



Institutional Corruption and Economic performance Nexus: An Empirical analysis with evidence from Nigeria

Chris AC-Ogbonna, Ph.D

Department of Economics

Phoenix University, Agwada Nasarawa State

Nigeria

ABSTRACT

Corruption has emerged as a multifaceted challenge severely impacting the Nigerian economy in recent times. The impetus behind this study stems from the recognition that no sector, whether private, public, local or traditional institution can claim to be free from corruption. The primary objective is to examine the potential repercussions of institutional corruption on the productive performance of the Nigerian economy. Employing the Ordinary Least Squares (OLS) methodology and rooted in the endogenous growth theory, the study underscores that corruption is a hindrance to economic performance in Nigeria, as supported by evidence-based research and documented cases of corrupt practices in the country.

In summary, the comprehensive view reveals that corruption detrimentally affects Nigeria's economic performance in various aspects. The study concludes that the effect of corruption on the productive performance of Nigeria is alarming and has manifested adverse consequences for the economy and if Nigeria fails to combat corruption, the nation risks facing dire consequences due to its pervasive presence. The policy recommendations emphasized that the Nigeria government should streamline and harmonize all forms of monetary transactions and payments in the country using the treasury single account (TSA), National identification number (NIN), the bank verification number (BVN) and all forms of electronic payment systems into a single digital platform and link such digital platform with the various anti-graft agencies for periodic monitoring. This will drastically reduce corruption and transactions with physical cash. Secondly, the Nigerian government should demonstrate the political will to prosecute individuals involved in corrupt practices, regardless of their tribe, religion, or political affiliation. Such stringent actions are crucial as deterrents for others. These findings align with the ongoing institutional restructuring agenda widely advocated in Nigeria.

Keywords: Corruption, Economic, Performance, Nigeria.

1. INTRODUCTION

Corruption in Nigeria's economic landscape is like a multifaceted, persistent problem that has spread to every aspect of society. It's an economic virus that infects both private and public sectors, government ministries, agencies, and even local institutions. Fraud is so widespread that it occurs even within families on a daily basis. This issue has grown to alarming proportions in recent times, gaining international attention as a transnational problem that necessitates global cooperation to combat it effectively.

In Nigeria, corruption reached its peak during the military regimes of General Ibrahim Babangida and Sani Abacha from 1985 to 1998. These regimes were characterized by extravagant and wasteful spending on projects with little to show in terms of tangible infrastructure. Corruption became deeply ingrained in the country's political and administrative culture, with public funds being looted in the billions and trillions of Naira and Dollars. Abacha's regime, in particular, siphoned off vast sums, leaving the national treasury almost empty.

Corruption not only weakens democratic institutions but also deters investment and hampers economic development. It diverts resources meant for development towards personal gain, discourages foreign investment, and makes it difficult for small businesses to overcome the initial hurdles due to corruption.

The negative effects of corruption are pervasive in the economic system, leading to resource misallocation and inefficiency. Over the years, the scale of corruption has expanded, hindering growth and development in Nigeria. Despite numerous anti-corruption efforts, the problem remains entrenched among politicians and authorities.

Efforts to combat corruption, such as the recovery of stolen funds from abroad and the establishment of anti-graft agencies, have had limited success. Corruption continues to undermine Nigeria's economic growth, leading to widespread poverty and a decline in public services, human development, and foreign investment.

President Muhammadu Buhari, upon taking office in 2015, recognized corruption as Nigeria's greatest problem and launched the War Against Corruption. However, corruption is fighting back, proving to be a complex and deeply entrenched issue. It distorts democratic processes, undermines the rule of law, and perpetuates a system where bribery is a way of life.

Corruption in Nigeria is endemic, and despite government efforts, it persists. Notable instances of corruption include the petroleum subsidy fraud, pension fund misappropriation, budget padding in December 2015 with over-bloated overheads and over-bloated personnel costs, embezzlement of funds allocated for the energy sector, and high-profile cases like those in the Niger Delta Development Commission (NDDC).

Despite the establishment of anti-corruption agencies like the ICPC and EFCC, corruption continues to persist. The magnitude of corruption has grown over the years, impeding the country's economic growth and development, and contributing to widespread poverty.

This study aims to investigate the effect of corruption on the institutional performance of the Nigerian economy and provide policy recommendations to address this complex issue.

1.1 STATEMENT OF THE PROBLEM

Upon assuming office in 2015, President Muhammadu Buhari identified corruption as the most pressing issue in Nigeria, stating that "if Nigeria does not eliminate corruption, corruption will destroy Nigeria". In response, he initiated the War Against Corruption, aiming to purify Nigeria's deeply corrupt system by plugging the leaks that allowed individuals to embezzle public funds and damage the nation's economy. Nevertheless, corruption has fiercely resisted the efforts of Buhari's administration, behaving like a complex and pervasive problem.

Corruption significantly contributes to the country's stagnant and constrained economic growth and the widespread poverty that plagues the nation. It has led to the deterioration of public infrastructure, services, the Human Development Index (HDI), and Foreign Direct Investment (FDI). Furthermore, corruption undermines democratic institutions, retards economic development, and fosters governmental instability. It corrodes the very foundations of democratic systems, distorting electoral processes, subverting the rule of law, and creating a bureaucratic web whose primary purpose is soliciting bribes.

The menace of corruption in Nigeria is deeply rooted and has continued to grow, despite numerous attempts by successive governments to mitigate its effects. There is substantial evidence of corruption-related investigations in Nigeria, including instances of fraud in the petroleum subsidy program, the misappropriation of pension funds, the recycling of items in the various annual budgets, fraudulent embezzlement of \$16 billion allocated for the energy sector during former President Olusegun Obasanjo's tenure, the 2016 and 2017 budget padding scandal, misappropriation of ₦754.7 million by the former Director-General of NIMASA, Patrick Akpobolokemi, embezzlement of ₦140 million by the former Governor of Delta State, James Ibori.

In 2024, Mr. Godwin Emefiele the former central bank of Nigeria governor is currently been arraigned on several high-profile corruption cases against his person while in office which ranges from abuse of office, stealing and fraudulent emblem of public funds among which are \$6.23million, 543.4million pounds kept in a fixed account in a UK bank, manipulated the naira exchange rate fraud in the e-naira project, fraudulent acquisition several properties within and outside Nigeria. Others are:

1. Fraudulently allocating forex of \$2,136,391, 737.33
2. Corruptly received \$26, 552,000 from NIPCO Plc
3. Corruptly received \$7, 720,000 from Raja Punjab on account of for example his employer
5. Conferred corrupt advantage on his associate, Limelight Multidimensional Services Ltd to the tune of ₦900, 216,324.21

6. Fraudulently allocated forex of \$291, 945,785.59 without bid
7. Corruptly received \$740, 000 from NIPCO Plc
8. Corruptly received \$850, 000 from Raja Punjab on account of forex to his employer
9. Conferred corrupt advantage on his associate, Limelight Multidimensional Services Ltd to the tune of ₦1, 060,030,249.42
11. Conferred corrupt advantage on his associate, Adswin Resources Solution Ltd to the tune of ₦398, 031,732.32
12. Abuse of office by special allocation of forex of \$1, 769,254,793.16
13. Corruptly received \$2, 410,000 from Raja Punjab on account of forex to his employer
14. Corruptly received \$400, 000 from Source Computer Ltd as kickback for contract award
15. Conferred corrupt advantage on his associate, COMEC Support Services Ltd to the tune of ₦149, 001,009.70
16. Conferred corrupt advantage on his associate, Adswin Resources Solution Ltd, to the tune of ₦204, 992,739.51
17. Fraudulently allocating of forex of \$370, 872,893.01 without due process
18. Corruptly received \$6, 320,000 from Raja Punjab on account of forex to his employer
19. Corruptly received \$200 000 from Source Computer Ltd as a kickback for a contract award
20. Conferred corrupt advantage on his associate, COMEC Support Services Ltd, to the tune of ₦151, 168,458.73
21. Corruptly received \$6 320,000 from Raja Punjab on account of forex to his employer
22. Corruptly received \$200 000 from Source Computer Ltd as a kickback for a contract award
23. Conferred corrupt advantage on his associate, COMEC Support Services Ltd, to the tune of ₦151, 168,458.73

Another high-profile corruption cases was within the Niger Delta Development Commission (NDDC) wherein in April 2020, a group of stakeholders in the Niger Delta region raised an alarm that the NDDC fraudulently awarded a ₦5,474,647,125.00 contract to a Port Harcourt-based company, Signora Concepts Services Limited, for the procurement of specialized medical personal protective equipment (PPEs) for health workers to fight the coronavirus in the nine member states of the commission and was never delivered. In 2020, the budget to the office of chief of staff to the president was ₦24.35 million, in 2021, it was ₦76.55million, in 2022 it was ₦526.47million, in 2023, it was ₦517.95 million and in 2024, it jumped to ₦21.22billion. Despite the establishment of anti-corruption agencies, such as the Independent Corrupt Practices and Other Related Offenses Commission (ICPC) in 2000, the Economic and Financial Crimes Commission (EFCC) in 2003, and the Presidential Advisory Committee against Corruption, led by Professor Itse Sagay (SAN), corruption continues to persistently challenge the system in Nigeria. The scale of corruption has grown over the years, hindering the country's pursuit of sustainable economic growth and development. This raises the question of how corruption affects various institutions and government expenditure model in Nigeria and to what extent it has contributed to the pervasive poverty in the nation. If the institutions are endemic with corruption, how would the economy effectively perform optimally to achieve high productivity and an improved standard of living.

The primary objective of this study is to investigate the effect of corruption on the performance of Nigeria's economy and provide policy recommendations to navigate the complex challenges it presents.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

A substantial literature has been developed over the past few years examining the sources and consequences of corruption. A wide array of variables has been linked to corruption. In recent years, a large number of papers related to corruption and economic growth have been produced and presented and such studies reviewed in the literature looked into Corruption as any illegally earned, transferred or utilized resources from any source.

The study conducted on Corruption and Development in Nigeria by Akanle, & Nkpe, (2022) delves into the critical issue of corruption in Nigeria and its impact on the country's development. Despite Nigeria's status as the acclaimed largest economy and the most populous nation in Africa, it remains one of the most underdeveloped countries globally, primarily due to the pervasive problem of corruption. This research, presented in the book titled "Corruption and Development in Nigeria," focuses on exploring the intricate connections, consequences, and future prospects of corruption and development in Nigeria. The study encompasses a comprehensive examination of the relationship between corruption and Nigeria's development, both in narrative and case study formats, along with insights into the broader implications of corruption on development in Africa and other developing nations. The study's contributions

address various aspects, including conceptualization, theory, causes, contexts, outcomes, and pathways related to corruption and development. It seeks to answer fundamental questions about why corruption occurs, what its impacts are, and how it affects Nigeria's development. The research approach is global and critical, grounded in empirical evidence, and normative in its perspective. This book offers a diverse collection of chapters, tackling key issues, making it a valuable resource for academics, scholars, policymakers, and all stakeholders interested in understanding the relationship between corruption and development.

It effectively highlights the gravity of the corruption issue in Nigeria, linking it to the country's underdevelopment. The study's comprehensive approach, addressing conceptual, theoretical, and empirical aspects of corruption, is commendable. However, there are some areas where this work can be critiqued:

1. **Lack of Quantitative Data:** The study primarily adopts a qualitative approach, focusing on conceptualization and theory. While this is valuable for providing a nuanced understanding of corruption, a more quantitative analysis could strengthen the research by offering concrete data and measurements.
2. **Regional and Cultural Specificity:** The study primarily focuses on Nigeria, and while it provides insights into corruption in Africa and developing countries in general, it could benefit from a more global comparative analysis to provide a broader context.
3. **Causation vs. Correlation:** The study suggests that corruption is "largely responsible" for Nigeria's underdevelopment, but it is important to acknowledge that causation can be challenging to establish definitively. Corruption is a complex issue with multiple contributing factors.

The dearth of these gaps claimed the attention of this study.

Gian (2020). *Corruption in the Oil Sector: An extensive review and critique of existing literature*. In spite of the growing interest in investigating corruption, the available literature often offers broad definitions that fail to capture the specific forms it takes within various economic sectors. Moreover, many quantitative analyses heavily rely on perception-based indices to depict this complex phenomenon. This paper conducts a systematic examination of the literature concerning corruption within the global oil sector. It goes a step further by offering evidence, based on existing literature, to support the aforementioned arguments. This is achieved by scrutinizing 184 studies sourced from Web of Science, Scopus, and Google Scholar, providing bibliometric data, and evaluating the research methodologies employed. By comparing the different strands of literature within this field, the review highlights the potential benefits of enhanced coordination between qualitative and quantitative research, as well as the need to focus on specific sectors of the economy. In particular, the review emphasizes the importance of deeper qualitative analyses to establish a comprehensive classification of corruption within the oil sector. Once such a classification is established, quantitative analyses can then measure the identified forms of corruption using empirically-based indices.

Mathew (2020) in his study on *Corruption in Nigeria: A Hindrance to National Development*. It is beyond question that the ongoing 'abuse of entrusted authority for personal gain' is a prevalent occurrence in the governance systems worldwide. While the concept of corruption has gained global recognition, in Nigeria, it holds a distinct position due to its prevalence in the country's political leadership. In this context, corruption is considered 'almost celebrated more than anywhere else in the world.' This paper argues that corruption in Nigeria significantly hampers the nation's progress since economic and political advancement is a precursor to social development. Corruption, as a social vice, needs to be analyzed in this light. The paper concludes that unless Nigeria undergoes a substantial shift in its administrative approach, meaningful development will remain a distant goal. While the methodology adopted in this study was based on content analysis, it created a gap in which this study intends to fill using OLS quantitative data analytical technique.

Nurudeen, & Marcin, (2019) investigated the determinants of Corruption in Nigeria: Evidence from various estimation techniques. The research highlighted that reducing corruption has posed a significant challenge for Nigerian government and policymakers. To address this issue, the study employed various estimation techniques, including ARDL, CCR, and FMOLS, to assess the determinants of corruption in Nigeria from 1984 to 2016. The

cointegration test revealed a long-term relationship between corruption and its determinants, which included economic development, political rights, military spending, rents, civil liberties, and openness. The study's results, obtained through ARDL, CCR, and FMOLS estimations, showed that economic development, political rights, military spending, rents, civil liberties, and openness were the primary drivers of corruption in the long term. Higher levels of economic development, increased civil liberties, greater openness, and higher military expenditure were associated with lower corruption, while higher rents and political rights were linked to higher corruption. As a result, the study recommended policies aimed at promoting economic development, civil liberties, political rights, and openness, and reducing reliance on the oil sector to combat corruption in Nigeria. Strengths: The study uses a variety of estimation techniques, providing a robust analysis of corruption determinants. It also acknowledges the long-term relationship between corruption and its determinants.

Though the study did not address the potential shortcomings of estimation techniques, such as data limitations or model assumptions. Additionally, it does not explore the role of institutional factors in corruption such as the role of institutions, enforcement mechanisms, and legal frameworks in combating corruption. In terms of data sources, the study should address the sources of data and potential data quality issues, as this can impact the reliability of the findings. All these constituted the gap this study intends to address.

Salihu, & Gholami, (2018) conducted a study on Corruption in the Nigeria Judicial System: An overview to examine corruption within the Nigerian judicial system, exploring its impact on the administration of justice and the broader fight against corruption in the country. This research primarily relied on desk research methods, using secondary sources from published materials such as journal articles, online articles, and books. The study's findings revealed a prevalence of corruption within the judicial system, which was identified as a significant obstacle in the fight against corruption in Nigeria. The study's scope was limited to issue and content analysis, focusing specifically on corruption within the Nigerian judiciary. Strengths: The study serves as an overview of corruption in the Nigerian judicial system and its implications. It relies on various secondary sources to build a comprehensive understanding of the issue. The weakness of the study is based solely on desk research, and its scope is limited to content analysis. It primarily adopted an overview and content analysis techniques of analysis.

Idodo, (2017), carried out a study on th Corruption and economic growth in Nigeria from 1990-2014. The study adopted OLS methodology the analysis and anchored on the endogenous growth theory. In the analysis, the findings of the study revealed that corruption has caused decay and dereliction within the infrastructure of government and the society in physical, social and human terms. Most often, borrowed funds are either misapplied or embezzled. In this regard, government effort at curbing corruption should be sustained. In conclusion, it is obvious that in a bid to minimize corruption in order to restore the fame and dignity of the economy making it an environment for rapid economic growth and further recommended that Based on this, this study suggests not a single action in tackling corruption but rather a combination of various actions in tackling this monster that is so deep rooted in the Nigerian economy effectively and efficiently. Hence the study is in the same direction with this study, the time frame was not current enough to capture the current realities in Nigeria which created a gap this study was fill.

In summary, the major literatures reviewed so far, have revealed some gaps that begs to be filled. One of such gap is that from the literatures reviewed in the study so far, nobody has looked into the high profile cases of corruption perpetrated by Nigerians in position of authority and how it has stunted and stagnated sustainable economic growth and development in Nigeria. The study is anchored on the theory of policy-oriented theory of corruption. The theory opine that with the high level of corruption in any country whether developed or developing countries will not allow the country's economy to grow and that if the field of administrative corruption is to become more theoretical and less descriptive, it must develop a framework and methodology that will help to measure its effect on economic growth.

3 METHODOLOGY

Research design demonstrates how variables of the study will be observed, controlled, or manipulated to generated necessary data for the study. Therefore, the study is designed to be an ex-post facto research study.

3.1 Method of data and sources of data collection

The data for this research was gathered from entirely secondary sources from the Data Management Office in the Statistics Department of the Central Bank of Nigeria. The data includes data for the Rebased Gross Domestic Product growth rate (GDP_t), Corruption perception index (CPI), government expenditure (GEXP), Unemployment rate (UR),debt stock (DS) and Foreign Direct Investment (FDI).

3.2 Model Specification

Following the work of Nurudeen, & Marcin, (2019) which was derived from a production function framework based on the theoretical models of the neoclassical and endogenous growth as well as various empirical analysis models. They investigated the determinants of Corruption in Nigeria: Evidence from Various Estimation Techniques. The research highlighted that corruption has posed a significant challenge for Nigerian government and policymakers. To address this issue, the study employed various estimation techniques, including ARDL, CCR, and FMOLS, to assess the determinants of corruption in Nigeria from 1984 to 2016 in which certain macroeconomic variables were incorporated in their study.

This study adapted the model of Nurudeen, & Marcin, (2019) in this study with slight inclusion of some variables which further identified the gap this study intends to fill.

The model of this study is therefore specified thus:

$$GDP_t = f(CPI, PR, GEXP,UR, DS,FDI)$$

$$GDP_t = \beta_0 + \beta_1Cpi_t + \beta_2Gexp_t + \beta_3Ur_t + \beta_4Ds_t + \beta_5Pr_t + \beta_6Fdi_t + \mu$$

Where:

Cpi =Corruption perception index

GDP_t =Gross Domestic Product growth rate

Ds=Debt Stock

Ur=Unemployment Rate

Gexp=Government Expenditure

Fdi=Foreign Direct Investment

Pr=Poverty Rate

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ are the policy Parameters to be estimated

U_i : Error term

Table 4.1 Unit Root- Augmented Dickey Test Result ADF stationary Test on GDP model

Variables	At Level/ First Diff.	Calculated ADF	Critical V 1%	5%	10%	Integrated At 5%	Remark
Log(GD)	Level	2.7704	-3.7497	-2.9969	-2.6381	IO	NS
	First Diff.	-2.2323	-3.7667	-3.0038	-2.6417	IO	NS
	Second Diff.	-6.2076	-3.7856	-3.0114	-2.6457	IO	S
Log(CPI)	Level	-1.1154	-3.7497	-2.9969	-2.6381	IO	NS
	First Difference	-4.1415	-3.7667	-3.0038	-2.6417	IO	S
Log(DS)	Level	-2.0239	-3.7497	-2.9969	-2.6381	IO	NS
	First	-3.1307	-3.7667	-3.0038	-2.6417	IO	S

	Difference						
Log(FDI)	Level	-1.0990	-3.7497	-2.9969	-2.6381	IO	NS
	First Difference	-3.3178	-3.7667	-3.0038	-2.6417	IO	S
Log(GE)	Level	2.8930	-3.7497	-2.9969	-2.6381	IO	S
	First Difference	-2.7835	-3.7667	-3.0038	-2.6417	IO	NS
Log(PR)	Level	-1.7810	-3.7497	-2.9969	-2.6381	IO	NS
	First Difference	-3.3453	-3.7667	-3.0038	-2.6417	IO	S
Log(UR)	Level	0.2910	-3.7497	-2.9969	-2.6381	IO	NS
	First Difference	-3.4679	-3.7667	-3.0038	-2.6417	IO	S

Note: NS = Non-stationary while S= stationary

Source: Author’s computation,2024

The preceding analysis indicates that all variables achieved stationarity through their respective initial differences. This involved assessing the stationarity of individual variables using the Augmented Dickey Fuller (ADF) test to ascertain the presence of a unit root in each time series. Table 1 presents the results of the ADF test, revealing that, with the exception of Government Expenditure (GE), variables were not stationary at the levels. This observation is based on a comparison between the observed absolute values of ADF test statistics and the corresponding critical values at a 5% level of significance. The table indicates strong evidence of non-stationarity, as ADF statistics were consistently lower than the critical values in absolute terms.

Consequently, the null hypothesis is accepted, indicating the presence of a unit root in Gross Domestic Product (GDP), Corruption Perception Index (CPI), Foreign Direct Investment (FDI), Poverty Rate (PR), Unemployment Rate (UR), and Debt Stock (DS) at the levels. Only Government Expenditure (GE) was found to be stationary at the levels, rejecting the null hypothesis and establishing its stationary nature.

Building on this outcome, GDP, CPI, FDI, PR, UR, and DS underwent first differencing, and the ADF test was conducted, as illustrated in the subsequent table. Comparisons with the 5% critical value demonstrated that all variables, excluding GDP and GE, were stationary at the first difference. Consequently, the null hypothesis of non-stationarity was rejected, affirming the stationarity of these variables. This implies that CPI, FDI, PR, UR, and DS are integrated of order one, I(1).

To further ensure consistency in subsequent econometric modeling and to explore the possibility of co-integration, GDP underwent second differencing. The ADF test, detailed in table 1 and compared with the 5% critical value, confirmed the stationary nature of GDP at the second difference, denoted as I(2). This step was taken to evaluate co-integration possibilities and maintain consistency in subsequent stationary econometric modeling. Following the assessment of variable stationarity, the analysis proceeds to the Johansen co-integration test.

Thus, we proceed to carry out the co-integration analysis.

4.2 Co-integration Test Result for GDP Model

Series: CPI, DS, FDI, GDP, GE, PR, UR

Lagsinterval(in first differences);1 to 1

Table 4.2. JOHANSEN COINTEGRATION TEST

Hypothesized No. of CE(s)	Eigen Value	Likelihood Ratio	5 Percent Critical Value
None *	0.987835	-360.1560	125.6154
At most 1 *	0.964119	-346.0095	95.75366
At most 2 *	0.798162	-307.7427	69.81889
At most 3 *	0.594252	-289.3393	47.85613
At most 4 *	0.516709	-278.9961	29.79707

At most 5 *	0.433888	-270.6040	15.49471
At most 6 *	0.331799	-264.0690	3.841466

Source: Computed by the author,2024

Series: CPI, DS, FDI, GDP, GE, PR, UR
 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 *	0.987835	274.5813	125.6154	0.0000
At most 1 *	0.964119	173.1701	95.75366	0.0000
At most 2 *	0.798162	96.63637	69.81889	0.0001
At most 3 *	0.594252	59.82970	47.85613	0.0025
At most 4 *	0.516709	39.08314	29.79707	0.0032
At most 5 *	0.433888	22.35899	15.49471	0.0039
At most 6 *	0.331799	9.272839	3.841466	0.0023

Trace test indicates 7 cointegratingeqn(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 *	0.987835	101.4112	46.23142	0.0000
At most 1 *	0.964119	76.53373	40.07757	0.0000
At most 2 *	0.798162	36.80667	33.87687	0.0217
At most 3	0.594252	20.74655	27.58434	0.2918
At most 4	0.516709	16.72415	21.13162	0.1854
At most 5	0.433888	13.08615	14.26460	0.0761
At most 6 *	0.331799	9.272839	3.841466	0.0023

Max-eigenvalue test indicates 3 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Source: Author’s computation,2024

The findings regarding co-integration, indicating the presence of a long-term linear relationship, are outlined in Table 2, specifically through Trace Statistics and Maximum Eigenvalue, utilizing the methodology proposed by Johansen and Juselius (1990). The trace statistic in the co-integration tables signifies seven co-integrations at a 5% significance level, implying a co-integrating or long-run relationship among Gross Domestic Product (GDP), Corruption Perception Index (CPI), Foreign Direct Investment (FDI), Poverty Rate (PR), Unemployment Rate (UR), Debt Stock (DS), and Government Expenditure (GE). By comparing the values of trace statistics/likelihood ratio with the critical values at the 5% level, we determined that these statistics exceed the critical values, leading us to conclude the presence of a long-run equilibrium relationship among the dependent and explanatory variables.

This evidence of co-integration dispels the possibility of spurious correlations and suggests a unidirectional influence among the variables. It is crucial to note that the existence of co-integration vectors among a set of variables does not necessarily imply causal influence between pairs of variables in the co-integration test model.

4.3 Presentation of Results and Findings

Table 4.3 Result of short run Regression for the GDP Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CPI	-0.6500	0.2513	-2.587	0.0040
DS	0.7670	0.3380	2.275	0.0042
FDI	0.8491	0.2792	3.041	0.0008
GE	0.5199	0.1624	3.202	0.0009
PR	0.5405	0.1392	3.884	0.0007
UR	0.6120	0.1516	4.035	0.0001
C	0.7317	0.3450	2.120	0.0063

Source: Author’s acomputation,2024

R-Squared =0.795 , Adjusted R-Squared= 0.673, F-Statistic= 55.56, Durbin Watson= 2.00

$$GDP_t = \beta_0 + \beta_1CPI_t + \beta_2GE_t + \beta_3UR_t + \beta_4DS_t + \beta_5PR_t + \beta_6FDI_t + \mu$$

$$(0.7317)(-0.6500)(0.5199)(0.6120)(0.7670)(0.5405)(0.8491)$$

The regression analysis results indicate that unemployment rates are not statistically significant and exhibit a positive association with the rate of Gross Domestic Product (GDP) growth. The unexpected positive correlation with unemployment rates may be attributed to Nigeria's heavy reliance on the capital-intensive oil sector, which contributed 95% of foreign exchange earnings and over 65% of government revenue in 2005. Theoretically, a lower level of capacity utilization leads to decreased GDP, and efficient resource utilization is linked to reduced unemployment, increased aggregate supply, and economic growth.

Additionally, the findings reveal a positive and statistically significant contribution of poverty rate to GDP. This implies that a unit increase in the poverty rate resulted in a 0.21 percent increase in GDP during the study period. The positive relationship between unemployment rate contribution to GDP and poverty level aligns with the conclusions reached by Idodo (2017) regarding the GDP-poverty relationship in Nigeria.

Table 3 indicates that the coefficient of government expenditure (GE) carries the correct sign but lacks statistical significance in affecting GDP. This suggests that if the government appropriately manages expenditure on socio-economic and community services, it could have a substantial impact on economic growth. This finding corresponds with the study by Nurudeen and Marcin (2019), which found no significant relationship between most components of government expenditure and economic growth in Nigeria.

Furthermore, the relationship between Gross Domestic Product and debt stock is not statistically significant. The study suggests that the increasing debt stock has positively influenced economic growth in Nigeria, affirming the expected positive impact of debt stock after debt forgiveness, provided the funds are used efficiently.

The positive relationship between Foreign Direct Investment (FDI) and Economic Growth (GDP) aligns with expectations. The coefficient of FDI is 0.211, indicating that a unit increase in FDI will increase GDP by \$0.211 billion. However, corruption negatively influences this relationship, as it first reduces Foreign Direct Investment and subsequently impacts Gross Domestic Output in Nigeria.

In summary, the applied econometric tests in this study reveal a statistically significant relationship between the dependent variable (GDP) and the independent variable (CPI), leading to the rejection of the null hypothesis (Ho) that corruption does not impede economic growth in Nigeria. The alternative hypothesis is accepted, stating that corruption hampers economic growth in the country.

4.4 Discussion of Findings

The regression analysis results presented in Table 1 indicate several relationships between the dependent variable, Economic Growth (GDP), and various independent variables. Notably, there is a negative correlation between GDP and corruption, while positive correlations are observed with government expenditure, unemployment rate, foreign

direct investment, debt stock, and poverty level. The coefficient for corruption is -0.6500, suggesting a negative impact on economic growth; as corruption increases, GDP decreases significantly, and vice versa. This aligns with the findings of Idodo (2017), Nurudeen and Marcin (2019), highlighted the adverse effects of corruption on Nigeria's economic growth.

The coefficient of determination (R^2) is 0.79, indicating that 79% of the total variation in GDP can be attributed to corruption and other explanatory variables. The remaining 21% is explained by other variables outside the model. The Durbin-Watson statistic is 2.00, within the determinate region, suggesting the absence of autocorrelation among explanatory variables.

Standard errors of the estimates are provided for each coefficient, and at the 5% significance level with 18 degrees of freedom, the T-statistics test is conducted. The T-calculated for corruption (2.5868) exceeds the T-table (1.734), leading to the rejection of the null hypothesis (H_0) and acceptance of the alternative hypothesis (H_1) that corruption significantly impacts economic growth in Nigeria.

The F-statistic test, comparing the calculated F^* (55.564) with the critical value at the 5% level (2.6613), supports the rejection of the null hypothesis. This further confirms that corruption has a significant economic implication on the Nigerian economy.

The analysis includes the lagged error correction term ECM (t-1), which exhibits a negative sign and statistical significance, indicating a long-run relationship between explanatory and dependent variables. The standard errors for the model's coefficients are provided, and the T-test confirms the statistical significance of each parameter estimate.

The specific coefficient for the Corruption Perception Index (CPI) is highlighted, manifesting a negative sign and high significance at the 5% level. This aligns with expectations, indicating that corruption depresses economic growth in Nigeria. The outcome of this result is unsurprising given the prevalence of abandoned capital projects attributed to corruption.

In summary, the empirical evidence supports the assertion that corruption impedes economic growth in Nigeria. The findings emphasize the urgent need for anti-corruption measures and effective governance to foster sustainable development, reduce poverty, and enhance overall economic progress. The negative impact of corruption on public infrastructure, democratic institutions, foreign direct investment, and business growth underscores the multifaceted challenges posed by corruption to Nigeria's economic landscape.

5.1 Summary of major findings

In summary, the study has revealed a significant correlation between corruption and Economic Growth (GDP) in Nigeria. Economic growth, along with other explanatory variables, exhibits a significant relationship at the 1% level, indicating that corruption is negatively associated with economic growth. The empirical analysis uncovers a long-term relationship between the reduction in corruption levels, foreign direct investment, government expenditure, debt stock, unemployment rate, poverty rate, and economic growth. Specifically, the trace test identifies seven co-integrating equations, while the maximal eigenvalues identify three co-integrating equations at a 5% significance level. These findings emphasize the noteworthy connection between corruption levels and economic growth from 1991 to 2022.

It is crucial to acknowledge that corruption plays a pivotal role in the widespread poverty prevailing in Nigeria today. Despite a significant increase in the national budget from just over ₦900 billion in 1999 to ₦24.82 trillion for the 2024 fiscal year, poverty has risen proportionally especially from the fuel subsidy regime which had proven to be so harmful to the overall health of our national economy. The primary cause of this phenomenon is discernible: a substantial portion of allocated funds ends up in the hands of a privileged few rather than being utilized for their intended purposes. Funds designated for infrastructure projects, such as road construction, are misappropriated, resulting in avoidable road accidents and human suffering. Similarly, when funds allocated for electricity provision are misused, the population is left in perpetual darkness. The misallocation of healthcare budgets contributes to high maternal and infant mortality rates, hyperinflation has rendered the economy very weak because the Nigeria economy

is not productive and depend on dollars for the importation of foreign goods to supplement domestic consumption. These are the structural factors driving inflation and the tangible costs directly attributed to corruption in Nigeria.

5.2 Conclusions

The analysis indicates that corruption has a negative impact on economic growth, contributing to the nation's gross underdevelopment. Despite the abundance of human and material resources in the country, Nigeria, with its deep-rooted corruption, lags behind in industrialization. The inability of successive administrations to eradicate corruption can be attributed to the inadequacy of the nation's anti-graft protocols. It is evident that unless Nigeria addresses corruption decisively, the nation will suffer dire consequences.

5.3 Policy Recommendations

The study puts forth the following policy recommendations:

1. The Nigerian government should establish monitoring and evaluating (M&E) agencies tasked with overseeing and providing periodic feedback on government-initiated and executed infrastructural projects to the anti-graft agencies. This will minimize fraud and put a check on fraudulent contractors and their collaborators.
2. The Nigerian government should exhibit the political will to prosecute individuals found guilty of corruption, regardless of tribe, religion, or party affiliation, to serve as a deterrent to others.
3. The Nigeria government should streamline and harmonize all forms of monetary transactions and payments in the country using the treasury single account (TSA), National identification number (NIN), the bank verification number (BVN), tax identification number (TIN) and all other forms of electronic payment systems into a single digital platform and link such digital platform with the various anti-graft agencies for periodic monitoring. This will drastically reduce corruption.
4. Anti-graft agencies such as the Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices and Related Offences Commission (ICPC) should be restructured to enhance their proactive role in combating corruption. These agencies should be equipped with modern security devices and maintain a comprehensive database of Nigerians with regular updates.

REFERENCES

Akanle, O. ,& Nkpe, D. O.,(2022). Introduction: Corruption and development in Nigeria.

In Akanle, O. & Nkpe, D.O. Corruption and Development in Nigeria. London: Routledge. Available at: <https://www.routledge.com/Corruption-and-Development-in-Nigeria/AkanleNkpe/p/book/9781032014425>

Gian M. M.,(2020). Corruption in the oil sector: A systematic review and critique of the literature. *The Extractive Industries and Society*,7(1), 217-236

https://www.researchgate.net/publication/344210509_CORRUPTION_IN_NIGERIA_An_Impediment_to_National_Development

<https://www.premiumtimesng.com/news/top-news/684870-fresh-charges-against-ex-cbn-governor-emefiele-at-glance.html>

Idodo, M.(2017), Corruption and economic growth in Nigeria. An unpublished m.sc thesis submitted to the department of economics, veritas university Abuja.

Nurudeen, A., & Marcin, W. S., (2019) carried out a study on the determinants of corruption in Nigeria Evidence from various estimation techniques., *Economic Research-Ekonomska Istraživanja*, 32(1), 3058-3082, DOI: [10.1080/1331677X.2019.1655467](https://doi.org/10.1080/1331677X.2019.1655467)

Salihu, H.A., & Gholami, H., (2018), Corruption in the Nigeria Judicial System: An Overview, *Journal of Financial Crime*,25(3), 669-680. <https://doi.org/10.1108/JFC-01-2017-0005>