

## **Empirical Investigation of the Nexus among Fiscal Policy, COVID-19 and Economic Growth in Nigeria**

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### **Abstract**

This study was carried out to determine the effect of fiscal policy variables and Covid -19 on Nigeria economic growth from 2015Q1 to 2020Q4. The Ordinary Least Square (OLS) econometric method was employed in testing the relationship among the variables and the results revealed that external debt as a fiscal policy variable has direct and significant effect on the growth of the Nigerian economy while total government revenue has direct but insignificant impact on the growth of the Nigeria economy. Furthermore, the COVID-19 has direct and insignificant effect on the growth of Nigeria's economy but the interaction between COVID-19 and fiscal policy have an adverse effect on the country economy. Therefore, it was, recommended that the Nigerian government needs to fine-tune its fiscal responsibility by increasing its revenue and expenditure based to bust the growth sector of the Nigerian economy since expenditure is a function of revenue and there is a need to redirect fiscal policy measures toward varying the Nigerian economy from oil and the Nigerian government should have the political will to applied Anti-corruption laws, so that diversion of external debt fund to private pocket can be curtailed.

**Keywords:** Fiscal Policy, Economic Growth, Government Revenues, COVID-19 and Pandemic.

### **Introduction**

It is a conventional truth that market mechanism cannot solely perform all the economic functions in a country and such make public policy inevitable to correct, direct and complement the market forces. Fiscal policy is one of such policy government uses to correct market imperfections and malfunctioning. In Nigeria, governments at various times had used these policies to manage the economy with a view of achieving desired macroeconomic objectives such as price stability, full employment, reduction of poverty levels, high and sustainable economic growth, stable exchange rate, favorable balance of payment and reduction in the nation's debt. However, the performance of this policy was render impotent due to outbreak of COVID-19 pandemic in 2019 which causes significant economic, social, and political disorder.

Adesoji & Asong (2020) noted that the Coronavirus outbreak, later coded as COVID-19, hit the world like a thunderbolt towards the end of December, 2019 and it was first discovered in Wuhan city, China and World Health Organisation (WHO) declared that the health crisis in China had a global potential threat because of the modern world market mechanism entrenched in the

concept of globalisation and the position of China as the manufacturing sector hub of the world. Available statistics as at the 17<sup>th</sup> of April showed that the total global confirmed cases of COVID-19 were 139,501,934 while the global death toll was 2,992,193. This indicated a 2.14 percent fatality rate while a total of 751,452,536 vaccine doses have been administered (WHO, 2020). Africa continent being classified as highly vulnerable continent have a total confirmed cases of COVID-19 stand of 4,395,884 cases; with about 9,263,298 recoveries and 117,061 deaths recorded, with about 2.7% fatality rate (WHO, 2020). Furthermore, 3,943,388 people have recovered from the illness as at 17<sup>th</sup> of April, 2021. These represent an 89.7% recovery rate and about 9,263,298 people were also vaccinated.

However, Nigeria recorded the first case of COVID-19 on the 27th February, 2020. As at 17<sup>th</sup> of April, the total confirmed cases in Nigeria stood at about 164,147 with 154, 304 discharged and 2,061 deaths, representing about 98.74 percent recovery rate and 1.26 percent fatality rate respectively which revealed low confirmed case in Africa and Nigeria inclusive. Asongu, Diop & Nnanna (2020) observed that the low number of confirmed cases of COVID-19 in African suppose to be high due to low level of public health infrastructure, governance structure, porous borders, weak institutions, inter alia, in the region but concluded that the low number of confirmed cases in the region is due to low testing capacity and not necessarily because of location or the effectiveness of containment policies of the government.

Farayibi & Asongu (2020) asserted that the Coronavirus pandemic represents both public health and economic crisis. The public health crisis addresses disease containment measures, treatment and development of vaccines, increase in infant mortality rate, morbidity rate, etc. while the economic crises are reflected in supply and demand shocks as well as oil price shock, consequent upon disruptions in economic activities caused by global lockdown. The interrelationship between the health and economic crisis is that improved health reduces mortality, boosts population size as well as productivity and on reverse case reduces population size of any nation because when the value of the extra lives result from health improvements is taken into account, the effect of health improvements on economies will be much greater than the effect on per capita GDP alone (Bloom, Canning, Fink & Finlay 2007). This implies that improved in health statuses of the citizen improve the nation economic activities all things being equal.

The outbreak of the Coronavirus has thus disrupted the conduct of monetary and fiscal macroeconomic policies across the globe and Nigeria inclusion. For instance, the crash in the price of oil has exposed major fault lines in the Nigerian economy. Since independence in 1960, the Federal Government has consistently relied on crude oil exports as its primary source of revenue, leaving its finances vulnerable to oil price shocks. Farayibi & Asongu (2020) noted that Nigeria as a developing country has faced the burden of the fluctuations in the price of crude oil - which accounts for about 70 percent of her gross domestic product (GDP) and 65 percent of total government revenue. The rise in government spending driven by the need to combat the effect of COVID-19 had increased the country's fiscal deficit and her susceptibility to high public debt vulnerabilities. Furthermore, the dismal in global capital inflows and outflow due to lockdown has put serious pressure on the country foreign exchange reserves and exchange rates have also affected the conduct of sundry fiscal policies in the country. This situation is expected to result into macroeconomic consequences such as decline in economic growth.

There have been a number of interventions from various government through fiscal policy to cushion the effect of COVID-19 such as the adjustment in the 2020 budget, the stimulus package by the CBN, the downward adjustment of the pump price of petrol despite it has also increases, reliefs announced by the Federal Inland Services (FIRS) through tax cut for business and the Emergency Economic Stimulus Bill introduced by the National Assembly. Furthermore, Farayibi & Asongu (2020) revealed that other fiscal intervention are N984 million contingency fund released to Nigeria's centre for disease control (NCDC), N6.5billion released for the purchase of testing kits, opening isolation centres across the 36 states and training medical personnel, Lagos State got a grant of N10billion to increase capacity for containing the outbreak, Review of 2020 Budget and a cut in capital spending by N1.5trillion, provision of N500 billion fiscal stimulus package (styled COVID-19 Intervention Fund) to support healthcare facilities, provide relief for tax payers and incentive to employers, Introduction of Import duty waivers for pharmaceutical firms, regulated fuel prices have been reduced, and an automatic fuel price formula introduced to ensure fuel subsidies are eliminated, Increase of the social register by 1 million households to 3.6 million to help cushion the effect of the lockdown.

However, despite these fiscal measures, the Nigerian economy has dwindled in terms of economic growth for the year 2020. In the third quarter of 2019 the growth of the Nigerian economy was 2.5% and diminishes into 1.87% in first quarter of 2020. The second and the third quarter of the same year recorded -6.1% and -3.62% respectively which portray that the country is into recession also Nigeria, Africa's largest economy, has been ranked third on a list of countries with the highest unemployment rate globally. Therefore, the main of objectives of this study are to empirically evaluate the effect of fiscal policy variable and COVID-19 on Nigeria's economic growth.

### **Conceptual Issues**

Fiscal policy is a deliberate exercise of government power to tax and spend for the purpose of bringing the nation's output and employment to a desired level (Oriakhi, 2019). Fiscal policy is formulated and directed toward achieving macroeconomics objectives such as economic growth, distributive justice, economic and price stability, restricting monopolies, growth of public sector etc. Fiscal policy has conventionally been related with the use of taxation and public expenditure to influence the level of economic activities. The implementation of fiscal policy is essentially routed through government's budget. The budget is, therefore, more than a plan for administering the government sector. As it also used to shape a country's economic life, in fact, the most important aspect of a public budget is its use as a tool in the management of a nation's economy (Omitogun & Ayinla, 2007).

The coronavirus disease (COVID-19) is caused by a new strain of coronavirus (SARS-CoV-2) that has not been previously identified in humans. The coronavirus disease (COVID-19) is caused by a new strain of coronavirus (SARS-CoV-2) that has not been previously identified in humans. The virus is said to belong to the family of ribonucleic acid (RNA) viruses. Ololo, Onyedikachi & Allens (2020) asserted that the name "Coronavirus" came about because the virus particle exhibits characteristics of 'corona' (crown) of spike protein around its lipid environment. The disease is usually common in animals and humans. It is equally highly contagious and can be transmitted between animals and humans. The deadly virus is said to cause illness ranging from the common cold, poor breathing and acute respiratory syndrome. It is because of the wide spread and the prevalent nature of the disease across the world that the WHO has come to refer to the COVID-19 as pandemic. The disease was first reported to WHO on the 31st of December, 2019 in Wuhan, China.

The concepts of economic growth have multi-conceptual definitions. Aigbokhan (1995), cited in Imoughele & Ismali (2015) defined economic growth as the rate of change in national output or income in a given period. The increase in output is brought about through increase in the capital stock, increase in population or increase in productivity of the labour force or technological progress or discovery of some new resources deposit. Olopade & Olopade (2010) noted that economic growth represents the expansion of a country's potential GDP or output. For instance, if the social rate of return on investment exceeds the private return, then tax policies that encourage can raise the growth rate and levels of utility.

### **Theoretical Issues**

On the theoretical issues, one way to look at the literature on the relationship between fiscal policy and economic growth might be to review the predictions of classical theory, neoclassical theory, the Keynesian theory and the Ricardian Equivalence theory on the subject matter. The classical theory stresses restraint on government intervention because the economy is best left to run on self-correcting mode. That allowed the forces of demand and supply to determine the growth of an economic activity. While the Neoclassical theory is concerned with the real crowding out effect of fiscal policy which involves increase in government borrowing relative to taxation led to reduction in private investment. The neoclassical theory of fiscal policy stresses the need for manage even of tax (Lucas, 1986; Barro, 1989). This theory emphasises on the expenditure induced deficits, whereby budget deficits are used to meet the increasing public expenditure, while maintaining low tax rates.

On the other hand, Keynesian theory considers government intervention through taxation and expenditure policies as a desirable force that helps to stabilise output and possibly enhance economic growth. This was postulated by British economist, John Maynard Keynes, who put forward the argument that under-spending by governments depress economic performance and exacerbate the rate of unemployment. He argues that in order to reduce unemployment, government should deliberately create expansionary fiscal policy of deficits financing to stimulate demand for goods and services and in the process drive output and create employment which will have a spillover effect on economic activity. The school of thought emphasised on government intervention in the administration of economic problems necessitated by Covid-19 which led to Nigeria economic recession through budget deficits. He stated that it is wrong to assume that competitive markets will, in the long run, deliver full employment or that full employment is natural, self-righting, equilibrium state of a monetary economy as in the neoclassical economics.

Finally, the Ricardian theory of fiscal policy stress that government expenditure must be financed by taxes either now or sometimes in future, i.e. budget deficit is simply described as postponed tax (Ussher, 1998). Budget deficits can influence the price level through aggregate demand changes and it should change the expected value of the future taxes. In this sense, budget deficits and taxation are said to have equivalent effects on the economy hence the term, "Ricardian equivalence hypothesis" (Barro, 1989). However, Fontana (2009) concluded that there is nothing closely approaching an agreement among modern theories on the effects of fiscal policy on economic activities.

### **Empirical Literature**

The empirical literature on the effects of fiscal policy and COVID-19 on economic growth is still scant because as we write, the pandemic is still increasing across the world with other regions becoming epic centers despite the gradual development of vaccine. A good premise to start the review therefore is to glean a similar incidence from a historical study. Farayibi & Asongu

(2020) reviewed the macroeconomic impact of the COVID-19 pandemic in Nigeria. the study adopt the aggregate supply and aggregate demand (AS-AD) model for its theoretical framework and the trend analysis revealed that the number of infected cases reflects significant correlations with economic activity while the estimates from dynamic ordinary least squares (DOLS) show that nexuses between the number of confirmed cases and attendant macroeconomic outcomes are largely insignificant with the expected signs and concluded that the COVID-19 pandemic has insignificant negative impacts on basic macroeconomic variables in Nigeria such as inflation, employment, exchange rate, GDP growth, among others. The study recommended that the Nigerian government should engaged the Economic Sustainable Plan (ESP, 2020), which is a post-COVID-19 recovery plan to reposition the country's economy on the path towards inclusive and sustainable economic development.

Boissay & Rungcharoenkitkul (2020) also reviewed the macroeconomic effect of COVID-19 on the US economy. They found that the economic cost of the COVID-19 pandemic can be proxied by GDP foregone, most especially based on the comparison between the current GDP forecast and the COVID-19 outlook. The study also revealed that COVID-19 would lead to output loss which ranged between 5-9 percent for the United States and between 4 and 4.5 percent for the global economy. The study recommended that a better understanding of the transmission channel of the COVID-19 shock to the economy, the interaction between economic decisions and the pandemic and the policy trade-off would assist in reducing the macroeconomic effect of the pandemic. Fornaro & Wolf (2020) modelled the impact of COVID-19 on macroeconomic policy in order to assess the macroeconomic implications of the pandemic. They asserted that COVID-19 would cause a negative supply shock to the world economy by forcing factories to shut down and disrupting global supply chains. They also found that Coronavirus caused a fall in demand and involuntary unemployment. Social distancing impaired the ability of households to spend and the study concluded that the coronavirus would cause a short-lived negative supply shock and concluded that there is need for drastic policy interventions such as monetary and fiscal policies might prevent the negative supply shock from severely affecting employment and productivity.

Loayza & Pennings (2020) further examined the conduct of macroeconomic policy in the time of COVID-19 in for developing countries. They opined that the pandemic reflected both worldwide public health emergency and an international economic crisis whose consequences surpassed the global financial crisis of 2008-2009. The study found that, first; the human and economic costs of the COVID-19 are likely to be higher in developing countries because of the structure of their economies which aggravates the impact of shutdowns and reduction in economic activities. Second, factors such as lower health care capacity, larger informal sectors, shallower financial markets, less fiscal space, and poorer governance are likely to stymie the gains of sundry containment measures taken. In order to reduce the vulnerability of citizens due to the pandemic, a viable macroeconomic policy that would strengthen monetary transmission and fiscal space as well as increase fiscal multipliers is worthwhile. This would ensure macroeconomic stability and enhance the quality of governance.

KPMG (2020) examined the economic impact of COVID-19 in Nigeria with emphasis on business activities. Findings revealed that the pandemic has a twin shock on the Nigerian oil-dependent economy, namely, global and domestic shocks as well as oil price shock. The study opined that the twin shocks are expected to affect the economy through the supply, demand and financial channels. The study concluded that the social-economic impact of the pandemic might still persist well after the virus had been conquered. Olubusoye & Ogbonna (2020) investigated the impact of the emergence of COVID-19 on some macroeconomic fundamentals (oil price,

exchange rate, All Share Index (ASI), inflation and output growth), in a bid to make projections for Nigeria's economic growth. The study employed basic statistical and risk analytic tools to assess the behaviour of the macroeconomic fundamentals, for periods starting from the announcement of the COVID-19 pandemic. The results showed that COVID-19 has negative impact on global oil prices, Naira/USD exchange rate, Nigeria all share index, inflation and growth rate, with these impacts worsening as the pandemic lingers. The country's budget estimate is also negatively affected, given the large changes between the budget assumptions and stance during the COVID-19 pandemic and this led to external borrowing, hence increasing the debt burden of the country. The study concluded that Nigeria, just like most developing countries, is at a risk of an impending recession.

Ozili (2020) analysed the COVID-19 situation in Nigeria and its effect on the economy and the structural causes that worsen the coronavirus (COVID-19) crisis. The findings revealed that the economic downturn in Nigeria was triggered by a combination of declining oil price and spillovers from the COVID-19 outbreak, which not only led to a fall in the demand for oil products but also stopped economic activities from taking place when social distancing policies were enforced. It was concluded that government responded to the crisis by providing financial assistance to businesses and a small number of households that were affected by the coronavirus (COVID-19) outbreak. The monetary authority adopted accommodative monetary policies and offered a targeted ₦3.5trillion loan support to some sectors. He concluded that these efforts should have prevented the economic crisis from occurring but it didn't because economic agents could not freely engage in economic activities for fear of contracting the COVID-19 disease that was spreading very fast at the time.

Ololo, Onyedikachi & Allens (2020) look at the economic impact of COVID-19 and policy implications for Nigeria. They noted that the novel COVID-19 pandemic has indeed brought untold attendant consequences not just on human lives but the economic well-being of Nigeria and the world at large. Because the strict containment and mitigation measures enforced by government of various territorial entities and units to contain the spread of the virus have adverse consequences on the global supply of food and primary commodities, foreign financial flows; particularly, in the area of remittance, which serves as a source of revenue for the government and various households in Nigeria. With crude oil price in the global market falling below the oil benchmark price projected as a guide for the Nigeria budget, Nigeria is operating at deficit level. Sequel to these realities on ground, the study recommended that there is need for immediate diversification of the economy, enhanced provision of micro economic facilities to those in the informal sector and prompt re-strategising and immediate policy measures should gear towards sound micro-economic and fiscal measures to contain the adverse shocks of COVID-19 on the Nigerian economy.

Using the Augmented Dickey-Fuller (ADF) test of stationarity and granger causality test Ozougwo (2012) assessed the impact of fiscal policy on the economic growth of Nigerian for the period 1978 to 2011. The result showed that taxation as a fiscal policy variable has an insignificant negative influence on economic growth; although, it granger-causes economic growth. On the other hand, deficit financing revealed an insignificant positive effect and a bi-directional causality on economic growth while government expenditure has an indisputable, significant, and positive effect (but lacks causality) on economic growth in Nigeria. Alimi, Yinusa, Akintoye & Aworinde (2015) examined the relationship between fiscal policy and macroeconomic performance in Nigeria in the post economic crisis era. The vector autoregressive, granger causality and impulse response function estimators are employed to capture the interactions between fiscal policy and macroeconomic variables. The findings

indicated that the previous values of government revenue employed in financing government expenditure have impact on macroeconomic factors except for per capita income growth.

Babalola (2015) examined the short and long run impact of fiscal policy on economic development in Nigeria between a period of 1981 and 2013 using annual time series data of government recurrent expenditure, government capital expenditure, government investment and tax revenue to indicate fiscal policy. Economic development was proxied by real per capita income. The result showed that government recurrent expenditure and government investment have significant positive impact on economic development in both the short and long-run. Capital expenditure appeared to have a short run positive impact but not in the long run. Tax revenue had an inverse significant impact in both short and long-run. Idris, Bakar & Ahmad (2018) studied the effects of fiscal operations on the economic growth and stability with the view to identifying its significance on real output growth and sustainable development. The study utilises an annual time series data covering the period of 1980 to 2015 and further adopts an ARDL model for estimation. The overall results indicated that fiscal operations lead to economic growth as shown by the Baseline model; and it also leads to economic stability as revealed by the Alternative model and concluded that any meaningful spending with corresponding taxation will improve the public sector performance and produce a desirable outcome on output growth and strengthen the capability of fiscal operations in terms of economic management.

Olubunmi, Chinedu, Yusuf & Sokunbi (2019) explored the relationship between fiscal policy and economic growth in Nigeria. Data were collected from the Central Bank of Nigeria Statistical Bulletin from 1990 to 2017 and the study employed the Autoregressive Distributed Lag (ARDL) model and Error Correction Model (ECM). The study revealed that economic growth and government revenue have a significant positive relationship in Nigeria in the short-run, but the relationship becomes negative in the long-run. However, recurrent expenditure has a significant negative relationship with economic growth in the short-run, but the relationship becomes insignificant in the long-run.

### Methodology

The research design adopted in this study was ex-post facto design (the use of secondary data). This study is to empirically evaluate the impact of fiscal policy (public debt and total government revenue) and COVID-19 on economic growth in an emerging economy such as Nigerian Economy. Data used in this study were all secondary quarterly time series data extracted from the Central Bank of Nigeria (CBN) statistical bulletin and National Bureau of Statistics (NBS) for the 2015Q1-2020Q4 periods.

### Model Specification

The relationship between fiscal policy and COVID-19 on Nigeria economic growth for this research work is expressed in a linear econometric model as follows:

$$GDP_t = \beta_0 + \beta_1 GVR_t + \beta_2 COVID_t + \beta_3 DEBT_t + \beta_4 GVR * COVID_t + U_t \quad 1$$

Where:

GDP = Gross domestic product proxy for economic growth

GVR = total government revenue

COVID = COVID-19 proxy by dummy variable

DEBT = External Debt

GVR\*COVID = interaction of fiscal policy and COVID-19

$\beta_0 - \beta_4$  = Coefficients of the independent variables

$u_t$  = Stochastic Disturbance Term

t = Time of Observation

### Methods of Data Analysis

The researcher employed an econometric instrument of Ordinary Least Square (OLS) research techniques to examine the exact relationship among the dependent and independent variables. The Ordinary Least Squares method of analysis is Unbiased, it is simple to understand and reliable for prediction compared to the other method of econometric techniques. The aim of this study is to decide whether a relationship exists between fiscal policy, COVID-19 and economic growth in Nigeria.

### Results and Discussion

Using the data covering the period 2015Q1- 2020Q4, we regressed and analysed the results of the model which were specified in section three using EView 9.5 computer software package. The regression results are presented in two ways. The first results present the effect of fiscal policy and COVID-19 on economic growth while the second results present the interaction of fiscal policy and COVID-19 on Nigeria economic growth. The result of the estimation of the effect of fiscal policy and COVID-19 and its interaction on economic growth is presented in table 1 and 2 below:

**Table1: Long-Run Regression of the Effect of Fiscal Policy and COVID-19 on Economic Growth**

Dependent Variable GDP				
Variable	Coefficient	Standard Error	t-Statistic	Prob.
C	-28.60311	131.2783	-0.217882	0.8298
GVR	-9.07E-07	7.23E-06	-0.125404	0.9015
COVID	161.3956	62.83119	2.568717	0.0188*
DEBT	0.015699	0.005714	2.747569	0.0128*
$R^2 = 0.652432$ ; $R^{-2} = 0.597553$ ; F-Statistic = 11.88851*; D.W Statistic 1.661396				

Note: \*Significant at 5 per cent

Source: Regression Output using Eviews 9.5 (2021)

**Table 2: Long-Run Regression of the Interaction of Fiscal Policy and COVID-19 on Economic Growth**

Dependent Variable GDP				
Variable	Coefficient	Standard Error	t-Statistic	Prob.
C	-1308.731	2126.492	-0.615441	0.5460
GVR	3.46E-05	5.93E-05	0.583226	0.5670
COVID	1467.175	2165.766	0.677439	0.5067
DEBT	0.017089	0.006252	2.733314	0.0136*
GVR*COVID	-3.72E-05	6.17E-05	-0.603181	0.5539
$R^2 = 0.659318$ ; $R^{-2} = 0.583611$ ; F-Statistic = 8.708796*; D.W Statistic 1.579751				

Note: \*Significant at 5 per cent

COVID-19 and external debt have positive and significant relationship with Nigeria economic growth. A unit rise in COVID-19 and external debt lead to 161.3956 and 0.015699 units increase in economic growth in Nigeria respectively. With the probability value of COVID-19 and external debt being less than the test significant level (i.e.  $P < 0.05$ ), we conclude that COVID-19 and external debt have significant impact on Nigeria economic growth which is not consistent with the *apriori* expectation. This implies that during pandemic government increase their expenditure and even borrow to finance the economy to bust their economic activities.

Total government revenue and economic growth in Nigeria are negatively and insignificantly related. From the result in table 1 above, the probability value of total government revenue (0.9015) is greater than the test significant level (i.e.  $P < 0.05$ ). Hence, we conclude that total government revenue has insignificant effect on Nigeria economic growth. Perhaps, this outcome may be attributed to the effect of COVID-19 on price of crude oil in the international which led to the massive dwindling in the Nigeria revenue generation which has adverse effect on economic growth.

The coefficient of determination (adjusted R-squared) shows that 65 percent of the variations in Nigeria economic growth are caused by changes in government total revenue, COVID-19 and external debt. Therefore, only 35 percent of variations in economic growth in Nigeria are caused by other factors not included in the model. This represents a very good-fit. The Durbin-Watson (DW) statistic of 1.661396 is within permissible levels suggesting the absence of positive serial auto-correlation. More so, since  $DW > R^2$ , we conclude that the regression result is not spurious and economically stable in measuring the level of government total revenue, COVID-19 and external debt on economic growth in Nigeria.

From the regression results in table 2, total government revenue and COVID-19 have positive but insignificant effects on Nigeria economic growth while external debt has direct and significant impact on the nation economy. With the probability value of COVID-19 and total government revenue greater than the test significant level (i.e.  $P < 0.05$ ), we conclude that COVID-19 and government revenue have insignificant impact on Nigeria economic growth while external debt and economic growth are significantly related since the probability value (0.0136) is less than the test significant level (i.e.  $P < 0.05$ ). Hence, external debt has significant effect on Nigeria economic growth which is not consistent with the theoretical expectation. The coefficient of interaction between fiscal policy and COVID-19 have negative effect of Nigeria economic growth which point to the fact that COVID-19 and the fiscal policy formulated to curb the pandemic has not contributed to Nigeria economic growth. From the result in table 2, the probability value of the interaction of COVID-19 and fiscal policy (0.5539) is greater than the test significant level (i.e.  $P < 0.05$ ).

The coefficient of determination (adjusted R-squared) shows that 58 percent of the variations in Nigeria economic growth are caused by changes in government total revenue, COVID-19, external debt and interaction between COVID-19 and fiscal policy. Therefore, only 42 percent of variations in economic growth in Nigeria are caused by other factors not included in the model. This represents a very good-fit. The Durbin-Watson (DW) statistic of 1.579751 is within permissible levels suggesting the absence of positive serial auto-correlation. More so, since  $DW > R^2$ , we conclude that the regression result is not spurious and economically stable in measuring the level of government total revenue, COVID-19, external debt and interaction between COVID-19 and fiscal policy on economic growth in Nigeria.

### **Conclusion and Policy Implication**

The main premise of this study is to examine the impact of fiscal policy and COVID-19 on Nigeria economic growth. This study employed empirical analysis to examine the effect of fiscal policy (total government revenue, external debt), COVID-19 and interaction between COVID-19 and fiscal policy on economic growth in Nigeria using data from 2015Q<sub>1</sub> to 2020Q<sub>4</sub>. The Ordinary Least Square (OLS) econometric method was employed in testing the relationship among the variables and the results revealed that external debt as a fiscal policy variable has direct and significant effect on the growth of the Nigerian economy on the long runs. This result is consistent with Ndubuisi (2017) and Odubuasi, Uzoka & Anichebe (2018) who revealed that external debt stock has positive and significant effect on Nigeria's economic growth index but contrary to Onakoya & Ogunade (2017) who stated that external debt as a fiscal policy variable had inverse impact on economic growth in Nigeria. While total government revenue has direct but insignificant impact on the growth of the Nigeria economy which is in line with Olubunmi, Chinedu, Yusuf & Sokunbi (2019) position that government revenue have positive relationship with Nigeria economic growth.

Furthermore, the COVID-19 has direct and insignificant effect on the growth of Nigeria's economy. This result point to the fact that during pandemic government try as much as possible to spend more money to stimulate economic growth but the interaction between COVID-19 and fiscal policy has an adverse effect on the country economy. This is consistent with the position of Ololo, Onyedikachi & Allens (2020) and Ozili (2020) that the novel COVID-19 pandemic has brought untold attendant consequences not just on human lives but the economic well-being of Nigerian and the world at large which lead to output loss and declined in economic growth.

Therefore, from the findings of the study, it can be reasonably concluded that the fiscal policy has contributed significantly to the growth of the Nigerian economy while COVID-19 and interaction of it with fiscal policy has no robust impact on the growth of the nation economy. Therefore, to pursue the quest for growth in the Nigerian economy during and post COVID-19 the following recommendations are advocated. First, the Nigerian government needs to fine-tune its fiscal responsibility by increasing its revenue and expenditure to the growth sector of the Nigerian economy since expenditure is function of revenue. Secondly, the government should encourage and intensify efforts at entrenching fiscal freedom by putting in place functional agencies that would monitor the implementation of external debt incentives meant for deserving sector of the nation economy. Third, there is a need to redirect fiscal policy measures toward diversifying the Nigerian economy from oil. This will increase the country revenue base and expenditure. Finally, the Nigerian government should improve the overall institutional quality in the country, promote favorable institutional environments, make it stronger and Anti-corruption laws should be applied strongly, so that diversion of external debt fund to private pocket can be curtailed.

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