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**Foreign Debt, Institutional Quality and Economic Performance in Nigeria: An
Experimental Evaluation**

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ABSTRACT

Nigeria is the largest economy in Africa and the largest exporter of crude oil in Africa, yet Nigeria has a huge foreign debt portfolio and weak institutions. It is against this backdrop that this study examines the impact of foreign debt and institutional quality on economic performance in Nigeria. Data used for the analysis were quarterly data that ranges from 1996Q1 to 2019Q1. Foreign debt service was used as a measure of foreign debt while corruption control and government effectiveness were used as measures of institutional quality. Economic performance which is the dependent variable was measured using Gross Domestic Product. The study also examines how institutional quality influences the relationship between foreign debt and economic performance in Nigeria. Autoregressive Distributed Lag Model was used to specify and estimate the relationship between the variables. The result of the analysis indicates that foreign debt has an insignificant negative effect on economic performance in the short run and also negative insignificant effect in the long run too, corruption control has a significant positive effect on economic performance only in the short run, Government effectiveness does not have a significant effect in the economy, being the two; the short run and the long run, on that account corruption control influences the relationship between foreign debt and economic performance significantly and negatively only in the short run but also positively and insignificantly in long run. Mechanism should be put in place to ensure that foreign debts are properly utilized to embark on the projects they were meant for.

Keywords: Foreign Debt, Institutional Quality, Economic Performance, ARDL Model

Introduction

Nigeria has been identified as the largest economy in Africa, with a gross domestic product (GDP) that exceeded US\$1.085 trillion in 2022. The region's significant natural gas reserves coexist with its status as the primary oil-exporting continent. According to Obioma, Uchenna, and Alexandra (2015), there has been a significant increase in economic growth, particularly in the industrial sector. The growth rates for this sector were 6.3%, 7.6%, 7.4%, and 2.35% in the years 2009, 2010, 2011, and 2015, respectively, with a drop to 1.8% in 2022. Primary sectors

account for more than 50% of the industrial sector growth in the country. The oil and gas sector is a significant contributor to the Nigerian economy, accounting for approximately 5.30% of the country's GDP between 2022 and 2023. It also generates over 90% of the government's export earnings and contributes to 80% of the government's revenue. The agricultural sector is also an essential player in the Nigerian economy, contributing 20.63%, 20.98%, 20.85% and 23% to the GDP in 2015, 2016, 2017 and 2022, respectively. The industrial sector accounted for 20.16%, 18.17%, and 22.32% in 2015, 2016, and 2017, respectively while from 2011, March to Dec 2022, estimated an average rate of -0.9%. The service sector contributed about 58.12%, 59.79%, 55.80%, and 52.13% to the GDP in 2015, 2016, 2017 and 2021 respectively. However, the manufacturing sector only contributed approximately 15.06% to the GDP in 2022, according to research conducted by National Bureau of Statistics (NBS, 2022).

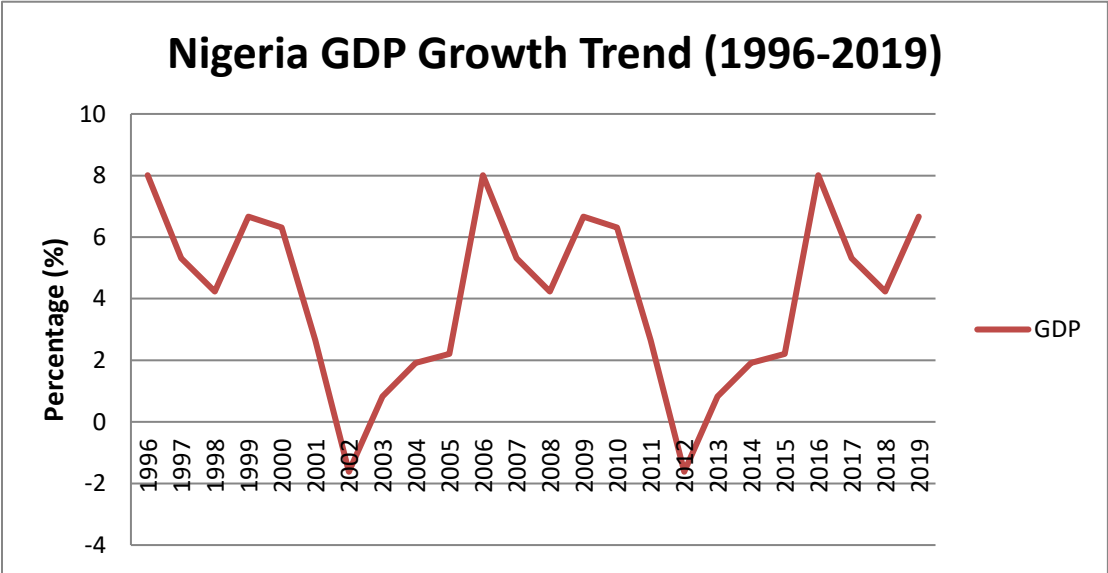
Despite having plentiful of natural largest domestic market in Africa, Nigeria's oil price fluctuate in an unconditional manner which has been highly disappointing in the last few decade derailing the country's level of improvement, making the country to be involved in foreign debt Morris &Fessehaie (2014). Meanwhile, over half of the country's real GDP is accounted for by the country's primary sectors - the oil and gas sector; which invariably became the largest sector of the Nigeria's economy and contributed about 5.30 percent and 6.21 percent to the GDP in 2022 and 2023(Q1) respectively making it illustrate that 95 percent of export earnings and with 80% of government revenue Business Day Newspaper (2023). The origin of Nigeria's external loans can be track back in the year 1958; during pre- independence period of the country, where World Bank grant a loan of 28 million US dollars to Nigeria government for the construction of railroads Afolabi, Laoye, Kolade&Enaholo (2017). This create an accumulation of more loans stock by the country to be increasing in an steady increasing condition, thereby rising from \$0.763 billion in 1977 to \$5.09 billion in 1978 and \$8.65 billion in 1980, an increase of over 73.96 percent between 1977 to 1980, currently with about N18.7trillion (i.e. US\$41.69 billion) in Q4 of external debt profile as at 2022.

According to a study conducted by AL-Tamimi and Jaradat (2019), institutional deficiencies have persisted for 39 years (1979–2018) in Nigeria. These deficiencies have hindered the efficient management of resources and have been attributed to a lack of political will or weak legal backing. As a result, sustainable economic growth in Nigeria has been impeded. Illicit financial flows from African nations to overseas destinations result in an annual loss of \$90 billion, with Nigeria being the primary contributor, as reported by Owasanoye (2019). The primary cause of this setback is attributed to institutional

weaknesses. The expansion of a country's productive capacity is a fundamental aspect of economic performance. Economic growth refers to the increase in the production of goods and services within a specific timeframe for a nation. Analyzing economic performance involves studying diverse factors like gross domestic product (GDP), inflation rate, labor, capital, trade, exchange rate, and employment rate. Among these factors, GDP is considered the most comprehensive gauge of economic activity. GDP measures the overall market value of all final goods and services produced within a country's boundaries during a designated period, usually a year. Over the past decade, there has been a noticeable underperformance in Nigeria's economic performance. The economy has experienced multiple instances of GDP decline, leading to the economic recession of 2016.

Moreover, economic performance trend of the Nigerian economy in the last decade has, indicates generally declining trend with some periods of almost negative growth. As often the case, declining growth in the economy is usually associated with undesirable economic conditions such as unemployment rate, poor trade transactions with other economies issues and inflation. In such periods analyst and policy makers usually research for possible causes and remedial measure.

Nigeria GDP Growth Trend (1996-2019)



Source: Author, with data from statistical bulletin (2020)

However, no clear consensus on this has been met by past researchers simply due to lack of credible empirical evidence and on the account that it is notoriously difficult to measure the quality and causality of an institution Radzeviča&Bulderberga, (2018). Due to these contradictions among scholars and policymakers on this bone of contention which create a

justification to the study, examining how institutional quality can influence the impact of external borrowing, on economic performance in Nigeria. Therefore, this study will be a significant addition to literature. Moreover, this study will also examine if the impact of institutional quality and foreign debt has joint effect on economic performance in Nigeria, thus creating a link between how institutional quality influence the effect of foreign debt on economic performance in Nigeria.

Significance of the Study

The improved economic prospects, which give Nigeria enormous benefits for its development, make the study of utmost significance due to its immense importance. As a consequence of this, the findings of this study will serve as a valuable resource for policymakers, directing them in making informed judgments regarding policy measures to improve the economy, particularly in terms of cultivating a free-foreign debt strategy and leveraging solid institutions. In other words, the findings of this study will help policymakers strengthen the economy by guiding them in making informed decisions regarding policy measures to boost the economy. In addition, students, members of the general public, and potential future scholars will find the study to be an essential resource, as it will serve as an essential store of knowledge within libraries.

Literature Review

2.1 Conceptualization

2.1.1 Economic Performance

"Economic performance" is a term used to describe the quantitative measure of the production of goods and services within a particular country during a specific timeframe. The measurement of growth is conducted through the use of several indicators, including but not limited to gross domestic product (GDP), inflation rate, labor, capital, trade, exchange rate, and rate of employment. The gross domestic product (GDP) is a commonly used metric to assess economic activity comprehensively. The topic of economic performance has been a widely discussed subject in both academic and non-academic circles, as per Amin's (2019) viewpoint. The measurement of growth in significant sectors of an economy is a widely accepted approach to assessing the vitality of these sectors and their overall contribution to the national economy.

Investigating the impact of industrial capacity utilization on the Nigerian economy is a critical issue that warrants assessment. According to recent data, Nigeria's population in 2021 is estimated to be approximately 213.4 million, making it the most populous country in Africa. According to estimates for 2022, Nigeria will boast the largest economy in Africa with a Gross Domestic Product of \$1.085 trillion.

2.1.2 Foreign Debt Stock

Foreign debt refers to the segment of a nation's debt, such as Nigeria's, that has been obtained from foreign creditors, including international financial institutions, governments, or commercial banks. The interest on the borrowed loans must be repaid in the currency in which the funds were lent. Afolabi et al. (2017) have highlighted the potential benefits of interdependence among economies in achieving sustainable economic development, despite the challenges posed by resource scarcity. Contrary to popular belief, domestic savings alone may not suffice to provide the necessary infrastructure required for the industrialization of a developing economy. On the view of, L-Tamimi & Jaradat, (2019) look at the history of Nigeria's foreign loan, which was originated or initiated in 1958 where a loan of USD28 Million was obtained from the World Bank for construction of developmental projects and railway system in Nigeria. Due to insufficient domestic savings, developing economies must depend on external loans to bridge the gap in economic growth within their economies.

2.1.3 Institutional Quality

Institutional quality is often defined based on North's (1981) description of institutions as a collection of regulations, compliance protocols, and ethical standards that aim to limit individual behavior in order to optimize the wealth or utility of principals. According to the framework established by Douglas North, the definition of institutions encompasses both formal and informal rules that govern the behavior of individuals and organizations. This definition is widely accepted in the field. The formal rules that are studied in this research include a constitution, laws, regulations, political systems, and property rights, among other elements. In contrast, informal rules refer to a comprehensive framework of societal values, cultural practices, beliefs, ideologies, and behavioral norms. Sulaiman and Azeez (2012) have provided a comprehensive definition that encompasses various institutions and their impact on human behavior.

2.2 Review of Empirical Literature

Al-Tamimi and Jaradat (2019) conducted a study to examine the impact of external debt on the economic growth of Jordan. The research employed annual time series data covering the period from 2010 to 2017. Empirical research indicates that external debt has a significant negative impact on economic growth. The policy implications of the study indicate that foreign direct investment may be a feasible option for financing economic growth in Jordan. The impact of public debt on economic growth and poverty reduction in South Asian countries, namely Bangladesh, India, Pakistan, and Sri Lanka, was investigated by Akram (2016) through a study. The research examined information spanning from 1975 to 2010. The research employed a theoretical framework that incorporated the influence of public debt on economic growth. The framework was converted into a mathematical equation and utilized to assess the impact of public debt on poverty. The research employed conventional panel data estimation methods to examine the correlation among public debt, economic growth, and poverty alleviation. According to the research, it was observed that economic growth was negatively affected by public debt. However, it was found that poverty reduction was not significantly impacted by public external debt and foreign debt servicing. The findings indicate that the impact of public external debt is comparable across economies with varying levels of wealth, irrespective of its possible favorable or unfavorable consequences. The study conducted by Olasode and Babatunde (2016) aimed to develop a model based on economic theories that explain the causal relationship between external debt and economic growth in the Nigerian economy. The study utilized an autoregressive distributed lag model to perform an empirical investigation on data covering the period of 1983 to 2012. The research utilized the augmented Dickey Fuller and Phillips-Perron unit root test to address the issue of spurious data.

In order to investigate the degree to which the variables are correlated with one another, the study utilized the Johansen co-integration method. The findings of the research, which were acquired through the utilization of the method of ordinary least squares, point to the possibility of a dualistic association existing between foreign debt and economic performance. According to the findings of the study, a positive impact is produced by lagging foreign debt, and a negative impact is produced by current-year external debt. According to the findings, one line of action that should be proposed is to channel loans towards beneficial uses. For the purpose of this study, an error correction model (ECM) and an ARDL bound testing methodology were employed in order to investigate the effect that external debt had on the expansion of Nigeria's economy from

1970 to 2013. The research discovered a correlation between the variables over an extended period and additionally confirmed that Nigeria's economic growth was significantly hindered by foreign debt. According to Mbah et al. (2016), the study suggests that encouraging prudent and export-induced borrowing would have positive policy implications. Iheonu, Ihedimma, and Onwuanaku (2017) carried out studies for their paper in which they evaluated the relationship between the quality of a country's institutions and the economic performance of West African nations. This study makes use of a panel dataset that extends from 1996 all the way up until 2015. According to the conclusions of the research, there is a positive and significant association between the economic performance of West Africa and criteria such as the control of corruption, the efficacy of the government, the quality of regulatory systems, and the rule of law. The parameters of the Blundell-Bond System Generalized Method of Moment (GMM) were utilized in the research project to evaluate the effects of institutions on economic performance in sub-Saharan Africa. The study placed a particular emphasis on the regulatory framework and the efficiency of government.

Kilishi, Mobolaji, Yaru, and Yakubu (2013) conducted a study. This study investigates the potential correlation between institutions and economic performance in sub-Saharan Africa. Pesaran et al. (2001) discovered a negative impact of the political freedom index, which serves as a proxy for institutional quality, on the economic prosperity of a nation. Their investigation into co-integration covered the years 1972–2008 and made use of the ARDL bounds testing methodology throughout that time span. During this same time period, Epaphra and Kombe (2018) carried out a study with the purpose of investigating the impact of institutions on economic growth in Africa. The investigation made use of a number of different statistical models, such as Generalized Methods of Moment (GMM), Fixed Effects (FE), and Random Effects (RE) models. 1996-2016. This study focuses on the analysis of institutional quality indicators. The research findings suggest that political stability is the primary determinant of real GDP per capita growth in Africa. Mijiyawa (2013) and Anyawa (2014) conducted research to identify the factors that influenced Nigeria's economic performance. Their findings indicated that government effectiveness played a significant role in driving economic growth during the periods of 1995–2005 and 1996–2010. The impact of institutional quality on economic performance within West Africa was examined by Iheonu et al. (2017) and Ogbuabor, Anthony, and Onyinye (2020) using a sample of 12 West African economies. The study period spanned

from 1996 to 2015. The research employed conventional indicators of institutional quality, including but not limited to corruption control, government efficacy, regulatory standards, and adherence to the rule of law. The study employed fixed effect, random effect, and two-stage least squares models. The findings of the study indicate strong evidence in favor of the notion that institutions have a positive and significant influence on economic performance. The impact of foreign debt and institutional quality on economic performance in Nigeria was investigated.

The findings of Kasidi and Said (2013) suggested that foreign debt had a positive and significant effect on the economic growth of Tanzania. However, it was also found that debt servicing had a negative impact on Tanzania's growth rate. According to Elwasila's (2018) research, there were positive indications that Sudan's economy was positively impacted by the external debt-to-export ratio. Matuka and Asafo (2018) conducted a study on the impact of foreign debt on the economic growth of Ghana. Their findings suggest that foreign debt has a positive effect on the country's economic growth in both the short and long term. Several studies conducted by foreign researchers have indicated a potential negative impact of foreign debt and its servicing on economic growth. These studies include works by AL-Tamimi and Jaradat (2019), Shkolnyk and Koilo (2018), Akram (2016), Siddique et al. (2015), Saxena and Shaner (2015), Mukui (2013), and Rifaqat and Usman (2012).

2.3 Theoretical Framework

2.3.1 Debt Theories

The Hypothesis of Overhang Debt

The overhang debt theory, as proposed by Myers in 1977, refers to a scenario where a company possesses surplus loans that impede its capacity to expand its business through investments. Consequently, the profits and benefits that would have been realized by the shareholders are redirected towards the debenture holders and other lenders. According to Krugman's (1988) study, the concept of hypothesis overhang debt suggests that there is a likelihood of the country being unable to repay its debt in the future. This could result in a decrease in both domestic and foreign investment due to the anticipated reduction in estimated debt-service costs. As a result, the expected rate of return from productive investment projects will be low, which could negatively impact the economy. Additionally, a significant portion of any subsequent economic growth may be directed towards the creditor countries.

Dutch Disease Theory

The term "negative consequences" is used in economics to refer to the Dutch disease hypothesis. This hypothesis posits that the discovery of a primary natural resource can lead to significant increases in foreign currency, such as foreign direct investment, foreign aid, or natural resource prices. The negative consequences of Dutch Disease in the literature of development economics, as described by Ottawa (2001), refer to the symptoms that arise from a rising currency value, which can impede oil revenue and hinder the economic growth and development of oil-dependent states. This often occurs at the expense of neglecting other sectors.

The Lewis Model

Lewis (1995) introduced the Lewis model, which is recognized for its two-sector economy framework consisting of a traditional sector and an industrial sector. The research findings indicate that in the traditional sector, there exists a significant disparity between the population and production output, as well as the availability of natural resources. Moreover, the marginal productivity of labor in the traditional sector is observed to be extremely low or even non-existent. At the point of equilibrium, the labor market will exhibit a bias towards capitalists, enabling them to sustain a stable wage rate. According to Lewis' perspective, the supply of labor is considered to be practically limitless, as long as the capitalist can maintain a consistent wage rate.

The relationship between wages in the industrial sector and those in the rural sector is a determining factor in the former's wage level. The research suggests that the wages offered in the industrial sector are comparatively lower than those offered in the rural sector. As a result, it is unlikely for individuals engaged in agricultural activities to migrate to urban or industrial areas in search of employment opportunities. Lewis' research indicates that the urban wage is approximately 30% higher than the rural wage. The existence of this gap is deemed crucial in motivating individuals to transition from rural to urban areas, either to offset the increased cost of living or to mitigate the psychological toll of relocation. Kasidi and Said (2020) conducted a study on a particular topic.

2.3.2 Economic Growth Theories (or Economic Performance)

Classical Growth Theory

The Classical school of thought was developed by a group of economists including Jean-Baptiste Say, Thomas Robert Malthus, John Stuart Mill, David Ricardo, and Adam Smith. According to classical growth theory, the increase in real GDP is a transient phenomenon. The theory posits that once the real GDP per capita surpasses the subsistence level, there is a surge in population that ultimately drives the real GDP per capita back to the subsistence level. As per the research findings, the population tends to grow until the real wage rate is pushed down to the subsistence real wage rate. At the given real wage rate, the cessation of both population growth and economic growth occurs. The predictions that were made during the development of the theory in the 18th and early 19th centuries, which may have appeared plausible at the time, are not in line with the growth patterns observed in contemporary industrial economies. Empirical data suggests that the relationship between population growth rate and income per capita is not as strongly correlated as posited by classical theory. Furthermore, there is no evidence to support the notion that population growth inevitably leads to a decline in income levels to subsistence levels.

The Neo-classical Growth Theory of Solow-Swan Model

The neoclassical theory posits three key variables, namely Output (Y), Capital (K), and Labor (L). The output is hypothesized to be dependent on two distinct factors of production, namely K and L. Assuming a constant return to scale in the production function and diminishing returns to factors of input such as labor and capital, the researchers have made further assumptions. According to the Solow-Swan neoclassical model, economic growth is driven by an increase in the relative share of capital in the national income, as opposed to labor. This phenomenon can be attributed to the positive correlation between capital accumulation and break-even investment. Countries with higher capital accumulations tend to require higher levels of investment to maintain their capital stock and prevent it from declining. According to studies, as capital increases, there is a point at which the economy experiences diminishing returns. Eventually, the economy will reach a threshold where further increases in capital will no longer result in increased economic productivity. The steady state of the economy is a well-established stage, and the only factor that can propel the economy beyond this stage is technological advancement.

The Harrod - Dormar Growth Theory

The above theory of economic growth was advanced by two economists Harrod and Dormar.

They view saving as a force that propels economic growth, to them, there exist a linear and direct relationship between saving and economic growth. The model considers economic growth as being a function of capital accumulation overtime which is depending on the rate of saving. The national income of the country will experience a high rate of growth if and only if the rates of saving increase.

2.3.3 Theories of Institutions

Rational Choice Institutionalism

Proponents of this thought view politics as a collection of various alternatives choices which leads to outcomes that are sub-optimal as actors cannot cooperatively agree on a superior course of action due to lack institutions. As a means to explain the origin of institutions, this approach makes use of deductive methodology to achieve the result which could be gotten from a functioning institution. The values held by the actors which were influenced by the institutions form the basis of the existence of the institutions whose creation is hinged on the agreement reached by the actors in question.

Sociological Institutionalism

Sociological institutionalism sprang up within the subspecialty of organizational theory following the argument of some sociologists on the distinction between formal and modern forms of organizations and ways of life associated with culture. These groups of institutionalists were of the opinion that institutions are created, chosen and transferred in like manner as cultural artifacts opposing the idea of some sociologists that the effectiveness of certain institutions in achieving specific goals is the reason behind the creation of these institutions.

The New Institutional Economics

The idea of new institutional economics was introduced to the literature by Oliver E. Williamson Williamson, (1998a) and (1998b) thus the purpose of this theory was to emphasis the dissimilarity between the new approach of institutions in comparison to the old approach of institutions (old institutionalism). The former (New Institutional Economics) initiated the behavioral approach in economics analysis of the impact of non-formal institutions Veblen, (1899). While the latter (Old Institutionalism) focuses mainly on formal institutions including the system of law Commons, (1975) .

This study is adopting the views of Jean-Baptiste Say, John Stuart Mill, David Ricardo, Thomas

Robert Malthus and Adam Smith, the economists behind Classical Growth Hypothesis. Assuming economic growth through capital accumulation and reinvestment of profit derived from specialization. Laissez-Faire ideology emphasizes in classical growth theory is that free competition, free trade and free market encouraged economic growth. Free market projection; were the buyers (supply) and sellers (demand) interact, making market forces to stabilize the economic system. Looking globally, Israel is one of the economy that relish economic prosperity through embracing certain features of classical growth hypothesis.

Research Method

This research is designed with two distinct sets of variables: the dependent variable and the independent variable. This study examines the relationship between economic performance and two independent variables, namely foreign debt and institutional quality. The dependent variable in this research is economic performance. For this study, the specified model will be estimated as an autoregressive distributed lag (ARDL) model. In an ARDL model, the dependent variable is expressed as a function of the lag value of the dependent variable and the current and lag values of the explanatory variables.

This study makes use of quarterly time series data for the variables that are of interest, covering a period of 92 quarters starting with the first quarter of 1996 and ending with the first quarter of 2019. Both the CBN Statistical Bulletin of 2019 and the World Governance Indicators (WDI) were used as sources for the data shown here. The relationship between gross domestic product (GDP), foreign debt, and institutional quality (government efficiency and corruption control) is investigated using a number of factors in this study. The dependent variable in this research is GDP, while the independent variables are foreign debt and institutional quality.

Two variables are used to measure institutional quality, which are government effectiveness, and corruption control.

$$Y = f(X, Z) \dots\dots\dots\text{eqn(1)}$$

Y = Economic Performance proxied by Gross Domestic Product Growth

X = Foreign Debt

Z= Institutional Quality proxied by Government Effectiveness and Corruption Control

The ordinary least squares (OLS) model specified as follows;

$$\text{GDP} = F(L, K, \text{EXCH}, \text{TRADE}, \text{FDI}, \text{FD}, \text{GEF}, \text{CNT}) \dots\dots\dots\text{eqn(2)}$$

Objective of this study is to examine how the influence of institutional quality on foreign debt affect economic performance in Nigeria, the product of corruption control and foreign debt is included in the model as explanatory variable. Corruption control is used because corruption has been a burning issue that said to have affected the quality of institutions in Nigeria over the years. Therefore, the model for this study now becomes;

$$GDP = F(L, K, EXCH, TRADE, FDI, FD, GEF, CNT, FDCNT) \dots \dots \dots \text{eqn(3)}$$

The specification of the ARDL model that captures the variables of this study is as follows;

$$GDP_t = \beta_0 + \beta_1 L_t + \beta_2 K_t + \beta_3 EXCH_t + \beta_4 TRADE_t + \beta_5 FDI_t + \beta_6 FD_t + \beta_7 GEF_t + \beta_8 CNT_t + \beta_9 FDCNT_t + \varepsilon_t \dots \dots \dots \text{eqn(4)}$$

Where our predicted long run growth theory is expressed as;

$$GDP_t = \beta_0 + \sum_{i=1}^p \beta_i GDP_{t-i} + \sum_{i=0}^q \beta_{1i} L_{t-i} + \sum_{i=0}^q \beta_{2i} K_{t-i} + \sum_{i=0}^q \beta_{3i} EXCH_{t-i} + \sum_{i=0}^q \beta_{4i} TRADE_{t-i} + \sum_{i=0}^q \beta_{5i} FDI_{t-i} + \sum_{i=0}^q \beta_{6i} FD_{t-i} + \sum_{i=0}^q \beta_{7i} GEF_{t-i} + \sum_{i=0}^q \beta_{8i} CNT_{t-i} + \sum_{i=0}^q \beta_{9i} FDCNT_{t-i} + \varepsilon_t \dots \dots \dots \text{eqn(5)}$$

GDP_t is the real per capita GDP growth, GDP_{t-i} represent one lag of real per capita GDP growth; and t explains time index. In addition to; equation (7) below; is expressed as an ARDL Model in its restricted ECM form as follows;

$$\Delta GDP_t = \beta_0 + \sum_{i=1}^p \alpha_i \Delta GDP_{t-i} + \sum_{i=0}^q \beta_{1i} \Delta L_{t-i} + \sum_{i=0}^q \beta_{2i} \Delta K_{t-i} + \sum_{i=0}^q \beta_{3i} \Delta EXCH_{t-i} + \sum_{i=0}^q \beta_{4i} \Delta TRADE_{t-i} + \sum_{i=0}^q \beta_{5i} \Delta FDI_{t-i} + \sum_{i=0}^q \beta_{6i} \Delta FD_{t-i} + \sum_{i=0}^q \beta_{7i} \Delta GEF_{t-i} + \sum_{i=0}^q \beta_{8i} \Delta CNT_{t-i} + \sum_{i=0}^q \beta_{9i} \Delta FDCNT_{t-i} + \phi ECM_{t-i} + \varepsilon_t \dots \dots \dots \text{eqn(6)}$$

Data Analysis

This study is focused on the effect of foreign debt and institutional quality on economic performance in Nigeria, using the ARDL model. Commencing with a discussion of descriptive statistics;

Descriptive statistics of the variables

	CAPTIAL	CNT	FDI	EXCH	FD	FDCNT	GDP	GEF	LABOUR
Mean	24.7809	-1.1559	21.6248	4.7652	7.8934	-9.0741	9.5492	-1.0274	18.1782
Median	24.7678	-1.1600	21.7961	4.8795	7.7165	-9.2688	9.8148	-1.0175	18.1762
Maximum	25.0225	-0.8900	22.9260	5.7495	9.5395	-6.8970	11.1719	-0.8900	18.4834
Minimum	24.5122	-1.4300	19.2385	2.3867	6.0402	-11.398	7.2974	-1.2100	17.8763
Std. Dev.	0.1287	0.1139	1.0052	0.7392	1.0803	1.1895	1.2566	0.0770	0.1750

Skewness	-0.0117	-0.2674	-0.5330	-1.4775	0.0202	0.0836	-0.3458	-0.4642	0.0120
Kurtosis	2.1744	2.8792	2.2000	4.7998	1.6711	1.8043	1.7302	2.5155	1.8453
Jarque-Bera	2.6434	1.1646	6.8836	46.3893	6.8499	5.6486	8.1011	4.2502	5.1686
Probability	0.2667	0.5586	0.0320	0.0000	0.0326	0.0594	0.0174	0.1194	0.0755
Observations	93	93	93	93	93	93	93	93	93

Source: Authors

Were the mean, median, maximum and minimum values of the data shows the presence of no outliers. Consequently; we observe that the variables reveal some variations, GDP, foreign debt (FD), and the joint effect of institutional quality and foreign debt on economic performance (FDCNT) and Exch, (Exchange rate), Cnt (corruption control) shows the least variations; while capital, fdi and labor indicate highest variations.

Results of the Augmented Dickey Fuller Test at Level and First Difference.

Variable	ADF Test Stat at Level	5% Critical Values	ADF Test Stat at 1 st Difference	5% Critical Values	Order of Integration
GDP	-4.494566	-2.897678	-9.430748	-2.894332	I(0)
FD	-0.023941	-2.896779	-6.393338	-2.897223	I(1)
GEF	-2.318130	-2.896779	-3.009530	-2.895109	I(1)
CNT	-2.715943	-2.895109	-8.972622	-2.895109	I(1)
FDCNT	-0.073317	-2.896779	-6.261398	-2.898623	I(1)

Source: Authors

The result of Augmented dickey fuller test is presented in the shows that GDP is stationary at levels while foreign debt (FD), government effectiveness(GEF), corruption control(CNT) and the product of foreign debt and corruption control (FDCNT) are stationary at first difference. Consequently, there is statistical justification to apply the ARDL modeling technique to estimate the coefficient of the relationship between the endogenous (economic performance) and exogenous variables (foreign debt, government effectiveness, corruption control). Follow by the ARDL bond test for long run relationship.

ARDL Bounds Co-integration Test

Test Statistic	Value	K	Level of	Critical Value Bounds
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			Significance	1(0)	1(1)
F-Statistic	4.059486	9	10%	1.88	2.99
	4.059486	9	5%	2.14	3.3
	4.059486	9	1%	2.65	3.97

Source: Authors Computation

The results of the study suggest that the F-statistics obtained from the ARDL bond test surpass the bond test procedure's critical values at a 5% significance level. The F-statistics were found to exceed the lower and upper bound critical values of 2.14 and 3.3, respectively, with a value of 4.05. Based on the statistical evidence gathered, it can be inferred that the null hypothesis is rejected, indicating the existence of a long-term relationship between the variables. A bond test process was conducted to investigate the potential existence of a long-term relationship between the variables of interest. The dynamic ARDL model was utilized to estimate the short- and long-term coefficients, and the findings are

Long –run Regression result, ARDL (2,2,0,0,1,1,0,0,4,2)

Dependent Variable = GDP				
Variable	Coefficient	Std. Error	t-Statistic	P-value
C	-3.7820	3.2235	-1.1733	0.2448
GDP(-1)	1.4647	0.0921	15.9039	***0.0000
GDP(-2)	-0.4926	0.0941	-5.2328	***0.0000
LABOUR	-1.5318	4.3542	-0.3518	0.7261
LABOUR(-1)	12.2674	7.6296	1.6079	0.1126
LABOUR(-2)	-10.5212	4.5885	-2.2930	0.0250
CAPITAL	-0.0031	0.0125	-0.2445	0.8076
EXCH	0.0049	0.0047	1.0445	0.3000
TRADE	-0.0133	0.0165	-0.8024	0.4252
TRADE(-1)	0.0215	0.0166	1.2975	0.1989
FDI	-0.0068	0.0073	-0.9290	0.3562
FDI(-1)	0.0184	0.0072	2.5541	0.0129
FD	-0.0229	0.0289	-0.7943	0.4298
GEF	-0.0087	0.0262	-0.3333	0.7400

CNT	-0.1087	0.5575	-0.1949	0.8461
CNT(-1)	0.9616	0.8155	1.1792	0.2425
CNT(-2)	-0.8252	0.4623	-1.7850	0.0788
CNT(-3)	0.1517	0.1340	1.1321	0.2616
CNT(-4)	-0.1759	0.0760	-2.3143	0.0237
FDCNT	0.0146	0.0680	0.2143	0.8310
FDCNT(-1)	-0.1226	0.0994	-1.2332	0.2218
FDCNT(-2)	0.1018	0.0549	1.8533	0.0682
R-squared	0.999955			
Adjusted R-squared	0.999940			
F-statistic	70296.09			
Prob(F-statistic)	0.000000			
DW Stat	2.124141			

Source: Authors Computation from Eview, Note: *** denotes Significant at 1% level

The findings of the study indicate that the ARDL long-run coefficients reveal a positive and significant relationship between GDP (as a proxy for economic performance) and lag 1 and lag 2 at both the 1% and 5% levels of significance. Additionally, the results demonstrate a significant negative association between GDP and lag 2. According to research, foreign debt has a negligible and adverse impact on economic performance over time. The findings indicate that there is a negative relationship between foreign debt and economic performance in the long term, with a 1% increase in foreign debt resulting in a -2.29% decrease in economic performance. The study examined the relationship between corruption control and foreign debt and economic performance in Nigeria. The results indicate that corruption control has a positive impact on economic performance, but this impact is statistically insignificant in the long run. The coefficient for corruption control was 0.0146. Additionally, the study found that both foreign debt and corruption control have a positive effect on economic performance in Nigeria, but this effect is not significant in the long run. The variable used to measure institutional quality was Cnt. Looking at the joint-effect of the two explanatory variables, institutional quality (proxied corruption control) demonstrating insignificant and positive justification in underling how fd (proxied foreign debt) can be used to determine economic performance in Nigeria. The

interpretation is explain as a conditions where institutional quality is essential in pointing out how fd (proxied foreign debt), stimulate growth in Nigeria. The study is in justification with finding from Ogbuabor et al., (2020), which study explain the joint-effect of institutions and how fdi (foreign direct investment) was positive and significant in improving economic growth in Nigeria.

While corruption control and government effectiveness were not statistically significant in explaining economic performance. The F-statistic in the long run indicate that the model is well specify, showing that the independent variables were useful in predicting the outcome (GDP proxied economic performance), and it's statistically significant. The R-squared of 99% reveals that 99% of the data in long run fit the ARDL Model estimated. However, the negative sign in foreign debt (proxied external debt) signify the classical view on debt. describing how a nation's rate of economic growth is negatively impacted by public borrowing (foreign debt). This finding further supports the notion that sluggish growth is related to high levels of public external debt since servicing this stock of public borrowing entails a higher tax burden on capital. This results in a reduced rate of return on investment, lower investment, a loss of dead weight, and actually worse economic growth. The outcome demonstrates that the debt overhang issue is real in Nigeria and is consistent with Krugman's (1989) theory, which holds that an increase in the stock of accumulated debt imposes a higher cost on future production and slows growth (development) over time. It also agrees with investigations conducted by Udoh et al. (2020). Bernardin et al. (2018) Babu et al. (2015) As a result, trade's impact on economic growth is an additional variable in the long-term model with a negligible negative sign. The fact that a 1% increase in trade can result in a 1.33% decrease in growth (proxied GDP) when all other factors are held constant shows that trade can be viewed as damaging to the economy and supports protectionism policies. The study's findings support the claim that developing nations won't gain from trade because they frequently lack complementary contributions, reputable institutions, and human capital. These demonstrate the inability of trade liberalization to advance commerce and economic development in African nations Ndkumana and Balimoune, (2007). While measures to combat corruption show a long-term inverse link with economic growth. That is to say, a 1% change in corruption control will result in an overall decline in Nigeria's economic growth of 10.9%. These findings imply that from 1996 Q1 to 2019 Q1, Nigeria's GDP suffered as a result of corruption control (CNT). These can be viewed as a direct result of reducing corruption on long-term economic growth (proxied GDP), which shows a reduction of roughly 10.9% after a 1% increase in the level of corruption control. Despite being insignificant, similar findings were found in studies conducted by Dreher and Herfeld (2005), Badawi and Al Quadah (2019), Rahman Belal and Owen (2007), and Al Quadah (2009). Due to government effectiveness (Gef) being

statistically insignificant, the study demonstrates that the impact of government effectiveness on economic growth over the long term is negative and insignificant, explaining that for every 1% increase in government effectiveness, economic growth declines by 0.9%. In light of this finding, the government should exercise caution in increasing its annual budget, which should be directed primarily to the productive sector. Additionally, we verified that there is no long-term, beneficial relationship between the labor force and economic growth. The Solow growth model, in particular, disagrees with the neo-classical growth models. This could be a result of a high percentage of underemployment causing labor inefficiency because Nigeria's public and civil services are among the most bloated in the world, which is linked to inefficiency as the majority of workers are not utilized to their full potential.

One of the causes of the inefficiencies related to personal remunerations could be the problem of ghost workers that plagued the federal government's civil services prior to the deployment of the Integrated Public Payroll and Personal Information System (IPPIS) by the Nigerian Government. The results of this study also support those of Chandana, Adamu, and Musa (2021). Interestingly, several of the results do not match the short-run predictions that were presented in the short-run estimate.

ARDL-ECM result- ARDL (3,4,3,4,4,3,4,0,4,4)

Variable	Dependent Variable = GDP			
	Coefficient	Std. Error	t-Statistic	P- value
C	0.0115	0.0238	0.4844	0.6305
D(GDP(-1))	2.2456	0.1747	12.8544	***0.0000
D(GDP(-2))	-1.1976	0.1591	-7.5295	***0.0000
D(GDP(-3))	-0.2214	0.0928	-2.3864	**0.0214
D(LABOUR)	-0.1825	4.3795	-0.0417	0.9670
D(LABOUR(-1))	6.5628	3.9143	1.6766	0.1007
D(LABOUR(-2))	-23.1482	4.5279	-5.1123	***0.0000
D(LABOUR(-3))	2.3669	3.9305	0.6022	0.5502
D(LABOUR(-4))	12.7171	4.0536	3.1373	***0.0030
D(CAPITAL)	-0.0105	0.0274	-0.3816	0.7046
D(CAPITAL(-1))	-0.0044	0.0278	-0.1573	0.8757
D(CAPITAL(-2))	-0.0192	0.0283	-0.6782	0.5012
D(CAPITAL(-3))	-0.0296	0.0256	-1.1553	0.2542
D(EXCH)	-0.0047	0.0108	-0.4328	0.6673
D(EXCH(-1))	0.0067	0.0096	0.6983	0.4887
D(EXCH(-2))	0.0096	0.0101	0.9488	0.3479

D(EXCH(-3))	0.0231	0.0104	2.2137	**0.0321
D(EXCH(-4))	0.0297	0.0115	2.5800	**0.0133
D(TRADE)	-0.0640	0.0247	-2.5904	**0.0130
D(TRADE(-1))	0.0529	0.0216	2.4455	**0.0185
D(TRADE(-2))	0.0102	0.0222	0.4603	0.6475
D(TRADE(-3))	0.0204	0.0208	0.9781	0.3334
D(TRADE(-4))	-0.0414	0.0182	-2.2675	**0.0283
D(FDI)	-0.0047	0.0077	-0.6084	0.5460
D(FDI(-1))	0.0250	0.0078	3.1836	***0.0027
D(FDI(-2))	-0.0163	0.0076	-2.1305	**0.0388
D(FDI(-3))	-0.0179	0.0078	-2.2951	**0.0266
D(FD)	-0.0500	0.0931	-0.5367	0.5942
D(FD(-1))	0.0075	0.1253	0.0601	0.9524
D(FD(-2))	0.0108	0.1258	0.0859	0.9319
D(FD(-3))	-0.0433	0.1332	-0.3249	0.7468
D(FD(-4))	-0.2609	0.1364	-1.9126	0.0623
D(GEF)	-0.0419	0.0514	-0.8142	0.4199
D(CNT)	2.2577	0.6569	3.4367	**0.0013
D(CNT(-1))	0.7704	0.7658	1.0061	0.3199
D(CNT(-2))	-1.6794	0.7884	-2.1301	**0.0388
D(CNT(-3))	-0.2650	0.7571	-0.3500	0.7280
D(CNT(-4))	2.4361	0.7031	3.4646	***0.0012
D(FDCNT)	-0.2537	0.0814	-3.1178	***0.0032
D(FDCNT(-1))	-0.1038	0.0959	-1.0830	0.2847
D(FDCNT(-2))	0.2070	0.0986	2.0986	**0.0416
D(FDCNT(-3))	0.0310	0.0953	0.3254	0.7464
D(FDCNT(-4))	-0.3090	0.0894	-3.4562	***0.0012
ECM(-1)	-2.1965	0.2167	-10.1369	***0.0000
R-squared	0.943549			
Adjusted R-squared	0.888382			
F-statistic	17.10332			
Prob(F-statistic)	0.000000			

DW Stat	1.359368			
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Source: Authors. Note; *** and ** denotes Significance at 1% and 5% level, respectively.

In addition, some of the above results do not agree with the short-run estimates. The study's findings show that the variable D (FD) in the short-run error correction model has a negative relationship with economic growth but is not statistically significant. The long-run results showed a similar relationship but were also statistically insignificant. In reality, a 1% change in the level of foreign debt (proxied D (FD)) causes a 5% decline in GDP. This is undoubtedly proof that Nigeria's economy will soon be crowded out by the effects of its external debt. The results agree with those of Shah &Pervin (2012) and Cholifihani (2008). Akram(2010) being the sole exception. Additionally, the error correction term (ECM(1)), which measures how quickly equilibrium must be restored in the dynamic model following a disturbance, conforms to a priori expectations because its value of -2 was both negative and statistically significant at the 1% level. According to 1965, a shock to economic growth in the current quarter will be corrected in the following quarter at an adjustment speed of roughly 219.6%. Examine how the pace of adjustment of a short-run disequilibrium in economic development was reasonably fast, with the next quarter seeing a convergence of roughly 219.6% of the divergence in growth caused by the shock of the current quarter, while the combined impact of corruption control on foreign debt (FDCNT) is unfavorable and statistically significant in the short term. This is explained by the fact that a 1% increase in both interacting regressors will cause Nigeria's output to slow down or stop growing economically. This outcome differs from the one obtained by Ogbuabor et al. in (2020). Predicting based on short-run results, it was found in discussions of the result that foreign debt has negligible short- and long-term restraints on Nigerian economic activity.

Discussion of Findings

The study's results indicate that foreign debts have a negligible and adverse impact on output in Nigeria, both in the short and long term. The research findings indicate that, both in the short and long term, foreign debt has a negligible impact on economic activities in Nigeria. The findings of this study indicate that there is no significant correlation between foreign debt and Nigeria's economic performance, both in the short and long term. Research has shown that foreign debt can have a detrimental impact on economic performance over time. These justify that over time, foreign debt diminish economic performance in Nigeria. This could be because in the long run, the expected gains from borrowing in the economy are not realized. Measures of institutional quality in the estimated model are corruption control and government effectiveness. Corruption control has a positive and significant effect on economic performance effect in the short run while government effectiveness is not significant in explaining economic performance both in

the long run and the short run.

This shows that corruption control has immediate effect on economic performance in Nigeria. Throughout the history of Nigeria, corruption has been identified as one of the major reasons for limited economic progress in Nigeria, with the country being ranked high in corruption rating, this illustrate that institutional quality variables impacts positively and significantly on economic growth in Nigeria in short run, but not in long run. These results largely mimic those obtained for Nigeria by, Ogbuabor, J and Anthony, O (2020), Okoi and Bassey (2015), and Iyoboyi& Pedro (2014). In conclusion, it can be said that foreign debt if properly utilized is useful in enhancing economic performance in Nigeria.

Conclusion

The influence of corruption control on foreign debt has a insignificant positive effect on economic performance only in the long run. While in short run it negatively significant at both 5% and 10% level. Policy makers and analyst are interested in how effective foreign debt is in helping economies to achieve their macroeconomic objectives as well as those factors that affect the use of foreign debt to enhance economic performance such as institutional quality.

The findings of this study have shown that foreign debt has negative effect on economic performance in the long run. It also shows that institutional quality, specifically corruption control has a significant effect on economic performance in the short run while the influence of institutional quality and foreign debt also has a positive effect on economic performance in the short run. Therefore, it can be said that foreign debt if properly utilized is useful in enhancing economic performance in Nigeria. It could also be said that institutional quality has an impact both on the way foreign debt in Nigeria is utilized within Nigeria's growth rate.

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