

## **Macroeconomic Policy, Institutional Quality and Inclusive growth in Nigeria**

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The inability of macroeconomic policy in influencing macroeconomic indicators in Nigeria has been attributed to weak institutional quality which has consequences for the achievement of inclusive growth. Thus, this study investigates the link between macroeconomic policy, inclusive growth, and institutional quality in Nigeria. The period of this study spanned 1996 to 2021. The study utilised fully modified ordinary least square and the results showed that macroeconomic policy variables and institutional quality contributed significantly in enhancing inclusive growth in Nigeria. More so, it was observed that the interactive terms between macroeconomic policy variables and institutional quality enhanced inclusive growth. Therefore, the study concludes that macroeconomic policy and institutional quality are important drivers of inclusive growth in Nigeria. This study recommends that institutional quality should be improved using appropriate anti-corruption policies through institutions like the Economic and Financial Crime Commission (EFCC) and the Independent Corrupt Practices and Other Related Offences Commission (ICPC).

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*Keywords:* Macroeconomic Variables, Institutional Quality, Inclusive Growth, FMOLS, Nigeria.

### **1. INTRODUCTION**

Since the great economic depression of the 1930 macroeconomic policy has been accorded an indispensable role and a vital tool in the achievement of sustainable growth. This is premised on the notion that sustained growth creates employment opportunities, and reduces inequality and poverty among others (Camdessus, 2005). While some countries have experienced sustained growth due to appropriate macroeconomic policy, the level of inequality, poverty, unemployment, and the percentage of the working poor have been on the rise. For instance, the Nigerian economy experienced an average growth rate of 6.3 per cent between 2000 and 2010 while within the same period, the unemployment rate rose from 13.1 per cent to 21.1 per cent. The simultaneous increase in the level of poverty and the worsening state of unemployment and inequality, clearly showed that the recorded economic growth has not been inclusive by not enhancing the quality of life nor abridged the income inequalities gap (Eurasian Economic Commission (EEC) & United Nation Conference on Trade and Development (UNCTAD, 2019).

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Besides, the inability of macroeconomic policy to influence socio-economic indicators has been attributed to weak institutional quality. Poor institutional quality weakens the ability of the state to address the problem of inclusive growth due to uneven distribution of the gains of economic growth and lack of equal employment/income earning opportunities. Such weak institution is characterised by corruption, nepotism, red-tape, bureaucracy, and selective/injustice among others. More worrisome is the fact that, despite the launching of institutional reforms (such as ICPC (Independent Corrupt Practices and other related Crime) and EFCC (Economic and Financial Crime Commission (EFCC)), inequality, poverty, and unemployment have worsened. The failure of macroeconomic policy and institutions in addressing issues of inequality, despite the recorded economic growth, resulted in a new line of economic thought—inclusive growth.

Inclusive growth emphasises the complementary relationship between economic growth and equity in addressing socio-economic issues such as rising poverty and the unemployment rate. Addressing the issue of inclusive growth is pertinent because inequality affects the innovation and investment potentiality of the poor and consequently hampers gross investment and economic growth (ECC & UNCTAD, 2018). More so, rising inequality propagates poverty levels, weakens the democratic process, and creates agitations for civic and social unrest, thereby discouraging macroeconomic activities and reducing the potential of the country to attract foreign investors (Dabla-Norris et al., 2015).

Despite the important role of institutional quality and macroeconomic policy in promoting inclusive growth, there has been less emphasis on the relationship among these variables with respect to empirical literature. Previous indigenous literature has largely focused on the link between inclusive growth and monetary policy (Olakenmi & Olaguj, 2020) while other studies analysed the fiscal policy–inclusive growth relationship (Estrada *et al.*, 2014). The outcomes of these studies are incomprehensive because they focused only on one aspect of macroeconomic (either monetary or fiscal) policy. Similarly, the literature is silent on the link between institutional quality and inclusive growth. However, emphasis has only been placed on the relationship between institutional quality and economic growth (Garba, Abdullahi, & Abubakar, 2016) and among institutional quality, macroeconomic policy, and economic development (Ifere, Okoi & Christian, 2015). Furthermore, the issue of the interactive influence of institutional quality and macroeconomic policy on inclusive growth has equally been neglected in the literature. Therefore, drawing from the weakness in the reviewed empirical literature, the under-listed research questions are raised for investigation.

- (i) To what extent does institutional quality and macroeconomic policy influence inclusive growth? and
- (ii) Does the interaction of institutional quality and macroeconomic policy influence inclusive growth?

Analysing the link between institutional quality, macroeconomic policy and inclusive growth is vital because the inferences from the study will enable policymakers to assess the relative effectiveness of both institutional quality and macroeconomic policy in influencing inclusive growth. More so, evaluating the interactive influence of institutional quality and macroeconomic policy on inclusive growth would provide remarkable evidence on whether the adjustment of these policy variables (institutional quality and macroeconomic policy) simultaneously would enhance or hamper the attainment of inclusive growth in Nigeria. Consequently, the findings from this study would enable

policymakers to apply the appropriate policy dose in achieving sustainable inclusive growth. More so, the policy reference resonating from this study will assist policymakers on the matters of actualising inclusive growth as contained in the Sustainable Development Goals (EEC & UNCTAD, 2019).

## **2. LITERATURE REVIEW**

### **2.1. Conceptual Review**

Inclusive growth has been described by the Eurasian Economic Commission (EEC) as the convergence of the welfare of different groups of persons in a country, which is accomplished not only by the appropriate redistribution of the benefits of economic growth but through the creation of impartial and favourable economic environments, which allows every member of the country to achieve the desired quality of life. The Asian Development Bank (ADB) described inclusive growth as the rise in earnings through equal participation in economic activities and the simultaneous decrease in inequalities as described by "non-financial" aspects of human welfare. The European Commission (EC) described inclusive growth as a strategy supporting the actualization of the reduction in the level of unemployment in the country. More so, it involves investment in skills acquisition, combating poverty, and the reformation of the labour markets.

According to the Organisation for Economic Cooperation and Development (OECD), inclusive growth is referred to as an improvement in the multidimensional living status of a typical (average) household. The World Economic Forum (WEF) refers to inclusive growth as the transformation of real economic growth into the enhancement of human welfare through the provision of relevant opportunities (EEC-UNCTAD, 2019).

For institutional quality, it has been described by Citizendum (2012) as the extent to which a country's institutional framework fosters multinational transactions and provides safety and certainty of investment decisions. Institutional quality according to Bruinshoofd (2016) refers to a broad notion that captures government regulations and individual rights. Heywood (2002) defined an institution as "a well-established body with a formal role and status. According to North (1990) institution is described as man-made regulations and factors which structure social, economic, and political interactions.

### **2.2. Empirical Review**

With respect to empirical literature, studies on inclusive growth are very few. Using panel data for 33 countries with sub-Saharan African (SSA) countries, Hussen (2023) analysed the impact of institutional quality on economic growth for the period 1991 to 2015. Utilising a two-step system generalised method of moment estimation method, the results of the study demonstrated that regulatory institutions, investment-promoting institutions and democratic institutions significantly contributed to growth enhancement in the SSA region while conflict-preventing institutions were irrelevant to promoting growth in the SSA region.

Using data on emerging markets and middle-income countries, Bayraktar et al. (2023) analysed the role of institutional quality in the link between financial development and economic growth. Using the Dumitrescu–Hurlin causality technique, the estimate revealed the presence of causality between indicators of financial development and

economic growth. More so, the GMM estimate displayed that in the presence of institutional quality, the indicators of financial development significantly enhanced growth. Nevertheless, in the absence of institutional quality, financial development is not significant in promoting economic growth.

With a focus on 20 Sub-Saharan African countries, Mohammed, Kassem and Ali (2023) analysed the extent to which economic growth is influenced by financial inclusion and institutional quality. The outcomes of the system generalised method of moment estimate displayed that financial inclusion significantly enhanced economic growth while the effect of institutional quality on economic growth depends on the measurement of institutional quality.

Using panel data on 44 developing countries, Chala (2022) analysed the role of institutional quality and economic freedom in the link between foreign aid and economic growth. The study spanned from 2002 – 2019 and utilised the dynamic panel threshold estimation approaches. The results of the study showed that institutional quality and economic freedom played a vital role in the impact of foreign aid on economic growth in developing countries.

Using data on 46 Muslim countries for the period covering 2005-2018, Wibowo, Kusuma, and Qizam (2022) examined the role of institutional quality on the relationship between macroeconomic policy mix and economic growth. The panel estimate displayed a direct significance of macroeconomic policy and institutional quality on economic growth. However, the findings showed that institutional quality played an insignificant moderating effect in the relationship between macroeconomic policy mix and economic growth in sampled Muslim countries.

Olakanmi and Olagunju (2020) examined the relationship between monetary policy and inclusive growth. The study spanned from 1991 to 2018 and focused on Nigeria. The study used the ordinary least square method, and the results showed that money supply had a significant and positive impact on inclusive growth while exchange rate and interest rate were insignificant in influencing inclusive growth.

Using data for the period 1985 to 2017 for the Nigerian economy, Bassey and Ugwu (2019) analysed the effects of institutional quality and fiscal policy on inclusive growth in Nigeria. In the study, the dependent variable (inclusive growth) was captured by the per capita Gross Domestic Product (PGDP) and human development index (HDI). The ordinary least squares technique was utilised and the results showed that fiscal policy contributed significantly to enhancing inclusive growth whereas institutional quality had an insignificant impact on inclusive growth. More so, using data from 1980 to 2015, Ayinde and Adekunle (2017) explored the effectiveness of monetary policy in Nigeria. Using data envelop analysis (DEA) the results showed that the effectiveness of monetary policy actions in Nigeria involves tolerable adjustments to achieve inclusive growth. Findings from the Structural Vector Auto-regressive technique showed that inclusive growth responded substantially to monetary policy shocks from financial openness and money supply.

More so, applying data spanning 1981 to 2013 for the Nigerian economy, Arodoye and Adegboye (2015) investigated the effects of tax base and tax structure on inclusive growth. Using the multiple regression method, the study observed that company income taxes had the most effect on government spending while the value-added tax had the least effect on government spending. Furthermore, the study observed that productive

government spending provides optimality for tax in terms of productivity growth. The study equally noted that in terms of tax structure, indirect taxes enhance economic growth than direct taxes. Therefore, they conclude that to achieve sustained inclusive growth, which involves growth and employment generation emphasis should be placed on indirect taxes while policy should be made to stimulate direct taxes.

Using Rosenstein-Rodan's thesis of Big-push theory, Adeola (2015) investigated the nexus between inclusive growth, fiscal policy, and social welfare. The findings of the study indicated that changes in tax rates and government spending resulted in a substantial decline in government debt with respect to social welfare costs. Using the Vector Error Correction Mechanism (VECM) and Auto-Regressive Distributed Lag (ARDL) techniques, Kolawole (2015) analysed the link between institutional quality, public spending, and inclusive growth. The study covered the period 1995-2013 and focused on Nigeria. The estimates showed that economic growth, health expenditure, and economic freedom contributed to the enhancement of inclusive growth. With data spanning 1986 to 2013, Richard (2015) investigated the link between optimal fiscal policy and inclusive growth in Nigeria. The study employed Dynamic Stochastic General Equilibrium (DSGE) and the results observed that optimal fiscal policy was insignificant in influencing inclusive growth in Nigeria.

Using data spanning 1995 to 2013 for the Nigerian economy, Ifere et al. (2015) examined the impact of institutional quality and macroeconomic variables on economic development. Applying the ordinary least squares estimation technique, the results of the study displayed that institutional quality and macroeconomic policy (proxy by interest rate) were insignificant in influencing economic development while macroeconomic policy (proxy by government expenditure) had a significant influence on economic development in Nigeria.

Also, focusing on Nigeria, Adenaike (2015) used data from 1970 - 2014 to analyse the link between fiscal policy and inclusive growth. Using the error correction method, the results showed that fiscal and monetary policy had a positive effect on economic growth. Gafaar and Osinubi (2005) examined the link between macroeconomic policies and pro-poor growth. The study focused on Nigeria and used data which spanned from 1960 to 2000. Using descriptive statistical methods, the study observed that the influence of economic growth on the poor is positive but very little.

The review of previous literature showed that the focus had largely been the fiscal policy, institutional quality, and inclusive growth (Basse & Ugwu, 2019; Adeola, 2015; Kolawole, 2015) while Olakanmi and Olagunju (2020) and Ayinde and Adegunle (2017) focused on the monetary policy and inclusive growth. These studies are largely lopsided by considering only one aspect of macroeconomic policy either monetary or fiscal policy. Such neglect would have limited the policy reference by only considering either fiscal or monetary. Although Ifere et al. (2015) used both fiscal (government expenditure) and monetary (interest rate) policy variables, the focus of the study was on economic development and not inclusive growth. More so, the study by Ifere et al. (2015) used the ordinary least squares estimation methods but failed to conduct the preliminary tests (such as unit root and co-integration). In addition, the study did not conduct any diagnostic tests. This neglect weakens the policy references of the study. In light of the above, this study seeks to fill the lacuna in the literature by conducting comprehensive empirical work on macroeconomic policy, institutional quality, and inclusive growth in Nigeria.

### 3. DATA AND METHODOLOGY

The study adapts the analytical framework of Afonso and Jalles (2016), which is in line with endogenous growth model of Barro (1990). The endogenous growth theory emphasized the importance of endogenous variables (like institutional quality and macroeconomic policy) in influencing growth in an economy (Afonso & Jalles, 2016). Thus, the model of Afonso and Jalles (2016) incorporates institutional quality and government spending in the endogenous growth model as specified below:

$$\ln grt = A_0 + (1 - \delta - \theta)\gamma_t + (1 - \delta - \theta)\tau_i INSTQ_i + \rho \ln(k)_i + \sigma \ln MAP_i \quad \dots \quad (1)$$

The equation highlights how the workers' output reacts to the institutional quality (INSTQ), capita, and policy direction (MAP). This equation serves as the framework for the model specification of macroeconomic policy, institutional quality, and inclusive growth. It is assumed that institutional quality is the fulcrum of the economic model because it enhances productivity and ensures a robust trickle-down effect of policy.

Therefore, from the equation (1),

$$\ln grt = \varphi_0 + \varphi_1 \gamma_t + \varphi_2 INSTQ_t + \varphi_3 K_t + \varphi_4 \ln MAP_i \quad \dots \quad \dots \quad \dots \quad (2)$$

Where the dependent variable is inclusive growth, INSTQ is the institutional quality, K is the capital needed to achieve inclusive growth and MAP is other macroeconomic variables needed to achieve inclusive growth. Capital in this case is a collection of government expenditure and money supply which serves as the proxy for both fiscal and monetary policy sub-policy instruments of macroeconomic policy. The exchange rate and inflation rate are the other macroeconomic variables (control variables) included in the equation. The  $\gamma_t$  is the interactive term of the policy and institutional quality.

Specifically,

$$\begin{aligned} RGDP\_CAP_t = \varphi_0 + \varphi_1 (M_2 * INSTQ)_t + \varphi_2 (GOVE * INSTQ)_t + \varphi_3 INSTQ_t \\ + \varphi_4 M_2_t + \varphi_5 GOVE_t + \varphi_6 EXR_t + \varphi_7 INFL_t + \mu_t \quad \dots \quad \dots \quad (3) \end{aligned}$$

Inclusive growth was proxied by per capita real gross domestic product (RGDP\_CAP), M2 is the broad money supply, GOVE is the government expenditure, INSTQ is the institutional quality, EXR is the exchange rate and INFL is the inflation rate. The institutional quality index was obtained through the application of the principal component analysis (PCA) technique. The six measures of institutional quality namely: political stability and absence of violence/ terrorism, rule of law, control of corruption, voice, and accountability government effectiveness, and regulatory quality were subjected to PCA, and index scores were obtained which serve as a proxy for aggregate institutional quality. Broad money supply, government expenditure, exchange rate, and inflation rate were obtained from the statistical bulletin of the Central Bank of Nigeria 2021 edition, while per capita real gross domestic product was sourced from the WDI.

The study adopted the Fully Modified Ordinary Least Square (FMOLS) technique. The estimation technique is capable of obtaining an efficient and consistent estimate when the sample size is small. It estimates direct long-run effects and possesses the ability to correct for endogeneity problems. It eliminates the incidence of reverse causality and the problem of autocorrelation.

Table 1

*Variable Measurement and Sources*

S/N	Variable	Description	Data Source
1	RGDP_CAP	Per capita real gross domestic product. It is used to proxy for inclusive growth. It is measured as the ratio of real gross domestic product to population growth.	World Development Indicator (WDI), 2021.
2	M2	This is a broad money supply. It is used to proxy monetary policy aspect of macroeconomic policy.	Central Bank of Nigeria Statistical Bulletin, 2021.
3	INSTQ	Institutional quality is measured institutional quality index obtained through the application of the principal component analysis (PCA) technique. The six measures of institutional quality namely: political stability and absence of violence/ terrorism, rule of law, control of corruption, voice and accountability government effectiveness, and regulatory quality were subjected to PCA and the index obtained.	World Governance Indicator (WGI), 2021.
4	GOVE	Government expenditure is measured by the sum of both the capital and recurrent expenditures	Central Bank of Nigeria Statistical Bulletin, 2021.
5	EXR	The exchange rate is measured by the real official exchange rate of Naira to the United States of America Dollar (₦/\$).	Central Bank of Nigeria Statistical Bulletin, 2021.
6	INFL	This is measured by the annual inflation rate.	Central Bank of Nigeria Statistical Bulletin, 2021.

*Source:* Authors' 2023.

## 4. DATA ANALYSIS AND DISCUSSION

### 4.1. Unit Root / Stationary Estimate

The study carried out unit root tests to ascertain the order of integration of the variables. The study applied the Augmented Dickey Fuller (ADF) test to ascertain the degree of the stationarity of the variables. The null hypothesis of the test is that there is the presence of a unit root, while the alternate hypothesis is there is no unit root at the specified level. The test was conducted at both level and first difference. Also, three different

conditions were examined namely: with constant, with constant and trend, and without constant and trend. The estimate presented in Table 2 below showed that at three different conditions, all the variables or series were not stationary at level. However, at the first difference RGDP\_CAP, INSTQ, GOVE, INFL were stationary at all the conditions, while M2 was integrated with constant and also with constant and trend. Also, EXR was integrated with constant and, with constant and trend. The outcome of the stationarity estimates implied that the co-integration test is paramount to confirm the variables' degree of long-run relationship and number of co-integrating questions.

Table 2

*Unit Root / Stationary Test Results*

<b>At Level</b>							
		RGDP_CAP	INSTQ	GOVE	M2	INFL	EXR
With Constant	t-Statistic	-1.4984	-1.9902	3.0664	2.4161	-2.1821	0.4372
	<b>Prob.</b>	<b>0.5156</b>	<b>0.2886</b>	<b>1.0000</b>	<b>0.9999</b>	<b>0.2176</b>	<b>0.9799</b>
With Constant & Trend	t-Statistic	0.2090	-1.5863	0.7350	-1.2219	-2.4326	-0.7526
	<b>Prob.</b>	<b>0.9965</b>	<b>0.4688</b>	<b>0.9993</b>	<b>0.8816</b>	<b>0.3544</b>	<b>0.9565</b>
Without Constant & Trend	t-Statistic	0.8369	0.4541	3.4861	4.7876	-1.7519	2.2322
	<b>Prob.</b>	<b>0.8847</b>	<b>0.8028</b>	<b>0.9994</b>	<b>1.0000</b>	<b>0.0758</b>	<b>0.9915</b>
<b>At First Difference</b>							
		d(RGDP_CAP)	d(INSTQ)	d(GOVE)	d(M2)	d(INFL)	d(EXR)
With Constant	t-Statistic	-6.2815	-4.1500	-3.7514	-4.0760	-7.2433	-3.5498
	<b>Prob.</b>	<b>0.0000</b>	<b>0.0051</b>	<b>0.0409</b>	<b>0.0051</b>	<b>0.0000</b>	<b>0.0157</b>
With Constant & Trend	t-Statistic	-6.0181	-4.1908	-3.9560	-5.9686	-6.8693	-3.3344
	<b>Prob.</b>	<b>0.0003</b>	<b>0.0192</b>	<b>0.0311</b>	<b>0.0004</b>	<b>0.0001</b>	<b>0.0868</b>
Without Constant & Trend	t-Statistic	-2.1837	-3.0734	-2.1394	1.0160	-7.4835	-2.6164
	<b>Prob.</b>	<b>0.0307</b>	<b>0.0038</b>	<b>0.0339</b>	<b>0.9116</b>	<b>0.0000</b>	<b>0.0114</b>

Source: Authors', 2023.

Note: Total number of observations is 26 (1996-2021).

#### 4.2. Co-integrating Test

Having discovered the order of integration of the variables, it is important to explore their long-run convergence because the adopted model works efficiently in a co-integrated model. Johansen co-integration test was adopted to examine the long-run relationship. The test was conducted using trace and maximum eigenvalue. The result of trace statistics in Table 3, showed that three co-integrating equations exist among the variables, while the result of Maximum Eigenvalue showed the existence of two co-integrating equations among the six variables. The result of the test informed the decision of adopting a fully modified ordinary least square model by taking into consideration the first order of integration of the variables.

Table 3

*Johansen Co-integration Estimate*

Hypothesised No. of CE(s)	Trace Statistic	Prob.	Max-Eigen Statistic	Prob.
None	146.1607*	0.0000	55.32623*	0.0005
At most 1	90.83442*	0.0004	40.40863*	0.0072
At most 2	50.42579	0.0281	25.56038	0.0888
At most 3	24.86541	0.1663	15.17789	0.2766

Source: Authors', 2023.

Note: \* implies significance level at 1 percent.

The estimated model in Table 4 comprised both the impacts of institutional quality and macroeconomic policy on inclusive growth and the interactive effect of macroeconomic policy and institutional quality on inclusive growth in Nigeria. Government expenditure captures the fiscal policy part, broad money supply serves as a proxy of monetary policy, and exchange rate and inflation rate are major variables that serve as control variables. It is expected that for a country to achieve inclusive growth, government effectiveness, political stability, and absence of violence/terrorism, the rule of law, regulatory quality, and, voice and accountability should be well enshrined in the system of government. An economy can have sound macroeconomic policies but weak institutions can be its Achilles heel why it cannot achieve a reasonable trickledown effect.

The result obtained through FMOLS technique indicated that the index of institutional quality can aid the inclusive growth in Nigeria in the long run, especially if the country's system of governance is reformed and the people embrace comprehensive sociological change. Institutional quality exhibited a positive relationship with inclusive growth as captured by the per capita real gross domestic product. It was observed that institutional quality enhanced inclusive growth by 1.39 units in the long run growth with t-value of 5.7845 and p-value less than 0.05. This finding is in contrast with Bassey and Ugwu (2019)

However, government expenditure which serves as a proxy for fiscal policy reduced inclusive growth in the country in the long run. This result is in line with Adeola (2015) but in contrast with Kolawole (2015). The negative relationship between fiscal policy and inclusive growth can be attributed to the fact that capital expenditure in Nigeria is less than 30 percent of the total government expenditure. A larger share of the expenditures is being directed toward projects that seem to be unnecessary, while little is being done in the area of human capital development expenditure like health and education that can exhibit serious trickle-down effects on the populace. Government expenditure decreased inclusive growth with a coefficient of -0.0665, ( $t=-4.9438$ ,  $p<0.05$ ). In the case of broad money supply, the variable significantly influenced inclusive growth with a coefficient of 0.2488. This result is in line with Olakanmi and Olagunju (2020). It implies that in the long run, the country may achieve inclusive growth if the monetary policy system is targeted at the real sector, especially by supporting the activities of small and medium-scale enterprises in the agricultural and manufacturing sector. Thus, Nigeria may achieve the SDGs goals of inclusive growth by having a sound monetary framework that is pro-poor, unlike the present pro-rich monetary system.

The result in Table 4 showed that exchange exhibited a negative relationship with inclusive growth in Nigeria (-0.0175,  $t=-3.2479$ ,  $p<0.05$ ). Exchange rate depreciation adversely influences the economic prosperity of a nation like Nigeria, because firms in the country's real sectors depend on imported inputs. The depreciation of the exchange rate has resulted in the rising cost of doing business and has aided the rise in prices of foods and other necessities. This has reduced the quality of the welfare of the poor. More so, the rise in the inflation rate in Nigeria impairs the achievement of inclusive growth in Nigeria. Those who bear the brunt of the rise in the cost of living are the poor and the middle class, who majorly depend on their small income for sustainability. Access to good healthcare, qualitative education, good nutrition, and good things in life are mostly affected when the price level is unbearable.

The interaction between fiscal policy and institutional quality showed that a good institutional framework would ensure a positive trickle-down effect of government expenditure in Nigeria. The interactive term of fiscal policy and institutional quality has a report coefficient of 0.087 with a t-value of 4.5450. Also, the interaction between monetary policy and institutional quality indicated that sound institutional quality will enhance the robust performance of monetary policy in Nigeria. It depicts the fact that monetary policy would contribute to a rise in inclusive growth.

Table 4

*Fully Modified Ordinary Least Square Model*

Variable	Coefficient	t-Statistic	Prob.
INSTQ	1.392585	5.784597	0.0000
LOG(GOVE)	-0.065040	-4.943876	0.0002
LOG(M2)	0.248894	32.74735	0.0000
EXR	-0.017586	-3.247949	0.0054
INFL	-0.052417	-8.805679	0.0000
C	1.005908	7.408861	0.0000
LOG(M2)*INSTQ	0.073579	5.544116	0.0001
LOG(GOVE)*INSTQ	0.087786	4.545066	0.0004
R-squared: 0.967169			Adjusted R-squared:
0.951848			
F-statistics: 305.9984 ( $p < 0.05$ )			

Source: Authors', 2023.

Note: Total number of observations is 26 (1996-2021).

## 5. CONCLUSIONS AND POLICY RECOMMENDATIONS

The study explored the relationship among institutional quality, macroeconomic policy, and inclusive growth in Nigeria for the period 1996-2021. Fully Modified Ordinary Least Square was adopted and the study observed that institutional quality aided the process of achieving inclusive growth in the country. More so, macroeconomic policy variables - government expenditure, broad money supply, and exchange rate - contributed to the attainment of inclusive growth. Although their contributions were conditioned on the institutional framework of the country. The study observed that Nigeria may attain a sustainable growth position that reflects in the well-being of the populace if the structure

of governance is reformed. Ineffectiveness in governance, political instability, poor regulatory quality, and lack of accountability within the Nigerian institutions would retard the trickle-down effect of government policy. No matter the robustness of either fiscal or monetary policy, when the platform of implementation is weak and characterised by ineffectiveness, it will remain a paper policy that cannot achieve its expected result. Having discovered that macroeconomics policy in Nigeria can be more effective in achieving inclusive growth when the country's institutions are strengthened, the study recommends that institutional quality should be improved using appropriate anti-corruption policies through the strengthening of institutions like the Economic and Financial Crime Commission (EFCC) and the Independent Corrupt Practices and Other Related Offences Commission (ICPC). More so, government spending should be geared toward improving the performance of the education and health sectors which constitute major determinants of human capital development. This would enhance the participation of workers in the overall economic activities.

### 5.1. Limitations of the Study

This study focused on the relationship between macroeconomic policy, institutional quality, and inclusive growth in Nigeria. The findings of this research work provided important contributions to knowledge as identified above. However, the study is constrained by the non-availability of data on a quarterly basis which reduced the number of observations used for the regression estimate. High-frequency (quarterly, monthly, daily) data are known to produce better estimates compared to lower-frequency (yearly) data.

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