Fiscal Policy and Economic Growth:
An Empirical Assessment in Fiscal Regimes in Nigeria (1970-2019)

Endurance Gabriel Udo (Ph.D)[1], Ekomabasi Akpan[2], Ofonime Moses Akpan(M.sc)[3]

[1,3]Department of Economics, School of Arts and Social Sciences, College of Education, Afaha Nsit.
[2]Department of Economics, University of Uyo

ABSTRACT: This study examined the impact of fiscal policy on economic growth in Nigeria over the period 1970 to 2019, using annual data obtained from secondary sources. Specifically, the study examines the impact of government expenditure (capital and recurrent) on Nigeria's gross domestic product in regulated and deregulated fiscal regime. The econometric techniques of ARDL and Bound Cointegration were used to analyze the data. The results obtained from the analyses show that government capital expenditure had a significant negative relationship with economic growth in Nigeria in the deregulated period but an insignificant effect in the regulated period; while government recurrent expenditure had a significant positive relationship with economic growth in Nigeria in the deregulated period and an insignificant effect in the regulated period. The regression coefficient of the dummy variable (Regime) was positively signed and significant implying that there is a significant difference in the impact of fiscal policy across the two periods (regulation and deregulation). Thus, the study concluded that fiscal policy is more effective in the deregulated period compared the regulated period. Among the recommendations of this study are that the government should avoid extravagant capital expenditure.

KEYWORDS: Fiscal policy, economic growth, fiscal regimes

1.0 INTRODUCTION

Fiscal policy is the economic term which describes the actions of a government in setting the level of public expenditure and the ways in which that expenditure is funded. Fiscal policy is an important concept in economics since it is one of the macroeconomic management instruments used by governments at all levels to regulate the economy through their expenditure, revenue, and debt portfolios. It is concerned with the government's management of the nation's economy by varying the size and content of taxation and public expenditure done with much regard to their impact on the economy. It is therefore, referred to as discretionary changes in the level, composition and timing of government expenditure and revenue (Aliyu, Ndagwakwa, Zirra, Salam, & Mohammed, 2019).

Fiscal policy is concerned with the government's purposeful expenditure of money and imposition of taxes in order to influence macroeconomic variables in a desired direction. It has both general and specific objectives. General objectives are broadly the same as those of other macroeconomic policies. Specific objectives are in relation to the typical problems that arise in an economy. The policy has both promotional and stabilization roles in an economy. The broad objectives of fiscal policy may be listed as: attainment of full employment of resources; high rate of economic growth; optimum allocation of economic resources; equitable distribution of wealth and income; price stability; control of business cycles; balanced growth; and export development. All of these objectives are not equally emphasized in any fiscal policy. Not only that, the priority of objectives changes with time and with changing economic conditions. As a result, fiscal policy seeks to keep the economy stable. Increased government spending or lower taxes tend to help the economy out of a recession, whereas reduced expenditure or higher taxes tend to stifle a boom (Dornbusch and Fischer, 1990).

Aliyu, Ndagwakwa, Zirra, Salam, & Mohammed (2019)**,** are of the opinion that, "the ways and pattern in which fiscal policy is executed vary from economy to economy and depend on the prevailing economic situation and economic objectives of the government." Government interventions in economic activities are basically in the form of controls of selected areas/sectors of the economy. These regulations vary, and they are determined by the government's unique requirements or goals. The Nigerian economy had been characterized by excessive government control over production, financial intermediation procedures and foreign trade variables through the administration of interest rates, prices and exchange rates before the adoption of the market economy which led to the adoption of the Structural Adjustment Program (SAP) in 1986. The shift from the era of economic regulation to the era of economic deregulation was premised on the need to sustain the pace of economic growth within the environment of a shallow and weak private entrepreneurial class.

Fiscal Policy and Economic Growth: An Empirical Assessment in Fiscal Regimes in Nigeria (1970-2019)

According to Udah (2010), governments of many developing nations embarked on economic reforms, which are generally perceived as movement towards a more friendly market-oriented economy because of the perception of policymakers that the adoption of the neoclassical philosophy is capable of propelling their economies to the path of sustained economic growth. According to Udah (2010), SAP and subsequently NEEDS (National Economic and Empowerment and Development Strategy) were adopted to mitigate the negative impact of interventionist policies (regulation) on economic performance in the early century. As with SAP, the new paradigm (deregulation) replaced faith in government with confidence in the free market system and the private sector's creativity. The implementation of fiscal policies under (deregulation) SAP and later NEEDS should therefore be more disciplined and efficient.

The influence of fiscal policy on economic growth has remained a topic of discussion in both theoretical and empirical research. Indeed, there are two main strands of literature regarding the impact of fiscal policy in fostering economic growth in an economy. One point of view is that supporting government fiscal policies for knowledge accumulation, research and development, productive investment and maintaining law and order may boost both short-term and long-term growth (Heller and Rao, 2007). But there is the bureaucratic and less effective government fiscal policy method and as a result, if they (government) are active in the productive sector of the economy it tends to inhibit rather than promote growth. Thus, government fiscal policy is thought to stifle economic growth by distorting the effect of tax and government spending. For the Nigerian economy, significant scholarly efforts have been made in the past to investigate the impact of fiscal policy variables on economic growth with mixed results (for example Aliyu, *et. al.,*2019**;** Asaju *et al*, 2014; Onyemaechi, 2014; Iyeli and Azubuike, 2013; Ozougwo, 2012; Isiaka *et al,* 2011; Appah, 2010 and Agiobenebo, 2003).

However, we are of the opinion that the fiscal regime in place matters at least as much for efficacy of fiscal policy variables as does the volume of the fiscal policy variables. But surprisingly, to the best of our knowledge, the impact of fiscal policy variables under different fiscal regimes has been ignored in previous empirical studies on the fiscal policy-economic growth relationship in Nigeria.

Therefore, this study empirically examines the relationship between fiscal policy variables and economic growth using periodized Nigeria fiscal policy data which offered the researchers the opportunity to examine also the differential effects (if any) of fiscal policy variables on Nigeria's economic growth under different fiscal regimes.

The achievement of macroeconomic goals like full employment, stability of general price level, high and sustainable economic growth, and external balance, had from time been a major priority for policy makers. The realization of these goals is not automatic rather it requires a good measure of policy guidance. Such policy guidance represents the objective of economic policy. Fiscal and monetary policy instruments are the main instruments of achieving these macroeconomic targets.

Since the 1970s, the government has initiated several fiscal policy measures aimed at creating an environment for rapid economic growth. These policies span through regulation and deregulation periods (Ogbole, 2010). However, in spite of the many and frequently changing fiscal and other macroeconomic policies, Nigeria has not been able to harness her economic potentials for rapid economic growth. The Nigerian economy is still characterized by problems such as unimpressive economic growth rates and high rates of unemployment which fiscal policy is theoretically supposed to have addressed.

Hence, the following questions still beg for answers: What is the impact of fiscal policy on economic growth in Nigeria? Is the impact of fiscal policy on economic growth in Nigeria the same or different across two fiscal regimes? These issues prompted this work aimed at empirically analysing the impact of fiscal policy on economic growth in Nigeria using periodized (regulation and deregulation periods) fiscal policy data.

The main objective of this study is to analyse the impact of fiscal policy on economic growth in Nigeria during regulation and deregulation periods.
The Specific Objectives are:

- To examine the impact of fiscal policy on economic growth in Nigeria.
- To ascertain whether the impact of fiscal policy on economic growth in Nigeria is the same or different across the two fiscal regimes (regulation and deregulation) in Nigeria.

2.0 LITERATURE REVIEW
2.1 Conceptual Literature review
2.1.1 Fiscal policy

According to Morakinyo, David, & Alao (2018), Fiscal policy is associated with the use of government expenditure and taxation to influence the economic activities of a country. Fiscal policy involves government deliberate actions in levying taxes and spending money with the view of influencing targeted macroeconomic variables to move in a desired direction. These microeconomic variables include high employment rate, sustainable economic growth, and low inflation. As a result, fiscal policy seeks to stabilize the economy. Increases in government spending or reductions in taxes tend to lift the economy out of a recession, whereas decreases in expenditure or increases in taxes tend to slow down a boom (Dornbusch & Fischer, 1990).

Fiscal Policy and Economic Growth: An Empirical Assessment in Fiscal Regimes in Nigeria (1970-2019)

Peter and Simeon (2011) define fiscal policy as the process of government management of the economy through the manipulation of its income and expenditure to achieve certain desired macroeconomic objectives. Central Bank of Nigeria (2011) defined fiscal policy as the use of government expenditure and revenue collection through tax and amount of government spending to influence the economy.

Fiscal policy is the use of government taxation and expenditure to control the economy. Government taxes and expenditure are the two primary fiscal policy instruments. According to Geoff (2012), fiscal policy entails the use of government expenditure, taxing, and debt to influence the level and growth of aggregate demand, production, and employment generation. Government spending decisions have an impact on macroeconomic conditions. In order to regulate the economy, these policies impact tax rates, interest rates, and government expenditure. Fiscal policy is the process through which a government changes its expenditure levels in order to monitor and control a country's economy.

From all of these definitions, we can conclude that fiscal policy is one of the regulatory policies employed by the government to achieve its goals of economic growth. Fiscal policy is an offshoot of Keynesian economics, and its logical analysis implies that it is a definite way to stabilize the economy. Modern fiscal policy seeks to improve economic efficiency and stability. In a contemporary economy, the government has a hand in every aspect of economic activity. Taxation and expenditure are two primary fiscal instruments used by governments to affect private economic activity. Other tactics may include public debt, public works, and so on.

2.1.2 Economic Growth

Economic growth has long been seen as an essential target of economic policy, with a large body of study devoted to demonstrating how it may be accomplished (Fadare, 2010). Scholars have paid a lot of attention to economic growth. Economic growth, according to Kalu (2000), is the gradual expansion in the economy's productive capacity through time, resulting in greater output of products and services and growing levels of national revenue. According to Jhingan (2003), economic growth is defined as "a continuous quantitative increase in a country's per capital income or output accompanied by expansion in its work force, consumption, capital, and trade volume."

Economic growth, according to Zuvekas (1979), is defined as the "rise over time in a country's real production of goods and services, or more correctly, real output per capital." Todaro (2004) defines a temporal dimension as "a long-term growth in ability to offer more diversified economic products to its population" by Professor Simon Kuznets. From microeconomics point of view, Baumol and Blinder (1998) observe that economic growth occurs "when an economy is able to produce more goods and services for each consumer". That is, when an average citizen gets larger and larger quantities of goods and services produced.

The above definitions consider economic growth as involving only increase in output and greater efficiency and ignored the real effect of growth on the people. On that note, Hanson (1981) stresses the rate of increase of national income as providing a measure of a country's rate of economic growth and therefore of the standard of living of its people. Furthermore, it is important to note that economic growth involves "an expansion of the system in one or more dimensions without a change in its structure" (Friedman in Jhingan, 2003).

Economic growth has also been defined as "a sustained increase in per capita or per worker product, most often accompanied by an increase in population and usually by sweeping structural changes." Onyiriuba (2000).

From the definitions above, we can observe that there is no consensus on what precisely constitutes economic growth-although the real rate of growth in a country's total output of goods and services (measured by gross national product, adjusted for inflation) is the most widely used yardstick, there are those who argue that national income per capital, consumption per capital or some other measures is the most appropriate.

For this work, we define economic growth as a continuous and sustained increase in output level as well as productive capacity and efficiency resulting in high real income or output per capita, standard of living and in the long-run positive change that is conducive for the development of the economy.

2.2 Theoretical Literature Review

2.2.1 Keynesian Aggregate demand Theory

The Keynesian approach to aggregate demand management asserts that the market mechanism could not be relied upon for an economy in recession or below full employment to recover or rebound quickly. In other words, a basic premise of the Keynesian approach is that the private sector is inherently unstable and therefore recommends activist fiscal and monetary policies. An activist macroeconomic policy involves setting fiscal and monetary variables in each time period at the values which are thought necessary to achieve government objectives (Levacic and Rebmann, 1982).

The Keynesian theory essentially advocates public spending, preferably involving deficit in government fiscal budget to stimulate aggregate demand. In other words, it presents a framework that could be used to calculate the effects of government spending on economic activity and imposing taxes and consequently estimating the size of the required intervention. Activist stabilisation policy can take two forms: either as a discretionary or as a feedback rule which relates policy to current and lagged output. A discretionary policy involves the government or other authorities such as the central bank deciding in each period what the appropriate policy response should be given current circumstances. On the other hand, a feedback policy rule establishes some

fixed formula for deciding what values the policy variables should take and this formula would remain unchanged over a considerable time span. In practice, a feedback policy rule has been limited to the operation of automatic stabilizers. These are changes in government spending and taxation which occur automatically as national income changes and which act in a stabilizing manner, e.g., government spending on unemployment rises in a depression while the tax revenue fall (Levacic and Rebmann, 1982).

Government expenditure is a missing variable within the Solow-Swan neoclassical model. Alternative growth theories have also been developed in response to policy needs to accommodate the missing variables in the neoclassical model (Bogunjoko, 2004). The Keynesian framework views government expenditure as an input in the aggregate production function which the neoclassical model assumed to depend only on labour and capital as factor inputs. The Keynesian theory view fiscal expansion as having a multiplier effect on aggregate demand and hence economic growth. This study is anchored on the Keynesian theory.

The Keynesian theory has been criticized by many economists. Government borrowing, according to neoclassical economics, leads to increased interest rates, which might negate the stimulative effect of expenditure. They claimed that when the government has a budget deficit, cash must be raised by public borrowing (the sale of government bonds), offshore borrowing, or debt monetization. Because government borrowing produces more demand for credit in the financial markets, interest rates can rise throughout the market when governments cover deficits by issuing government bonds. This reduces aggregate demand for goods and services, partially or completely negating the direct expansionary impact of deficit spending, and so reducing or eliminating the attainment of the fiscal stimulus goal (Levacic, 2015).

2.2.2 Wagner's Law of Increasing State Activities

The Adolf Wagner's law of ever-increasing state activity is a dominant theory of fiscal spending behaviour in public finance that examined the cause of growth in government expenditure over time. The German economist, Adolf Wagner (1893) advocates the "law of rising public expenditure" on the basis of empirical findings and came up with the proposition that there is a long run tendency for government activities to grow relative to the growth in national income. According to him, government expenditure must increase at a rate faster than national output.

According to Wagner, the operations of different tiers of government, such as the federal and state governments, have an intrinsic propensity to expand and intensify. As time passes, successive levels of government take on additional responsibilities. This implies that the scope of public-sector operations has been broadened. Extensive growth in government services may be defined as the process of introducing new operations. Intensive expansion in public activity, on the other hand, refers to governments' inclination to fulfill both existing and new tasks more effectively and thoroughly (Jaén-Garca, 2018).

Wagner explains three reasons why state engagement in the economy is increasing: a) increasing the complexity of legal relation and communications; increased urbanization and population density; substitution for the public service for a portion of private sector activities; b) increasing demand for education, leisure, more equal distribution of revenue and more public services; c) state neutralization of private monopolies and, in some cases, the creation of monopolies by the state itself (Jaén-García, 2018).

The criticism of Wagner's law was based on the argument that Wagner was contemplating long run tendency rather instead of short run variations in government spending. That since his study was relied on chronological knowledge, the exact quantitative association between the magnitude of rise in state outlay and the duration taken was not determined logically (Eze, 2016). According to Dutt and Ghosh (1997), Wagner did not present any mathematical form in order to examine his hypothesis and he also was not explicit in the formulation of his hypothesis. Another criticism of the Wagner's theory is that it did not contain a well-articulated theory of public choice (Bird., 1971).

In spite of all the criticism of Wagner's Law, it will continue to play an important role in the study of fiscal policy (public expenditure behaviours). According to Wagner's Law, there is a functional relation between the growth of an economy and the government fiscal activities with the result that the government sector grows faster than the economy.

2.3 Empirical Literature Review

Aliyu et al. (2019) investigated the influence of fiscal policy on Nigerian economic performance between 1981 and 2016. The annual time series data collected for the study was analyzed using the Cointegration and Error Correction model. The study showed that fiscal policy had a limited impact on economic growth in Nigeria throughout the study period.

Using the VECM approach, Abubakar (2016) conducted a disaggregate study of the influence of public expenditure on Nigerian economic development. His research found that government spending had a mixed influence on economic growth. Some components of government spending had a detrimental influence on Nigeria's economic growth, while others had a positive impact.

Abdulrauf (2015) used the Vector Error Correction Model (VECM) approach to evaluate the short and long run effects of fiscal policy on Nigeria's economic development using annual data series from 1981 to 2013. His findings revealed that government recurrent expenditure and government investment had both short and long run beneficial effects on economic development, but capital expenditure only had a short run positive influence. Tax income was discovered to have a negative association with Nigeria's economic progress in both the short and long run.

Maku (2015) examined the impact of fiscal policy on economic growth in Nigeria between 1970 and 2011. The study employed the Engle-Granger cointegration for long-run relationship, ordinary least square for long run estimate and diagnostic test for consistency of instruments. Economic growth was proxied by real gross domestic product while fiscal balance was used to

denote fiscal policy. Macroeconomic indices such as gross capital formation, broad money supply and exchange rate were captured in the study. The results revealed fiscal policy exerted significant positive effect on economic growth, which indicates that appropriate fiscal measures stimulate economic growth in Nigeria. The study maintained that government spending has greater impact on the growth rate of the Nigerian economy.

using time series data spanning from 1986 to 2010, Osuala and Jones (2014) used the autoregressive distributed lag model to empirically examine the influence of fiscal policy on economic growth in Nigeria. The research takes into account fiscal policy factors such as government recurrent and capital spending, non-oil taxation, and government debt. The findings found evidence of a long run equilibrium link between fiscal policy and economic growth throughout the projected time span. Government recurrent and capital expenditures were shown to have a significant and positive influence on economic growth, but non-oil taxes and government debts had no meaningful impact on real GDP. Only capital expenditure had short-run equilibrium relationship with economic growth.

Alex and Ebieri (2014) used the ARDL approach to investigate the impact of fiscal policy on Nigerian economic growth. In Nigeria, the analysis discovered evidence of a long-run equilibrium link between fiscal policy and economic growth. Government capital and recurrent expenditure were shown to have a strong positive relationship with economic growth, but non-oil taxes and government total debt had no meaningful influence on real GDP. Only capital spending, however, was found to have a short-run connection with economic growth.

Asaju et al (2014) examined the efficacy of fiscal policy in promoting economic growth and reducing poverty in Nigeria, they discovered that aggregate growth has been slow and sectorial growth uneven and these situations were attributed to ineffective fiscal policy implementation and lack of budgetary discipline. They observed that inflation rate has continued to accelerate and budget deficit is higher, recurrent expenditure has continued to take a larger portion of the total expenditure, causing the increase in the national debt profile. The non-oil sector's contribution to the nation's revenue has not improved and there is still high incidence of extra-budgetary allocation. All these are contrary to the fiscal objectives of the nation.

Osuala and Jones (2014) used the Ordinary Least Squares method of multivariate regression to evaluate the log-linearized model to examine the influence of fiscal policy on economic growth in Nigeria from 1986 to 2010. The variables' stationarity was established using the Augmented Dickey-Fuller unit root test, and the existence of long-run and short-run equilibrium conditions was tested using the General-to-Specific approach to Auto-Regressive Distributed Lag (ARDL) model. The findings indicate that there is evidence of a long run equilibrium link between fiscal policy and economic growth in Nigeria over the study period. Government recurrent and capital expenditures are specific fiscal policy variables that have a significant and positive influence on economic growth in Nigeria. Non-oil taxes and total government debt have no effect on real GDP; only capital spending has a short-run equilibrium relationship with economic growth.

Agu, Idike, and Okwor (2014) investigated the influence of several fiscal policy components on the Nigerian economy. After establishing data stationarity, descriptive statistics were employed to demonstrate the contribution of government fiscal policy to economic growth, and an OLS in a multiple form was used to determine the connection between economic growth and the government expenditure component. According to the findings, overall government expenditures have tended to rise in tandem with government revenue, with expenditures peaking sooner than revenue. Investment expenditures were much lower than recurrent expenditures, indicating that the country's economy is growing slowly. Hence, there is an evidence of positive correlation between government expenditure on economic services and economic growth.

Iyeli and Azubuike (2013) studied the influence of fiscal policy factors on Nigerian growth between 1970 and 2011. They used co-integration and Error Correction Mechanism (ECM) approaches to address the problem of non-stationarity that is commonly associated with time series data. The findings suggested a long-run equilibrium relationship between economic growth and fiscal policy variables.

Ozougwo (2012) used the Augmented Dickey-Fuller (ADF) test of stationarity and the granger causality test to examine the influence of fiscal policy on Nigerian economic growth from 1978 to 2011. The findings revealed that taxes had a negative and insignificant impact on economic growth, despite the fact that it is a granger-cause of economic growth. On the other hand, deficit finance has an insignificant positive effect and bi-directional causality on economic growth in Nigeria, whereas government expenditure had an undeniable, significant, and positive effect (but lacks causation).

Ogege and Abass (2012), examine the dynamics of Nigeria's monetary and fiscal policies. The fundamental objective of the study was to examine the effects of monetary/fiscal policies on the growth of the Nigerian economy. They employed the Engle-Granger and Johansen-Joselius methods of co-integration in the Vector Error Correction Model (VECM) setting. The empirical results showed that there exists a long-run linear relationship between the dependent variable and the independent variables. This means that both monetary and fiscal policies contributed to economic growth in Nigeria during the period of study. Based on that, they recommended that both fiscal and monetary policies should be used interchangeably in order to influence the GDP.

Ogbole, Amadi and Isaac (2011) carried out a study on fiscal policy and economic growth in Nigeria. They used time series data covering the period 1970 to 2006 representing government expenditure and GDP which were the independent and dependent variables respectively. They tested the data using the Augmented Dickey-Fuller test, and co-integrated using the Johansen's co-

integration test. The Granger-Causality test was also applied to test for the causal relationships between the variables. The results of the analysis showed the existence of a causal relationship between them with a unidirectional causality running for government expenditure to GDP, which happened to be in line with the apriori expectation. They then concluded that during the period under consideration, fiscal policy operations contributed, to some extent, to economic growth. Although, the precise extent, according to them, is a subject for further study. Based on that, they recommended thus: that fiscal policy should be refocused in order to ensure appropriate policy mix. That government expenditure be refocused to increase output. That government capital and investment expenditure should be increased to exceed consumption expenditure and finally that punitive measures be meted out against fraud and mismanagement of public funds.

Isiaka, Abdulraheem, and Mustapha (2011) examined the impact of fiscal and monetary policies on the level of economic activities in Nigeria proxied by the GDP. The OLS regression approach was adopted and the result showed a long run relationship between the variables used, that is, government capital and recurrent expenditures, taxes and money supply. It was also found that government capital and recurrent revenues positive relationship with the GDP but this relationship is insignificant. Also, tax and money supply were not significant in explaining the gross domestic product.

2.4 Summary of Reviewed Literatures

Attempts have been made to review some related theoretical and empirical literature to this study. The theoretical background covers what economic theory says concerning the subject or the a priori information about it, while the empirical literature discusses the major findings of the existing works, the methods adopted, and their strengths and weaknesses. This study will add to knowledge by investigating the effect of fiscal policy on economic growth in Nigeria under the regulated fiscal regime and the deregulated fiscal regime.

3.0 RESEARCH METHODOLOGY

3.1 Basic Research Design

This study employed the econometric techniques of Autoregressive distributed lag (ARDL) and bound cointegration as the main analytical techniques in the examination of the impact of fiscal policy variables on economic growth in Nigeria. Therefore, the research design that was adopted in this study is the analytical research design (an aspect of the quasi-experimental research design) because it is best suited for investigations involving time series data.

3.2 Model specification

The model below is derived from the Keynesian theory. This theory presents a framework that could be used to calculate the effects of government spending on economic activity and imposing taxes and consequently estimating the size of the required intervention. The model is also similar to the model adopted by Appah, E. (2010). In order to achieve our research objectives, three models where estimated.

Model one; regulated regime

$$InGDP_t = \propto_0 + \propto_1 InGCEX_t + \propto_2 InGREX_t + \propto_3 InEXRATE_t + \propto_4 InGFCF_t + \propto_5 InLF_t + \propto_6 INFL_t + \mu_t \ldots\ldots (3.1).$$

Model two; deregulated regime

$$GDP_t = \propto_0 + \propto_1 GCEX_t + \propto_2 GREX_t + \propto_3 EXRATE_t + \propto_4 GFCF_t + \propto_5 LF_t + \propto_6 INFL_t + \mu_t \ldots\ldots (3.2)$$

Model three; combined regime

$$GDP_t = \propto_0 + \propto_1 GCEX_t + \propto_2 GREX_t + \propto_3 EXRATE_t + \propto_4 GFCF_t + \propto_5 LF_t + \propto_6 INFL_t + \propto_7 REGIME_t + \mu_t \ldots\ldots (3.3)$$

Where; GDP =Gross Domestic Product which proxy economic growth. GCEX = Government Capital Expenditure. GREX = Government Recurrent Expenditure. EXRATE =Exchange rate measured as official exchange rate of the Naira to 1 US dollar. GFCF=Gross fixed capital formation is used to proxy domestic investment LF= Labour force INF= Inflation rate. REGIME =Dummy variable (0 for regulated periods and 1for deregulated periods). $\propto_0$ is a constant, $\propto_1, \propto_2, \propto_3, \propto_4, \propto_5, \propto_6$ and $\propto_7$ are the parameters, while (μ_t) is the stochastic error term that captures the impact of other variables not included in the model that may affect

Apriori Expectation

$$\propto_{1,}, \propto_2 > 0, ,\propto_{3,} > 0 \ or \ < 0 , ,\propto_4, \propto_5 > 0 , \propto_6 < 0 \ and \ \propto_7 > 0$$

3.3 Estimation Techniques

In order to develop strong, robust and reliable estimate of the parameters above, the Autoregressive Distributed Lage (ARDL) estimation technique was adopted and it is upon this model that statistical and econometric test such as stationarity, co-integration, post estimation diagnostic tests, as well as the error correction model was be carried out.

3.5 Data Sources

The data used for this study were obtained from secondary source. Annual data from 1970 to 2019 were obtained from different publications of the central bank of Nigeria (CBN) Statistical Bulletin in other to achieve the objectives of the study.

Fiscal Policy and Economic Growth: An Empirical Assessment in Fiscal Regimes in Nigeria (1970-2019)

4.0 DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 Unit Root Test

Table 4.1: Phillips-Perron Unit Root Test Results: (1970-1985) (Model 1)

VARIABLES	PP TEST STATISTIC	ORDER OF INTEGRATION
GDP	-4.055537**	l(1)
GCEX	-6.658785**	l(1)
GREX	-4.771139**	l(1)
EXRATE	-4.483036**	l(1)
GFCF	-3.975893**	l(1)
LF	-4.107089**	l(0)
INFL	-7.125468**	l(1)

Source; Authors computation (E-views 9)

Table 4.2: ADF Unit Root Test Results: (1986-2019) (Model 2)

VARIABLES	ADF STATISTIC	ORDER OF INTEGRATION
GDP	-4.936320***	l(1)
GCEX	-5.035034***	l(1)
GREX	-7.343818***	l(1)
EXRATE	-4.191530***	l(1)
GFCF	-6.035042***	l(1)
LF	-5.840544***	l(1)
INFL	-4.616739***	l(0)

Source; Authors computation (E-views 9)

Table 4.3: ADF Unit Root Test Results: (1970-2019) (Model 3)

VARIABLES	ADF STATISTIC	ORDER OF INTEGRATION
RGDP	-6.153076***	l(1)
GCEX	-6.115949***	l(1)
GREX	-6.057136***	l(1)
EXRATE	-5.207219***	l(1)
GFCF	-6.861839***	l(1)
LF	-8.926167***	l(1)
INFL	-4.032294**	l(0)
REGIME	-6.845519***	l(1)

The decision rule states that we accept the null hypothesis if the absolute value of the t-statistic is lower that the absolute critical value at 5% level of significance. From Table 4.1 above, the phillips-perron t-statistic value at level for each of the variables except LF is less than its corresponding critical values, thus, we accept the null hypothesis at level and conclude that GDP, GCEX, GREX, EXRATE, GFCF, and INFL are non-stationary while LF was stationary at level.

However, the results confirm that transforming the variables into their first difference brought all the variables to stationarity since the absolute values of the t-statistic of each variable is greater than its corresponding critical value at 5%. This implies that the variables are integrated of order zero, and one. In our model two and three, all our variables were stationary at first difference I(1) except INFL that was stationary at level.

4.2 Co-Integration Test

Cointegration among time series variables suggests that series may behave in different way in the short run but that they will converge towards common equilibrium behavior in the long run. ARDL Bound cointegration test was used to test the long run relationship in all three models (model one, two and three).

Fiscal Policy and Economic Growth: An Empirical Assessment in Fiscal Regimes in Nigeria (1970-2019)

Model one

Table 4.4: ARDL Bound Cointegration Test

ARDL Bounds Test
Date: 08/21/21   Time: 14:09
Sample: 1971 1985
Included observations: 15
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	4.215008	6

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.12	3.23
5%	2.45	3.61
2.5%	2.75	3.99
1%	3.15	4.43

Source: Author's computed results (Eviews9)

From the results obtained, the f-statistic value of 4.215 is greater than the lower and upper bound critical values of 2.45 and 3.61 respectively at 5% level of significance. So, we reject the null hypothesis of no cointegration and we conclude that there exists a long run relationship among our variables in model one.

Model two

Table 4.5: ARDL Bound Cointegration Test Results

ARDL Bounds Test
Date: 08/21/21   Time: 15:32
Sample: 1988 2019
Included observations: 32
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	10.07734	6

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.12	3.23
5%	2.45	3.61
2.5%	2.75	3.99
1%	3.15	4.43

From the results obtained, the f-statistic value of 10.07734 is greater than the lower and upper bound critical values of 2.45 and 3.61 respectively at 5% level of significance. So, we reject the null hypothesis of no cointegration and we conclude that there exists a long run relationship among our variables in model two. That is to say that our variables in model two are cointegrated.

Fiscal Policy and Economic Growth: An Empirical Assessment in Fiscal Regimes in Nigeria (1970-2019)

Model three

Table 4.6: ARDL Bound Cointegration Test Results

ARDL Bounds Test
Date: 08/21/21   Time: 17:48
Sample: 1972 2019
Included observations: 48
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	16.39658	6

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.12	3.23
5%	2.45	3.61
2.5%	2.75	3.99
1%	3.15	4.43

From the result in table 4.6, the f-statistic value of 16.3966 is greater than the lower and upper bound critical values of 2.45 and 3.61 respectively at 5% level of significance. So, we reject the null hypothesis of no cointegration and we conclude that there exists a long run relationship among our variables in model three. That is to say that our variables in model three are cointegrated.

4.3 ARDL Regression Results

Model one

Variables	Coefficient	t-statistics	p-value
LGCEX	-0.320440	-1.799730	0.1220
LGREX	0.221013	0.678358	0.5228
LEXRATE	-3.419062	-2.786575	0.0317
LGFCF	-0.429063	-2.149392	0.0752
LLF	10.740683	7.648531	0.0003
INFL	0.004866	0.839375	0.4334
C	-181.932659	-7.907861	0.0002
R-squared	0.794532		
Adjusted R^2	0.767242		
f-statistics	36.41641		
Prob(f-statistics)	0.000003		

Source: Author's computed results (Eviews9)

Model two

Variables	Coefficient	t-statistics	p-value
GCEX	-0.044125	-2.830444	0.0111
GREX	0.020134	2.848362	0.0107
EXRATE	-66.999262	-0.683369	0.5031
GFCF	17.343794	4.072195	0.0007
LF	-0.000318	-0.410208	0.6865
INFL	44.318281	1.859395	0.0626
C	55.042265	2.763179	0.0191
R-squared	0.899853		
Adjusted R^2	0.879746		
f-statistics	9404.327		
Prob(f-statistics)	0.000000		

Source: Author's computed results (Eviews9)

Fiscal Policy and Economic Growth: An Empirical Assessment in Fiscal Regimes in Nigeria (1970-2019)

Model three

Variables	Coefficient	t-statistics	p-value
GCEX	-0.060725	-3.146051	0.0036
GREX	0.020636	3.054065	0.0045
EXRATE	101.792101	1.213460	0.2338
GFCF	16.067854	4.470093	0.0001
LF	-0.000229	-0.572729	0.5708
INFL	191.819704	1.671189	0.1044
REGIME	64.547976	2.160063	0.0468
C	35.086175	2.354981	0.0307
R-squared	0.986873		
Adjusted R^2	0.978813		
f-statistics	16758.72		
Prob(f-statistics)	0.000000		

Source: Author's computed results (Eviews9)

4.4 Interpretation

From our result in model one, Government capital expenditure (LGCEX) had a negative and statistically insignificant effect on economic growth in Nigeria. Government recurrent expenditure (LGREX) also had an insignificant positive effect on economic growth in the regulated fiscal regime. Further, Exchange rate (LEXRATE) in our model one had a negative effect on economic growth. That is, a percentage increase in LEXRATE will lead to a 3.41 percentage decrease in economic growth and this negative effect was statistically significant at 5% level of significance as the p-value of LEXTRATE (0.0317) was less than 0.05. GFCF and INFL was found to have an insignificant effect on economic growth in the regulated regime. Labour force (LF) was found to have a significant effect on economic growth in the regulated regime. A unit increase in LF will lead to a 10.7 percent increase in economic growth on the average, other things being equal. Our R^2 of 0.79 in model one indicates that 79% of the total variation in Gross Domestic Product (GDP) is explained by our independent variables.

From our model two, GCEX, EXRATE and LF have a negative effect on economic growth (GDP). That is to say, a one percent increase in GCEX will lead to a 0.04 percent decrease in economic growth. The negative effect of GCEX was statistically significant at 5% level of significance with a p-value of 0.011. Further, GREX, GFCF and INFL have a positive effect on economic growth in the deregulated period. The positive effect of GREX and GFCF was found to be statistically significant at 5% level of significance. That is, a one percent increase in GREX and GFCF will increase economic growth on the average by 0.02 and 17.3 percent respectively. Our coefficient of multiple determination shows that 89% of the total variation in economic growth in the deregulated period is jointly explain by our independent variables.

From our model three, GCEX have a negative and statistically significant effect on economic growth in Nigeria. A percentage increase in GCEX will decrease economic growth by 0.06 precent on the average, all other things being equal. GREX and GFCF have a significant positive effect on economic growth. That is, a percentage increase in GREX and GFCF will increase economic growth by 0.02 and 16 percent respectively. On the other hand, INFL and EXRATE have a statistically insignificant positive effect on economic growth while LF had a negative but insignificant effect on economic growth as well. Regime which was used to captured regulated and deregulated period had statistically significant positive effect on economic growth. The R^2 value of 0.98 indicate that 98% of the total variation in economic growth is explained by the independent variables in the model.

4.5 Discussion of Findings

From our model one that captures the effect of fiscal policy on economic growth in a regulated fiscal regime, we observed that none of the fiscal variables (GCEX and GREX) introduced in the model had a statistically significant effect on economic growth. But in our model two that captures the effect of fiscal policy on economic growth in a deregulated fiscal regime, we observed that GCEX and GREX had a statistically significant effect on economic growth within this period. The variable GCEX had a significant negative effect on economic growth in the deregulated period compared to the regulated period where GCEX had a statistically insignificant negative effect on economic growth. Further, the variable GREX had a statistically significant positive effect on economic growth in the deregulated period compared to the regulated period where GREX had an insignificant positive effect on economic growth.

In our model three, where we looked at the effect of fiscal policy on economic growth across the two fiscal regimes to find out if the effect of fiscal policy is different or the same across the periods; we observed that the sign of the coefficient of government recurrent expenditure (GREX) is positive and conforms to our theoretical expectation. It is also significant at 5 percent level having a probability value (P-value, 0.0045) less than 0.05. This finding is consistent with studies by Osuala et al. (2014) who reported a positive and significant impact of government recurrent expenditure on economic growth in Nigeria.

The sign of the coefficient of government capital expenditure is negative which is contrary to our theoretical expectation. However, it is significant at 5 percent having a probability value (P-value, 0.0036) less than 0.05. This implies that during the period covered in our model three, government capital expenditure has exerted significant negative impact on economic growth (GDP) in Nigeria. This finding contradicts previous result by Osuala et al. (2014) who reported a positive and significant impact of government capital expenditure on economic growth in Nigeria. This could be largely due to misappropriation of public funds and increased corruption that have resulted in siphoning of public funds to personal accounts abroad. It can also be attributed to the large number of abandoned capital projects in the country. It should be noted that public funds stacked away in personal accounts in foreign countries, stimulates production only in the foreign economy and may affect economic growth in the domestic economy adversely.

The variable Exchange rate in our model three was positive and statistically insignificant at 5% level of significance with a p-value greater than 0.05. The positive coefficient of exchange rate conforms to our theoretical expectation. The variable GFCF was found to have a positive and significant effect on economic growth.

The variable Regime was introduced in our model three to capture the effect of fiscal policy on economic growth across the two fiscal regimes being studied. The sign of the coefficient of Regime is positive, about (64.55) and conforms to our theoretical expectation. It is also significant at 5 percent level having a probability value (P-value, 0.0468) less than 0.05. Specifically, the result indicates that there is a statistically significant difference in the effect of fiscal policy on economic growth across the two fiscal regimes (regulation and deregulation). Comparing our model one and two we can see that fiscal policy is more effective in the deregulated regime compare to the regulated regime, and in model three, since our variable Regime was significant, we can conclude that the effectiveness of fiscal policy on economic growth across the two fiscal regimes is not the same.

5.0 CONCLUSION AND RECOMMENDATIONS
5.1 Conclusion

The main objective of this study is to comparatively analyse the impact of fiscal policy on economic growth in Nigeria during regulation and deregulation periods. Specifically, the study set out to analyze the impact of fiscal policy on economic growth (GDP) in Nigeria, and to ascertain whether the impact of fiscal policy on economic growth in Nigeria is the same or different across the two fiscal regimes (regulation and deregulation). We conclude that there is a significant difference in the level of impact of fiscal policy on economic growth across the different fiscal regimes in Nigeria. The effectiveness of fiscal policy in Nigeria is higher in the period of deregulation than in the period of regulation.

5.3 Recommendations

The main objective of fiscal policy is to regulate, stabilize, and stimulate the economy for economic growth. Fiscal policy is the use of government expenditures, taxation, and public debt to regulate economic activities in a country. In order to achieve these objectives, the following recommendations should be considered:

i- Increase Recurrent Expenditure

Based on the standardized coefficients of the fiscal variables, a strong emphasis should be placed on government's recurrent expenditure as it is the most important and influential variable in the determination of the level of the GDP in our models. Government should utilize its recurrent expenditures as a strong fiscal policy tool to control its economic growth.

ii- Transparency and Accountability in Government

One reason which could have been the cause of the unexpected signs and magnitudes in the coefficients of the explanatory variables in the empirical finding is the lack of transparency and accountability in government activities especially in the spending of government generated revenue, in addition to the mismanagement of public funds. Nigeria is a country known internationally for corrupt practices and embezzlement of public fund, this fact has a great influence on the amount allocated to a sector in the budget and the output of that sector at the end of the fiscal year. In a country where corruption and financial crimes are rampant, a whole lot is being expended, little is accounted for, and the output of such expenditure is meagre. To resolve this problem, the Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices and Other Related Offences Commission (ICPC) should ensure an unbiased discharge of their duties of curbing corrupt practices while the Executive, Legislature, and Treasury controls of public expenditure are carried out by the various institutions responsible for them, that is, the Presidency, the National Assembly, and the Accountant-General of the Federation respectively.

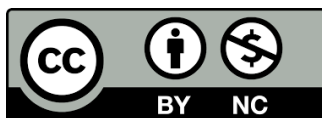iii- Avoidance of extravagant capital expenditure

Nigerian government is known for abandoned capital projects due to mismanagement and misappropriation of funds therefore, efforts should be made by the government to ensure that all expenditures are well allocated and properly utilized, and all residue should be repatriated to the Treasury on the last day of the fiscal year. Also, efforts should be made to complete previously abandoned capital projects.

Fiscal Policy and Economic Growth: An Empirical Assessment in Fiscal Regimes in Nigeria (1970-2019)

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