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Macro-Economic Variables Fluctuations and the Growth of Micro, Small and Medium Scale Enterprises in Nigeria

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Abstract*—This study examines the Impact of Macroeconomic variables fluctuations on the growth of Micro, Small and Medium Scale Enterprises (MSME) in Nigeria covering the period between 1986 to 2023. Data was collected from Central Bank of Nigeria's Statistical Bulletin and National Bureau of Statistics publications. In this study, we applied the Autoregressive Distributed Lag technique to analyse and establish the relationship among the variables of the model. The result show that the Macroeconomic variables such as exchange rate, interest rate and government tax have significant impacts on the growth rate of MSME outputs in Nigeria. The result of Interest rate coefficient agreed with a'priori expectation and displayed inverse and significant relationship with growth of MSME output. The study concluded that whereas interest rate revealed an indirect relationship, exchange rate and government tax revenues have direct relationships with growth rate of MSME output in Nigeria. Hence it is correct to state that the macroeconomic environment has diverse effects based on peculiarities on the growth rate of MSME output in Nigeria. The study recommends that the Central Bank of Nigeria should leverage more on selective monetary policies such as reduction in tax rates for newly established business ventures as well as credit control and minimum interest rate. More so, there is the need to discourage importation of goods related to MSME products in order to continually stimulate growth of Micro, Small and Medium scale Enterprises in Nigeria.

***Key Words:** Macroeconomic Variables, Innovation, MSME, Growth Rate.*

I. INTRODUCTION

Macroeconomic environment exerts influence on the performance of micro, small and medium scale enterprises (MSME). These macroeconomic factors are regarded as fundamentally strong indicators of economic stability of nations (Gabriel (2015). The study of Allen and Robinson (2015) point out that fluctuations of macroeconomic indicators, have major effect on the operations of micro, small and medium scale enterprises. Additionally, economic instability of an economy largely affects performance of small and medium scale enterprises with its effects on Gross Domestic Products (GDP) (Bernard & Barbosa, 2016). They also expressed that MSMEs are seen to contribute over 50 per cent to the Gross Domestic Product (GDP) of nations.

When an economy is in recession, profit motivates entrepreneurs to innovate, create and invent innovative products and services to stimulate productivity and job creation (Schumpeter (1934), thereby increasing national wealth. This stimulates consumer confidence in the economy. The absence of consumer confidence suggests low-capacity of organizations as they may not survive any recession (Adeyemi, 2016). Evolving from this is the belief that business organization is an integral part of its environment, on the ground that they are mutually interdependent and exclusive. The environment plays the role of providing resources and opportunities to business organizations to offer their products and services to the populaces.

From the foregoing, small and medium scale enterprise operators need to understand and appreciate its environment as they proactively respond to it. Micro, Small and Medium Scale Enterprises operate in an economic environment characterized with macroeconomic factors such as inflation rate, exchange rate, interest rate and government tax revenue which interact on a regular basis in predicting their performance. The fluctuations of these variables according to Halim, Malim, Derasit, Rani and Rashid (2017) have a multiplier effect on the productive capacity of small and medium scale enterprises. This is predicative of the fact that these firms operate as an open system as they depend on the environment for their material inputs needed for their operations and heavily rely on its environment for their output.

OECD report (2018) put the average death rate of European SMEs at less than 15% in sharp contrast to the report of UNIDO ITPO Nigeria, which claimed

the rate to be about 80% in Nigeria. These two discrete reports lay a formidable foundation for inquiries into the economic environment in which MSMEs operate in the two separate worlds. This study shall provide a platform to analyse the macroeconomic variables that have accounted for the abysmal survival of MSMEs in Nigeria as well as fill the gaps created in previous studies. It shall study the impact of macroeconomic variables including inflation, government tax, exchange rates and interest rate on the performance of MSMEs in Nigeria while providing a robust analysis.

The basic aim of this study is to examine the impact of macroeconomic variables on the growth of MSME in Nigeria. The Specific objectives are to: (i) evaluate how exchange rates influence growth of MSMEs in Nigeria. (ii). investigate the significance of inflation rate on growth of MSMEs in Nigeria. (iii). examine the effect of government tax on growth of MSMEs in Nigeria. (iv). analyse the impact of interest rate on growth of MSMEs in Nigeria. The purpose of this study is to investigate the impact of macroeconomic variables on the growth of micro, small and medium-term enterprises in Nigeria. The study applies time series data between 1986 to 2023 from the Central Bank statistical bulletin and National Bureau of Statistics. The findings of this study is expected to help prospective investors, policy makers and the general public to be intimated with the effects of macroeconomic variables on the success or otherwise of MSMEs.

The first section covers the introductory aspect of the study. Section 2 reviews the Literature of the study regarding the conceptual, theoretical and empirics. Section 3, deals with the research methodology, while section 4, deals with analyses, presentation and discussion of results output. Section 5 reports the summary, conclusion and policy implications of the study.

II. LITERATURE REVIEW

2.1 Conceptual Issues

The National Collaborative Survey on Small and Medium Scale Enterprises (2010) report addressed the issue of what constitutes micro, small and medium enterprises, definition. The definition adopts a classification based on dual criteria. First, micro enterprises are those businesses whose total assets (excluding land and buildings) are less than five million Naira with a workforce not exceeding ten employees. Secondly, small enterprises are those enterprises whose total assets (excluding land and building) are above five million Naira, but not exceeding fifty million Naira with a total workforce above ten workers, but not exceeding forty-nine employees. Additionally, medium enterprises are those enterprises with total assets excluding land and building) are above fifty million Naira, but not exceeding five hundred million Naira with a total workforce of between 50 and 199 employees.

Exchange Rates

Exchange rate is a value that a currency has compared to another currency (Krugman, 2001).

Exchange rate is divided into two categories, fixed exchange rate and flexible exchange rate. In a fixed exchange rate, it is set by the government, whereas flexible exchange rate is set by the market with or without the influence of the government in the effort to stabilize the currency value (Beck, Demirguc-Kunt, Laeven, & Levine, (2005). Simply put, the exchange rate between two currencies is the rate at which one currency can be exchanged for the other.

Exchange rates are set in the global financial market-place, where banks and other financial institutions trade currencies around the clock based upon their views on the above-mentioned factors as well as their own financing needs and investing strategies.

Exchange rate determines the relative prices of domestic and foreign goods, as well as the strength of external sector participation in the international trade. The exchange rate according to Jongbo (2014) is therefore an important relative price as it has influences on the external competitiveness of domestic goods. Thus, exchange rate has received considerable attention in terms of its influence on investment and economic growth.

Interest Rate

Interest rate is the value gained by saving or investment (Fisher, (1930) and (Myers, 2011). Interest rates represent the cost of borrowing fund for a given period of time. Borrowing is a significant source of finance for many firms. Interest rates are often indexed to inflation. These rates reflect the interaction between exchanges of money (Liedholm & Mead, 1999). In the long term, rates however, shows the condition of the current economy and the possibility of inflation.

Inflation

Inflation is a persistent increase in general price levels in an economy over time. Inflation effectively reduces the purchasing power of a country's currency. Low or medium levels of inflation in a country can have a positive effect on the business sector, in that it can act as an incentive to production (Gamber & Joutz, 1993). Inflation increases the price of goods and the price of labour input, thus the cost of goods and selling price increases. Inflation fluctuations reflects on interest rates. The accelerating inflation rate in Nigeria's economy is pushing millions of businesses to the brink with many unable to continue operations (Okojie (2022).

Taxation

There is no universally accepted definition for the term taxation but judicial and literal definitions have been able to provide a sufficient outlook on the subject matter. The national tax policy for Nigeria provided that tax is a monetary charge on a person's entity or income, property or transaction and usually is collected by a defined authority at the federal, state and local government levels. A tax can be direct or indirect' it may be proportional, progressive or regressive. It can be levied on a person (natural or artificial) goods or services or capital, and finally the rate of the tax can be specific or ad valorem.

The MSMEs in Nigeria are liable to pay personal income tax, value-added tax and withholding tax. Formerly they were subject to company income tax, however, this has changed due to amendment of the Finance Act 2019 which exempts MSMEs from paying it. Most MSMEs are taxed based on presumptive taxation due to the difficulties in assessing their income for want of proper documentation. An effective and efficient tax administration system should be integral to any country's well-being (Atawodi & Ojeka, 2012).

2.2. Theoretical Literature

There are several growth and entrepreneurship theories but, in this study, we review the Schumpeter's model of economic growth.

Schumpeter's Model of Economic Growth

Joseph Schumpeter's model of economic growth fundamentally asserts that innovation, rather than a steady progression, is the primary engine of economic development. These innovations disrupt the existing "circular flow" of economic activity, moving the economy out of equilibrium. Schumpeter's model, while acknowledging a classical production function, emphasises that technological progress and resource discovery, which drive autonomous investment, are directly dependent on the supply and activity of these entrepreneurs. His main function is to transmit innovations in the form of discovery of technological progress (Sledzik, 2013) such that: $T = T(E)$ and $K = K(E)$. . . . . (i)

Where: E = Supply of Entrepreneurs, T is technology, K is capital stock. This process of innovation leads to an inherently cyclical pattern of economic development, characterized by alternating periods of rapid growth (booms) and subsequent stagnation or recession (busts). When entrepreneurs successfully introduce innovations, they initially reap significant profits, which then encourage other firms to imitate and adopt these new methods or products (Sledzik, 2013). This proposition is expressed in the equation as follows: $E = E(R, x)$. R = Profits; x = Social climate. As innovations become widely diffused throughout the economy, the initial monopoly profits diminish, leading to a decline in economic activity until new innovations emerge to restart the cycle. This "unbalanced nature of economic growth" and the "jump" associated with innovation are central to understanding Schumpeter's view of the business cycle.

2.3 Empirical Literature

Empirical literature extensively explores the influence of macroeconomic variables on Micro, Small, and Medium Enterprises (MSMEs) in various economic environments, though few studies comprehensively cover all major variables. Research by Chadamoyo and Dumbu (2012) highlights that a simplified business environment, supported by favorable fiscal policies and strategic alliances, is crucial for MSME development, despite challenging legal, social, political, and economic factors. Okwu, Obiakor, and Obiwulu (2013) further emphasize the business environment's critical role in job creation, identifying inadequate external financing, competitive pressures, multiple taxes, and corrupt practices as significant impediments in Nigeria. Regarding specific macroeconomic factors, findings are mixed: Jongbo (2014) and Imoughele and Ismailia (2014) found a significant role for real

exchange rate in industrial output and MSME output respectively, with the latter also noting significant impacts from savings and time deposits. However, Imoisi, Uzomba, and Olatunji (2012) suggested exchange rate depreciation retarded growth, while Rasaq (2013) found positive influence from volatility. Interest rates consistently showed an adverse effect on MSME output and investment across studies by Imoughele and Ismailia (2014) and Imoisi, Uzomba, and Olatunji (2012). Taxation's impact was also debated as Ojochogwu and Ojeka (2012) reported a negative relationship in their findings, advocating for appropriate tax policies. Access to finance emerged as a persistent constraint, with Nwosa and Oseni (2013) noting the significant impact of bank loans on manufacturing output, but Omah et al. (2012) highlighting difficulties in accessing credit due to stringent policies and post-consolidation bank restructuring. Nwosa and Oseni (2013) specifically linked high exchange rates to negative performance of small-scale enterprises. Overall, a common gap identified in much of this literature, particularly studies terminating around 2014, includes outdated scope, insufficient data coverage, limited inclusion of comprehensive macroeconomic variables, and the need for more dynamic econometric tools like the ARDL technique, which this current study aims to address.

III. METHODOLOGY AND THEORETICAL FRAMEWORK

The theoretical framework of this study leverages on the Schumpeterian Innovations Theory of trade cycles. The theory shows that trade circular flow which contains absence of innovation, constant production, and constant resources can only be broken using bank credit by an entrepreneur leading to increased technical knowhow, capital accumulation and consequently output (Jinghan, 2012). Thus Schumpeter innovation theory states the input-output relationship in the following functional equation format presented as:

$Y = f(L, K, N, T, U)$ . . . . . (2)

Where; Y, is output of the economy, K, is produced means of production, L, is labor, N, is natural resources, T, is technology and Innovations and U, is social set-up or social organization. Technological progress and the rate of resource discovery depend on the supply of entrepreneurs:

$T = T(E)$ and $K = K(E)$ (3)

Where: E, is Supply of Entrepreneurs, indicating that the new entrepreneurs, are essential at increasing the level of technology and innovation in the economy. This can however be measured using Micro, Small and Medium Enterprises, its credits and outputs. It means that in capitalistic system the profits depend upon technology. In other words, the stock of capital changes due to change in applied technical knowledge. It is stated as:

$dK/dt = k\,(dST/dt)$ (4)

The relevance of this theory in the study cannot be overemphasised because of the provision of room for an entrepreneur (MSME), who creates innovation by way of new capital, securing bank loan etc. This is expected to increase productivity of the entrepreneur's business, and in this case the MSME, leading to more output in the economy.

3.1. Model Specification

This study specified its models based on the theoretical framework detailed above as follows:

$ENTR = f(EXR, INF, INT, GTR)$ . . . . . (5).

Where ENTR is Growth Rate of MSME output for robustness as growth rate is considered superior in term of analysis of growth in an economy, EXR is Exchange rate, INT is the interest rate on prime lending, INF is the Inflation rate and GTR is Government Tax Revenue. The Econometric Model is therefore explicitly specified as follows:

$ENTR = \alpha_0 + \beta_1 EXR + \beta_2 INF + \beta_3 INT + \beta_4 \ln GTR + \mu_1$ . . . . . (6)

α_{0i} is a constant parameter, $\beta_1 - \beta_4$ are coefficients of variables and μ_1 is the white noise error term. The following ARDL model was estimated in order to test the co-integration relationship among the variables: growth rate of MSME output, exchange rate, interest rate on prime lending, inflation rate and government tax revenue. In the model, ENTR is the growth rate of MSME output, EXR is the exchange rate, INT is the interest rate on prime lending, INF is the inflation rate and GTR is government tax. The long run multipliers are indicated by Δi, α_0 is the intercept, b_1-b_5 represent the short run coefficients of the variables and ϵ_t are white noise errors. That is: H_0: δ1= δ2= δ3= δ4 = δ5=0 against the alternative H_1: δ1≠ δ2≠ δ3≠ δ4 ≠ δ5≠0.

$$\Delta ENTR_t = \sum_{t-i}^{p} b_1 \Delta(ENTR)_{t-i} + b_2 \Delta(EXR)_{t-i} + b_3 \Delta(INF)_{t-i} + b_4 \Delta(INT)_{t-i} + b_5 \ln(GTR)_{t-i} + \delta_1 ENTR_{t-i} + \delta_2 EXR_{t-i} + + \delta_3 INF_{t-i} + \delta_4 INT_{t-i} + \delta_5 \ln(GTR)_{t-i} + \epsilon_t \ldots. \quad (7)$$

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The δj , j = 1, ..5 correspond to the long-run relationship while the short-run effects are captured by the coefficients for the first difference variables i.e. bi , i=1.....5.

Once co-integration is established the conditional ARDL model with estimates of the long run position represented by the ECM is as stated below.

$$\Delta ENTR_t = \alpha_0 + \sum_{i=1}^{P} b_1 \Delta ENTR_{t-i} + \sum_{i=1}^{p} b_2 \Delta(\text{EXR})_{t-i} + \sum_{i=1}^{p} b_3 \Delta(\text{INF})_{t-i} + \sum_{i=1}^{p} b_4 \Delta(\text{INT})_{t-i} + \sum_{i=1}^{p} b_5 \Delta \ln(\text{GTR})_{t-i} + \lambda ECM_{t-i.} + \in_t \quad \ldots\ldots\ldots \quad (8)$$

IV. DATA ANALYSIS, PRESENTATION AND DISCUSSION

This study utilizes historical and quantitative data. It employs annual time series data spanning the period 1986 to 2023. Sources of the data include various issues of Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics Abstracts. The results of the data analysed are discussed as below:

Table 1. Descriptive Statistics Result

	ENTR	EXR	INF	INT	GTR
Mean	8.32	95.61	19.54	12.27	5.83
Median	7.95	115.26	12.38	11.28	6.25
Maximum	9.37	305.79	72.73	23.6	8.52
Minimum	7.49	2.02	5.41	5.69	1.50
Std. Dev.	0.67	79.07	17.55	4.29	2.29
Skewness	0.46	0.55	1.70	0.79	-0.43
Kurtosis	1.54	2.85	4.75	3.16	1.81
Probability	0.14	0.43	0.000056	0.19	0.23
Sum	266.36	3059.45	625.42	392.66	186.70
Sum Sq. Dev.	13.81	193818.2	9543.13	572.08	162.71
Observations	36	36	36	36	36

Source: Author Regression Output.

Table 1, above shows the descriptive statistics for growth rate of MSME output (ENTR), Exchange rate (EXR), Inflation Rate (INF), Interest rate (INT) and Government tax revenue (GTR). Table above explains the mean, median, maximum, minimum and standard deviation of the series. All the variables except GTR have positive skewness value meaning that the distribution has long right tail and positively skewed indicating that the series has higher values than the sample mean. Whereas GTR has negative skewness value meaning that the distribution has long left tail and negatively skewed indicating that the series has lower values than the sample mean. Kurtosis statistics indicates that the variables except INF and INT are less than 3, meaning that the distributions are platykurtic.

Table 2. VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-412.5669	NA	846216.7	27.83779	28.07133	27.91250
1	-271.8916	225.0805	389.1811	20.12610	21.52730*	20.57436
2	-238.9011	41.78794*	265.8732*	19.59341*	22.16227	20.41521*

Source: Author Regression Output.

The test results of the different lag selection methods are reported in Table 2. After meticulous examination of the different lag lengths by estimating the VAR at each lag length and diagnosing the whiteness of resulting residuals, two lag lengths, as recommended by sequential modified LR, FPE, AIC and HQ test statistics, was chosen.

Table 3. Unit Root Test Results

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Variable	ADF Level	ADF 1st Diff	5% Crit Value	Integration Order
ENTR		-4.8248	-2.9639	1(1)
EXR		-3.1398	-2.9639	1(1)
INF		-3.7509	-2.9639	1(1)
INT		-6.5486	-2.9639	1(1)
GTR	-3.0148		-2.9604	1(0)

Source: Author Regression Output.

This study conducted a test of order of integration for the variables using Augmented Dickey-Fuller (ADF) to avoid spurious and deceptive regression output. The results of the unit root test as presented in table 3 above indicate mixed integration order of I(I) and I(0) of the variables, hence, the choice of Auto Regressive Distributed Lag (ARDL) methodology for the regression model analysis.

Table 4. Result of Bound Test of Cointegration

F-Bounds Test		Null Hypothesis: No levels relatship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	5.03159	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: Authors Regression output.

The result of the bound test of co-integration are reported in Table 4 above. The Computed F-Statistic from bound test is 5.031595. This value exceeds the lower and upper bounds critical value of 2.56 and 3.49 at the 5% and 1% significance level. This result implies the acceptance of alternative hypothesis (H_1) indicating the existence of co-integration relationship among the MSME growth rate variables.

Table 5. Summary of ARDL Long Run and Short Run Result Output

Long Run Output			Short Run Output
EXR	0.003564 (0.0138)	D(EXR)	0.063802 (0.2460)
INT	-0.114032 (0.0063)	D(GTR)	-0.00118 (0.5296)
INF	-0.001893 (0.5925)	D(INF)	0.333314 (0.0115)
GTR	0.142266 (0.0081)	D(INT)	-1.12289 (0.0200)
C	7.287954 (0.0000)	ECM(-1)	-1.13946 (0.0006)
R-Squared	0.911979		
Adjusted R-Sqd	0.753542		
Durb-Watson stat	2.492529		
Breusch-Godfrey Serial correlation LM test	78.06623 (0.0621)		
Joint F Statistics	37.19551 (0.0000)		

Normality test (Jarque-Bera)	2.977645 (0.225638)
	*Values in bracket are the PV

Source: Authors Regression output.

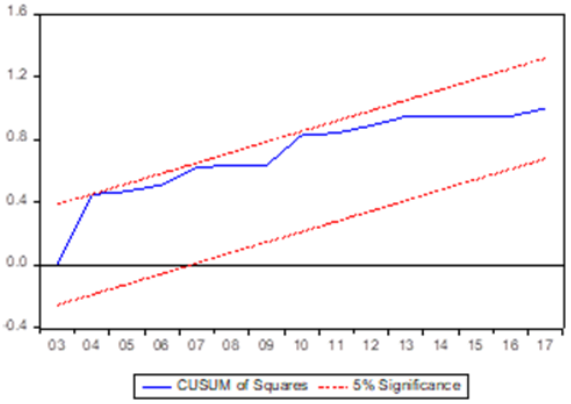
The result output as displayed in table 5 indicate that the variables under study explains 75 percent variations on MSME annually in Nigeria. The short-run result coefficient of exchange rate and interest rates have significant effects on Growth of MSME outputs. A percentage (1%) increase in previous period exchange rates, results in the reduction of Growth of MSME outputs by 3%, and 4%, respectively. However, the long run result output indicate the Exchange rate to have direct and significant relationship with growth of SME Output. Conversely, the long-run interest rate coefficient indicate a significant inverse relationship with MSME growth. This indicates that a 1% increase in exchange rate and interest rate leads to growth in SME output directly by 0.0356% and indirectly 11.4% respectively. The short-run coefficient of inflation of 0.3333 is significant with a PV of 0.0115, while the long-run inflation indicates an insignificant coefficient of -0.0018. This implies that a percentage change in Inflation causes 33.33% significant increase in MSME in the short run. This indicates that inflation enhances profit generation in the short-run. However, in the long-run a percentage increase in inflation creates an insignificant decline in MSME growth. The government tax revenue is not significant in the short-run and impacts negatively on the growth of MSME, but significant in the long run with a coefficients of 0.1422 (0.0081).This result indicate that government taxes causes MSME not to grow in short run but supports growth in the long-run. This could be because the Nigerian government often encourages business owners with credit facilities. The ECM statistics for the model is negative which revealed that the speed of adjustment of the growth of MSME output function to equilibrium is 33%.

Diagnostic Tests

The Normality tests for model using both Jarque-Bera probability and Kurtosis revealed that the distributions were normal and Mesokurtic (i.e the Kurtosis is moving towards 3 and the Jarque-Bera probability is higher that 5%). Heteroskedasticity Test using Preusch-Pagan-Godfrey probability is greater than 5% for the function indicating absence of heteroskedasticity. Serial correlation test using probability statistics of Breusch-Godfrey Serial Correlation LM Test is 0.0621. F statistics measuring the joint significance of all the explanatory variables in the model is statistically significant at 5 percent as F-statistics > probability (37.19551>0). Also, the goodness of fit for the model as indicated by R-square is 85% meaning that 85% of the variation in growth rate of MSME Output is explained by the explanatory variables.

Stability Test

Fig. 1: Plot of Cumulative Sum of Recursive Residual



Stability test is performed using Cumulative Sum of Squares (CUSUM Q) of residual of the ARDL model as shown in figures 1. The existence of parameter instability is established if the Cumulative Sum of the residual goes outside the area between the critical (dotted bounded) lines. It is estimated at 5 percent critical level. From figures 1, it can be inferred that the model at 5 percent level of significance has been stable over time. The decision rule is that, all the coefficients of the error correction are stable and the null hypothesis cannot be rejected provided that the plots stay within 5% range of the significance level (i.e. within the two straight lines), if otherwise we reject the null hypothesis (Pesaran and Smith 2001). As shown in figures 1 and 2, both plots lie within the critical boundaries, which implies that the long run coefficients of the economic growth function is stable.

V. SUMMARY

This study examined the effect of macroeconomic variables on the growth of MSME output in Nigeria, using the Autoregressive Distributive Lag (ARDL) methodology approach. The study premised its focus on filling the gaps created by the works of other authors. The study laid its theoretical framework on the Schumpeterian Innovations Theory of trade cycles. The impact of macroeconomic variables on MSME in Nigeria were found to be positive and indirect among the variables under study. The Normality test on the model revealed that the distributions were normal, while the diagnostic tests conducted indicated absence of heteroskedasticity and serial correlation. Additionally, the Joint F-statistics show that the impact of the explanatory variables on economic growth is statistically significant. The ECM coefficient revealed that the speed of adjustment of the growth rate of MSME output to equilibrium is 33%, with a stable stability as indicated by CUSUMSQ test results.

VI. CONCLUSION

The findings from this study show that exchange rate, interest rate and government tax have significant impacts on Growth rate of MSME outputs in Nigeria. This corroborates the Central Bank of Nigeria's claim that the imposition of exchange rate restriction on some selected goods shall further boost the growth of MSMEs in Nigeria. The results of this study which portends a direct relationship between government tax and Growth rate of MSME output in Nigeria points to the fact that the utilization of such revenue has positive impacts capable of increasing the growth rate of MSME outputs in Nigeria. The study concluded that whereas interest rate revealed an indirect relationship, exchange rate and government tax revenues have direct relationships with growth rate of MSME output in Nigeria. Hence it is correct to state that the macroeconomic environment has diverse effects based on peculiarities on the growth rate of MSME output in Nigeria.

VII. POLICY IMPLICATIONS AND RECOMMENDATIONS

The study recommends the following:
Interest rates have significant impact on MSME growth inversely, on this score, it is expected
that the Central Bank should be adjusting the lending rates (interest rate) to stimulate investment that will increase the rate of growth of MSME output in Nigeria. Further protection of new MSMEs is necessary, by discouraging importation of goods related to MSME productions. This is particularly so, since the result of this work revealed that exchange rates fluctuations had a negative relationship with growth rate of MSME output.

The burden of taxes on MSMEs should be reduced as the result of the short run coefficient reveals a negative relationship between government tax and growth rate of MSME output in Nigeria.

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