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Deficit Financing and Economic Growth: Empirical Evidence from Nigeria

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Abstract

The impact of deficit financing on economic growth has long been recognized in the extant literature given that this type of financing is germane to accelerated and sustainable economic growth. Yet, Nigeria did not seem to have utilized deficit financing proceeds to invest in those related infrastructural facilities that would generate income and augment domestic savings, thereby helping to make and sell quality products and services that are internationally competitive, and ultimately stimulate economic growth. Rather, the seemingly weak governance in the country engaged in massive misappropriation of public funds and outright corruption thereby exacerbating unemployment, insecurity, and widespread poverty both in the urban and rural areas of the country. The main aim of the study therefore was to investigate empirically the impact of deficit financing on economic growth in Nigeria for the period 1981 to 2019. Secondary data for the study were sourced from the Central Bank of Nigeria and the World Bank Global Development Index. The fully modified ordinary least squares methodology of the econometrics was employed to analyze the data of the study. The major findings of the study showed that the federal government domestic debt variable, the federal government budget deficit variable, the foreign exchange reserves variable, and the broad money supply variable exerted positive impacts on economic growth, while the external debt variable exerted a negative and insignificant impact on economic growth in Nigeria. The study therefore concluded that public borrowing in Nigeria can only induce rapid and sustainable economic growth only and if only borrowed funds are massively invested in related infrastructural facilities that would generate revenue which would augment domestic financial resources. Accordingly, the study recommended that the federal government of Nigeria should carefully study the state of its economy to enable it invest in those infrastructural facilities that are thought germane to the achievement of sustainable economic growth.

Keywords

Deficit Financing, Economic Growth, Nigerian Economy, Fully Modified Ordinary Least Squares

JEL: C32, F43, L11, O14, N17

1. Introduction

Rapid and sustainable economic growth is of great essence to all contemporary countries of the world, especially the developing and emerging ones such as Nigeria. The reason for this may not be far-fetched! Economic growth entails the ability of the economy to increase the production of goods and services with the stock of capital and other factors of production available within the economy (Nnnanna, Englama, & Odoko, 2004; Ughulu, 2021). Thus, economic growth involves increases in per capita income which, in turn, leads to the attainment of a high standard of living comparable to that obtainable in the advanced countries (Todaro & Smith, 2011; and Ughulu & Ajayi, 2020). In this context, it can be argued with reasonable justification that sustainable economic growth fuels economic development that every country earnestly desires. Evidently, however, it has not been established that there exists any country in the world which is self-sufficient in the financial resources needed for the attainment of this level of economic development. This is where the issue of deficit financing comes in handy.

Deficit financing is a veritable tool designed to promote economic growth and development in order to correct the budget deficits created by expansionary fiscal operations of government. This is to say that deficit financing can result in increased domestic earnings as well as the growth of the overall economy if well managed. Hence Okoro (2013) states that deficit financing arises largely because of the need to expand the economy since economic managers cannot fund their capital projects without resorting to external sources such as the citizens and/or external countries. Such a situation usually ignites the need for governments to finance their capital projects either through internal borrowing, external borrowing or the implementation of certain monetary instruments to increase the flow of fund in the economy. It must be noted that there is a ripple effect on the economic performance of any country whose economic activities are financed through the prolonged debt from foreign countries as it crowds out private investments due to its high interest rate (Ughulu & Ughulu, 2020). Thus, deficit financing can be seen as the practice of seeking to stimulate a nation's economy by increasing government expenditures beyond available revenue (Onwioduokit, Inam, 2018; CBN, 2013).

In Nigeria, fiscal deficits of 1970s were justified on the grounds that the country was seriously engaged in massive reconstruction and rehabilitation exercise which emanated from the civil war that lasted over thirty months. However, as a result of the oil boom of the mid-1970s, which was characterized by high crude oil export earnings, the Federal Government engaged in extravagant spending that was shrouded in massive mismanagement of public funds and outright corruption and, hence, deficit financing continued until 1980. Between 1982 and 1983, crude oil export earnings declined drastically and this resulted in large-scale fiscal deficits that were financed through heavy borrowing after the country's external reserves had been significantly depleted.

Given this scenario, Nwanna and Umeh (2019) noted that the need for adequate public expenditure program has therefore become paramount, particularly at this period when the country is in excess exploration and various arms of government and many private sector organizations are experiencing severe financial constraints. According to these authors, the federal government was left with no other option but to seek foreign assistance. Contrarily, Okah, Chukwu, and Ananwude (2019) averred that the persistent recurrence of deficit financing via the creation of high-powered money might not necessarily guarantee the attainment of the desired macroeconomic objectives and this type of situation could hinder the level of investment in the economy and at the same time slow down economic growth. These authors therefore opined that the root cause of borrowing as a means of financing deficit must be fully understood and appreciated by carefully and diligently implementing the appropriate tools of fiscal policy. Their idea was based largely on those macroeconomic indices which influence investors' decisions as to invest or not to invest in an economy. This argument tends to lend credence to the current economic realities in Nigeria. For instance, the Nigerian economy is highly undiversified; the country relies solely and wholly on a single primary product – the crude oil. It is needless to say that Nigeria's continuous export of primary products would lead to stagnation. Therefore, it seems imperative that Nigeria needs to invest massively in those infrastructural facilities that are closely related to industrialization which drives economic growth. Similarly, corruption and self-sabotage which have become the bane of rapid and sustainable economic growth in Nigeria need to be replaced with good governance characterized by transparent and accountable leadership that is capable *of lifting the country from its current low-income nation status to that of a high-income nation in the very near future.*

The thrust of the study therefore is to investigate empirically the extent to which the huge quantum of deficit financing by the federal government of Nigeria has stimulated the nation's economic growth from 1981 to 2019. In doing this, the study attempts to provide answers to the relevant questions raised herein using time series data for the period under study thereby contributing to knowledge.

2. Literature Review

This section covers conceptual issues, review of some empirical studies, the origin of deficit financing in Nigeria, and the theoretical framework that constitutes the foundation upon which the study rests

2.1 Conceptual Issues

2.1.1 Economic Growth

Economic growth involves a change in the amount of real output and income in an economy over time. An economy grows because it obtains increased goods and services, obtains increased resources and uses same more efficiently (Nzotta, 2014). This is to say that economic growth can only occur when a country embraces value-added agricultural and manufacturing sectors that are equipped with modern advances in technology and technical knowledge and in the process enhance productivity and output that are internationally competitive.

The main task of the study therefore is to examine empirically the relationship between deficit financing and economic growth in Nigeria for the period 1981 to 2019.

2.1.2 Federal Government Budget Deficit

Adesuyi and Falowo (2013) define deficit financing as the net increase in the amount of money in circulation where such an increase results from a conscious governmental policy designed to encourage economic activities which would otherwise not have taken place. In the same vein, Bhatia (2014) sees deficit financing as some or all of those debt obligations as far as data are available and for the purpose for which the government needs them. Similarly, Nzotta (2014) defines deficit financing as a planned excess expenditure over income, which is supported by government policy or creating fund to finance deficit by borrowing either from internal or external sources, which must be repaid with interest within a specific period of time. Clearly, all these definitions point to the fact deficit financing arises when government spending is in excess of its anticipated revenue.

The extent to which federal government deficit financing has impacted on economic growth in Nigeria remains an issue to be resolved empirically in the study.

2.1.3 Federal Government External Debt

External debt is the portion of a country's debt that is borrowed from foreign lenders, including commercial banks, governments, or international financial institutions (IMF, 2020). These loans plus interest must be paid in the currency in which they were contracted. To earn the needed currency, the borrowing country may sell and export goods to the lending country. If a nation is unable or refuses to repay its external debt, it is said to be in sovereign default. In this type of scenario, lenders may withhold future releases of assets that are crucially needed by the borrowing nation for developmental goals; such can have a serious consequence for economic growth (Ughulu, 2021). Indeed, the borrower-nation's currency may collapse while its overall economic growth will stall.

The contribution of external borrowing to economic growth in Nigeria therefore remains one of the key issues to be examined empirically in the study.

2.1.4 Federal Government Domestic Debt

Domestic debt consists of liabilities that a country's citizens and government owe. It is the amount of money raised by the government in local currency and from its own residents. Generally, domestic debt consists of two categories - bank and non-bank borrowings. Bank borrowing is made up of loans and advances made to the government by the central bank. Although, borrowing from the central bank is usually discouraged, time usually arises when the government is compelled to resort to it.

On the other hand, non-bank borrowing - securitized debt - is made by the government from the general public through the issuance of government securities such as treasury bills (TBs), development stocks and bonds. The TBs have short a maturity period of one year, usually 3 to 12 months or 91 to 360 days. Essentially, the concept of domestic debt entails debt instruments issued by the federal, states and local governments and denominated in local currency but excludes contractors' debts and suppliers' credit owed by the governments, as well as contingent liabilities and inter-agency debts (Bazza, Binta &

Alhaji, 2018).

The study would verify empirically whether or not domestic debt has played any role in economic growth in Nigeria.

2.1.5 Federal Government Foreign Exchange Reserves

Foreign exchange reserves (also called international reserves or external reserves or reserve assets in the balance of payments) are those external assets that are readily available to and controlled by a country's monetary authorities (IMF, 2020). They comprise foreign currencies, other assets denominated in foreign currencies, gold reserves, special drawing rights (SDRs) and IMF reserve positions. These reserves may be used for direct financing of international payment imbalances or for indirect regulation of the magnitude of such imbalances via intervention in foreign exchange markets in order to affect the exchange rate of the country's currency (CBN, 2020). In other words, external reserves are used to back liabilities and influence monetary policy. These assets serve many purposes but are most significantly held to ensure that a government or its agency has backup funds if their national currency rapidly devalues.

The study would therefore attempt to examine the relationship between external reserves and economic growth in Nigeria for the period 1981 to 2019.

2.1.6 Broad Money Supply

The broad money supply is the totality of money in the economy which is in a usable form. It includes the narrow money supply (M_1), that is currency notes and coins in circulation plus balances on demand deposit with the deposit money banks plus quasi money in an economy.

The extent to which broad money supply has impacted on economic growth in Nigeria remains one of the key issues to be examined empirically in the study.

2.2 Empirical Studies

There exists a plethora of studies on the impact of deficit financing on economic growth in the extant literature and some of them are reviewed, thus:

2.2.1 Studies on Other Countries

Onwioduokit and Inam (2018) investigated the relationship between budget deficits and economic growth in Liberia using the error correction model. The empirical findings that emerged from that study showed that there existed a positive and significant relationship between budget deficit and economic growth in Liberia. According to these authors, a 1.0 percent increase in deficit financing resulted in approximately 0.42 units increase in Liberia's economic growth.

Tung, (2018) examined the effect of fiscal deficit on economic growth in Vietnam for the period 2003 to 2016 using quarterly data. The empirical results of the study showed that fiscal deficit exerted harmful effects on economic growth in both the short and long runs. In fact, the correlation analysis confirmed that fiscal deficit could hurt not only the gross output but also private investments, foreign direct investments, and net exports. He therefore recommended that policymakers in Vietnam as well

as other emerging countries in need of urgent economic recovery, must reduce their fiscal deficit rates so as to experience a more rapid and sustainable economic growth in the very near future.

Hussain and Haque (2017) studied the effect of deficit financing on economic growth in Bangladesh. Findings from the study revealed that there existed a positive and significant relationship between FD and GDPGR, supporting the Keynesian theory, while findings from the VECM using World Bank data showed that the impact of fiscal deficit (FD) on GDPGR was mild but negative and significant at the 5% level.

Pelagidis and Desli (2014) discussed the potential of fiscal policy in supporting growth with some European experiences. The authors argued that budget deficit maybe led to hiher business profits, thereby supporting economic growth. In fact, the result suggested evidence pointing to a positive relationship between fiscal deficit and capital profitability. This evidence also implies that the dogmatic aversion to budget deficits may be dangerous.

Faraji and Makame (2013) investigated the impact of external debt on the economic growth of Tanzania using time series data on external debt and economic performance for the period 1990 to 2010. The findings of the study showed that there did not exist a long-run relationship between external debt and GDP. Furthermore, the findings showed that external debt and debt service payments had significant impact on GDP growth with the total external debt stock exerting a positive effect of 0.36939 and debt service payment having a negative effect of -28.517 on Tanzania's economic growth.

Velnampy and Achchuthan (2013) conducted a study on the effect of fiscal deficit on economic growth in Sri Lankan for the period 1970 to 2010. The authors did not find any existence of the relationship between the fiscal deficits on economic growth in the country. Similarly, Ahmad (2013) examined the relationship between fiscal deficit and GDP of Pakistan for the period 1971 to 2007. His results showed a positive but insignificant relationship existed between fiscal deficit and GDP in the country.

2.2.2 Studies on Nigeria

Okah, Chukwu, and Ananwude (2019) examined the effect of deficit financing on Nigeria's economic growth from 1987 to 2017. The vector autoregressive (VAR) methodology was used to analyze the data of the study. The result of their study revealed that deficit financing exerted a positive but insignificant effect on Nigeria's economic growth. They therefore recommended that government should strive to diversify its revenue base and also demonstrate a high level of transparency both in its monetary and fiscal operations among others.

Similarly, Nwanna and Umeh (2019) examined the effect of deficit financing on Nigeria's economic growth using secondary data spanning from 1981 to 2016. The results of their regression exercise using the OLS methodology revealed that deficit financing through external borrowing had a negative but significant effect on Nigeria's economic growth. They also found that domestic debt recorded a positive and significant effect on Nigeria's economic growth, while the debt service variable had no significant effect on Nigeria's economic growth.

Ifeanyi and Umeh (2019) examined the effect of deficit financing on Nigeria's economic growth using secondary data from 1981 to 2016. Their findings showed that external debt had a negative but significant effect on Nigeria's economic growth; domestic debt had a positive and significant effect on Nigeria's economic growth, while debt service had no significant effect on Nigeria's economic growth. They therefore recommended that Government should set up monitoring teams that would ensure that the nation's budget is carefully implemented in order to reduce corruption, leakages and wastages.

Similarly, Solawon and Adekunle (2018) carried out a study on the effect of deficit financing on Nigeria's economic growth from 1986 to 2016 using secondary data sourced from the Central Bank of Nigeria. They adopted the Auto Regressive Distributed Lag (ARDL) to estimate their results. Their empirical findings showed that all the explanatory variables, with the exception of budget deficit, exerted positive and significant effects on economic growth. Hence, they strongly recommended that government budget deficit should be centered on capital expenditure rather than recurrent expenditure to ensure improvements in infrastructural facilities that could stimulate the desired economic growth. Furthermore, they opined that external debt should be closely monitored such that it did not exceed the expected threshold that would result in debt overhang.

Nwakobi, Echekoba and Ananwude (2018) examined the effect of fiscal deficit on selected macroeconomic variables in Nigeria including gross domestic product, money supply and inflation for the period 1981 to 2015. Their results revealed that fiscal deficit had a negative but significant effect on money supply and inflation in Nigeria but exerted a positive but insignificant effect on gross domestic product; this tended to have aligned with the Keynesian postulation of the existence of a positive relationship between fiscal deficit and macroeconomic variables.

Ubi and Inyang (2018) descriptively appraised the implication of fiscal deficit on Nigeria's economic development from 1980 to 2016. Their findings disclosed that Nigeria's fiscal deficit had contributed positively to the growth of per capita income, economic growth and the stabilization of the nation's balance of payments only but did not reduce unemployment and inflation rates. Similarly, Bazza, Binta, and Alhaji (2018) evaluated the impact of deficit financing on economic growth in Nigeria for the period spanning from 1981 to 2016 using the ARDL Technique. Their result from the ARDL regression estimates showed that government deficit finance over the years had significantly impacted on the output growth of Nigeria.

Ali, Mandara, and Ibrahim (2018) examined the impact of deficit financing on economic growth in Nigeria utilizing secondary data that spanned from the period from 1981 to 2016. The study employed the ARDL technique to analyze the data of the study and the results thus obtained showed that government deficit financing over the years had significantly impacted on the output growth of Nigeria.

Momodu and Monogbe (2017) examined the influence of budget deficit on economic performance in Nigeria using time series data for the period 1981 to 2015. The findings of the study showed that budget deficit significantly stimulated economic performance. Accordinvg to the findings, the lag value of federal government budget deficit has contributed to performance of the economy in the current year

although the contributive quadrant was not felt to a reasonable extent. These empirical findings support the Keynesian postulation of significant relationship between budget deficit and economic performance.

Olatunde and Temitope (2017) studied the effect of fiscal deficit on the outputs of the agricultural, industrial, building and construction, wholesale and retail trade, and service sectors in Nigeria from 1981 to 2015. The autoregressive distributed lag was used to analyze the data of the study. The results that emanated there-from showed that fiscal deficit had a negative effect on agricultural, building and construction, industrial and wholesale and trade sector in the short run, while in the long run, fiscal deficit had negative effects on the following sectors: agricultural, building and construction, service and wholesale and trade. For industrial sector, fiscal deficit had positive effect in the long run.

Richard and Ogiji (2016) investigated the implications of deficit financing on economic stability in Nigeria between the period 1970 and 2013. The study adopted regression analysis the result of which revealed that external source of deficit financing (EXF), non-bank public source of deficit financing (NBPF) and exchange rate had significant and positive implications on economic stability proxy for gross domestic product (GDP), while ways and means source of deficit financing (WM), banking system source of deficit financing (BSF) and interest rate (INTR) had negative implications for economic stability in Nigeria.

Monogbe, Dornubari and Emah (2015) examined the effects of deficit financing on economic performance in Nigeria using time series data covering the period 1981 to 2014. Their findings revealed that deficit financing through borrowing from foreign countries had a contagious effect but significant association with economic performance in Nigeria. They therefore recommended that government should monetize her debt as much as possible when faced with deficit, that is, putting in place appropriate monetary policy tools that would stimulate total money supply in the economy thereby reducing interest rate, influencing investment opportunities, providing easy accessibility to loans by infant industries thereby triggering economic growth and stability such that high governmental demand for loanable fund would be offset.

Ezeabasili and Nwakoby (2013) investigated the relationship between fiscal deficits and private investment in the Nigeria, using data covering 1970 to 2006. The results of their study showed that there existed a positive long run relationship between private investment and the real growth of the national economy. Similarly, Osuka and Achinihu (2014) evaluated the impact of budget deficits on macro-economic variables in the Nigerian economy for the period 1981 and 2012. The findings of the study showed that the variables in the study are all co-integrated of order one, I(1), indicating the presence of a long-run relationship between the dependent and independent variables of the study. They therefore concluded that budget deficits exerted a significant impact on the macro-economic performance of the Nigerian economy during the period under study.

Nwanne (2014) investigated the impact of budget deficit financing on economic stability in Nigeria from 1970 to 2013. The results of the study showed that external source of deficit financing as well as

non-bank public sources of deficit financing and exchange rate had positive and significant effect on gross domestic product. On the other hand, ways and means sources of deficit financing, banking system sources of deficit financing and interest rates had negative impacts on gross domestic product.

Suliman and Azeez (2012) studied the effect of external debt on the economic growth in Nigeria using annual time series data spanning from 1970 to 2010. The findings from the error correction model revealed that external debt contributed positively to the economic growth in Nigeria. They therefore recommended that the Nigeria must ensure that both political and economic stability prevail in the country so as to aid effective debt management.

The results of the studies reviewed above are mixed; while some support the view that deficit financing aids economic growth, others were indifferent. However, theories especially the Keynesian theory and the Richardian equivalent theorem posit that deficit financing would only aid economic growth if domestic savings are large and massive investments are made in related infrastructural facilities. Unfortunately, domestic savings in Nigeria are quite ;low and a conducive environment in which investment can thrive does not seem to exist. Most worrisome in the circumstance is the fact that governance in the country is not only weak; it is also characterized by misappropriation of funds and massive sharing of public funds. These uncharitable tendencies seem to lead to lack of investment in infrastructure such as the power and education sectors, good road networks, technology, etc.

2.3 Deficit Financing and the Nigerian Economy

Deficit financing in Nigeria dates back to 1961 and this seemed justified as the government of the immediate post-independence era pursued rapid and sustainable economic growth agenda with great vigor. However, the 1973 and 1979 period heightened the urge for deficit financing due mainly to the oil price shocks at the international markets, which resulted in current account deficits. Since then, Nigeria's annual budgets have been running deficits (Nwanna & Umeh, 2019). The annual deficits as percentages of gross domestic products have been rising steadily and this has severe consequences for public debt and, invariably, economic growth. For example, Nigeria's national debt occasioned by deficit financing stood at $50.85 billion in 2015 representing 20.33 per cent to GDP, $63.11 billion in 2016 or 23.41 per cent to GDP, $76.52 billion in 2017 or 25.34 per cent to GDP, $93.82 billion in 2018 or 27.66 per cent to GDP, and $111.54 billion in 2019 or 29.14 per cent to GDP (https://www.statista.com). These figures refer to the whole country and include the debts of the States, the communities, the municipalities, and the social insurance. There may not be any gainsaying the fact that these continuously rising national debt profiles are significantly mortgaging the living standards of Nigeria' future generations who have nothing to inherit from these reckless borrowings.

Perhaps, this explains why Hicks, Marshall, Chamberlin and Samuelson hold the view that the current crisis that has engulfed the African continent can be largely attributed to the distortions in the internal operations of the African economies and their excessive dependence on the advanced countries (Bhatia, 2006).

3. Theoretical Framework and Model Specification

3.1 Theoretical Framework

The study is based on the dual gap theory and the choice for this theory is predicated on the fact that it provides a framework that shows that the development of any nation is a function of investment and that such investment requires domestic savings that is not large enough to ensure that development takes place (Olanrewaju, Abubakar, & Abu, 2013). However, such investment cannot be successfully achieved without huge domestic savings - meaning that for a country to achieve a sustainable level of development, investment and huge domestic savings is required. Impliedly, this theory postulates that the combination of domestic savings, investment and foreign borrowing are a function of economic development.

(i.e. M > E), then;

I > S and M > E

Hence, I – S = M – E

In national income accounting, an excess of investment over domestic saving is equivalent to excess or surplus of import over export.

Income = consumption + import + savings

Output = consumption + export + investment

Since Income = output, then Investment – Saving = Import – Export

3.2 Model Specification

The paper modified the models specified in the works of Okah, Chukwu and Ananwude (2019) and Nwanna and Umeh (2019) which analyzed the impact of fiscal deficit on the performance of the Nigerian economy. In those works, economic growth was denoted by gross domestic products (GDP), while federal government domestic debt and federal government foreign debt served as the explanatory variables. The modified version is presented, thus:

$$RGDP = f(FGDD, FGXD, FGBD, FOER, BRMS) \quad \ldots \quad (1)$$

Where:

RGDP = Real Gross Domestic Product

FGDD = Federal Government Domestic debt

FGXD = Federal Government External debt

FGBD = Federal Government Budget Deficit

FOER = Foreign Exchange Reserves

BRMS = Broad Money Supply

βo = Constant

$\beta i - \beta 4$ = Estimation parameters.

In econometrics, equation (1) above is insufficient resulting from absence of error term. Hence, we express equation (1) in a functional relationship using linear regression model by introducing constant and error term, hence we have:

$$RGDPt = \beta o + \beta_1 FGDD + \beta_2 FGXD + \beta_3 FGBD + \beta_4 FOER + \beta_5 BRMS + \mu t \quad \ldots (2)$$

Where:

μt = Stochastic (Error) Term.

The variables of the study were therefore normalized for equation (3) to assume the log form to take account of the positive skewness of the data utilized in the study. Hence, equation (3) takes the form:

$$\log RGDPt = \beta o + \log(\beta_1 FGDD) + \log(\beta_2 FGXD) + \log(\beta_3 FGBD) + \log(\beta_4 FOER) + \log(\beta_5 BRMS) + \mu t \quad \ldots \quad \ldots (3)$$

A-priori Expectation

The a-priori expectations are symbolically represented, thus:

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5 > 0$.

4. Data Analyses and Interpretation of Results

This section gives the empirical results obtained from the analyzed secondary data sourced from the CBN Statistical Bulletin and the World Bank Global Development.

4.1 Data of the Study

The secondary data used in the study are contained in Appendix I.

4.2 Descriptive Statistics

The results obtained from the estimation exercise for descriptive statistics yielded the results contained in Table 1, below:

Table 1. Descriptive Statistics

	LOG(BRMS)	LOG(FGBD)	LOG(FGDD)	LOG(FGED)	LOG(FOER)	LOG(RGDP)
Mean	2.617999	6.020129	6.352005	6.221288	2.099482	10.27072
Median	2.541202	5.355107	6.739276	6.450597	2.014186	10.04588
Maximum	3.059176	11.58743	9.455198	8.956635	3.981549	11.22116
Minimum	2.213754	0.698135	2.415021	0.845868	-0.072571	9.530920
Std.Dev.	0.266334	2.580097	2.150940	1.978996	1.397461	0.564174
Skewness	0.386411	0.242048	-0.287042	-1.000487	-0.020983	0.355504
Kurtosis	1.751001	2.527771	1.877467	3.394308	1.469025	1.648762
Jarque-Bera	3.415648	0.724137	2.516949	6.585676	3.713939	3.691346
Probability	0.181260	0.696235	0.284087	0.037148	0.156145	0.157919
Sum	99.48394	228.7649	241.3762	236.4090	79.78030	390.2873
SumSq.Dev.	2.624546	246.3053	171.1821	144.9078	72.25719	11.77683
Observations	39	39	39	39	39	39

Source: Regression output using E-Views 9.0 (2021).

A careful look at Table 1 above, reveals that the dependent variable being the natural logarithm of

RGDP has the highest mean with an average value of 10.27072, followed by natural logarithm of FGDD with a mean value of 6.352008, next is natural logarithm of FGED with an estimated mean value of 6.221295, next is natural logarithm of BRMS with an estimated mean value of 2.617999, next is natural logarithm of FOER with an estimated mean value of 2.099482while the natural logarithm of FGBD next is the least with an estimated average value of 6.020129. In addition, the table revealed that the highest standard deviation was recorded by natural logarithm of FGBD with the value of 2.580097. Like manner, the natural logarithm of BRMS has the lowest Standard deviation of 0.266334.

The maximum and minimum value for the natural logarithm of BRMS is 3.059176 and 2.213754 respectively. While the maximum and minimum values for the natural logarithm of FGBD are 11.58743 and 0.698135 respectively. Also, the maximum and minimum values for the natural logarithm of FGDD are 9.455198 and 2.415253 respectively. Meanwhile, the maximum and minimum values for the natural logarithm of FGED are 8.956635 and 0.846383. The maximum and minimum values for the natural logarithm of FOER are 3.981536 and 0.069361. Finally, the maximum and minimum values for the natural logarithm of RGDP are 11.22116 and 9.530920 respectively.

4.3 Econometric Results

The econometric regression exercise of the study was carried out in three stages – unit rood root test, co-integration test and error correction model - to ensure that the empirical investigations are not only valid but also reliable for acceptable generalizations. The results of these stages are reported, thus:

4.3.1 Pre-test: Unit Root Test

The first stage of the estimation exercise tested the data on the variables for unit root properties in line with Engle and Granger (1987) view that estimation of models using data that are not stationary have the potentials of yielding spurious regression results. In the same vein, Dauda (2010) asserts that usual econometric tests without the pre-test such as the unit root test are likely to be inappropriate and the inferences drawn there-from are likely to be erroneous and misleading. In the study, the Augmented Dickey/Fuller unit root test was conducted and the results thus obtained are contained in Table 2 below:

Table 2. Unit Root Test Results

Test Variables	ADF Test Statistic Value	Mackinnon Critical Value			P-Value	Order of Integration	Decision
		@ 1%	@ 5%	@ 10%			
LOG(BRMS)	-5.883431	-3.626784	-2.945842	-2.611531	0.0000	1(1)	Stationary
LOG(FGBD	-5.223020	-3.626784	-2.945842	-2.611531	0.0001	1(1)	Stationary
LOG(FGDD)	-4.453307	-3.626784	-2.945842	-2.611531	0.0011	1(1)	Stationary
LOG(FGED	-4.654444	-3.626784	-2.945842	-2.611531	0.0006	1(1)	Stationary
LOG(FOER)	-5.496950	-3.626784	-2.945842	-2.611531	0.0001	1(1)	Stationary
LOG(RGDP)	-3.506366	-3.626784	-2.945842	-2.611531	0.0135	1(1)	Stationary

Source: Regression output using E-Views 9.0 (2021).

The results of the Augmented Dicker Fuller test (ADF) reveal that none of the variables were stationary at their levels but became stationary after first difference. This is to say that the series are all intergraded in order of I(1), indicating that they are all stationary at first difference. This is based on the fact that the values of the ADF test statistics for all the variables under investigation were greater than the Mackinnon Critical values of all the variables. To further buttress this, their probability values are less than the 5% significant level but greater than 95% confidence level. Since the prerequisite of co-integration is the integration of all variables at same level, this parameter therefore leads to co-integration of employed variables.

4.3.2 Co-integration Test

Having established that the series in the analysis are stationary at I(1), we move on to ascertain if they are co-integrated. The essence of this is to test whether or not a long-run relationship exists among the variables under investigation. The co-integration results are presented in Table 3 below:

Table 3. Johansen Cointegration Test Output

Date: 07/04/2021 Time: 14:50

Sample (adjusted): 1983 2019

Included observations: 37 after adjustments

Trend assumption: No deterministic trend

Series: LOG_BRMS_ LOG_FGBD_ LOG_FGDD_ LOG_FGED_ LOG_FOER_ LOG_RGDP_

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.820144	152.6278	103.8473	0.0000
At most 1 *	0.676164	90.86620	76.97277	0.0030
At most 2	0.469745	50.27555	54.07904	0.1047
At most 3	0.320469	27.43723	35.19275	0.2673
At most 4	0.218774	13.52856	20.26184	0.3231
At most 5	0.120941	4.640510	9.164546	0.3251

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Source: Regression output using E-Views 9.0 (2021).

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.820144	61.76164	40.95680	0.0001
At most 1 *	0.676164	40.59065	34.80587	0.0091
At most 2	0.469745	22.83833	28.58808	0.2280
At most 3	0.320469	13.90867	22.29962	0.4704
At most 4	0.218774	8.888051	15.89210	0.4459
At most 5	0.120941	4.640510	9.164546	0.3251

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Source: Regression output using E-Views 9.0 (2021).

The co-integration result above revealed that there exists at least two co-integrating equation. This premised on the fact that both the trace statistic and Eigenvalue values are greater than the critical value. To further buttress this, the co-integration equation's probability values are less than 5% significant level but greater than 95% confidence level. Sequel to this result, we cannot accept the null hypothesis of no co-integration among the variables. Therefore, we can conveniently assert that long-run relationships exist between the dependent variable and the selected independent variables. The presence of co-integration, rules out the issue of spuriousity. However, it is important to note that; co-integration (long-run relationship) among a group of variables may not imply that such group of variables granger causes each.

4.4 Granger Causality Test

Granger causality test is aimed at determining whether group of variables granger causes each. It may also be viewed as a statistical hypothesis test that is used to determine whether a time series data set is useful for policy formulation (forecasting) or not (Wikipedia, 2020). In other words, it tends to focus on the impact of what happen prior to the effect and how the cause affects the future. The result is therefore presented in Table 4 below:

Table 4. Pairwise Granger Causality Tests

Pairwise Granger Causality Tests

Date: 07/04/2021 Time: 15:18

Sample: 1981 2019

Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
LOG_BRMS_ does not Granger Cause LOG_RGDP_	38	1.17296	0.2864
LOG_RGDP_ does not Granger Cause LOG_BRMS_		7.76949	0.0086
LOG_FGBD_ does not Granger Cause LOG_RGDP_	38	1.43648	0.2390
LOG_RGDP_ does not Granger Cause LOG_FGBD_		1.87093	0.1803
LOG_FGDD_ does not Granger Cause LOG_RGDP_	38	4.48273	0.0416
LOG_RGDP_ does not Granger Cause LOG_FGDD_		1.47871	0.2324
LOG_FGED_ does not Granger Cause LOG_RGDP_	38	7.65355	0.0091
LOG_RGDP_ does not Granger Cause LOG_FGED_		0.49763	0.4853
LOG_FOER_ does not Granger Cause LOG_RGDP_	38	1.94398	0.1723
LOG_RGDP_ does not Granger Cause LOG_FOER_		4.69861	0.0373
LOG_FGBD_ does not Granger Cause LOG_BRMS_	38	0.23212	0.6330
LOG_BRMS_ does not Granger Cause LOG_FGBD_		1.06012	0.3105
LOG_FGDD_ does not Granger Cause LOG_BRMS_	38	2.74574	0.1067
LOG_BRMS_ does not Granger Cause LOG_FGDD_		1.25811	0.2699
LOG_FGED_ does not Granger Cause LOG_BRMS_	38	0.05788	0.8113
LOG_BRMS_ does not Granger Cause LOG_FGED_		2.46299	0.1258
LOG_FOER_ does not Granger Cause LOG_BRMS_	38	15.1007	0.0004
LOG_BRMS_ does not Granger Cause LOG_FOER_		0.05080	0.8230
LOG_FGDD_ does not Granger Cause LOG_FGBD_	38	4.04228	0.0524
LOG_FGBD_ does not Granger Cause LOG_FGDD_		4.25912	0.0467
LOG_FGED_ does not Granger Cause LOG_FGBD_	38	3.69134	0.0631
LOG_FGBD_ does not Granger Cause LOG_FGED_		0.04586	0.8317
LOG_FOER_ does not Granger Cause LOG_FGBD_	38	0.34475	0.5610
LOG_FGBD_ does not Granger Cause LOG_FOER_		3.05550	0.0895
LOG_FGED_ does not Granger Cause LOG_FGDD_	38	0.00468	0.9459
LOG_FGDD_ does not Granger Cause LOG_FGED_		0.87934	0.3550
LOG_FOER_ does not Granger Cause LOG_FGDD_	38	1.42989	0.2401
LOG_FGDD_ does not Granger Cause LOG_FOER_		9.65229	0.0038
LOG_FOER_ does not Granger Cause LOG_FGED_	38	0.02256	0.8815
LOG_FGED_ does not Granger Cause LOG_FOER_		8.85660	0.0053

Source: Regression output using E-Views 9.0 (2021).

The granger causality result presentenced in Table 4, gives us the direction of causality among the variables under study. Usually granger causality result reports two (2) outcomes: uni-directional or bi-directional relationship. In this study, it was observed that there was no bi-directional relationship among the variables under study instead only uni-directional relationship was reported such that:

1. LOG_RGDP Granger Cause LOG_BRMS
2. LOG_FGDD Granger Cause LOG_RGDP
3. LOG_FGED Granger Cause LOG_RGDP
4. LOG_RGDP Granger Cause LOG_FOER
5. LOG_FGBD Granger Cause LOG_FGDD
6. LOG_FGDD Granger Cause LOG_FOER
7. LOG_FGED Granger Cause LOG_FOER_

The decision to accept the alternative hypotheses in the stead of the null hypotheses was therefore guided by their P-value being less than 5% level of significant and greater than 95% confidence level.

4.6 Short Run Regression Results

This test is used to test if there is a significance relationship between the dependent variable and the independent variable on the short-run. It is therefore presented in Table 5 below:

Table 5. Fully Modified Ordinary Least Squares (FMOLS) Results

Dependent Variable: LOG(RGDP)
Method: Least Squares
Date: 07/04/2021 Time: 15:30
Sample: 1981 2019
Included observations: 39

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-56800.62	14340.42	-3.960874	0.0004
LOG(FGED)	-3409.046	1166.240	-2.923108	0.0063
LOG(FGDD)	10054.55	2040.043	4.928597	0.0000
LOG(FGBD)	1363.292	437.3062	3.117477	0.0038
LOG(FOER)	561.3509	1624.511	0.345551	0.7319
LOG(BRMS)	14811.42	7135.431	2.075757	0.0460
R-squared	0.932525	Mean dependent var		33853.74
Adjusted R-squared	0.921982	S.D. dependent var		19835.73
S.E. of regression	5540.449	Akaike info criterion		20.22148
Sum squared resid	9.82E+08	Schwarz criterion		20.48004
Log likelihood	-378.2081	Hannan-Quinn criter.		20.31347
F-statistic	88.45017	Durbin-Watson stat		0.650804
Prob(F-statistic)	0.000000			

Source: Regression output using E-Views 9.0 (2021).

The regression results in Table 5 above reveal that the value of the constant term (C), -56800.62, and its corresponding t-statistic value, -3.960874[0.0004] are both negative but significant at the traditional 1 per cent level. This connotes that if all the independent variables are held constant, the dependent variable (RGDP) is expected to be decreased by about 56800.62 units. Although this finding is negative, its ρ-value, 0.0004, is less than 5% level of significance, suggesting that despite its negative nature, its importance in the model cannot be over-emphasized.

The value of the R-squared (R^2), 0.932525, suggests that over 93 per cent of the systematic variations in the dependent variable, RGDP, are explained by the changes in all the independent variables put together. After allowing for degree of freedom, the value of the adjusted R-squared, 0.921982, shows that the all the independent variables are able to explain over 92 per cent systematic variations in the dependent variable. These two statistical findings show that there exists a large measure of goodness-of-fit among the variables of the study. Similarly, the value of the F-statistic, 88.45017 [0.000], passes the test of overall significance at the traditional l per cent level. However, the value of the Durbin-Watson statistic, 0.650804, suggests the existence of serial correlations among the variables since its value is less than 2.

4.6.1 Federal Government External Debt and Real Gross Domestic Products (GDP)

The value of the coefficient of federal government external debt, -3409.046, and the value of its corresponding t-statistic -2.923108[0.0063], are both negative but significant at the traditional 1 per cent level. The reason for this may not be far-fetched! The huge amounts of external loans obtained by the Federal Government of Nigeria might not have been invested in those related infrastructural facilities that would drive industrialization and invariably scaling up domestic savings and at the same time stimulating economic growth. Clearly, these empirical findings contradict both the Keynesian theory and the Richardian equivalence theorem which posit that when external loans are not put to productive use, the economy of the borrower-nation would largely remain under-developed if not stagnant. The findings are also in agreement with those of Nwanna & Umeh (2019) and Ifeanyi & Umeh (2019) who reported a negative but significant relationship between external debt and economic growth. However, the findings agree with those of Solawon & Adekunle (2018) and Sulimand & Azeez (2012) who reported a positive and significant relationship between external debt and economic growth.

4.6.2 Federal Government Domestic Debt and Real Gross Domestic Products (GDP)

The value of the coefficient of federal government domestic debt, 10054.55, and its corresponding t-statistic, 4.928597[0.000] are positive and significant at the traditional 1 per cent level. These empirical findings imply that a 1 unit increase in federal government domestic debt will elicit approximately 10055 units increase in economic growth in Nigeria. The policy implication of the findings is that the higher the federal government domestic debt, the greater economic growth in Nigeria will be. The findings are in alignment with the a-priori expectation of the study. They are also in tandem with Solawon and Adekunle (2018) and Sulimand and Azeez (2012) but contradict those of

Nwanna and Umeh (2019) and Ifeanyi and Umeh (2019).

4.6.3 Federal Government Budget Deficit and Real Gross Domestic Products (GDP)

The value of the coefficient of federal government budget deficit, 1363.292, and its corresponding t-statistic, 3.117477[0.0038], are positive and significant at the traditional 1 per cent level. The policy implication of these empirical findings is that a 1 unit increase in federal government budget deficit leads to over 1363 units increase in economic growth in Nigeria. These empirical findings uphold the a-priori expectation of the study as well as the Keynesian theory and the Richardian equivalence theorem which posit that a positive relationship exists between government budget deficit and economic growth. Furthermore, the findings validate the results of Tung (2018); Pelagidis and Desli (2014); Osuka and Achinhu (2014); Adeusi and Falowo (2013) but contradict those of Iya et'al (2014) and Nwanne (2014).

4.6.4 Foreign Exchange Reserve and Real Gross Domestic Products (GDP)

The value of the coefficient of foreign exchange reserve, 561.3509, and its corresponding t-statistic, 0.34551[0.7319], are positive but exert insignificant impact on Nigeria's economic growth. The policy implication of these empirical findings is that a 1 unit increase in foreign exchange reserves leads to approximately 561 units increase in economic growth in Nigeria. These empirical findings are in tandem the a-priori expectation of the study as well as the tenets of dual-growth theory. They are also in agreement with the findings of Tung (2014) but contradict\ the findings of Hussain and Haque (2017).

4.6.5 Broad Money Supply and Real Gross Domestic Products (GDP)

The value of the coefficient of broad money supply, 14811.42, and its corresponding t-statistic, 2.075757[0.0460], are positive and significant at the 5 per cent level. The implication for these findings is that a 1 unit rise in broad money supply will lead to approximately 14811 units increase in economic growth in Nigeria. The policy implication of these empirical findings is that as broad money supply increases, economic growth increases too. The results are in tandem with the findings of Solawon & Adekunle (2015) but contradict those of Monogbe et al (2015).

4.7 Diagnostic Test

The empirical results of the diagnostic tests are presented in Table 6 below:

Table 6a. Diagnostic Test: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.179209	Prob. F(5,32)	0.3410
Obs*R-squared	5.912219	Prob. Chi-Square(5)	0.3149
Scaled explained SS	12.15067	Prob. Chi-Square(5)	0.0328

Table 6b. Test Equation

Dependent Variable: RESID^2

Method: Least Squares

Date: 07/04/2021 Time: 17:39

Sample: 1981 2019

Included observations: 39

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.81E+08	1.61E+08	-1.124740	0.2691
LOG(BRMS)	1.13E+08	80260134	1.409642	0.1683
LOG(FGBD)	-6297141.	4918869.	-1.280201	0.2097
LOG(FGDD)	-21191498	22946628	-0.923512	0.3627
LOG(FGED)	9549320.	13118000	0.727956	0.4719
LOG(FOER)	11156550	18272688	0.610559	0.5458
R-squared	0.155585	Mean dependent var		25849745
Adjusted R-squared	0.023645	S.D. dependent var		63069687
S.E. of regression	62319590	Akaike info criterion		38.87739
Sum squared resid	1.24E+17	Schwarz criterion		39.13596
Log likelihood	-732.6704	Hannan-Quinn criter.		38.96938
F-statistic	1.179209	Durbin-Watson stat		1.130820
Prob(F-statistic)	0.341014			

Source: Regression output using E-Views 9.0 (2021).

From the results of the diagnostic test as presented in Table 6b, it is evident that the short-run model successfully passed the serial correlation test, normality test, and Heteroskedasticity test.

This assertion is based on the fact that the respective p-values for the diagnostic tests are greater than 5% (at 5% significance level). Thus, the FMOLS regression result can be trusted and relied upon for policy regulation on deficit financing and economic growth in Nigeria.

5. Summary, Conclusion and Recommendations

5.1 Summary of Findings

The study carried out an in-depth empirical verification of the impact of deficit financing on economic growth in Nigeria using annual time series data spanning the period from 1981 to 2019. In doing this, both the statistical and econometrics strategies were employed to conduct the verification exercise which was preceded by preliminary tests including the unit root and co-integration tests. The empirical findings thus obtained are summarized, thus:

1. Federal government external debt (FGED) had a negative but significant impact on economic growth in Nigeria.
2. Federal government domestic debt (FGDD) exerted a positive and significant impact on economic growth measured by RGDP in Nigeria.
3. Federal government Budget Deficit (FGBD) had a positive and significant impact on economic growth (RGDP) in Nigeria.
4. Federal Government Foreign Exchange Reserves (FOER) had a positive and insignificant impact on economic growth (measured by RGDP) in Nigeria.
5. Federal government budget deficit (FGBD) exerted a positive and significant impact on economic growth (measured by RGDP) in Nigeria.
6. Broad money supply (BRMS) exerted a positive and insignificant impact on economic growth in Nigeria.

5.2 Conclusion

Based on the findings contained in 5.1 above, the study concluded that deficit financing per se is a good strategy for inducing economic growth only and if only the proceeds of the borrowed funds are deployed to related infrastructural facilities that can generate revenue that would augment domestic savings and hence stimulate economic growth. Unfortunately, Nigeria did not seem to have done this and hence rapid and sustainable economic growth in the country seems to be a mirage.

5.3 Recommendations

In line with the conclusion and findings of the study, the following recommendations are put forward:

1. That the federal government of Nigeria together with its policy makers carefully studies the present state of the economy before deciding on measures through which deficit financing would be focused.
2. That the federal government of Nigeria maintains optimum level of domestic debt as it represents a veritable mechanism through which the much-desired accelerated and sustainable economic growth can be achieved..
3. That the federal government of Nigeria ensures that the proceeds of external debt are invested in related infrastructural facilities that can aid domestic savings and, invariably, economic growth and development that the country earnestly desires.
4. That deficit financing in Nigeria be properly managed such that an efficient public expenditure process and fiscal discipline that are simultaneously achieved to assure macroeconomic stability capable of enhancing domestic savings and ultimately accelerated and sustainable economic growth.
5. That the government engages in proper public awareness campaign to change people's ideology on the nexus between budget deficits and economic growth as this would make the citizens to have a sense of belonging in government activities.

6. That the fiscal authorities in Nigeria make use of the various contractionary policies to reduce the incidence of too much money in the economy which would further fuel the already overheated economy which is characterized by high inflationary pressures.

Authors' Contributions:

The study showed that despite the large quantum of deficit financing in Nigeria for the past three decades, there seemed to be no appreciable level of economic growth as a result of the massive misappropriation of funds and large scale corruption in the country's public service. It is needless to say that this is a worrisome situation given that Nigeria is seriously lagging behind its peer group countries such as Brazil, Indonesia and others. Hence, the study strongly recommended that Nigeria must, as a matter of urgency and deliberate policy, reverse this ugly situation so as to relinquish its widely acclaimed status of the **World's Capital for Poverty**.

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Appendix I. Data for the Study

OBS	Dependent Variables	Independent Variables				
	RGDP	FGDD	FGED	FOER	FGBD	BRMS
1981	15,258.00	11.19	2.33	4.17	3902	9.99
1982	14,985.08	15.01	8.82	1.93	6104.1	10.19
1983	13,849.73	22.22	10.58	1.25	3364.5	10.85
1984	13,779.26	25.67	14.81	1.67	2660.4	11.8
1985	14,953.91	27.95	17.30	1.89	3039.7	11.6
1986	15,237.99	28.44	41.45	1.35	8255.3	11.76
1987	15,263.93	36.79	100.79	1.5	5889.7	11.05
1988	16,215.37	47.03	133.96	0.93	12160.9	11.97
1989	17,294.68	47.05	240.39	2.04	15134.7	10.95
1990	19,305.63	84.09	298.61	4.13	35755.2	9.49
1991	19,199.06	116.20	328.45	4.68	39532.5	12.65
1992	19,620.19	177.96	544.26	1.2	107735.3	12.21
1993	19,927.99	273.84	633.14	1.64	70	13.13
1994	19,979.12	407.58	648.81	1.65	3.38	13.06
1995	20,353.20	477.73	716.87	1.71	46.95	9.99
1996	21,177.92	419.98	617.32	4.33	81.19	9.15
1997	21,789.10	501.75	595.93	7.78	30.04	10.05
1998	22,332.87	560.83	633.02	7.3	102.57	10.64

1999	22,449.41	794.81	2,577.37	5.65	11.25	11.85
2000	23,688.28	898.25	3,097.38	10.1	27.56	12.74
2001	25,267.54	1,016.97	3,176.29	10.65	133.39	15.6
2002	28,957.71	1,166.00	3,932.88	7.57	285.10	13.29
2003	31,709.45	1,329.68	4,478.33	7.42	103.78	14.68
2004	35,020.55	1,370.33	4,890.27	17.26	221.05	12.31
2005	37,474.95	1,525.91	2,695.07	28.63	301.40	11.85
2006	39,995.50	1,753.26	451.46	42.74	202.72	13.25
2007	42,922.41	2,169.64	438.89	51.91	172.60	15.54
2008	46,012.52	2,320.31	523.25	53.6	161.41	20.45
2009	49,856.10	3,228.03	590.44	45.51	101.40	21.25
2010	54,612.26	4,551.82	689.84	35.88	117.24	20.21
2011	57,511.04	5,622.84	896.85	36.26	47.38	19.33
2012	59,929.89	6,537.54	1,026.90	47.55	255.73	19.37
2013	63,218.72	7,118.98	1,387.33	46.25	102.34	18.92
2014	67,152.79	7,904.03	1,631.52	37.5	293.51	18.24
2015	69,023.93	8,837.00	2,111.53	29.01	1064.6	19.68
2016	67,931.24	11,058.20	3,478.92	28.02	1109	21.31
2017	68,490.98	12,578.80	5,787.51	40.5	193.55	19.67
2018	74,694.00	12,774.40	7,759.20	42.84	20.01	19.63
2019	66,837.73	10,293.80	5,853.21	38.7	78.3	16.42

Source: CBN Statistical Bulletin and the World Bank Global Development Index (2019)