used to study the impact of corruption on External Debtin Nigeria. This model will be adjusted to reflect our current study showing the functional relationship of the variables required.

Where,

*CPS/GDP* = *Credit to the private sector ratio to Gross domestic product* 

*CPI* = *Corruption perception index.* 

*CPR* = *Corruption perceived rating.* 

The econometric specification of the explicit form of the multiple regression models is given as follows;

 $CPS/GDP_t = a_o + a_l CPI_t + a_2 CPR_t + Ue_t.....(2)$ 

Where:

 $a_0 = intercept$ 

 $a_1...a_2$  = Coefficients of the explanatory variables to be estimated. They measure the effect of a unit change in corruption on private sector performance in Nigeria.

Uet = Error term of the time series for dataset.

*Decision Rule:* Inference about the hypotheses is made by considering the t-statistics outcome in absolute values and the critical values (probabilities) associated with individual variables. In this study the decision rule is to reject the null hypothesis (H0) if the t-statistics outcome is greater than critical values (probabilities) at 5% level of significance.

IV. ANALYSIS AND DATA INTERPRETATION

#### Table 1.1 Test Result of Unit Root for CPS/GDP

Null Hypothesis: D(CPS/GDP) has a unit root				
Exogen	ous: Constant			
Lag Len	gth: 0 (Automatic	- based o	on SIC, maxlag=4	4)
			t-Statistic	Prob.*
Augmented Dick	Augmented Dickey-Fuller test statistic			0.0000
Test critical values:	1% level		-3.857386	
	5% level		-3.040391	
	10% level		-2.660551	

Interpretation: Order of integration at 5% = 1(1)

Source: E-view 9 output

#### Table 1.2Test Result of Unit Root for CPI

Null Hypothesis: D(CPI) has a unit root				
Exoger	ous: Constant			
Lag Length: 0 (Automatic - based on SIC, maxlag			=4)	
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.476396	0.0004	
Test critical values:	1% level		-3.857386	
	5% level		-3.040391	
	10% level		-2.660551	

Interpretation: Order of integration at 5% = 1(1)

Source: E-view 9 output

#### Table 1.3Test Result of Unit Root for CPR

Null Hypothesis: D(CPR) has a unit root				
Exogenor	us: Constant			
Lag Length: 0 (Automatic - based on SIC, maxlag=4)				)
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-3.337679	0.0022
Test critical values:	1% level		-2.699769	
	5% level		-1.961409	
	10% level		-1.606610	

Interpretation: Order of integration at 5% = 1(1)

Source: E-view 9 output

The above tables 'evidenced unit root test results of selected data in the study. The results revealed stationarity of data(integrated) at first difference, exhibited as: 1(1) at 5% significant level. This indicates that data has no unit root problem. Note, a data is said to have no unit root problem if the test statistics is greater than the critical value in absolute terms. This reveals that data employed can be used for meaningful decision making.

Coblo	1 4	Ichanson	Co integration	Test	Doculto	
able	1.4	Jonansen	Co-integration	rest	Results	

Date: 11/20/19 Time: 12:44				
Sample (a	djusted): 2001 2	018		
Include	d observations: 1	8 after adjustm	ents	
Trend	assumption: Lin	ear deterministi	c trend (restricted)	
Series: C	CPI CPR CPS/GI	OP		
Lags i	nterval (in first c	lifferences): 1 to	o 1	
Unrestrie	cted Cointegratio	on Rank Test (T	race)	
Hypothesized	Hypothesized Trace 0.05			
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.817754	51.37579	42.91525	0.0058
At most 1	0.485249	20.73259	25.87211	0.1911
At most 2 0.385987 8.779311 12.51798				0.1944
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level				1
* denotes rejection of the hypothesis at the 0.05 level				
**MacKi <b>Source:</b> Auth	innon-Haug-Mic nor's Computatic	helis (1999) p-v on with E-View	values 9 Output	

This table evidenced the Johansen co-integration test result that indicates the existence of one co integrating long run relationship among data selected in this study. We arrive at this conclusion by comparing the trace statistic against the Critical Values at 5% significant level. Therefore the error correction mechanism is relevant to test and estimate parameters in order to capture the short run shocks not captured in the previous year.

Table 1.5 Error Correction Mechanism (ECM) Test Results

Dependent Variable: D(CPSGDP)				
Meth	nod: Least Square	s		
Date: 1	1/19/19 Time: 1	1:39		
Sample	(adjusted): 2000	2018		
Include	d observations: 1	9 after adjustme	nts	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.994341	0.404395	2.458836	0.0389
D(CPI)	0.871871	0.234606	3.716320	0.0221
D(CPR)	0.604995	0.169257	3.574416	0.0103
ECM(-1)	-0.991285	0.215141	-4.607597	0.0003
R-squared	0.592885	Mean depe	endent var	0.826316
Adjusted R- squared	0.511463	S.D. deper	ndent var	5.022045
S.E. of regression	3.510181	Akaike info	o criterion	5.533876
Sum squared resid	184.8206	Schwarz criterion		5.732705
Log likelihood	-48.57182	Hannan-Quinn criter.		5.567526
F-statistic	7.281556	Durbin-W	atson stat	2.312063
Prob(F-statistic)	0.003067			

Source: Author's Computation with E-View 9 Output

This table (1.5) portrays corruption impact on private sector performance in Nigeria. The t-test output will be used

to test the hypotheses formulated in the study. The error correction term will tell us the speed with which our model returns to equilibrium following short run fluctuations not captured in the Johansen co-integration test. The ECM coefficient of --0.991285 indicates that ECM is of right specification and the diagnostic statistics are appropriate. The negative sign depicts the short run adjustment of the explanatory variables to the explained variable. The ECM term also shows 99% fast speed of adjustment towards equilibrium. This implies that 99% of disequilibrium caused by exogenous shocks in the previous period is corrected in the current year.

Using the a priori criteria of estimating the parameters, all individual variables met a priori expectations hence fulfilling the economic criterion of the model.

The results also show that corruption perception index (CPI) and corruption perceived rating(CPR) are linear (positive) and statistically significant to credit to private sector ratio to gross domestic product (CPS/GDP)both in short and in the long run. Furthermore, the results of the test of the overall significance of the model using F-statistics shows that the entire model is statistically significant. We arrive at this conclusion because the F-statistics is greater than the Fprobability. Coefficients of determination (R<sup>2</sup>) indicate that almost 60% of total variation of credit to private sector ratio to gross domestic product (CPS/GDP) is explained by corruption perception index (CPI) and corruption perceived rating (CPR) in the model. This means that the model is of good fit. Finally, the Durbin-Watson statistics, is within the acceptable region thus, reveals the absence of first order autocorrelation.

*Test Of Hypotheses:* The table above (1.5) reveals that corruption perception index (CPI) and corruption perceived rating (CPR) have t-statistic of: 3.716320and 3.574416respectively with an associated probabilities values of: 0.0221, and 0.0103which is less than 5% significant level. Hence the null hypotheses are rejected. This means that corruption perception index and corruption perceived rating have a significant impact on private sector performance in Nigeria for the period under.

# Discussion of Findings

Results evidenced from the error correction mechanism (ECM) reveals that corruption with study range of1999-2018 has a significant impact on private sector performance in Nigeria. As revealed from our empirical results, corruption proxies (corruption perception index and corruption perceived rating) had a collective significant impact on private sector performance proxy (credit to private sector ratio to gross domestic product) in Nigeria for the period under study.

Furthermore, both impact variables have a linear significant relationship with credit to private sector ratio to gross domestic productin Nigeria. This depicts that 1% reduction in either corruption perception index or corruption

perceived rating will reduce private sector performance by 87% and 60% respectively in Nigeria. On the other hand, 1% increase in either corruption perception index or corruption perceived rating will spark up private sector performance by 87% and 60% respectively in Nigeria.

These findings do not conform to apriori expectations and that of Campos et al. (2010) that developed data set for the Brazilian economy in which to differentiate corruption on firm-entry and firm growth, and their study confirmed approximately 70% of the businesses to identify corruption as a major obstacle for firm entry and more than 30% as obstacle for growth. The study findings is also intone with the findings of Friedman et al. (2000) using the International Country Risk Guide (ICRG), which reveals that corruption fosters informality, and argue that irrespective of a country's level of GDP per capita, a one-point improvement in the corruption index is associated with a 9.7% reduction in the size of the informal sector. However, the study findings are contrary to the empirical findings of Seker and Yang (2012). They analyzed data from Latin America and the Caribbean, and found that bribery significantly, inhibit firm performance. Specifically, they argue that corruption is more damaging to tender and low revenue realizing firms.

## V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

Corruption has long co-existed with human race. It is as old as reality and remains one of most endless socio economic vice globally both in developed and developing economies with devastating consequences. This study revealed that corruption proxies collectively impacted significantly on private sector performance in Nigeria for the period under study.

The results further reveal that individual explanatory variables in the study (corruption perception index and corruption perceived rating) also have a linear relationship with the explained variable (credit to private sector ratio to gross domestic product).

Our conclusion therefore, is that corruption is not absolutely an evil as acclaimed within our national boundary (Nigeria), this is because it contributes 87% and 60% respectively to Nigerian private sector performance for the period under study. However, its extreme existence in the dealings of public affairs should be curtailed minimally as to portray an acceptable and good image before global eyes.

From the empirical findings of this study, we are constrained to recommend that:

An enlightenment programmes should be jointly design by all arms of Government (Executive, Legislative and Judiciary) in respect to conceived patterns and believes about corruption as to discourage its excessive abuse, and most importantly anchoring it on the habit of desisting from extreme wealth acquisition and the culture of get rich quick syndrome for all (Nationals and non-Nationals). And finally, the phenomenon of corruption should be ascribed with embedded economic benefits rather than individual self-enthroned enrichment.

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## APPENDIX

# DATA EMPLOYED

YEARS	CPS/GDP	CPI	CPR
1999	18.1	16.0	98.0
2000	6.3	12.0	90.0
2001	9.2	10.0	90.0
2002	2.5	16.0	101.0
2003	2.3	14.0	132.0
2004	7.3	16.0	144.0
2005	8.3	19.0	152.0
2006	8	22.0	142.0
2007	11.2	22.0	147.0
2008	17.7	27.0	121.0
2009	20.7	25.0	130.0
2010	18.6	24.0	134.0
2011	16.9	24.0	143.0
2012	20.4	27.0	149.0
2013	19.7	25.0	144.0
2014	19.2	27.0	136.0
2015	19.8	26.0	136
2016	20.8	28.0	136
2017	23.8	27.0	148
2018	25	27.0	144

**Source:** Central Bank of Nigeria (CBN) Statistical Bulletin, 2018 and Transparency International Report, 2018. Note: CPS/GDP=Credit to the private Sector ratio to Gross Domestic Product, CPI=Corruption Perception Index and CPR=Corruption Perceived Rating.

## UNIT ROOT RESULT FOR CPS/GDP

Null Hypothesis: D(CPSGDP) has a unit root Exogenous: Constant Lag Length: 0 (Automatic - based on SIC, maxlag=4)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.579793	0.0000
Test critical values:	1% level	-3.857386	
	5% level	-3.040391	
	10% level	-2.660551	

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

Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 18

Augmented Dickey-Fuller Test Equation Dependent Variable: D(CPSGDP,2) Method: Least Squares

## Date: 11/19/19 Time: 10:55 Sample (adjusted): 2001 2018 Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CPSGDP(-1)) C	-1.450708 1.044761	0.220479 1.122533	-6.579793 0.930717	0.0000 0.3658
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.730157 0.713291 4.697414 353.0511 -52.32706 43.29367 0.000006	Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion Hannan-Quinn criter. Durbin-Watson stat		-0.172222 8.772806 6.036340 6.135271 6.049982 1.908118

## UNIT ROOT RESULT FOR CPI

Null Hypothesis: D(CPI) has a unit root Exogenous: Constant Lag Length: 0 (Automatic - based on SIC, maxlag=4)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.476396	0.0004
Test critical values:	1% level	-3.857386	
	10% level	-2.660551	

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

Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 18

## Augmented Dickey-Fuller Test Equation Dependent Variable: D(CPI,2) Method: Least Squares Date: 11/19/19 Time: 11:18 Sample (adjusted): 2001 2018 Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CPI(-1)) C	-1.049999 0.522499	0.191732 0.720873	-5.476396 0.724814	0.0001 0.4790
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.652105 0.630362 2.920403 136.4600 -43.77183 29.99091 0.000051	Mean dependen S.D. dependent Akaike info cri Schwarz criteri Hannan-Quinn Durbin-Watsor	nt var var terion on criter. i stat	-0.650000 4.803461 5.085759 5.184689 5.099400 2.206283

# UNIT ROOT RESULT FOR CPR

Null Hypothesis: D(CPR) has a unit root Exogenous: Constant Lag Length: 0 (Automatic - based on SIC, maxlag=4)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.337679	0.0022
Test critical values:	1% level	-2.699769	
	5% level	-1.961409	
	10% level	-1.606610	

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

Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 18

Augmented Dickey-Fuller Test Equation Dependent Variable: D(CPR,2) Method: Least Squares Date: 11/19/19 Time: 11:08 Sample (adjusted): 2001 2018 Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CPR(-1))	-0.791203	0.237052	-3.337679	0.0039
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood Durbin-Watson stat	0.395856 0.395856 14.20729 3431.402 -72.79407 1.712988	Mean depender S.D. dependen Akaike info cr Schwarz crite Hannan-Quin	nt var t var riterion erion n criter.	0.111111 18.27853 8.199341 8.248806 8.206161

## **ORDINARY LEAST SQUARE (OLS) REGRESSION RESULTS**

Dependent Variable: CPSGDP Method: Least Squares Date: 11/19/19 Time: 11:22 Sample: 1999 2018 Included observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-3.843662	4.043690	-0.950533	0.3552
CPI	0.929239	0.220535	4.213557	0.0006
CPR	0.019630	0.042502	0.461855	0.6500
R-squared	0.616703	Mean dependent var		12.20000
Adjusted R-squared	0.571609	S.D. dependent var		6.684782
S.E. of regression 4.3752		Akaike info cr	iterion	5.927306
Sum squared resid	325.4345	Schwarz criterion		6.076666
Log likelihood	-56.27306	Hannan-Quinn criter.		5.956463
F-statistic	13.67602	Durbin-Watson	n stat	1.841006
Prob(F-statistic)	0.000288			

## JOHANSEN CO-INTEGRATION TEST RESULTS

Date: 11/20/19 Time: 12:44 Sample (adjusted): 2001 2018 Included observations: 18 after adjustments Trend assumption: Linear deterministic trend (restricted) Series: CPI CPR CPSGDP Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.817754	51.37579	42.91525	0.0058
At most 1	0.485249	20.73259	25.87211	0.1911
At most 2	0.385987	8.779311	12.51798	0.1944

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.817754	30.64320	25.82321	0.0107
At most 1	0.485249	11.95328	19.38704	0.4195
At most 2	0.385987	8.779311	12.51798	0.1944

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegrating Coefficients (normalized by b'\*S11\*b=I):

CPI	CPR	CPSGDP	@TREND(00)	
0.515774	-0.011892	-0.298223	-0.126951	
0.023404	-0.066046	-0.461664	0.611552	
-0.133913	0.060778	0.089385	-0.123944	

Unrestricted Adjustment Coefficients (alpha):

D(CPI) D(CPR) D(CPSGDP)	-0.725352 -2.901262 3.523783	1.414703 2.410464 1.006766	1.035756 -5.599878 0.448014	
1 Cointegrating	Equation(s):	Log likelihood	-145.7935	
Normalized coir CPI 1.000000	ntegrating coeff CPR -0.023056 (0.02452)	icients (standard CPSGDP -0.578204 (0.11477)	error in parentheses) @TREND(00) -0.246136 (0.19465)	

Adjustment coefficients (standard error in parentheses)

D(CPI)	-0.374118	
D(CPR)	(0.37904) -1.496397	
-(0)	(1.39496)	
D(CPSGDP)	1.817477 (0.33168)	
	` /	

2 Cointegrating Equation(s):	Log likelihood	-139.8168	
Normalized cointegrating coeff	icionte (standard e	rror in paranthas	<u></u>

Normalized coin	tegrating coeffic	lients (standard	error in parentneses)
CPI	CPR	CPSGDP	@TREND(00)
1.000000	0.000000	-0.420477	-0.463411
		(0.08315)	(0.08539)
0.000000	1.000000	6.841042	-9.423715
		(1.31889)	(1.35443)
	··· · · · ·		
Adjustment coef	ficients (standar	d error in parer	ntheses)
D(CPI)	-0.341008	-0.084810	
	(0,0000)	(0, 0, 1, 1, 7, 0)	

(0.32083)	(0.04170)	
-1.439982	-0.124700	
(1.35306)	(0.17587)	
1.841039	-0.108397	
(0.29909)	(0.03887)	
	(0.32083) -1.439982 (1.35306) 1.841039 (0.29909)	(0.32083)(0.04170)-1.439982-0.124700(1.35306)(0.17587)1.841039-0.108397(0.29909)(0.03887)

# THE ERROR CORRECTION MECHANISM (ECM) TEST RESULTS

Dependent Variable: D(CPSGDP) Method: Least Squares Date: 11/19/19 Time: 11:39 Sample (adjusted): 2000 2018 Included observations: 19 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.994341	0.404395	2.458836	0.0389
D(CPR)	0.604995	0.254606	3.574416	0.0221
ECM(-1)	-0.991285	0.215141	-4.607597	0.0003
R-squared Adjusted R-squared	0.592885 0.511463	Mean dependent var S.D. dependent var		0.826316 5.022045
S.E. of regression	3.510181	Akaike info criterion		5.533876
Log likelihood	184.8206 -48.57182	Schwarz criterion Hannan-Quinn criter.		5.732705 5.567526
F-statistic Prob(F-statistic)	7.281556 0.003067	Durbin-Watson	n stat	2.312063