

Is Higher Economic Growth Possible Through Better Institutional Quality? Evidence from Nigeria

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Abstract

Using an ARDL model, this study analyzes the impact of institutional quality on economic growth in Nigeria. Employing time series data from the World Bank from 2002 to 2020, it was found that the variable for controlling corruption has a negative impact on economic growth both in the short and long run. More specifically, a one percent rise in corruption results in over nine per cent loss or decrease in economic growth. However, it was shown that long-term political instability has a negative impact on economic growth. Simply put, a rise in political instability by one per cent would lead to over six per cent decrease in growth rate. The findings support the idea that corruption eventually weakens economic performance. As a step in economic policy, it is important to make efforts to fight corruption in every facet of the economy.

Keywords: Institutions; growth; ARDL model; corruption, FDI.

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1.0 Introduction

In the last four decades several scholars and studies had given their various definitions and contributions on the subject- institutional quality. For example, Anthony-Orji et al. (2019) and Benyah (2010) agreed that institutional quality can be regarded as the level to which procedures by regulatory authorities foster the protection of investors and enhance greater access to funds for borrowers. Furthermore, Levine (1998) expound institutional quality as respect for legal rules and stated that no economy can attain sustainable growth if there are no clear rules on the protection of investors, effective regulation and enforcement of property rights. Certain institutional factors play vital roles in the growth and development of every nation. For instance, no respect for the rule of law, poor government regulations, obstructions of civil liberties (such as the right to organize demonstrations, freedom of speech, freedom of religious association, education, travel and other individual rights), lack of freedom to exercise political rights and participate in the political process and high level of corruption have been blamed for the economic stagnation in most developing countries (Siba 2008; Ogbuabor et al. 2019).

Numerous theoretical and empirical studies in the field of economics have established a link between strong institutions and economic growth. The most common are those carried out by the World Bank and in particular, Knack and Keefer (1995), Hall and Jones (1999), Hayat Arshad (2019) and Mei Ling Wanga et al (2021). In addition to this research, we have some by Lau et al. (2014) and Salman et al. (2019). These studies have demonstrated the extent to which institutional quality could lead to the success or failure of monetary or fiscal policies in a country. The role quality institutions play in the growth and development of an economy cannot be overstated. For most developing countries, for example, improving the quality of institutions has become a yardstick for obtaining financial support from international financial institutions, given how fragile their economies vis-à-vis the realities of globalization (Etsiba et al., 2018). By the same token, as pointed out by Nguegang et al. (2019), the role of institutional quality in the analysis of economic growth is only recently emerging in developing countries and in Africa.

In our contemporary economy, foreign investors desire to do business in an economy characterized by profitability of investment, reduced costs and uncertainties. This is imperative because no investor would like to operate in a terrain where economic policies cannot be predicted and where risks are high. Thus, the quantity and quality of foreign direct investment a country would attract depends largely on its risk level and on the level of transaction costs inherent in such risks. Therefore, one of the measures that have been taken into account in recent time to reduce transaction costs associated with uncertainties is to bear in mind the quality of institutions.

In this regard, North (1990) examined the role institutions play in the process of economic development. He specifically showed that the existence of improved institutions for private property rights encourages investment and makes a significant contribution to growth and development. Therefore, it is paramount that the quality of institutions needs to be taken into consideration for every economy to thrive in this 21st century and beyond. Additionally, studies by North (1981), Jones (1987) and Olson (1982) show that institutions are relevant for investment and long-term sustainable growth. In the same vein, Acemoglu, et al (2004) showed that private property rights institutions are the main drivers of long-term economic growth, investment and financial development. Arshad, (2019), also discovered that higher levels of institutional quality were also contributing to

the FDI-led economic expansion in 104 countries. The point put forward by these studies is that institutions are pivotal and determine economic growth in the long run.

Therefore, this question comes to mind: What impact do high-quality institutions have on Nigeria's economic growth? This study's goal is to assess how Nigeria's institutional quality affects economic development. This study makes a significant addition by considering short-run and long-run dynamics when examining how governance variables like political stability and corruption control affect economic growth.

The remainder of the article is divided into the following sections: (II) literature review, (III) data and methodological framework, (IV) estimating approach, and (V) empirical results and (VI) Conclusion and Recommendations

2.0 Literature Review

According to Etsiba et al (2018), the economic analysis of institutions can be seen in the early twentieth century by works universally categorized as heterodox- e.g. that of Mitchell, Veblen and Commons (1970) and the contemporary which is classified under the name of the New Institutional Economics (NIE), among which we can find those of North (1993) and Williamson (2000). This section therefore covers theoretical and empirical research on the functions of institutional governance in the process of national economic development.

2.1 Theoretical Foundations of Institutions

Institutions are central actors in governance. This is a common sense statement and requires elaboration, in theoretical terms Peters (2022). However, the establishment of institutions as an important concept in economic analysis was done by American institutionalism. In the USA, this idea as a belief in economics first emerged in the 20th century as a reaction to neoclassical abstraction, which stresses the role performed by institutions. This school of thought was initiated by Veblen (1898) and Commons (1936) and has its origins in the radical transformations that the United States of America experienced in the twentieth century. The economic study of institutions was initiated in the early twentieth century by work considered to be heterodox and basing institutionalism on the work of Veblen (1898) and Commons (1936), each of them made a vital but different contribution. Veblen (1898) defined an institution as a specific mental habit, a way of thinking and acting in the economic field. According to him, it refers to the behavior that an economic agent must, can, could, or couldn't exhibit.

Common (1936) an institution is a collective action governing individual actions. His work was not as popular as Veblen's; however, he had a greater impact on economic policy in the United States of America and a whole generation of economists. He places more value on the transaction than the market. In his 1936 paper "Institutional Economics," which he titled "Institutional Economics," he states that he "attempts to offer a theory of institutional economics derived purely from the decisions of the United States Supreme Court," a theory that was based on his experience. It is an essay on pure economics, as opposed to its applicability in real life. The latter belong to individual cases. Indeed, the notion of "reasonable value" is at the heart of Commons' Institutional Economics (1936), linked to other important notions in his theory such as those of transaction, intangible value or futurity (Gislain, 2002).

In the 1970s, a set of modern schools of thought known as the New Institutional Economics helped to revive the study of the economics of institutions. A return to the work of the American institutionalists of the early 20th century served as the foundation for neo-institutionalism (Thorstein Veblen, John R. Commons). A large body of work called New Institutional Economics unites numerous research that all question the functions that institutions play in the coordination of the economy.

2.2 Links between Economic Growth and Institutional Quality

Empirically, several literatures have emphasized how important institutional quality is in determining economic growth and development. In this regard, numerous studies conducted recently have demonstrated that institutions are essential for economic progress. Singh and Pradhan (2022) empirically examine the impact of institutional quality on economic performance (per capita GDP) in South Asia for the period 2002 to 2016. The outcomes reveal the impact of institutional quality on economic performance in South Asian countries is positive in the long-run, whereas, institutional quality proxies such as control of corruption, government effectiveness and political stability are important for better economic performance.

In a similar study by Alika and Oladipo (2022), they adopted the Autoregressive Distributed Lag (ARDL) model to analyse the short and long-run impacts of institutional quality and foreign direct investment (FDI) inflow on economic growth in ECOWAS member countries, using time series data sourced from the World Bank, UNCTAD and Freedom House for the period 1990 to 2020, they went a step further to ascertain whether the impact is homogeneous in the region or not. Amongst others, the results found a positive relationship between FDI inflow and growth in ECOWAS. However, this was not statistically significant in the short run. Furthermore, it was discovered that the institutional quality variable of political regime was found to be insignificant both in the short

and long run. However, the impact of coup was negative and statistically significant at 10 per cent in the short run and long run. It was also discovered that the impact of foreign direct investment and institutional quality on economic growth were not homogeneous across ECOWAS member countries such that while the impact was positive for some countries, it was negative for others. The statistical significance of the impacts varied across the economies.

Ahmed F. et al (2022) examined the role of institutional quality and financial development in green growth in the long run in South Asian economies over eighteen years period, their findings reveal that institutional quality and financial development are driving factors in promoting green economic growth.

Similarly, other studies have shown that institutional quality leads to economic growth Khandil (2009), Layla F. et al (2020), Mamba E. (2021)

3.0 Data and Methodological Framework

3.1 Empirical Model

To determine the effects of institutional quality on economic growth in Nigeria, we use an augmented Solow model as in the work of Batila (2018), and Woo and Kumar (2015). This model proposed by Mankiw, Romer and Weils (1992) considers labor as a homogeneous factor, and physical capital as the only factor of production that can be accumulated. This function is as follows:

$$Y_t = A_t K_t^\alpha L_t^{1-\alpha} \dots \dots \dots (1)$$

Where, Y_t , α , $1-\alpha$ and A_t connotes "output," "capital and labor compensation shares in GDP," and "level of technology" respectively. Acemoglu et al (2001) incorporate the institution variable when studying the direction of causality between institutions and economic growth. As a result, the institution variable transforms into an intrinsic growth factor. Consequently, the Solow model is:

$$Y_t = A_t inst_t^\beta K_t^\alpha L_t^{1-\alpha} \dots \dots \dots (2)$$

Where "inst" stands for institutional quality. These variables can be expressed as a functional equation as:

$$GDPPC = f(CONCO + POLS + FDI + GCF) \dots \dots (3)$$

The estimable function is derived from equation (3) and expressed as:

$$GDPPC_t = \alpha_0 + \alpha_1 CONCO + \alpha_2 POLS + \alpha_3 FDI + \alpha_4 GCF + \mu_t \dots \dots \dots (4)$$

where the coefficients represents the elasticity of the variables' coefficients, and which is the long-run equilibrium relationship between the variables. (See Table 1 for definition of variables).

3.2 Autoregressive Distributed Lag (ARDL) Methodology

The paper employed the Autoregressive Distributive Lag (ARDL) bound test approach developed by Pesaran, Shin and Smith (2001) on equation (3) to test the existence of cointegration of the variables. The ARDL specification of equation (3) is thus given as follows:

$$\Delta GDPPC_t = \alpha_0 + \sum_{i=1}^n \alpha_1 \Delta GDPPC_{t-i} + \sum_{i=0}^n \alpha_2 \Delta CONCO_{t-i} + \sum_{i=0}^n \alpha_3 \Delta POLS_{t-i} + \sum_{i=1}^n \alpha_4 \Delta FDI_{t-i} + \sum_{i=1}^n \alpha_5 \Delta GCF_{t-i} + \mu_t \dots \dots \dots (5)$$

Where α_0 represents the intercept, α_1 to α_5 are the long run multipliers; and μ_t is the error term. The decision criteria for determining the existence of a long-term association are based on an F-test of the joint significance of the coefficients of the variables, in accordance with Pesaran, Shina, and Smith (2001).

The F-test is often a test of hypothesis where the alternative shows the presence of co-integration, and the null reflects no cointegration among variables. The alternative hypothesis is accepted if the F-statistic exceeds the upper bound. In contrast, if the F-statistics is between the upper and lower bounds, the result is regarded as inconclusive and the null hypothesis of no cointegration is accepted. Pesaran et al (2001) provide the econometric information.

The error correction model is calculated to derive the short run dynamics and long run adjustment parameter once long-run cointegration has been established. The provided error correction model is specified as:

$$\Delta GDPPC_t = \alpha_0 + \sum_{i=1}^n \alpha_1 \Delta GDPPC_{t-i} + \sum_{i=0}^n \alpha_2 \Delta CONCO_{t-i} + \sum_{i=0}^n \alpha_3 \Delta POLS_{t-i} + \sum_{i=1}^n \alpha_4 \Delta FDI_{t-i} + \sum_{i=1}^n \alpha_5 \Delta GCF_{t-i} + \theta ECM_{t-i} + e_t \dots \dots \dots (6)$$

Where Δ denotes the first difference operator. α_0 represents the intercept and α_1 to α_5 are short run dynamic coefficients of the model, while θ is the rate of adjustment to equilibrium.

3.3 Data Sources and Presentation of Variables

3.3.1 The Data

The data used in the specified model's exogenous variable estimation comes from different secondary sources. The information and its sources must therefore be presented. However, the fact that data is unavailable in explaining most economic situation is a problem which restricts the number of explanatory variables used in a model. This problem is mostly found in countries located in the south of the Sahara in which Nigeria is part of, compared to developed and advanced economies. This explains the reason for scanty literatures on institutional quality, FDI

and economic growth in these countries. In the framework of this study, the data used come from a set of publications of the World Bank (WDI, 2021) and the World Governance Indicators (WGI). The size of the sample is 19 observations which cover the period 2002-2020. Given that institutional quality data are complete and available for this time period, this size can be explained. Again, given the fact that the number of observations and sample size is inadequate, we may not be able to estimate the model using ARDL (since n is less than 30), hence, we used Eviews 10.0 to disaggregate the data in order to circumvent this problem thereby making it a quarterly data. This enables us to increase our sample from 19 to 76 observations.

3.3.2 Study Variables

Every econometric research begins with model specification followed by the estimation of the exogenous variables. Due to the constraint of data availability, the endogenous variable employed is the gross domestic product which is defined as GDP per capita in Nigeria, while the exogenous variable considered are: Foreign Direct Investment inflows, gross fixed capital formation, corruption and political stability.

Table 1: Variables Used in the Model and A Priori Expectations

| Variables | Codes | Expected sign | Measures adopted and units |
|-------------------------------|-------|---------------|--|
| Gross Domestic Product | GDPPC | Positive | GDP per capita growth (annual %) |
| Corruption | CONCO | Negative | Control of corruption |
| Political Stability | POLS | Positive | Political stability and absence of violence/terrorism |
| Foreign Direct Investment | FDI | Positive | Foreign direct investment are the net inflows of investment |
| Gross Fixed Capital Formation | GCF | Positive | Fixed assets of the economy plus net changes in the level of inventories |

We expect a positive sign for GDP per capita. Since corruption is a bad omen for the economy, we expect the sign to be negative. However, political stability is expected to have a positive relationship with growth, likewise foreign direct investment inflows and gross fixed capital formation.

This section will concentrate on institutional aspects of political stability and corruption.

In the words of Waziri (2011) Corruption is condemned by all religions, all ethical code, and all legal systems. It stifles all growth, delays all advancement, and hinders all of it. It targets the weakest and most vulnerable people first, diverting scarce resources from those who are most in need. In addition to undermining confidence in the fairness of free and open markets and the rule of law, corruption also erodes trust in public and private organizations. Simply put, corruption is a disease on civil society.

Corruption is a menace that has being in existence for time immemorial. It is an anti-social attitude awarding undue privileges or advantages contrary to legal and moral norms and impairs the authorities' capacity to secure the welfare of all citizens. It can be traced to the rise in public administration and the discovery of crude oil and natural gas in 1958. Corruption in Nigeria is a constant phenomenon. In 2012, Nigeria was estimated to have lost over \$400 billion to corruption since its independence and over N15.7 trillion of oil income was said to have accrued to Nigeria and this large revenue was mismanaged and nobody was punished for the mismanagement (Ikpeze, 2013).

In 2021, the country ranked 154th in the 180 countries listed in Transparency International's Corruption Index. It nonetheless takes on different shapes depending on the nation and the moment, and it continues to be one of the institutional indicators that pique the interest of international organizations.

Efforts have been made by government from pre-independence till date to curb corruption in Nigeria. These efforts range from the enactment of decrees and laws and the enactment of integrity systems yet little success was recorded.

The Federal Republic of Nigeria's 1999 Constitution, the Criminal Code Act, the Penal Code, the Money Laundering (Prohibition) Act of 2011, the Economic and Financial Crimes Commission Act, the ICPC Act, the Corrupt Practices and Other Related Offenses Act, the Code of Conduct Bureau and Tribunal Act, the Public Complaints Commission Act, and the Central Bank of Nigeria Act are just a few of the different statutes.

Institutions put in place to fight corruption in Nigeria include the National Assembly, the Judiciary, the Economic and Financial Crimes Commission, the Independent Corrupt Practices Commission the Public Complaints Commission, the Code of Conduct Bureau and Code of Conduct Tribunal, the Central Bank of Nigeria, Police and other Security Agencies and the Federal Character Commission. Despite these laws and enactments, corruption remains endemic in Nigeria.

Lack of stability can be interpreted as the impression that the government could be destabilized and ousted through violent (coup d'état) or unconstitutional means (political violence or terrorism). Broadly speaking, socio-political instability takes three forms (Gupta, 1991): elite or executive instability, which includes coups d'état, changes and crises of government; mass instability, which corresponds to social movements such as strikes, demonstrations or riots; and armed or violent instability, which includes civil war and guerrilla warfare, and any violent political action.

Scholars have described Nigeria, as an “unfinished state”, (Joseph et al., 1996), and as “a truculent African tragedy” (Ayittey, 2006). This is as a result of the political instability occasioned by several coup, inconclusiveness and annulment of elections. As Kew (2006) noted:

“The giant was brought to its knees by 20 years of brutal and corrupt military rule, which left a legacy of executive dominance and a political corruption in the hands of Nigeria’s so-called “godfathers”-powerful political bosses sitting atop vast patronage networks who view the government primarily through the lens of their own personal enrichment “

Because of this instability, the focus of the leadership became parochial with the overriding consideration for personal survival rather than national development.

Another form of political instability experienced in Nigeria is violence and terrorism inflicted on her people by the Boko Haram sect. This sect executes all manners of social vices such as kidnapping, money laundering, destruction of infrastructures and public goods. These have deterred foreign investors and instill fear in the people, thus, hampering and distorting economic activities.

Furthermore, the chaos caused by the Niger Delta militants over the years has set the country backwards. This agitation was as a result of failure on the part of government to meet the needs of the oil producing communities. Worthy of note also is the call for secession by the Indigenous People of Biafra (IPOB). The incessant call and violence made the current administration to proscribe the group as a terrorist organization. These activities in which few were mentioned have affected the political landscape in Nigeria, thus, leading to political instability in almost all its 36 states including the Federal Capital Territory-Abuja.

Table (2): The variables employed in the model are described statistically in the table below.

Table 2: Descriptive Statistics of Variables

| Variable | Number of observations | Average | Standard deviation | Minimum | Maximum |
|----------|------------------------|-----------|--------------------|-----------|-----------|
| GDPPC | 73 | 3.513977 | 3.344555 | -4.260113 | 12.45747 |
| CONCO | 73 | -1.101318 | 0.121495 | -1.431231 | -0.891883 |
| FDI | 73 | 1.552115 | 0.803219 | 0.195183 | 2.900249 |
| POLS | 73 | -1.968794 | 0.149419 | -2.211123 | -1.625118 |
| GCF | 73 | 6.550002 | 2.100001 | 2.633001 | 1.1910021 |

Source: Author's, based on EVIEWS 10.0 software

4.0 Empirical Results

4.1 Test of Stationarity of the Variables

It was decided whether or not unit roots existed using the Augmented Dickey Fuller (ADF) test, which analyzes statistics using both intercept and trend. To determine whether to accept or reject the idea that a unit root exists, we compared the "t" values with the Mackinnon critical values. We select 5 per cent as our critical value based on the typical technique. Table 3 displays the test outcomes. The following is how the claim is made:

Ho: $\theta = 1$ (non-stationary)

H1: $\theta < 1$ (stationary)

Table 3: Unit root Test- Augmented Dickey-Fuller

| VARIABLES | LEVEL TEST | | TEST IN DIFFERENCE | | I(d) |
|-----------|-------------------------|----------------|-------------------------|----------------|------|
| | Statistical value at 5% | Critical value | Statistical value at 5% | Critical value | |
| GDPPC | -1.129866 | -2.905519 | -3.610484 | -2.903 | I(1) |
| CONCO | -3.143074 | -2.905519 | / | / | I(0) |
| POLS | -2.48007 | -2.905519 | -3.537024 | -2.9062 | I(1) |
| FDI | -0.569909 | -2.902953 | -7.121489 | -2.903 | I(1) |
| GCF | -1.580846 | -2.902953 | -2.445482 | -1.9455 | I(1) |

Source: Author's computation based on EVIEWS 10.0 software

The ADF stationarity result tests in Table (3) shows that some variables were stationary at levels I(0) and first difference I(1); thus validating the use of the ARDL (bounds Test).

4.2 Estimation of the ARDL model (2,1,0,2,0)

The estimation outcomes of the best ARDL model that was chosen are shown below. The ARDL model will be chosen using the Akaike Information Criterion (AIC), which identifies the model with the fewest parameters that yields statistically significant results.

Table 4: ARDL Model Estimation (2,1,0,2,0)

| Variable | Coefficient | t-Statistic | Signification |
|---------------------------|-----------------|-------------|---------------|
| GDPPC(-1) | 1.566102 | 17.977650 | 0.000000 |
| GDPPC(-2) | -0.667395 | -8.034063 | 0.000000 |
| GCF | 0.000000 | 1.292916 | 0.200900 |
| GCF(-1) | 0.000000 | -1.730927 | 0.088500 |
| FDI | 0.261570 | 2.918646 | 0.004900 |
| CONCO | -9.590558 | -3.324517 | 0.001500 |
| CONCO(-1) | 16.280160 | 3.056354 | 0.003300 |
| CONCO(-2) | -7.622657 | -2.521573 | 0.014300 |
| POLS | -0.698389 | -1.619071 | 0.110600 |
| C | -2.115602 | -1.731971 | 0.088300 |
| R-squared | 0.988885 | | |
| Adjusted R-squared | 0.987246 | | |

Source: Author's computation based on EVIEWS 10.0 software

In order to determine the existence of a long term relationship between the variables, we will perform the Pesaran et al (2001) cointegration test.

4.3 Cointegration Test

In order to ascertain whether cointegration relationship exist among the variables, we adopted the Bound Test (ARDL). From Table 4, the result of the bounds test demonstrates strong evidence of a long-run relationship between the variables when compared with the Pesaran et al (2001) critical value at the lower and upper bounds. There is a long-term association between GDPPC and its determinants because the F-statistic in the model is bigger than both the lower and upper bounds critical value. As a result, the ARDL co-integration method is used to estimate our equation over the long term.

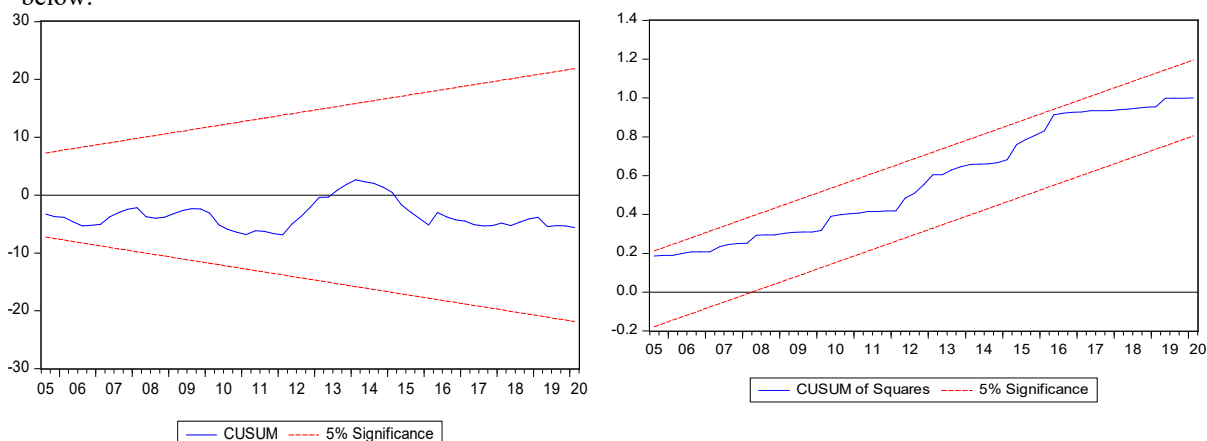
Table 5: Result of Bound Test

| F-Bounds Test | | Null Hypothesis: No levels relationship | | |
|----------------|----------|---|------|------|
| Test Statistic | Value | Signif. | I(0) | I(1) |
| F-statistic | 4.024134 | 10% | 2.2 | 3.09 |
| k | 4 | 5% | 2.56 | 3.49 |
| | | 2.5% | 2.88 | 3.87 |
| | | 1% | 3.29 | 4.37 |

Source: Author's computation using EVIEWS 10.0 software

4.4 Stability Test of the Model Coefficients (Cusum Test and Cusum of squares)

A very important property in the estimation of a model is the constancy or stability of parameters used in that model. This ensures that the estimates remain valid (Dinardo and Johnston, 1999). We thus applied the CUSUM and CUSUMSQ tests developed by Brown et al (1975). The statistics are within the crucial 5% critical boundaries according to the plots of the CUSUM and CUSUMSQ, indicating that the model's coefficient is stable as shown below.



The Ramsey Specification Test

Ramsey's test, commonly referred to as the RESET (Regression Error Specification Test), focuses on the suitability of the functional form of the model, including the inclusion or exclusion of pertinent variables.

Table 6: Result of the Ramsey Specification Test

| Ramsey Specification Test | | |
|---------------------------|----------|-------------|
| | Value | Probability |
| F-statistics | 1.899302 | 0.1733 |

Source: Author's computation using Eviews 10.0 software

The Ramsey test for the omission of at least one relevant variable show that no relevant variable has been omitted. This is justified by the probability value which is equal to $0.1733 > 0.05$.

4.5 Estimation of Short-Term and Long-Term Models

Short-Term Dynamics

The estimated coefficient of the error correction model is the primary output of the short-run dynamics (ECM). According to what was expected a priori, the ECM coefficient (0.10) was negative and highly significant at 1 percent, showing that the variables had a cointegrating connection. The parameter indicates that the variable on which the vector is normalized and the variable to which the parameter applies have a positive connection.

The adjustment process from the initial disequilibrium to a long-term equilibrium route is represented by the error correction term. In order to achieve equilibrium in the long run, the error correction term, represented by (0.10) or 10.00 percent, states that approximately 10.00 percent of the gross domestic product disequilibrium caused by the influence of exogenous variables in the preceding quarter would be corrected by 10.00 percent in the following quarter.

According to table (8)'s assessment of the short-run coefficients, the corruption control variable has a negative impact on economic growth. A unit change in the level corruption leads to 9.59 per cent decrease in economic growth rate in the short-run.

Furthermore, gross fixed capital formation has a positive effect on short-term economic growth in Nigeria.

Table 8: Estimation Result of Short-run Coefficients

| Dependent Variable: GDPPC | | | |
|---------------------------|--------------|-------------|--------|
| Variable | Coefficient | t-Statistic | Prob. |
| D(GDPPC(- | 0.667395*** | 10.33847 | 0.0000 |
| D(GCF) | 2.00E-11* | 1.548237 | 0.1267 |
| D(CONCO) | -9.590558*** | -3.759804 | 0.0004 |
| D(CONCO(-1)) | 7.622657*** | 2.880794 | 0.0055 |
| CointEq(-1)* | -0.101293*** | -5.111153 | 0.0000 |

N.B.: ***, ** and * represent the 1%, 5% and 10% significance levels respectively.

Source: Author's computation using EViews 10.0 software

4.6 Long-Term Dynamics

Table 9 below gives the estimated coefficients of the long-run model.

For control of corruption, the result obtained is similar to the short-run result. Indeed, a one point increase in the level of corruption leads to a 9.2 percent decrease in the level of economic growth.

Table 9: Estimation of Long-run Coefficients

| Dependent Variable: GDPPC | | | |
|----------------------------------|--------------------|--------------------|--------------|
| Variable | Coefficient | t-Statistic | Prob. |
| CONCO | -9.21146** | 4.810865 | 0.0602 |
| FDI | 2.582314*** | 0.625374 | 0.0001 |
| POLS | -6.894744* | 4.274868 | 0.1119 |
| GCF | -7.91E-11** | 3.52E-11 | 0.0281 |
| C | -20.88597** | 10.82817 | 0.0584 |

N.B.: ***, ** and * represent the 1%, 5% and 10% significance levels respectively.

Source: Author's computation using EViews 10.0 software

The assessment of the long-run relationship from a reduced structural model demonstrates that corruption has a negative long-term impact on economic performance; this finding can be explained by the fact that corrupt decision makers favor huge non-productive projects over profitable investments.

Indeed, corrupt public officials divert public funds to unproductive activities especially to mega public infrastructure projects, allowing them to get larger gains at the expense of productive projects that generate significant social benefits in this way it negatively affects the efficiency of public investment, which results in the decline of economic growth in the long run (Badry, 2016). This result is in tandem with that of Monte and Papagni (2001) and Murphy et al. (1993), who suggest that corruption is disadvantageous to firms and innovators, particularly those that lack the liquidity to finance them. On the other hand, political stability variable has a negative effect on economic growth in the long-run in Nigeria. The negative estimate of -6.89 connotes that a one point increase in political instability leads to 6.89 per cent decrease in the growth rate in Nigeria. This result is explained by the instability caused by the terrorist activities of Boko haram and bandits in the northern part of Nigeria and herdsmen in the southern part of the country. Furthermore, the agitations by the Indigenous People of Biafra (IPOB), Militants and agitations for the Yoruba nation by some Yorubas in the western part of the country has reduced the confidence level of foreign investors, which has led to decrease in economic growth.

The control variable foreign direct investment has a positive effect on economic growth in the long-run. A unit change in FDI will lead to 2.60 percent increase in growth rate. On the contrary, gross fixed capital formation has a negative effect on growth in the long-run. A unit change in GCF would cause growth to decrease by 7.9 percent in Nigeria.

5. Conclusion and Recommendations

In this paper, we have examined the effects of institutional quality on growth in Nigeria using quarterly data for the period 2002-2020. The estimates obtained from an ARDL model suggest that corruption negatively affects growth both in the short-run and also in the long-run. The reason for this is not far-fetched. The fact that dishonest public officials and decision-makers favor huge ineffective initiatives over profitable investments can be used to explain it. Again, political stability has a negative effect on economic growth in the long-run.

The results of this study make it very evident that efforts should be made to combat corruption at all levels. In addition to strengthening and enforcing existing rules, the National Assembly should pass new legislation to punish corrupt public officials. Anti-corruption organizations such as the EFCC and the ICPC should be revamped to punish corrupt decision makers. The acts establishing these bodies should be amended to include more stringent measures and penalties to convicted public officials charged with corruption, which would serve as a deterrent to other officials. Furthermore, whistle blowers should be motivated and protected by the law, which would further expose the corrupt.

The Anti-money Laundering Act and Combating the Financing of Terrorism Act (AML-CFT) should be religiously adhered to by financial institutions. This would limit the financing of terrorism and further stall corruption in the private and public sectors.

To prevent violence and terrorism, the Nigerian government should listen to the agitations of her people clamoring for an independent nation. The place of dialogue in nation building cannot be overemphasized. Thus, government should dialogue and meet the needs of these people who feel marginalized in the governance process.

The terrorist activities of Boko Haram and bandits should be brought to a complete stop. Strong political will on the part of the government is a prerequisite to ensure a lasting peace in Nigeria. The armed forces should be

revamped and fortified to enable them to halt the violence and terrorism experienced in Nigeria.

The multiplier effect of these recommendations if adhered to is increase investors' confidence which would attract large foreign direct investment inflows and increase economic growth in the short-run and long-run.

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