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Predictive Strength of Fiscal Policy on Nigeria's Economic Growth

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Abstract

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series (1985-2021) on the Nigerian economy were carried out. The results confirmed the stationarity of the data at level and first difference respectively. Heteroscedasticity and Cointegration tests equally confirmed existence of cointegration among the independent variables. The result revealed that fiscal policy as exemplified in the use of oil revenue, non-oil revenue, recurrent expenditure and capital expenditure exerted statistically significant impact on economic development in Nigeria; the short-run effects of the public debts and inflation notwithstanding. The study thus recommends among others, an increased government spending on capital projects such as to guarantee constant supply of electricity, provision of good road network in order to promote industrial development and in turn create more job opportunities for the citizenry as the employed contribute to increasing the GDP of the country. In addition, public debts should be made reproductive with a view to financing higher investment that will fasten repayment and lessen the encumbrance on the nation's economy.

Debate concerning the efficiency of fiscal policy as a tool for stimulating economic progress in developing countries, Nigeria inclusive, remains constantly raging and inconclusive. This study was thus embarked upon to take a stand on this in Nigeria context. Several stationarity tests involving ARDL bound test on 37 year-time

1. Introduction

The occurrence of macroeconomic instability is a well-established and familiar phenomenon that affects economies globally. Over the last two decades, issues such as business cycles, price increases, joblessness, and discrepancies in international commerce have manifested in many forms. Frequently, these circumstances degenerate into a worldwide economic recession of which governments all over the world has come up with various policies to mitigate the threat posed by them. Prominent among the policies used is the fiscal policy which has been used in conjunction with other programmes, most notably among which is the monetary policy. These two strategies have been used to attain the macroeconomic objectives of maintaining stable prices. ensuring full employment, reducing poverty levels, and most importantly, promoting robust and sustained economic growth which has been the focus of governments globally, especially the emerging nations.

In simple term, an economic growth refers to the increase in the total market value of goods and services produced in an economy, over a specific period of time, measured as a percentage rate of increase in the real gross domestic product or increase in gross domestic product per capita (Adeagbo, 2021). On the other hand economic development explains an economy's capacity to expand its production of commodities and services in a sustainable manner by using its capital stock and other production components (Omesi, Ngoke & Ordu, 2020; Didia & Ayokunle, 2020). It is the sustained rise in total output of an economy per individual that led to increases in real per capita income of a country (Adeagbo, 2019; Adeusi, Uniamikogbo, Erah, & Aggreh, 2020; Adefabi, 2022). It is usually calculated by the monetary value of all the final goods and services produced within an ecosnomy in a year, either in nominal value which takes inflation into consideration or correcting for it; which is measuring in real terms (Ayanwale, 2007: Nwamuo, 2020).

As for fiscal policy, it refers to the deliberate use of government expenditures and tax measures to exert control over economic circumstances, specifically macroeconomic indicators such as aggregate demand, employment, inflation, and economic growth (Uffie & Aghanenu, 2019; Benimana; 2020). It involves the creation of revenue via taxation and other means, as well as the determination of the scope and the direction of expenditures to sway economic activity (Anyanwu, 1993; Shahid & Naved, 2010; Dasanbo, 2017).

The fundamental roles of fiscal and monetary strategies in economic administration, and its applicability to all open economies, including Nigeria, are indispensable. The use of these policies to provide a solid bedrock for the achievement of stable job opportunity has been advocated by Keynes years back especially during periods of economic downturn,. He is of the notion that governments can stabilize the instabilities in economic activity and normalizes the production level by adjusting spending and tax policies to cater for inadequacies in the private sector (Idris, Bakar & Ahmad, 2018). Hence, in a growing country like Nigeria, fiscal policy may be taken as an economic stabilization weapon which the government can use to control her income and expenditure level in order to achieve her macroeconomic policy objectives and bring about steady economic growth, high rate of job opportunities and low inflationary rate.

Nevertheless, debates about the efficacy of fiscal policy in the enhancement of economic development in developing countries seem to be inconclusive. Various scholars have been committed to understanding the factors and mechanisms that drive changes in human material advancement since the 17th and 18th centuries, of which Adam Smith, David Richardo, John Mill, Karl Marx, and neoclassical economists are prominent (Ogbole, Amadi & Essi, 2011). This is also pertinent to various governments in this contemporary world but it should be noted that the economic prospects and progress of most developing countries, Nigeria inclusive, hinges on its global interconnectedness. This reflects in the country's economic system where external open transactions dictate its overall economic activity. However, in spite of the country's significant level of openness, its economic progress has remained lethargic and gloomy (Odedokun,

1997) with little or nothing to show for, in terms of its effect on poverty alleviation or economic growth, despite the country's huge revenue accrual from oil over the last fifty years (Sikiru & Ajayi, 2017) thus exposing the major challenges of fiscal management in term of its inefficient use of public resources. We can therefore smell a form of mismanagement in the country's resources. The main emphasis now is how to turn the country back to the track of effective fiscal management and move the economy forward.

However, the mixed outcomes of numerous studies have led to unclear conclusions about the effectiveness of fiscal policy in promoting economic growth and development. Consequently, the conflicting findings thus put policy makers at a crossroad hence the need for further studies. This research therefore sets to assess predictive strength of fiscal policy on Nigeria's economic progress using data from 1985 to 2021.

2. Literature Review

2.1 Empirical review

Previous empirical studies have not come out with clear conclusions concerning the strength of fiscal policies on economic progress of a nation. Some reported that a positive relationship exists between fiscal policy and economic growth (Onwe, 2014; Idris, Bakar & Ahmad, 2018; Babalola & Aminu, 2011, Isiaka, 2021); some reported negative effects (Olawumi & Avinla, 2007; Navaratnam & Mayandi, 2016; Tung, 2018) while others reported mixed results (Ogbole, Amadi & Essi, 2011; Nwamuo, 2020). For instance, Jahangir and Reza (2008) examined the effects of Iranian government budget policies on the progress of the country's economy from 1974 to 2007 using a vector error correction model and cointegration methods as their analytical tools. Findings from their study revealed that there exists a strong and longlasting link between the included explanatory variables (among which are work force, government and private spending) and the nation's economic advancement. Also, it was revealed that private investment and the development of human capital play a big role in the growth process especially in the short run. It should be noted that the study did not disaggregate government spending neither did it take into consideration the role of gross capital formation in their studies. Also the influence of borrowing on the nation's economy was not accounted for.

Navaratnam and Mayandi (2016) carried out a research on five South Asian countries (Bagladesh, Sri-Lanka, Pakistan, Nepal and India) to ascertain the influence of fiscal deficit on the economic growth of the countries between 1980 and 2014 using ordinary least square analytical tool with fiscal deficit and the real gross domestic product as the explanatory variables. The result of the findings confirmed that fiscal deficit has a negative impact on economic growth in the sampled countries during the period covered. Tung (2018) used quarterly data from 2003-2016 in his own study in Vietnam to examine the effect of fiscal deficit on economic growth using Error Correction Model. The result revealed that the nation's economic growth is adversely affected by fiscal deficit both in the short-run and long-run.

In another related study on the Moroccan economy, Gyasi (2020) examined the nexus between economic growth and fiscal deficit for the period 1990 to 2017 using ARDL estimation technique to verify the existence of a long-run or relationship short-run among variables employed. It was reported that fiscal deficit present a long run detrimental effect on the nation's economic progress. Further underscoring the place of time and location in the strength of fiscal policy to foster the economic growth of a nation, Babalola and Aminu (2011) investigated the effect of fiscal policy on Nigeria's economic growth using data spanning through 1977 to 2009. The data collected was analyzed using Autoregressive Distributed Lag method and the result revealed that productive expenditure positively influenced the growth of the country's economy. The study only accounted for government distortionary revenue but neglected other sources of revenue as well as the effect of borrowing on the nation's economy. Agu, Idike, Okwor and Ugwunta (2014), in a similar research, examined the influence of fiscal policy on Nigeria's economic performance using data that covered 1961 to 2010 which were analyzed with OLS method. They reported that government spending impacted positively on the nation's economy. However, the study did not integrate the revenue aspect of fiscal policy included the borrowing components.

Nwamuo (2020) examined the economic influence of government spending and income creation via tax measures in Nigeria using data which spanned 1981 to 2018. Gross domestic product was regressed on other explanatory variables such as government internal debt, government foreign debts, government recurrent expenditure as well as capital and non-oil revenue. The econometric results indicated that domestic, foreign debts and capital expenditure presented a negative but insignificant effect on the economic progress of the country while nonoil revenue impacted on the nation's economic growth positively and significantly. The study only considered the non-oil revenue aspect of government income but failed to recognize the effect of gross capital formation on the growth of the economy studied.

In another study, Benimana (2020)investigated the nature of Rwanda's economic performance with respect to government expenditures and revenue creation taking data from 1999 to 2017 as a case study. The data collected were analyzed using multiple linear regressions and OLS estimation method. The study used government expenditure, public debts and taxes as the explanatory variable for gross domestic product which was the proxy for economic growth, the dependent variable but failed to disaggregate government expenditures. Nevertheless, findings revealed that government spending; her borrowing and income have significant positive influence on the country's economic progress.

Introducing another dimension of fiscal policy variable, Rabia and Kamran (2012) conducted a research on the effect of debt burden on economic growth of Pakistan from 1980 to 2010. Debt was disaggregated into domestic and external debts and the data collected were analyzed using OLS estimation technique. Findings revealed that there exists an inverse and statistically significant relationship between debts incurred (both domestic and external) and economic growth. It should be noted that this study did not make provision for the effect of continuous increase in price on the nation's economic growth which is an important variable that exert effect on spending.

In a related study on Nigeria economy, Sheu and Aliyu (2013) examined the nexus between foreign debts and the nation's economic progression from 1970 to 2010 with Ordinary Least Square as the analytical instrument employed. Findings revealed that foreign borrowing presented a positive and significant contribution to the nation's economic progress during the period studied. In another related study but with different scope, Abdulkarim and Saidatulakmal (2021) examined the consequence government borrowings on Nigeria's of economic development taking data from 1980 to 2018. The data collected were estimated using ARDL method. Findings showed that external debts; though had a growth enhancing effect at the initial stage; it presented a negative and statistically substantial consequence for economic advancement in the latter years while domestic debts brought about positive impact in the long run despite its negative effect in the short run; thus emphasizing the effect of timing on results. However, the study failed to incorporate government expenditure into its component.

Efanga, Ugwanyi and Ogochukwu (2020) examined the effect of income from oil on

Nigeria's economic growth between 1981 and 2018 using ARDL method of analysis. Findings revealed that income from oil helped to drive the nation's economy forward. In another related findings, Isiaka (2021) observed the consequence of proceeds from the sales of oil on the performance of Nigeria economy from 1984 to 2018 using ARDL estimation technique. His findings revealed that proceed from the sales of oil to government assisted in propelling the nation's economy towards development. These studies neglected the important functions of gross capital formation and inflation on economic progress of the country.

Following from these expositions the omission of the disaggregation of government expenditure and revenue was crystal clear while some even overlooked the role of gross capital formation as an important variable to be considered. Similarly, most researchers did not consider the effect of debt burden (both domestic and foreign debt) on the dependent variable, the few ones that did failed to make provision for the effect of continuous increases in price on the nation's economic growth which is an important variable that exert effect on spending hence the significance of this study.

2.2 Theoretical framework

The basis of this research is the endogenous growth theory as it integrates the ways by which government spending and income decision via taxation can influence economic growth in the long run. This it does through the stimulation of level and growth rate of per capita output using government spending.

Precisely, the work of Barro and Sala-I-Martin (2004) forms the springboard on which the growth effect model in this work stands with the inclusion of labour (human capital) in addition to physical capital as an extension of the Cass-Koopmans model. The research uses a Cobb-Douglas production function and incorporated government spending as an input. Barro and Sala-I-Martin (2004) in their discussion of the endogenous growth model discerns the channels fiscal policy may inspire spontaneous economic growth. They used the capital and productivity level to form their base model as below:

In the equation above, Y stands for an economy's aggregate output level, while A depicts the total productivity level with letter K representing capital; L as labour, and α the quantity that measures the output elasticity of capital. When output elasticity of capital is a unit it shows that a linear relationship exists between the production function and capital bringing about ta constant returns to scale, thus we have:

Y = AK

In line with the above, the endogenous growth theory is popularly known as the AK model.

3. Methodology

3.1 Data source

The study adopted the secondary data from the Central Bank of Nigeria (CBN) Statistical Bulletin, 2021 edition for the variables covering the 1985 to 2021. The choice of the period was informed by the need for concerted efforts on the part of governments to address the challenges posed by economic downturn world over. The explanatory variables included in this research include the yearly data on oil revenue, non-oil government capital income. expenses. government recurring expenses, domestic debt, foreign debt, and inflation. The real GDP growth rate was used as the dependent variable to estimate the economic growth of the country.

An econometric model was specified to analyze the data collected. Koutsoyiannis (2001) argued that while constructing an econometric model, it is important to base it on economic theory and include all relevant data related to the subject being studied. The study was thus based on two theories: the AK model of spontaneous growth and the Cobb-Douglas output function. The inclusion of Cobb-Douglas output function was informed by its robustness and popular adoption in the measure of growth among which was its ability to accommodate multiple inputs, even in the face of market imperfections, without introducing distortions; its ability to handle various econometric estimation problems including serial correlation, heteroskedasticity, and multicollinearity making it a versatile tool for analysis.

In addition, Cobb-Douglas production function provides a good fit for aggregate data and it is also a good proof for growth accounting since it provides all necessary data. It is thus considered a veritable model for analyzing growth related issues (Dornbusch, Fischer & Startz, 2014).

The production function is thus represented by equation (i) as follows:

$$Y = AK^{\alpha}L^{1-\alpha} \qquad i$$

The variables of the equation are as follows: Y represents economic output, A represents technical development, K represents capital stock, and L represents labor. The parameters α and 1- α , are vector parameters. By dividing equation (i) by the variable "labour", we have the following results:

$$\frac{Y}{L} = A \frac{K\alpha}{L}$$
 ii

Let $y = \frac{Y}{L}$ represent the economic production per labour, $k = \frac{k}{L}$ represent the capital output per labour, α represent the vector of capital stock per labour, and A stay untouched by the labour force or capital stock. In simpler terms, this may be expressed as:

$$y = Ak^{\alpha}$$
 iii

3.1 Model Specification

The research is predicated on the premise that fiscal policy has an impact on technical advancement, therefore

$$y = f(FP)k^{\alpha}$$
 v

The research utilizes government expenditure and income as metrics for fiscal policy and integrates them into equation (v) to get equation (vi) as shown below

$$y = f(GEXP, GREV, INF) k^{\alpha}$$
 vi

since borrowing is one of the means by which governments, especially in developing countries, raise money to execute development policies, hence, the introduction of borrowing inform of debts to equation (vi).

Soludo (2003) opined that countries took loan either to finance higher investment or higher consumption and also to evade hard budget constraints thus, justifying the inclusion of debts as introduced in equation (vi) to produce equation (vii) below:

$y = f(GEXP, GREV, DBT, INF) k^{\alpha}$ vii

The inflation rate (INF) was included in the analysis of government expenditure (GEXP), and government revenue (GREV) and debt (DBT) because every cost incurred (spending or income) is vulnerable to inflation. This is important in assessing the real value of purchasing power in relation to the cost of goods and services. Also, most government spendings in Nigeria are either in capital or recurrent forms while her revenue are derived from either oil or non-oil sources. Government borrowing can also be sourced locally or off-shore, hence, the disaggregation into domestic and foreign debts.

Incorporating these analyses and converting equation (vii) into econometric form we have:

$$\begin{split} GDPgr_t &= \alpha_0 + \alpha_1 OILREV_t + \alpha_2 NOREV_t + \\ \alpha_3 CEXP_t + \alpha_4 REXP_t + \alpha_5 DDBT_t + \alpha_6 FDBT_t + \\ \alpha_7 INF_t + \alpha_8 K_t + \mu & viii \end{split}$$

where GDPgr = Gross Domestic Product growth rate proxy for Economic Growth, OILREV = Oil Revenue, NOREV= Non-Oil Revenue,

CEXP = Capital Expenditure,

REXP = Recurrent Expenditure,

DDBT = Domestic Debt

FDBT = Foreign Debt, INF = Inflation Rate,

K = Capital stock/Gross Capital Formation subsequently denoted by GCF. α_0 to α_8 are vector of the variables, μ = error term, t = time trend.

Equation (viii) must be adjusted so that all variables have consistent coefficients. This is necessary since INF and GDPgr were expressed as rates, while the other variables were measured in billions. Therefore, the variables that are expressed in billions would be transformed into logarithmic values, resulting in a log-linear version of the model as shown in equation (ix) below:

$$\begin{split} &GDPgr_t = \alpha_0 + \alpha_1 \, lnOILREV_t + \alpha_2 \, lnNOREV_t + \\ &\alpha_3 \, lnCEXP_t + \alpha_4 \, lnREXP_t + \alpha_5 \, lnDDBT_t + \alpha_6 \\ &lnFDBT_{t+} \, \alpha_7 \, INF_t + \alpha_8 \, lnGCF_t + \mu \qquad ix \end{split}$$

On the *a priori* $\alpha_0, \alpha_1, \alpha_{2,}, \alpha_3, \alpha_4, \alpha_6, \alpha_7, \alpha_8 > 0, \alpha_5 < 0$

Several robustness checks were carried out such as the Augmented Dickey Fuller (ADF) test and Phillip-Perron statistics, done to evaluate the stationarity of the variables. The Autoregressive Distributed Lags (ARDL) bound test was employed to determine cointegration, which accesses the presence of a long-term relationship between the dependent and independent variables. Additionally, Ordinary Least Square (OLS) was employed to estimate the effect of each descriptive variables included in the model on the dependent variable.

4. Results

In order to avoid the problem of spurious regression that could arise with the use of nonstationary variables which will eventually bring about a misleading conclusion a unit root test was conducted to confirm the state of the stationarity of the variables employed in the model. This was ascertained using both the Phillip-Perron statistic and Augmented Dickey Fuller methods at constant and trend with the null hypothesis that there is no unit root. Table 1 presents the outcome of the unit root tests at 5% and 1% levels of significance.

The results revealed that REXP, CEXP, OILREV, NOREV, DDBT, FDBT and GCF were also significant at first difference while INFR and GDPgr were significant at levels. Hence, the null hypothesis that the data have a unit root may be rejected for the former variables but upheld for the latter ones, thus justifying the need for ARDL bound tests as presented in Table 2.

The analysis is premised on the decision to reject the null hypothesis if the F-statistics from the results are higher than the critical value bound of I(1) and hence assume that there is cointegration, which means that the dependent variable and its explanatory factors have a long run relationship otherwise we accept the null hypothesis. In a contrary case of the values falling between levels and first difference, the test is adjudged indecisive and the result is thus questionable.

As can be observed from table 2, the Fstatistic is larger than the critical limit for I(1) at 5% significant level, thus affirming a long run link between the dependent variable and its regressors. Long run cointegration regression estimation with ARDL method was then employed to investigate the effect of the descriptive variables on the economic progress of the country.

Variable		ADF	P-value	PP	P-value	Order of	Conclusion
		5% t-		5% t-		integration	
		Statistics		Statistics			
		value		value			
	Levels	-0.672	0.968	-1.063	0.922		Stationary
Log REXP	1 st diff	-8.650	0.000***	-8.772	0.000***	I(1)	at 1 st diff
	Levels	-1.240	0.890	-1.265	0.882		Stationary
Log CEXP	1 st diff	-6.381	0.000***	-6.381	0.000***	I(1)	at 1 st diff
	Levels	-0.210	0.990	-0.379	0.985		Stationary
Log OILREV	1 st diff	-5.475	0.000***	-7.033	0.000***	I(1)	at 1 st diff
	Levels	0.188	0.996	-1.302	0.873		Stationary
Log NOREV	1 st diff	-4.685	0.003***	-7.824	0.000***	I(1)	at 1 st diff
	Levels	0.166	0.899	-1.453	0.882		Stationary
Log DDBT	1 st diff	-4.256	0.003***	-6.892	0.000***	I(1)	at 1 st diff
	Levels	0.192	0.955	-1.289	0.776		Stationary
Log FDBT	1 st diff	-4.526	0.004***	-7.214	0.001***	I(1)	at 1 st diff
	Levels	-2.254	0.448	-2.165	1.000		Stationary
Log GCF	1 st diff	-3.831	0.026**	-3.799	0.028**	I(1)	at 1 st diff
							Stationary
INFR	Levels	-4.290	0.011**	-2.868	0.184	I(0)	at level
							Stationary
GDPgr	Levels	-3.224	0.096	-3.776	0.029**	I(0)	at level

Table 1. Unit Root Test Results

denotes significant at 5%, * denotes 1%.

4.1 Robustness and diagnostic test results

Ordinary Least Square estimates remain dependable even when there is heteroskedasticity standard but the errors calculated unadventurously become unacceptable (Arellano & Bond, 1991). This research undertook an additional regression analysis using the residuals gotten from the original equation. The research used the Breusch-Pagan-Godfrey method to properly test for heteroskedasticity, using the probability value. The decision rule specifically, states that if the likelihood is below 5%, the null hypothesis will be accepted otherwise it will be rejected and conclude that there is no heteroskedasticity (Arellano & Bouver, 1995). The result is shown in table 3 below. The presence of heteroskedasticity in a model implies that the coefficients estimated from the regression analysis would be biased, hence the need for the various diagnostic tests as revealed in tables 3 and 4. Table 3 established the probability value been larger than the 5% significance threshold since the R^2 value is 3.811 and the resultant Chi-square value was 0.655 thus accepting the alternate hypothesis that the model was devoid of heteroskedasticity.

Table 2. ARDL Bounds Test					
Test Statistic	Value	Κ			
F-statistic	4.68	9			
Critical	Critical Value Bounds				
Significance	I(0) Bound	(1) Bound			
10%	3.14	3.24			
5%	3.46	3.62			
2.5%	3.76	3.89			
1%	3.96	4.44			

Explanatory Note: K stands for number of parameters.

Table 3. Heteroskeda	sticity Test: V	Vhite	
Heteroskeda	asticity Test: I	Breusch-Pagan-Godfrey	7
F-statistic	0.451	Prob. F(8	3,30)
0.352			
Obs*R-squared	3.811	Prob. Chi-S	Square(8)
0.655			
Scaled explained SS	10.154	Prob. Chi-S	Square(8)
0.176			
Table 4. Serial Correlatio	n Test		
Breusch-	Godfrey Serial	Correlation LM Test:	
E-statistic	2 157	Prob $F(2,28)$	0.07

F-statistic	2.157	Prob. F(2,28)	0.07
Obs*R-squared	4.794	Prob. Chi-Square(2)	0.05

Going further and employing Breusch Godfrey in its serial Correlation Langranger Multiplier test; table 4 revealed F-statistics value of 2.157 at probability value of 0.07 which is greater than 0.05, thus confirming that the model is free from the problem of autocorrelation.

After the various robustness test results and confirmations that the model is devoid of heteroskedasticity and as well free from the problem of autocorrelation, the study proceeded to examine the performance of each of the explanatory variables in the model as revealed in the OLS the regression result in table 5

The summary of the regression analysis in table 5 confirmed that the variables are not just pushovers in the determinant of economic growth of the country as they accounted for about 82% of the variation in GDPgr. This is confirmed by the R-squared value of the model and further buttressed by the adjusted R-squared value.

As a whole, the model is adjudged to be significant since the probability of F-statistics which is a measure of the joint effects of the descriptive variables produce a corresponding probability value of 0.002 which is statistically significant at 1%. It therefore sufficed to conclude that all the explanatory variables in the model are significant determining factors of GDPgr in Nigeria. The variables in the model are also serially correlated; this is confirmed by the value of Durbin-Waston with approximately 2.09 which falls within the acceptable range in an econometric analytical rule.

Following the analysis in table 5, the government recurrent expenditure presents a statistically significant positive effect on the country's economic progress though at a minimal rate. For 1%-point increase in REXP about 0.98unit rise in the country's economic progress was guaranteed. This outcome confirms Benimana (2020) which reported a positive and

significant impact of recurrent expenditure on the Rwandan's economy and the country's economic progress.

Table 5. Regression Analysis

Variable	Coeff	Coefficient		Std. Error t-Statistic	
Prob.*					
LOG(REXP)	0.981	4.312	-4.28	6 0.001	
LOG(CEXP)	7.192	2.925	2.45	9 0.025	
LOG(OILREV)	2.739	1.677	3.42	3 0.003	
LOG(NOREV)	5.994	3.247	1.84	6 0.082	
LOG(DDBT)	-3.739	2.067	-2.40	0.001	
LOG(FDBT)	-2.599	1.526	-1.69	8 0.000	
LOG(GCF)	1.443	3.561	0.4	0.690	
INF	0.227	0.071	3.12	1 0.006	
INF(-1)	-0.239	0.075	-3.2	0.005	
С	21.015	10.721	1.9	0.066	
R-squared	0.815	Mean dep	Mean dependent var 4		
Adjusted R-squared	0.620	S.D. dependent var		3.886	
S.E. of regression	2.397	Akaike info criterion		4.891	
Sum squared resid	97.701	Schwarz o	5.728		
Log likelihood	-69.050	Hannan-Quinn criter.		5.183	
F-statistic	4.166	Durbin-Watson stat		2.098	
Prob(F-statistic)	0.002				

*Note: Dependent Variable: GDPGR. Method: ARDL. Dynamic regressors (3 lags, automatic). p-values and any subsequent tests do not account for model selection.

LOG(REXP) LOG(CEXP) LOG(OILREV),

LOG(NOREV),LOG(DDBT), LOG(FDBT), LOG(GCF), INF

The outcome also depicts that government spending on capital project (CEXP) significantly improves economic progress in Nigeria as a 1%point increase in CEXP causes a statistically significant rise in GDPgr by 7.19units. This confirms that governments spending on infrastructure attracted more investors which in turn stimulated economic progress. Thus affirming the position of Jahangir and Reza (2008) as well as that of Agu, Idike, Okwor and Ugwunta (2014) that government spending in form of provision of social infrastructures stimulates the growth of an economy. In addition, government income from oil proceeds (OILREV) presents a substantial positive effect on the nation's economic progress as a 1%-point upsurge in it improves the growth in the nation's economy by 2.74units. This contribution is far below expectation as against the astonish rise in oil income over the years confirming Odedokun (1997) disappointing state of the oil income in Nigeria as an oil-reach nation. Thus we can conclude that it has not translated to meaningful development of the economy. Similarly, the government non-oil income (NOREV) contributes substantially to the nation's economic progress in a positive

manner as findings discovered that a 1%-point increase in it brings about 5.99unit upsurge in the country's economic advancement. The result is in line with Efanga, Ugwanyi and Ogochukwu, (2020) and that of Isiaka (2021).

As regards public debt, findings revealed that both domestic and foreign debts have significant negative effect on economic growth. A 1%-point increase in domestic debt results in 3.74unit backward step for the nation on his trajectory of economic progress while the same results in 2.60unit decrease in the case of foreign debt. This suggests that borrowings have adverse effect on economic development of the country especially when such borrowings were not put to effective and productive uses. Normally, countries experiencing fiscal deficit borrows to circumvent their hard budget constraint in order to improve the country's economic progress such countries like Nigeria remained disappointed by such approach as this has not impacted meaningfully on the nation's economic growth thus suspecting the negative role of corruption in borrowing to finance growth in the form of diversion of the funds to unproductive investment. The result corroborates the findings of Rabia and Kamran (2012) as well as that of Abdulkarim and Saidatulakmal (2021) but controverts Sheu and Aliyu (2013) which reported that borrowing assist in economic advancement. The departure from Sheu and Aliu's finding especially in Nigeria might be due to passage of time and data frame. This thus shows that the factor of location and timing matters.

As shown from the results in respect of capital stock (GCF) it was revealed that a 1%-point rise leads to 1.44unit upsurge in economic progress of the country. The small impact of capital formation was not too far from the devastating and deleterious impact of the outbreak of Covid-19, the labour unrest and state of insecurity which bewildered the nation and which encouraged capital flights and brain drain out of the economy.

As regards the effect of inflation on the economy, it was revealed the expected adverse effect was well pronounced in the later years than in the current years as a unit rise in prices of goods and services brought about 0.23 unit shrink in people's well-being over the period of investigation.

5. Conclusion and Policy Implication

This paper examined the relative potency of fiscal policy ingredients on the economic growth of Nigeria between 1985 and 2021. The research focused on analyzing the theoretical foundation that connects fiscal policy to economic growth as illustrated by the endogenous growth theory, with a particular emphasis on Barro's model. After the stationarity feature of the variables was confirmed, and it was found that all of them were combinations of I(0) and I(1) ARDL estimation approach was used, since it can handle variables with different levels of stationarity. The output of the bound test indicates that the variables are cointegrated, meaning that they exhibit a long-term link.

Several robustness tests were conducted to ensure the standardization of the research result making it reliable and different from other research outcomes. In general, the results indicate that fiscal policy has a statistically significant impact on economic output in Nigeria, while results on borrowing were counterfactual. The study disaggregated government expenditure and revenue and included the role of gross capital formation as an important variable to be considered. At the same time, it also measured the effect of debt burden (domestic and foreign) with provision for inflationary pressure on economic growth distinguishing it from most studies.

The study also poses far reaching implications for governance as it presents empirical basis for policy makers as it equips them with capability for a judicious application of public funds. For instance, governments are to spend more on capital project such as to foster constant supply of electricity and good road network among other means of engaging the productive use of the nation's resources. This will promote industrial development and in turn provide more job opportunities for the citizenry which will further increase GDP of the country. In addition, it was recommended that public debts, if necessary, should be made a reproductive one to finance higher investment that will fasten repayment and lessen the encumbrances on the nation.

Nigerian government should begin to scale up the diversification option from oil based productive activities to other sectors as findings have revealed the relative impact and significance of the non-oil sector in the overall economic development of the nation while putting in place measures to lessen the consequences of inflation. Such measures include increase in direct taxation, restraining the activities of hoarders, putting in place an effective price control system, among others. The need to boost the country's internally generated revenue and avoid borrowing is also rife, as doing so will lessen the debt encumbrance on the nation's economy and where and when borrowing is inevitable such should be channeled to more productive uses while also minimizing the effect of rent-seeking.

A future extension of this study may employ a wider coverage of data while adopting more sophisticated analytical tools with a view to explaining the place of fiscal policy in the growth equations of Nigeria. In terms of scope the study may be extended to regional analysis of the African continent while taking into consideration environmental disparity of each country. It is prescribed that issue of structural breaks in each of these countries may matter in explaining the predictive strength of fiscal policy in growth analysis.

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