

Fiscal Policy: Institutional Quality and the Quest for Growth of Manufacturing Sector in Nigeria

**Lawrence Ehikioya Imoughele, Ph.D.¹
and Gabriel Emeke Okoro²**

¹Department of Economics, Faculty of Social Sciences,
Ambrose Alli University, Ekpoma, Edo State, Nigeria

²Department of Economics, University of Delta, Agbor,
Delta State, Nigeria

¹Email: imolawrence@aauekpoma.edu.ng

²Email: okoroemeke2020@gmail.com

Abstract

Different rationales have been adduced for Nigeria's poor economic performance. The major problem has been the economy's constant reliance on the wealth from the crude oil earning without any meaningful economic diversification to accelerate the growth of the manufacturing sector. The productivity of this sector has dwindled over time in spite of government's intervention through fiscal policy and institutional quality reforms. It is against this backdrop that this study employed cointegration and error correction methodology to examine the effect of fiscal policy (total government expenditure on the manufacturing sector and company income tax), institutional quality (economic freedom index and fiscal freedom index) and exchange rate on Nigeria's manufacturing sector using data from 1995 to 2020. The residual co-integration result revealed that Nigeria's manufacturing sectors are cointegrated with the explanatory variables. The findings from regression results show that fiscal policy contributed significantly to the growth of Nigeria's manufacturing sector while institutional quality has no robust effect on the growth of Nigeria's manufacturing sector productivity because of poor institutional structure in the Nigerian economy. Therefore, the study recommended that the Nigerian government needs to fine-tune its

fiscal responsibility by increasing its expenditure to the manufacturing sector. As well, government should encourage and intensify efforts at entrenching fiscal freedom by putting in place functional agencies that would monitor the implementation of tax incentives meant for deserving manufacturing firms. Lastly, the Nigerian government should improve the overall institutional quality in the country, promote favourable institutional environment and anti-corruption laws should be applied strappingly so that illegal manufacturing industrial business could be curtailed.

Keywords: Fiscal policy, Institutional quality, Manufacturing sector, Government expenditure, Tax.

Introduction

Over the years, the Nigerian economy has been reputed to be mono given its dependence on crude oil as it contributes over 94 percent of the country's foreign exchange earnings. This mono-economy has been termed unsafe, inadequate and unsatisfactory for a nation with the magnitude of abundant natural and human resources at its disposal. Regrettably, the subject of diversification of the Nigerian economy has received lip service since independence in 1960 from military and civilian administrations and economic planners or managers of the economy (Omoera, 2010). In the face of the current global and overwhelming economic downturn occasioned by COVID-19, it is germane to reemphasise the need to diversify the economy to promote the growth of the manufacturing sector in post-COVID-19 pandemic Nigeria. Mike (2010) observes that in modern economies, the manufacturing sector serves as a vehicle for the production of goods and services and the enhancement of incomes. It also serves as a major driving force; an antidote for unemployment, a creator of wealth, and a channel for sustainable development capable of promoting industrialization in an economy.

The manufacturing sector further acts as a catalyst that accelerates the pace of structural transformation and diversification of the economy, which enables a country to utilize its factor endowments and depend less on the foreign supply of finished goods or raw materials (Adediran & Obasan, 2010). Ademuyiwa and Ezie (2017) claim that the sector creates investment capital at a faster rate than any other sector of the economy while promoting wider and more effective linkages among different sectors; and hence, the manufacturing sub-sector can be best described as the

heart and engine for economic growth and development. Therefore, for many emerging economies such as Nigeria, the development of the manufacturing sector is imperative for meaningful and sustainable national growth and development. Furthermore, Imoughale and Ismaila (2014) posit that the manufacturing sector in Nigeria epitomizes a major plank in the government's plan to reorganise the economy and diversify its productive base. It serves as an avenue for increasing productivity with import replacement and export expansion, creating foreign exchange earning capacity, raising employment and per capita income level which helps to cause an increase in consumption patterns.

Despite these laudable contributions of the manufacturing sector to economic growth, the Nigerian manufacturing sector has been experiencing a decline in terms of output in recent times. For instance, the contribution of the manufacturing sector to gross domestic product (GDP) between 1986 and 1992 was 24.10 per cent. It decreased to an average of 11.14 per cent and 9.70 percent between 1993 and 1999 and from 2000 to 2006 respectively and further contributed a marginal and insignificant increase of 10.07 per cent between 2007 and 2019 (Central Bank of Nigeria, CBN, 2019). Also available data from the CBN (2019) indicates that the average capacity utilization rate in the sector, which spanned from 1995 to 2019 has been consistently below the 58 per cent level with an average of 44.46 percent. This implies a huge loss in potential output and employment, and inefficient use of investors' resources in the sector (Edame & Okoi, 2015). The unimpressive performance of the sector in Nigeria is mainly due to huge importation of finished goods and inadequate financial support for the manufacturing sector, which ultimately has contributed to the reduction in capacity utilization of the sector in the country (Charles, 2012). This underscores Odior's (2013) position that the Nigerian manufacturing sector continues to experience challenges concerning access to credit from the banking sector, which in turn affects the importation of raw materials.

Others issues include the epileptic supply of electricity and the frequent increases in the pump price of diesel and fuel used to run generators as a source of private power supply. Furthermore, the poor performance of the manufacturing sector is attributed to the high production cost as a result of high cost of foreign exchange

procurement, high-interest rates, poor demand for made-in-Nigeria products, insufficient raw materials supply needed for production, inadequate working capital and frequent machine breakdown. All these coupled with inadequate finance snowball into low capacity utilization. Omojimite (2012), Madni and Chaudhary (2017) and Kolawole (2018) are of the view that to attain improvement in economic activities, institutions and fiscal policy matters must be given adequate attention. Fiscal policies are direct policies of government that concern the management of parameters that will directly affect government revenue and expenditure and these policies affect tax rates, interest rates and government spending to control economic activities. North (1990) defines institutions as humanly devised constraints that structure political, economic and social interaction of people. While Bruinshoofd (2016) noted that institutions should be viewed as a basic requirement for economic success and long-term progress and institutional quality are broad perceptions that capture law, individual rights and high-quality government regulation and services. However, Institutional quality and economic progress strengthen each in the long run, but we argue that institutional quality leads to the virtuous circle of economic advancement.

If institutional quality matters and makes people invest in their economic fortunes in the manufacturing sector, then long term growth in the sector should be higher in those countries where initial institutional quality was higher. Therefore, institutional quality contributes to the factors that generate economic growth, and hence, should be considered as a factor of manufacturing sector production. Adebisi and Babatope-Obasa (2004) and Omojimite (2012) agree that institutional quality (e.g. economic and legal institutions) matter for economic growth activity, just as other factors such the resource endowment and technical skills. They affirm that institutions have direct and indirect benefits of economic activities. For example, strong legal institutions that define and enforce property rights attract productive investments from both within and outside the country. They also promote ethical values that promote good conduct and stability in the business environment. These factors have positive effects on overall economic development. Zouhaier (2012) further claims that a sound institutional atmosphere can provide a positive climate that

encourages economic agents, both domestic and foreign, to invest more in economic activities with high added value while on the contrary, institutions of poor quality can increase uncertainty, unpredictability, instability, corruption and transaction and production costs which discourage investment in the manufacturing sector.

As a result of this, the Nigerian government has embarked on various policies to address the issue in the decline of manufacturing sector performance in the country since institutional quality is a conditional variable that can be modulated by public policy such as fiscal policy. Some of the policies involve the use of fiscal and institutional reformed policies such as Budget at the Budget Office of the Federation, Public Procurement by the Bureau of Public Procurement, Accounts and Audits at the Offices of the Accountant General of the Federation and Auditor General of the Federation, Tax reforms at the Federal Inland Revenue Service (FIRS), Information technology and e-Government at the National Information Technology Development Agency (NITAD), Ports and Customs reforms at the Nigerian Customs Service, Anti-Corruption at Independent Corrupt Practices and Other Related Offences Commission (ICPC), Economic and Financial Crimes at the Economic and Financial Crimes Commission (EFCC), Public Service Reforms at the Bureau of Public Service Reforms (BPSR), Nigerian Financial Intelligence Unit (NFIU), Fiscal Responsibility Commission (FRC), Standards organization of Nigeria (SON) amongst other. Even though the government has adopted several policies aimed at improving the growth of the Nigerian economy through the contribution of the manufacturing industry the capacity utilization of the sector is still very problematic. With this perception, one may be tempted to conclude that the use of the policy variables in Nigeria seems not to have resulted in the desired level of growth of the manufacturing sector given the dismal performance of the sector in recent years. Therefore, the main objective of this study is to empirically examine the effect of fiscal policy and institutional quality on Nigeria's manufacturing sector performance.

Several literatures have examined the effect of fiscal policy on manufacturing sector output in Nigeria. Scholars such as Eze and Ogiji (2013), Ezejiofor, Adigwe and Nwaolisa (2015), Falade and Olagbaju (2015), Arikpo, Ogar and Ojong (2017) and Ajudua and Imoisi (2017), among others, have written extensively on the

impact of fiscal policy on the growth of manufacturing sector while Ubi and Udah (2014), Okoi, Benjamin and Bassey (2015) and Abubakar (2020) have also evaluated the impact of institutional quality on the performance of the Nigerian economy with different findings and conclusions. Much attention has not been drawn to the simultaneous effect of fiscal policy and institutional quality on the Nigerian manufacturing sector output. The study of Edame and Okoi (2015) using ordinary least square technique examined the effect of institutional quality on the performance of the manufacturing sector in Nigeria between 1999 and 2013 without considering the effect of the fiscal policy and fiscal freedom index. Hence, there is the need to bridge the noticeable gap in knowledge by examining simultaneously the effects of fiscal policy and institutional quality on the Nigerian manufacturing sector. The study would also seek to expand knowledge by investigating the impact of fiscal freedom index on the manufacturing sector because fiscal freedom index as one of the indicators of institutional quality measures the tax burden imposed by government on economic activities such as manufacturing sector which may encourage or retard the growth of the sector. Following this introduction section, the remaining part of this study is structured into four. Section 2 reviews relevant literature whereas section 3 focuses on the methodology of the study; section 4 presents the empirical analysis of results while section 5 is the conclusion and policy implications.

Review of Related Literature

Fiscal policy can be conceptualised as the use of taxation and government spending to influence any economic activities. Fiscal policy deals with government's deliberate actions in spending money and levying taxes to manipulate macro-economic variables in the desired direction. It is mainly concerned with the uses of government spending, taxation and borrowing to influence the pattern of economic activities and also the level and growth of aggregate demand, output and employment. Okoh (2008) defines fiscal policy as that policy under which the government uses its expenditure and revenue programme to produce desirable effects and avoid undesirable effect for national income, production and employment. Olawunmi and Tajudeen (2007) and Okoh (2008) noted that the implementation of fiscal policy is essentially routed

through the government's budget. According to Anyanwu (1993), the objective of fiscal policy is to promote economic conditions conducive to business growth while ensuring that any such government actions are consistent with economic stability. The policy can either be expansionary or contractionary.

On the issues of the institution, North (1990) sees institutions as the rules of the game in a society or the humanly devised constraints that shape human exchange, whether political, social or economic. They also facilitate coordination and govern relationships between individuals and groups. According to Osabuohien and Efobi (2013), institutions can be broadly categorised into formal and informal. Formal institutions include rules and frameworks documented by specific authorities in the society to regulate the behaviour of various economic agents while informal institutions include customs, beliefs, norms and culture that can inform behaviours of economic agents. According to North (2005), informal institutions are usually not documented. For this study, emphasis is on the formal institutions as governance, contract enforcement, corruption, property rights, legal and security systems, fiscal policy freedom and economic freedom proxy for institutional quality. Oromareghake (2013) has noted that institutional qualities in Nigeria are weak. For instance, in West Africa, Nigeria is rated 13th out of 16 countries and in Africa it occupies 41st position out of 54 countries as regards good governance. Democratic processes have been interjected with autocratic military incursions during which most aspects of the constitution are changed or suppressed, and laws enacted overnight with retroactive effects. The corruption index is also very high. These create uncertainties that are inimical to investments and property rights.

The manufacturing sector includes those industries that are involved in the manufacturing and processing of items and indulge or give free rein in either the creation of new commodities or in value addition (Adebayo, 2011). This sector accounts for a significant share of the industrial sector in developed countries. The final products can either serve as finished goods for sale to customers or as intermediate goods used in the production process. Mbelede (2012) affirms that the manufacturing sector is involved in the process of adding value to raw materials by turning them into finished products. The manufacturing industry is broadly categorised into engineering industries, construction industries,

electronic industries, chemical industries, energy industries, textile industries, food and beverage industries, metalworking industries, plastic industries, transport and communication industries (Economic Watch, 2017). Charles (2012) noted that the manufacturing industries create employment, which helps to boost agriculture and diversify the economy in the process of helping the nation to increase its foreign exchange earnings. On the empirical base, Eze and Ogiji (2013) examined the impact of fiscal policy on the manufacturing sector output in Nigeria. Empirical evidence from the ex-post facto design (quantitative research design) indicates that government expenditure significantly affects the manufacturing sector output and concludes that if government did not increase public expenditure and its implementation, the Nigerian manufacturing sector output will not generate a corresponding increase in the growth of the Nigerian economy.

Also, Ajudua and Imoisi (2017) investigated the nexus between fiscal policy and the Nigeria manufacturing sector output. Employing the error correction model (ECM) method, time series data for the period 1986-2016 were tested to ascertain the relationship between manufacturing sector output (dependent variable) and three independent variables. Findings from the study established that government expenditure was significant and positively related to manufacturing sector output in Nigeria while government revenue was not significant. They recommended that there is need for government to encourage expansionary fiscal policy measures, diversification of the economy to enhance the performance of manufacturing sector and improved allocation to the manufacturing sector during budget implementation so as to increase the sector performance.

Furthermore, on the issue of manufacturing sector development in Nigeria, Ajayi (2011) in a study of the collapse of Nigeria's manufacturing sector, uses cross-sectional research design and found that the main cause of the collapse in the Nigerian manufacturing sector is the low implementation of the Nigerian budget, especially in the area of infrastructure. This implies that low implementation of fiscal policy affects the level of growth in the Nigerian manufacturing sector. Ezejiofor, Adigwe and Nwaolisa (2015) assessed whether tax as a fiscal policy tool affects the performance of the selected manufacturing companies in

Nigeria using descriptive method and data were collected through the use of six years of financial accounts of the selected companies. The study found that taxation as a fiscal policy instrument has a significant effect on the performance of Nigerian manufacturing companies. The study concluded that the amount of tax to be paid depends on the companies' performances. Based on the findings, it was recommended, among other things, that the government is required to be sensitive to the variables in the tax environment and other macro-environmental factors to enable the manufacturing sector to cope with the ever-changing dynamics of the manufacturing environment.

Falade and Olagbaju (2015) investigated the effect of government capital expenditure as a fiscal policy variable on the manufacturing sector output in Nigeria. Government expenditure is disaggregated into capital and recurrent to analyse the relative effect of these categories of government expenditure with emphasis on the capital component. They used time series data from 1970 to 2013. Data on the manufacturing sector output, capital and recurrent expenditure, nominal and real gross domestic product (GDP), exchange rate and interest rate were collected from statistical bulletin and annual report and statement of accounts published by the Central Bank of Nigeria (CBN). Econometric evidence revealed that the government's capital expenditure has a positive relationship with the manufacturing sector output in Nigeria; recurrent expenditure exerts a negative effect on the manufacturing sector output.

The study, therefore, suggests that a larger percentage of government expenditure in the annual budget should be on the capital component coupled with improved implementation of expenditure policies rather than recurrent expenditure, which does not have a significant impact on the manufacturing sector. In the same vein, Uzoka and Eze (2015) examined the effect of government capital expenditure on the manufacturing sector output in Nigeria. They used quantitative time series data and multiple regression techniques in the analysis. The result revealed that capital expenditure on road infrastructure and telecommunication affects the manufacturing sector output in Nigeria significantly while government capital expenditure on power has an insignificant effect on the manufacturing sector in Nigeria. The study concludes that the manufacturing sector output is affected by factors both exogenous and endogenous to the

government capital expenditure in Nigeria and, therefore, recommend that there is need for government to reduce its budgetary allocation to recurrent expenditure on the power sector and place more emphasis on the capital expenditures to accelerate economic growth in Nigeria through the manufacturing sector output and that government should also increase spending on road infrastructure, particularly on capital budgeting.

Bakare and Osobase (2015) looked at the impact of monetary and fiscal policies (i.e. stabilization policies) on the performance of the manufacturing industry as a real sector in Nigeria, using an error correction mechanisms model and discover that those policies have an expected impact on the output of the manufacturing sector in Nigeria both in the short-run and long-run. The model makes use of time series data while the least squared was the techniques of analysis, the data were filtered with the use of augmented dickey fuller unit root test while Johansen co-integration test was used to justify the long-run relationship among all included variables. While the error correction model serves as the basis for adjustment from short-run drift (disequilibrium) to long-run equilibrium through its speed of adjustment. The study establishes that stabilization policy has a great impact on the manufacturing sector performance and that if certain adjustments are made it would better the lot of the people by developing the sector, through government fiscal policy and its monetary policy measures. Edame and Okoi (2015) assessed the effect of energy consumption and institutional quality, on the performance of the manufacturing sector in Nigeria between 1999 and 2013 through the use of the ordinary least square technique. The study used three measures of institutional quality: economic freedom index, corruption perception index and contract intensive money. The results of the study show that that the level of corruption perception has a significant effect on the performance of the manufacturing sector and recommended that there is a need for the removal of executive interference in the operations of the country's institutions.

Arikpo, Ogar and Ojong (2017) considered the impact of fiscal policy on the performance of the manufacturing sector in Nigeria from 1982 to 2014. The study specifically assessed the extent to which government revenue and expenditure as fiscal policy variables impact the manufacturing output in the country. Time series data were collected and analysed using the ordinary least

square multiple regression statistical technique. The result from the analysis revealed that increases in government revenue reduce manufacturing sector output in Nigeria and recommended that government should increase its expenditure on infrastructural development and community services, as this will have a multiplier effect on manufacturing activities and enhance economic growth in Nigeria.

Ubi and Udah (2014) descriptively and quantitatively examined how corruption as an institutional quality in Nigeria has impacted economic performance. The regression results revealed that that corruption and institutional quality (measured by contract intensive money) have a statistically significant effect on economic performance in Nigeria. The study recommended that aggressive reorientation and education of the masses and other key decision-makers on the need to desist from rent-seeking activities is necessary and once the plague of corruption is successfully tackled, the institutional quality will be strengthened and the much desired people-centred economic growth will be achieved. Okoi, Benjamin and Bassey (2015) examined the relationship between institutional quality, macroeconomic policy, and economic development in Nigeria. The study employed data from four development indicators. That is the prevalence of undernourishment, life expectancy at birth, the human development index (HDI) and gross domestic product (GDP) per-capita from 1995 to 2013.

The regression results indicated an insignificant impact of domestic institution on Nigeria development indices. Interest rate was also found to have an insignificant impact on economic development in Nigeria but on the hand, government expenditure was found to exert a significant, though small, impact on the country's development indices. Based on the foregoing, they recommended a holistic approach of attitudinal change, systematic strengthening and development of institutions for the attainment of the country's developmental objectives. Anna and Krist (2018) study the role of institutional quality in economic growth and the implications for the Baltic States, which is made up of 113 countries during 2006-2016. The study employed the generalized method of moments (GMM) and the institutional effect is captured by government effectiveness, regulatory quality, tax burden, monetary freedom, financial freedom, trade freedom, strength of auditing and reporting standards, Efficacy of corporate boards, and Strength

of investor protection has a direct and significant effect on economic growth.

Abubakar (2020) used Johansen cointegration and ordinary least square (OLS) methodology to examine the nexus of institutional quality and economic growth in Nigeria from 1979 to 2018. The estimated cointegration test revealed a long-run relationship among the variables. The estimation result showed that economic growth responds positively to institutional quality (contract intensive money) and is statistically significant while effective governance index exerts positive and insignificant influence on the economy. The study concluded that there is a need for quality institutions that can ensure that both private and public enterprises function efficiently for sustainable growth and development in Nigeria. Mir and Idrees (2019) analysed the impact of infrastructure and institutional quality on the industrial growth of Pakistan for the period of 1984 to 2012. The study employed auto regressive distributive lag (ARDL). The finding revealed that both infrastructure and institutional quality has a direct effect in the industrial growth and concluded that that there is a need to make the institutions strong and invest more on infrastructural development to boost industrialization in the country.

Materials and Methods

Theoretical Model

The objective of this study is to examine the impact of fiscal policy and institutional quality on Nigeria’s manufacturing sector output. This was done by examining the impacts of various factors of fiscal policy and institutional quality indicators on the manufacturing sector in Nigeria. Solow’s (1956) model output growth as a function of units of capital and labour remains the most necessary inputs that determine productivity. It is however acknowledged by Nelson and Phelps (1966); Lucas, (1988); Becker, Murphy and Tamura, (1990); Romer (1990) and Barro (1991); that quality (not only quantity) of labour is important in trying to boost the productivity of a country economic activities. This implies that accumulated human capital has a positive impact on manufacturing firms’ productivity. The Cobb-Douglas production function is a starting point of most growth models and this can be specified as below:

$$Y_{it} = A K_{it}^{\alpha} L_{it}^{\beta} \text{----- (1)}$$

Where Y_{it} is the output; K_{it} is the physical stock of capital and L_{it} is the quantity of labour; all of firm i at time t . A is an efficiency parameter representing state of technology in the firm while $\hat{\alpha}$ and $\hat{\beta}$ are the output elasticities which could be used to measure the scale of production of the manufacturing sector: $\hat{\alpha} + \hat{\beta} = 1$ (Constant returns to scale); $\hat{\alpha} + \hat{\beta} < 1$ (Decreasing returns to scale); and $\hat{\alpha} + \hat{\beta} > 1$ (Increasing returns to scale).

To account for human capital in the production function, Mankiw, Romer & Weil, (1992) developed what they called an augmented-Solow Growth model, which can be specified as below:

$$Y_{it} = K_{it}^{\alpha} H_{it}^{\beta} (A_{it} L_{it})^{1-\alpha-\beta} = A_{it} K_{it}^{\alpha} H_{it}^{\beta} L_{it}^{\gamma} \text{-----} (2)$$

Where H_{it} is the stock of human capital of firm i at time t . Equation (2) can be linearized by taking the logarithm of both sides so that the equation is now expressed thus.

$$\log Y_{it} = \log A_{it} + \alpha \log K_{it} + \beta \log H_{it} + \gamma \log L_{it} + \mu_{it} \text{-----} (3)$$

Where Y_{it} , K_{it} , L_{it} and H_{it} are the output, physical capital stock, labour and human capital of firm i at time t respectively. Equation (3) can be further modified to capture other important variables that determine firms' productivity such as institutional quality. The modified equation can be specified as below:

$$\log Y_{it} = \log A_{it} + \alpha \log K_{it} + \beta \log H_{it} + \gamma \log L_{it} + Z + \mu_{it} \text{-----} (4)$$

Where Z is a vector of controlled variables in the firms' productivity model.

Empirical Model

Following the theoretical and empirical studies reviewed, several factors determine manufacturing sector output both at the micro or macroeconomic level in an economy. Based on the availability of data and the nature of this study, the factors that determine the level of manufacturing performance were generally classified into: (i) fiscal policy (total government expenditure on the manufacturing sector and company income tax); (ii) institutional quality (economic freedom index and fiscal freedom index); external factor (exchange rate) and (iii) firm specific variables

(labour force, gross fixed capital formation and deposit money bank credit to the manufacturing sector). Therefore, equation (5) below modeled the above factors:

$$\begin{aligned} \text{LOGMAO}_t = & \beta_0 + \beta_1 \text{LOGLAB}_t + \beta_2 \text{LOGGFCF}_t + \beta_3 \text{LOGTGEM}_t \\ & + \beta_4 \text{LOGCIT}_t + \beta_5 \text{LOGEFD}_t + \beta_6 \text{LOGDCM}_t + \beta_7 \text{LOGFFI}_t + \\ & \beta_8 \text{EXR} + U_t \end{aligned} \quad \text{----- (6)}$$

$\beta_1, \beta_2, \beta_3, \beta_5, \beta_6, \beta_7, >0; \beta_4 < 0,$

Where

LAB = labour force

GFCF = gross fixed capital formation

TGEM = total government expenditure on the manufacturing sector

CIT = company income tax

EFD = economic freedom index

DCM = Deposit Money bank credit to the manufacturing sector.

FFI = fiscal freedom index

EXR = official exchange rate

Ut = error terms

t = current time

The Error Correction versions of the above models are presented as equation 7 below:

$$\begin{aligned} \Delta \text{LOGMAO}_t = & \beta_0 + \hat{\alpha}_1 \Delta \text{LOGLAB}_t + \beta_2 \Delta \text{LOGGFCF}_t + \\ & \beta_3 \Delta \text{LOGTGEM}_t + \beta_4 \Delta \text{LOGCIT}_t + \beta_5 \Delta \text{LOGEFD}_t + \beta_6 \Delta \text{LOGDCM}_t + \\ & \beta_7 \Delta \text{LOGFFI}_t + \beta_8 \Delta \text{EXR} + \beta_9 \text{ECMt}_{-1} + U_t \end{aligned} \quad \text{----- (7)}$$

Where

ECM= error correction mechanism

Sources of Data

To examine the major determinants of manufacturing sector output in Nigeria, the study used time series data covering the period 1995 to 2019. The period was chosen because data for the years before 1995 for some of the variables (FFI and EDF) needed are not available. The data were mainly obtained from secondary sources. Among these are the Central Bank of Nigeria (CBN) Statistical Bulletin (various issues), National Bureau of Statistics (NBS), and World

Governance Indicators (WGI) by World Bank (2020) and World Bank (2020).

Estimation Method

This study utilized the residual cointegration and error correction mechanism (ECM) in explaining the effect of fiscal and institutional quality on the growth of Nigeria's manufacturing sector during the study period. To empirically investigate the long-run effect of fiscal and institutional quality variables on Nigeria manufacturing output as specified in our model, we start the analysis by testing for unit root using the standard Augmented Dickey-Fuller (ADF) test. This test reveals the stationarity or otherwise of the series and choice of model for estimation. The Second step is to examine whether the series are co-integrated. To identify a cointegration relationship among our non-stationary variables, we employed the residual stationarity co-integration test approach. This implies that if there are any deviations from the long-run equilibrium relationship the variables themselves will be stationary. The reasons for adopting the technique of co integration in this instance are; first, discovering that the variables are co-integrated allows for the use of Error Correction Model (ECM), which would lead to the separation of the long-run and short-run impact. Second, it ensures that the presence of co integration between the variable allows OLS estimation in level yield super consistent parameter estimates. Furthermore, the Error correction mechanism (ECM) is a means of reconciling the short-run behaviour of the identified economic variables of the model with its long-run behaviour.

Empirical Analysis of Results

Stochastic Properties of the Series

The Augmented Dickey Fuller (ADF) unit root tests signified that at a first difference, the test statistics are greater than the critical values at the 5% level except for the fiscal freedom index (FFI) which is stationary at a level as shown in Table 1.

Table 1: Stationarity Test

Variable	ADF Test Statistic at Level	ADF Test Statistic at first Difference	5% Critical Value	Prob.	Order of Integration
LOGMAO	-1.828	-3.533	-2.998	0.016	I(1)
LOGLAB	-0.953	-4.850	-2.998	0.000	I(1)
LOGGFCF	-0.725	-4.123	-2.998	0.004	I(1)
LOGTGEM	-1.547	-6.369	-2.998	0.000	I(1)
LOGCIT	-0.618	-4.480	-2.998	0.002	I(1)
LOGEFD	-2.275	-5.751	-2.998	0.000	1(1)
LOGFFI	-6.631	-	2.992	0.000	1(0)
LOGDCM	-1.588	-4.898	-2.998	0.001	1(1)
EXR	-0.133	-3.556	-2.998	0.016	1(1)

Source: Eviews9 Output, 2020.

As revealed in table 1, all the series are integrated of order one 1(1) except fiscal freedom index. Since the series are confirmed to be stationary at the level and first difference, then their linear combination is expected to give a stationary result in the long run or the variables are expected to converge to equilibrium in the long run. The Residual Co-integration test was used to determine the existence of a long-run equilibrium relationship among the variables of the study.

Co-Integration Test

Theoretically, it is expected that a regression involving non-stationary variables may produce spurious results; the co-integration test proves that the combination of stationary and non-stationary variables has a long-run relationship. In this study, the co-integration test was carried out through a residual test. The residual co-integration result is presented below:

Table 4.3: Co-integration residual stationary test result

Null Hypothesis resid01 has a unit root

Exogenous: Constant

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.531538	0.0016
Test critical values: 1% level	-3.737853	
5% level	-2.991878	
10% level	-2.635542	

*MacKinnon (1996) one-sided p-values.

Source: Eviews9 Output, 2020.

The result in Table 2 above shows that the residual is stationary at level. In line with Granger-Engel, the result pointed out that there is co-integration among the variables on the long run. This is because the absolute value of the test statistic of 4.532 is greater than the critical value of 2.992 at 5 percent significance level. Therefore, the null hypothesis of no co-integration is rejected in favour of the alternative hypothesis of the presence of co-integration among the variables. This further indicated that there is a long run relationship between the manufacturing output and the explanatory variables.

Long Run and Short Run ECM Regressions

Having established the existence of long run relationship between the variables, Ordinary Least Squares technique is applied to determine the collective and individual impact of the independent variables on the dependent variable, as well as the direction of the relationship that exists between them both on the short and long run. Table 3 below provides the information on the short and long-run regression of the relationship among manufacturing sector output and the explanatory variables.

Table 3: Estimates of Long Run and Short Run ECM Equations

Long -Run Equation				Short- Run Dynamic Equation			
Variable	Coefficient	t-Statistic	Prob.	Variable	Coefficient	t-Statistic	Prob.
LOG(LAB)	6.636**	10.238	0.000	Δ LOG(LAB)	1.288	0.585	0.568
LOG(GFCF)	0.035	0.494	0.628	Δ LOG(GFCF)	0.041	0.579	0.572
LOG(TGEM)	0.125**	2.146	0.048	Δ LOG(TGEM)	0.083**	2.096	0.054
LOG(CIT)	0.202	1.523	0.147	Δ LOG(CIT)	0.185**	2.093	0.055
LOG(EFD)	-1.627**	-3.046	0.008	Δ LOG(EFD)	-1.099**	-2.888	0.012
LOG(FFI)	0.898	0.993	0.336	LOG(FFI)	0.782	1.070	0.303
LOG(DCM)	-0.304**	-2.224	0.041	Δ LOG(DCM)	-0.083	-0.985	0.341
EXR	-0.137**	-2.297	0.035	Δ (EXR)	-0.109**	-2.724	0.017
C	10.766**	9.578	0.000	ECM(-1)	-0.646**	-2.822	0.014
				C	0.097	1.649	0.121
Model Diagnostics/Robustness Test							
R ²	0.897			R ²	0.617		
Adj-R ²	0.816			Adj-R ²	0.573		
DW	1.915			DW	1.755		
F-Test	75.388**			F-Test	3.693**		

Note that figures in (**) represent Significant at 5 percent level of significance.

Source: Eviews9 Output, 2020.

The empirical results from table 3 revealed that in the long run, the labour force (LAB) has direct and significant effect on manufacturing sector's output that is consistent with the theory because a well-developed labour force enhances the productivity of the manufacturing sector. The coefficient estimate of deposit money bank credit to the manufacturing sector (DCM) has a negative sign although significant at 5% level, which is contrary to the a priori expectation. This is in line with the findings of Okosodo and Imoughele (2019). On theoretical grounds, there is a strong basis for expecting DCM to contribute massively to the growth of the manufacturing sector if it is efficiently allocated to productive projects because the financial sector is expected to provide efficient allocation of resources from surplus units to deficit units, thereby leading the other economic sectors such as the manufacturing sector, in their growth process. This finding implies that credit to the private sector and deposit money bank's loans and advances to the

manufacturing sector has not been effective in enhancing the growth capacity of the Nigerian manufacturing sector.

The results of total government expenditure on the manufacturing sector (TGEM) proxy for fiscal policy show that one percent increase will lead to a 0.125 per cent increase in manufacturing sector output. The variable is also significant at 5% level of significance. This conforms to the apriori expectation. This result supports the fact that in the long run increase in government expenditure on infrastructure will enhance the growth performance of the sector. This implies that government expenditure does not crowd out investment in the Nigerian manufacturing sector. This finding is consistent with the observation of Eze and Ogiji (2013), which holds that government expenditure has a direct and significant impact on the growth of the manufacturing sector. Furthermore, the coefficient of company income tax (CIT) has direct but insignificant effect on the growth of the manufacturing sector output such that one per cent increase in CIT leads to a 0.202 per cent increase in the Nigerian manufacturing sector output. The direct effect of this variable is attributed to the fact that revenue generated from company income tax is used by government in the provision of infrastructure which leads to the low cost of production of the real sector of the economy such as the manufacturing sector. This finding conforms to Oladipo, Iyoha, Fakile, Asaleye and Eluyela (2019) who previously established that company income tax as a fiscal policy instrument has a direct effect on the growth of the Nigerian manufacturing sector.

Table 3 shows that a one per cent increase in gross fixed capital formation (GFCF) is associated with a 0.035 per cent increase in manufacturing sector output. This, therefore, explains that the growth of GFCF has a positive but insignificant influence on the Nigerian manufacturing sector output in the long run. This finding conforms to the theoretical expectation. Furthermore, the economic freedom index (EFD), which captures the institutional quality shows a negative and significant relationship with Nigeria's manufacturing sector output. The results show that one per cent increase in EFD is associated with a 1.627 per cent decrease in the growth of the manufacturing sector output of the Nigerian economy. This is not in line with the apriori expectation and is inconsistent with the findings of Edame and Okoi (2015). These findings point to the weak and inactive institutional quality outlook

of the Nigerian institutional system which restrains the ease of doing business and investing in the country's manufacturing sector. The test results show that the fiscal freedom index as a proxy for institutional quality, measures the tax burden imposed by the government was insignificant at a 5 per cent level of significance. As such, one per cent increase in FFI will lead to 0.898 per cent increase in manufacturing sector output. This portends that; a good tax administration enhances manufacturing industrial subsectors of Nigeria's economy. This finding is consistent with that of Kolawole (2018) who revealed that fiscal freedom propelled industrialization in Nigeria.

The outcome of the exchange rate (EXR) shows that one percent increase will lead to a decrease of 0.137 per cent in manufacturing sector output. The variable is significant at a 5% level of significance. This suggests that when the EXR of the domestic currency increases (appreciate), manufacturing sector output will grow slowly because the various subsectors of the manufacturing sector and their products will be less attractive to importers, decrease export and subsequently reduce the performance of the sector. This has really affected the rate at which naira exchanges for dollars, consequently, affected the prices of goods and services because Nigeria is an import-dependent country. Based on the results of the long run regression shown in table 3, model diagnostic test statistics was carried out.

This is to confirm the validity and efficiency of the parameters of the model estimated. That is, to ensure that the estimated coefficients are best, linear unbiased (BLU) estimators. It is also to confirm that the model is robust for analysis and policy formulation. The diagnostic statistics revealed that the adjusted R-square of the long-run model shows that about 89 percent of the variation in dependent variable manufacturing sector output (MAO) is explained by the combined effects of all the independent variables, thus, suggesting that data fit the model fairly well. The F-statistic value of 75.388 further confirms the overall significance of the long-run model while the Durbin Watson statistic value is 1.915. This test value shows the absence of positive serial autocorrelation among the independent variables since the DW statistics is approximately 2. This makes the estimation suitable for policy formulation on the long run.

The summary of the short run dynamic regression result in table 3 indicates that the coefficient of the difference of labour force DLOG (LAB) has direct and insignificant effect on the Nigeria manufacturing sector. This is not consistent with the apriori expectation. This implies that policy initiated by policymakers on the development of industrial manufacturer workers has the capacity to induced Nigerian manufacturing sector output. Also, the coefficient of difference of gross fixed capital formation DLOG (GFCF) is positively signed which indicates that a direct relationship exists between GFCF and Nigeria's manufacturing sector output. This is consistent with the apriori expectation such that one per cent increase in GFCF leads to 0.041 per cent increase in Nigeria's manufacturing sector output in the short run. The coefficient of the variable is statistically insignificant at 5 per cent level of significance. This is in line with the long run findings. The insignificant nature of this variable is a result of poor physical investment in the Nigerian manufacturing sector.

Further, the dynamic result shows a positive and significant relationship between total government on manufacturing sector DLOG (TGEM) and manufacturing sector output at 5 per cent level of significance in the short-run. A percentage increase in TGEM will cause the manufacturing sector output to increase by about 0.083 per cent. The positive and significant relationship between TGEM and manufacturing sector output in Nigeria can be attributed to robust fiscal policy through the medium-term expenditure framework and this conforms to the apriori expectation and the long run finding. Also on the short run the coefficient of difference of company income tax DLOG (CIT) is positively signed which indicates that a direct relationship exists between CIT and Nigeria's manufacturing sector output. This is inconsistent with the apriori expectation. The value of the coefficient is 0.185 which implies that one per cent increase in DLOG (CIT) leads to a 0.185 per cent increase in Nigeria's manufacturing sector output. The coefficient of the variable is statistically significant at 5 per cent level of significance. Thus, this implies that company income tax as a proxy for a fiscal policy has a robust effect on the Nigerian manufacturing sector output.

The difference in economic freedom index DLOG (EFD) which captures institutional quality shows a negative and significant relationship with Nigerian manufacturing sector output. The

results show that one per cent increase in EFD leads to a 1.099 per cent decrease in the growth of the manufacturing sector output in the short run and this does not conform with the apriori expectation. Besides, the difference in fiscal freedom index as a proxy for institutional quality has a direct but insignificant effect on the manufacturing sector output as such, one per cent increase in FFI leads to 0.782 per cent increase in manufacturing sector output. Therefore, the negative nature of the economic freedom index and the insignificant nature of the fiscal freedom index portrays the weak and stagnant institutional quality of the Nigerian economy. The results show that in the short-run the growth of the manufacturing sector (MAO) is negatively and insignificantly influenced by the deposit money bank credit to the manufacturing sector. This implies that one per cent increase in deposit money bank credit to the manufacturing sector leads to a 0.083 percent decrease in manufacturing sector output and this does not conform to the theoretical believed. However, it points to the fact that the Nigerian manufacturing sector is performing below capacity utilization as a result of poor credit supply to the sector.

In the short run the coefficient of the difference in exchange rate $D(EXR)$ is negatively signed, this shows that $D(EXR)$ has an inverse but significant effect on Nigeria's manufacturing sector output. This result is inconsistent with the apriori expectation. The value of the coefficient is -0.109 which implies that one per cent increase in $D(EXR)$ leads to 0.109 per cent decrease in Nigeria's manufacturing sector output in the period under reference. This finding shows that the behaviour of exchange rate is not surprising given the instability in the currency exchange due to the mono-economy of Nigeria's over-reliance on crude oil earnings. The error correction term (ECM) value of -0.646, with t statistics of 2.822 indicates that the speed of adjustment to the long-run situation is significant. The adjusted R-squared of the result shows that our model can explain about 57 per cent of the total variation in the manufacturing sector out in the short run. In all, the results suggest that the variable captured in the model tend to adjust to the long-run equilibrium values after experiencing short-run deviation at a speed of adjustment of 57 per cent. The Durbin Watson Statistic of the dynamic equation is 1.1.755 which indicates an absence of autocorrelation of the error term in the ordinary least square method of regression.

Conclusion and Policy Implication

This study has examined the impact of institutional quality and fiscal policy on the growth of Nigeria's manufacturing sector. It employed empirical analysis to investigate the effect of fiscal policy (total government expenditure on the manufacturing sector and company income tax), institutional quality (economic freedom index and fiscal freedom index) and external factor (exchange rate) on Nigeria's manufacturing sector using data from 1995 to 2020. The ADF test was employed in testing the stationarity of the variables and the results revealed that all the variables are stationary at first difference 1(1) except fiscal policy freedom index, which is stationary at level 1(0). The residual co-integration result reveals that Nigeria's manufacturing sector are cointegrated with the explanatory variables. This is an indication that there is a tendency for the variable to be at equilibrium in the long run.

To draw empirical evidence, both the long run and short run error correction models were estimated and the findings from regression results show that total government expenditure on the manufacturing sector as a fiscal policy variable has direct and significant effect on the growth of the manufacturing sector both in the short and long runs while company income tax has direct but insignificant impact on the growth of the manufacturing sector but on the short run the variable has significant impact of the manufacturing sector. The economic freedom index as an institutional quality variable has inverse but significant effect on the growth of Nigeria's manufacturing sector both in the short and long runs. The inverse and significant nature of this variable points to the fact difficulties are encountered in doing business in the Nigerian manufacturing sector industry. The fiscal policy freedom index has direct but insignificant effect on the manufacturing sector output. In the long run deposit money bank credit to the manufacturing sector has an inverse but significant effect on the growth of Nigeria manufacturing sector but in the short run the variable has inverse but insignificant effect on the growth of the sector.

The exchange rate has inverse and significant effect on the growth of Nigeria's manufacturing sector. This reveals that the depreciation of the naira has not induced the growth of the manufacturing sector in Nigeria because it is an import depended

country. Besides, the gross fixed capital formation has direct but insignificant effect on the Nigerian manufacturing sector while labour force contributes significantly to the growth of the sector both in the short run and long run. Therefore, from the findings of the study, it can be reasonably concluded that the fiscal policy has contributed significantly to the growth of Nigeria manufacturing sector while institutional quality has no robust impact on the growth of Nigeria's manufacturing sector productivity because of poor institutional structure in the economy. Therefore, to pursue the quest for growth in the Nigerian manufacturing sector the following recommendations are advocated. First, the Nigerian government needs to fine-tune its fiscal responsibility by increasing its expenditure to the manufacturing sector. Such an increase in expenditure should be aimed at the provision of the manufacturing sector industry-driving infrastructure like electricity, roads, research and development and other manufacturing industrial projects. Second, the government should encourage and intensify efforts at entrenching fiscal freedom by putting in place functional agencies that would monitor the implementation of tax incentives meant for deserving manufacturing firms. Third, there is a need to redirect fiscal policy measures toward diversifying the Nigerian economy through the manufacturing sector which in turn would reduce the country over depended on imported product and this will lead to an appreciation of exchange rate. Fourth, government fiscal policies should place greater emphasis on the principles of effective taxation aimed at promoting investment and the growth of the manufacturing sector in the country. Fifth, there is a need for institutional reforms that will drive credit facility to productive investments like the manufacturing sector as they constitute an integral part of the growth and transformation process of an agro-based economy like that of Nigeria. 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 illegal manufacturing industrial business can be curtailed.

References

- Abubaka, S. (2020). Institutional quality and economic growth: Evidence from Nigeria. *African Journal of Economic Review*, 7(1), 48-64.
- Adebayo, R. I. (2011). Zakat and poverty alleviation: A lesson for the fiscal policy makers in Nigeria. *Journal of Islamic Economics, Banking and Finance*, 7(4), 26-41.
- Adebiyi, M.A. & Babatope-Obasa, B. (2004). *Institutional framework, interest rate policy and the financing of the Nigerian manufacturing sub-sector*. African development and poverty reduction forum paper. Retrieved 22 August 2020, from http://www.tips.org.za/files/Institutional_Framework_Interes_Rate_Policy_Obasa_Adbiyi.PDF
- Adediran, O. & Obasan, K. (2010). The role of industrial sector in the economic development of Nigeria, *Journal of Management and Society*, 1(2), 9-16.
- Ademu, W.A. & Ezie, O. (2017). Financial liberalization and manufacturing sector outputs in Nigeria (1987-2015): Evidence from fully modified ordinary least square (FMOLS). *The Journal of Economics and Finance*, 2(1), 1-27.
- Ajayi, O. D. (2011). The collapse of Nigeria's manufacturing sector. *The Voice News Magazine*. Retrieved 22 August 2020, from www.thevoicenewsmagazine.com
- Ajudua, E. I., & Imoisi, A. I. (2017). Fiscal policy and manufacturing sector output nexus In Nigeria. *Dutse Journal of Economics and Development Studies*, 6(1), 58-69.
- Anna, M. & Krist, B. (2018). The role of institutional quality in economic growth: implications for the Baltic States. Retrieved 22 August 2020, from https://www.makroekonomika.lv/sites/default/files/2018-06/3_vieta_Bulderberga_Radzevica.pdf
- Anyanwu, J. C. (1993). *Monetary economics: theory, policy and institution*. Onitsha: Joane Educational Publishing Ltd
- Arikpo, O., Ogar, A., & Ojong, C. (2017). The impact of fiscal policy on the performance of the manufacturing sector in Nigeria. *Euro-Asian Journal of Economics and Finance*, 5(1), 11-22.
- Bakare, T. A. & Osobase, A. (2015). An empirical analysis of response of Nigerian industrial output to macro-economic adjustment Policies, *International Journal of Management Sciences and Humanities*, 2(2), 265-296.
- Barro, R. J. (1991). Economic growth in a cross-section of countries. *Quarterly Journal of Economics*, 106, 407-443.
- Becker, G. S., Murphy, K. M. & Tamura, R. (1990). Human capital, fertility and economic growth. *Journal of Political Economy*, 98, 12-37.
- Bruinshoofd, A. (2016). Institutional quality and economic performance. Retrieved 22 August 2020, from <https://economics.rabobank.com/publications/2016/january/institutional-quality-and-economic-performance/>

- Charles .A.N. (2012). Investigating the performance of monetary policy on manufacturing sector in Nigeria: 1980-2009. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 2(1), 12-25.
- Edame, G.E. & Okoi, W.W. (2015). The impact of taxation on investment and economic development in Nigeria, *Academic Journal of Interdisciplinary Studies*, 3(4), 209-218.
- Eze, O. R., & Ogiji, F.O (2013). Impact of fiscal policy on the manufacturing sector output in Nigeria: An error correction analysis. *International Journal of Business and Management Review (IJBMR)*, 1(3), 35-55.
- Ezejiolor, R. A., Adigwe P. K., & Nwaolisa, E. F., (2015) Tax as a fiscal policy and manufacturing company's performance as an engine for economic growth in Nigeria. *European Journal of Business, Economics and Accountancy*, 3(3), 1-12.
- Falade, O.E. & Olagbaju, I.O. (2015). Effect of government capital expenditure on manufacturing sector output in Nigeria. *Business and Economic Research*, 5 (2), 136-152.
- Imougehele, L. E. & Ismaila, M. (2014). Empirical investigation of the impact of monetary policy on manufacturing sector performance in Nigeria (1986-2012). *International Journal of Education and Research*, 2(1), 87-106.
- Kolawole, B. O. (2018). Fiscal incentives and industrialisation in Nigeria: An econometric analysis. *The Nigerian Journal of Economic and Management Studies*, 7(1), 1-19.
- Lucas, R. E. (1988). On the mechanics of development planning. *Journal of Monetary Economics*, 22, 3-42.
- Madni, G. R. & Chaudhary, M. A. (2017). Economic growth in context of institutions and fiscal policy. *Pakistan Economic and Social Review*, 55(1), 79-98.
- Mankiw, N. G., Romer, D. & Weil, D. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 107(2), 407-437.
- Mbelede, C. (2012). Cost engineering in the manufacturing sector of the economy of Nigeria. Paper presented at the 3rd Annual Technical Conference of Institute of Appraisers and Cost Engineering, Abuja, Nigeria.
- Mike, J. (2010). Banking sector reforms and the manufacturing sector: The manufacturers association of Nigeria perspective. *Central Bank of Nigeria Economic and Financial Review*, 46(4), 57-65.
- Mir, S. T. & Idrees, K.A. (2019). Impact of infrastructure and institutional quality on industrial sector of Pakistan. *Jinnah Business Review*, 7(1), 20-26.
- Nelson, R. R. & Phelps, E. S. (1966). Investment in humans, technological diffusion and economic growth. *American Economic Review: Papers and Proceedings*, 56, 69-75.

- North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge: Cambridge University Press.
- North, D. C. (2005). *Understanding the process of economic change*. Princeton: Princeton University Press.
- Odior, S.E. (2013). Macroeconomic variables and the productivity of the manufacturing sector in Nigeria: A static analysis approach. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, 1(5), 362-380.
- Okoh, S.E.N. (2008). *Public sector economics, principles & policies*. Benin City: Mindex Publishing.
- Okoi, I. E., Benjamin, O., & Bassey, C. E. (2015). Institutional quality, macroeconomic policy and economic development in Nigeria. *Journal of Economics and Development Studies*, 3(2), 140-145.
- Okosodo, L.A. & Imoughele L. E. (2019). Deposit money bank credit and export performance in Nigeria. *International Journal of Economics, Commerce and Management* 7(1), 112 -135.
- Oladipo, O.A., Iyoha, O.F., Fakile, A.S., Asaley, A.J. & Eluyela, D.F. (2019). Do government taxes have implications on manufacturing sector output? Evidence from Nigeria. *Journal of Management Information and Decision Sciences*, 22(3), 181-190.
- Olawunmi, O., & Tajudeen, A. (2007). Fiscal policy and Nigerian economic growth. *Journal of Research in National Development*, 5(2). Retrieved 22 August 2020, from <https://www.transcampus.org/ReadmoreV5Dec2007ReadmoreV5NO2Dec200719.html>
- Omoera, O.S. (2010). Potentials of the television in reinventing the Nigerian tourism industry. *EJOTMAS: Ekpoma Journal of Theatre and Media Arts*, 3 (1&2), 115-128. <http://www.ajol.info/index.php/ejotmas/article/view/121108/110526>
- Omojimate, B.U. (2012). Institutions, macroeconomic policy and the growth of the agricultural sector in Nigeria. *Global Journal of Human Social Science*, 12(1), 1-8.
- Oromareghake, P.B (2013). Electoral institutions/processes and democratic transition in Nigeria under the fourth republic. *International Review of Social Sciences and Humanities*, 6 (1), 19-34.
- Osabuohien E.S. & Efobi U.R. (2013). Africa's money in Africa. *South African Journal of Economics*. 81(2), 292-306.
- Romer, P. M. (1990). Human capital and growth: Theory and evidence. *Carnegie-Rochester Cott-ferette Series on Public Policy*.
- Solow, R.M. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, 70(1), 65-94.
- Ubi, P.S. & Udah, E.B. (2014). Corruption, institutional quality and economic performance in an emerging economy: Lessons from

Nigeria. *British Journal of Economics, Management and Trade*, 4 (11), 1708-1722.

Uzoka, N.D. & Eze, R. (2015). Implications of government capital expenditure on the manufacturing sector output in Nigeria. Retrieved 20 August 2020, from <http://www.globalacademicgroup.com/journals/academic%20excellence%20/IMPLICATIONS%20OF%20GOVERNMENT%20CAPITAL%20EXPENDITURE.pdf>

Zouhaier, H. (2012). Institutions, investment and economic growth. *International Journal of Economics and Finance*, 4(2), 152-162.