



# Insecurity, Inflation and Performance of Small and Medium Scale Enterprises in Nigeria

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## Abstract

This study was carried out to examine the influence of insecurity and inflation on the performance of small and medium-scale enterprises (SMEs) in Nigeria. The study specifically examined the influence of insecurity, inflation and interest rate on SMEs. The variable of interest, which is the performance of SMEs, was measured with SMEs' contributions to real gross domestic products, while the independent variable was proxied with the global insecurity index, inflation rate, and interest rate. The study employed secondary annual time series data, which spanned from 1999 to 2023. The data used were extracted from the CBN Statistical Bulletin 2023 edition. Preliminary tests were conducted using the Augmented Dickey-Fuller to determine the level of integration of the variables of interest. Consequent upon the findings of the above tests, the study employed an auto-regressive distributed lag as the method to estimate the specified model. A residual post-diagnostic test was also conducted. Findings from the study indicated that the influence of insecurity on the performance of SMEs on GDP is negative with a coefficient of -1,303.885 and significant with a probability value of 0.0000. Also, interest rate exerted a negative (with a coefficient of -415.51) and significant influence on the performance of SMEs to GDP with a probability value of 0.000. Similarly, the inflation rate has a negative (with a coefficient of -142.57) and significant influence on SMEGDP with a probability value of 0.0069; thus, all the explanatory variables with negative coefficients had a significant and negative influence on SMEs' contributions to real gross domestic products in Nigeria. The study concluded that insecurity and inflation have a significant but negative influence on the performance of SMEs in Nigeria. The study, therefore, recommended that governments both at the federal and state levels should design proactive and practical policies and measures to reduce the level of insecurity in Nigeria so as to guarantee safe and more secure environment for the SMEs to thrive and contribute significantly to Nigeria's economic growth.

**Keywords:** *Insecurity, Growth, Enterprises, Economy, Inflation*

## 1. Introduction

One of the main responsibilities of any government, be it at the federal or state levels, is to ensure the security of the lives and properties of the citizens (Abubakar et al., 2023). The citizens expect the governments to guarantee a safe and secured environment for them to realize their business aspirations with minimal costs. Where such expectations are met by the governments, the citizens in turn contribute significantly to the attainment of the government's macroeconomic objectives, including economic growth (Prieto, 2021). One of the key sectors of the economy that has been credited for accelerating economic growth in an emerging economy like Nigeria is small and medium-scale enterprises (SMEs) (Adaramola &



Dada, 2020). Insecurity as presently witnessed in Nigeria has been attributed to food scarcity, which has led to an increase in prices of goods and services (inflation), and inflation has the capacity to encourage upward movement of cost of capital (interest rate) (Okoli et al., 2023). Thus, this study was carried out to examine the influence of insecurity and inflation on the performance of SMEs in Nigeria.

Availability and assurance of protection of people and their property from known and unknown dangers and harms serve as a critical incentive and invitation for domestic and foreign innovators and investors to operate in SMEs of a nation (Magajil et al., 2022). This may explain why many countries around the world wish and work to maintain peace and security within and beyond their borders (Beland, 2005). Thus, a nation without insecurity will most likely contend with a high inflation rate, and evidence abounds in the literature that confirms the causal relationship between a high inflation rate and interest rate. Despite the huge potential of SMEs, the increasing cost of capital has limited the scope of SMEs contributions to Nigeria's real gross domestic product (RGDP) (Nwachukwu et al., 2023).

Many developing countries, like Nigeria, have struggled with implementing schemes and programs to ensure the growth of their SMEs without achieving desired outcomes (Olaoye et al., 2018). The general desire for SME growth in underdeveloped and developing nations is apparent as many programs and policy initiatives are designed to create a conducive environment for SMEs to function and prosper. Available studies, however, indicated that most of these initiatives have not translated to the growth and better performance of SMEs as envisaged. Globally, the security of lives and property is a major ingredient of the growth of any sector of a nation's economy. The deteriorating level of security in Nigeria can be linked to an increase in inflation challenges, which in turn can propel an increase in interest rate (Nto et al., 2015; Agogbua et al., 2022).

Despite huge annual budgetary allocations to the defence ministry and other security agencies by both the federal and state governments, the level of insecurity in Nigeria is yet to abate, unfortunately (Okoli et al., 2023). Operators in SMEs in Nigeria continue to decry the challenges and difficulties the insecurity is causing their endeavours. The food scarcity and subsequent food inflation as currently witnessed in Nigeria have been partly attributed to insecurity in the northern part of the country, where the bulk of the food consumed in the country comes from. Business enterprises generally need a safe and secure environment to prosper and grow; thus, insecurity, which breeds inflation, is a major challenge to SMEs, especially in an emerging economy like Nigeria. (Obamuyi, 2009; Odekunle et al., 2023).

The available studies on the influence of macroeconomic variables and SMEs did not consider insecurity as a key explanatory variable. This study added insecurity as a major variable that can influence SMEs' performance and growth, and it is hoped that its findings will expand knowledge on the SMEs' fortunes in Nigeria. The introduction of this study considered the background of the study, the statement of the problem, gaps in the literature. The next section is a literature review which contained a conceptual framework, theoretical framework and empirical review, while the third and fourth sections focused on methodology and results and interpretation, respectively. The last section was on the conclusion and recommendations.



## **2. Literature Review**

### **2.1. Conceptual Review**

#### **Insecurity**

The term insecurity has been conceptualised to mean threats to peace, instability, absence of national cohesion, fighting, kidnapping, war, terror, destruction of properties and lives (Ndubuisi-Okolo & Anigbuogu, 2019). On the other hand, security has been defined as an ongoing state involving the ability of the state to combat threats on its core values and interests (Onime, 2018). This suggests that insecurity is not the absence of crime, but the inability to rise to the challenges posed by these threats with expediency and expertise. Agogbua et al. (2022) conceptualised security to mean protection against all forms of harm, which include physical, economic and psychological. Insecurity on the other hand, means different things to different people, including danger, hazard, and uncertainty, lack of protection and lack of safety (Prieto, 2021). All these terms have been used to explain insecurity, which ultimately refers to a vulnerable state of harm and loss of life, property and livelihood. Hence, insecurity is a state of fear stemming from the absence of protection from attack or threat or lack of freedom from danger.

Insecurity generally is a formidable hindrance to the smooth functioning of the economy of any nation; it has the capacity to stunt growth, reduce the standard of living, increase poverty and lack, boost unemployment, increase inflation, increase crime rate and reduce productivity and ultimately affect the economic growth and development negatively (Olatunji & Ibikunle-Falayi, 2018). This justifies the huge resources that governments, especially in Nigeria, spend on combating insecurity. Insecurity is so central to a nation's quest for growth and development that it is used as a parameter for measuring how developed a nation is (Yusuf & Mohd, 2023).

#### **Inflation**

Inflation is generally considered to be a persistent increase in general prices of goods and services over a period of time. This increase in general prices of goods and services is termed inflation when it becomes persistent and above the specified benchmark (Afolabi & Adenle 2021). With high inflation comes increases in the cost of living which would cause households and firms to increase the cost of their consumption and consequently reduce their savings and funds for investment and this would cumulatively reduce the stock of funds to finance private sector operations (Nwachukwu et al., 2023). Inflation is adjudged not good for any economy since it negatively affects different segments of the economy, misrepresents prices and wrongly puts the prices of goods and services far above their values and consequently, reduces and devalues the purchasing power of the money in such economy.

Furthermore, increased inflation rate would attract the attention of monetary authorities like CBN to design and implement policies and programs that will mop up the excess liquidity in an economy and cause tight and stringent monetary stance which could lead to reduction in loanable funds with money deposit banks and subsequent increase in interest rates (Manzoor et al., 2021). This will ultimately affect private sector funding. Different types of inflation



have been identified to include demand-pull and supply push. Demand pull inflation is occasioned by an increase in aggregate demand without a corresponding increase in supply, while supply push (or cost push) inflation, on the other hand, is occasioned by a reduction in supply caused by an increase in the cost/price of the goods and services produced (Alimi, 2015). Changes or moderations in government monetary policies over time is the reason for structural inflation. The severity of inflation can be further categorised as hyper, galloping, high, chronic, moderate, and low inflation (Inim et al., 2012).

### **Small and Medium Scale Enterprises in Nigeria**

There is no known evidence to determine the origin of SMEs in Nigeria, and there is also no single definition or parameter that encapsulates the meaning of SME globally (Olaoye et al., 2018). However, efforts have been made by scholars and institutions to provide a working definition. Kadiri (2012) noted that the parameter for determining an enterprise as small, medium or large differs among countries depending on their level of economic and institutional development. SMEs can be defined by ownership structure, number of employees, annual turnover and assets base (Manzoor et al., 2021). The national policy on MSMEs categorises micro businesses as enterprises that have less than 10 employees and less than N5 million in assets, excluding land and buildings.

Small enterprises are businesses that engage between 10 and 49 employees with total assets excluding land and building above N5 million but less than N50 million, while medium enterprises engage more than 50 employees but less than 200 employees with assets based excluding land and building above N50 million but less than N500 million. Financial System Strategy (FSS, 2020) reported that SMEs are seen as enterprises whose annual turnover is below N100 million and have a staff strength of less than 300. The percentage of SMEs in Nigeria is about 96% compared to Europe and the US, that has 65% and 53% respectively, while the manufacturing subsector controls a larger percentage of SMEs in the country.

Obamuyi (2009) contended that SMEs in Nigeria are found in transportation, fishing, manufacturing, mining and quarrying, construction, forestry, domestic trade, export, real estate, import, public utilities, commerce, personal, professional, agriculture and miscellaneous. The National Bureau of Statistics (NBS, 2017) reported that Nigeria has a total of 41,543,028 micro, small and medium enterprises in operation. The breakdown shows that micro enterprises consist of 99.8% while medium enterprises represent 0.2%. In another study, NBS (2001) reveals that SMEs in Nigeria make up 97% of the economy. Ashogbon et al., (2022) estimated that there are 8.4 million SMEs in Nigeria. Despite the harsh economic environment that confronts SMEs, the sector has continued to strive for survival and has contributed meaningfully to the growth of national income in terms of employment generation and poverty reduction (Nto et al., 2015).



## **Theoretical Framework**

### **Relative Deprivation Theory**

According to Garry (1966) relative deprivation theory, insecurity stems from a collective discontent induced by a sense of economic and social deprivation. Three ideas, each concentrating on a different component of deprivation, lend support to the concept that deprivation is likely to lead to violence. First, there is the notion of frustration and aggression, which states that frustration generates aggressive behaviour (Pate & Haruna, 2015). Second, there is the expectation theory, which holds that failure to achieve an expected outcome will result in violence (Agwu & Emeti, 2015). Third, the reactance thesis proposes that the removal of behavioural freedom, which causes the arousal of reactance, may lead to violence (Onime, 2018). These three ideas emphasize the fact that different types of insecurity in Nigeria may be the result of varying levels of impoverishment. Many developing countries, like Nigeria, have higher number of people below the poverty level, as well as problems with governance and the economy.

The political process is plagued with inept, corrupt administrations and bad leadership poverty, inflation, unemployment, poor access to education and social services (Umamiah & Aliyu, 2022). Similarly, it is certain that significant socio-economic inequalities could generate conflict especially when the economic growth prospects are negative. The pervasive hardship and permissive settings for violence cause widespread disillusionment, outrage and public mistrust, which manifests as the people resist and undermine society's principles. As a result, there will be a significant number of furious people who are vulnerable to various political, cultural and other manipulations that can easily turn their rage and frustration into violence.

The level of insecurity in Nigeria has grown to the stage where most operators in SMEs in most states in the Northern Nigeria especially in agriculture cannot carry on their businesses due to banditry in the North West, terrorism in North East, herders and farmers in the North Central, Kidnapping and killer herdsmen in South West, IPOB terrorists in South East, and militants in the South-South geo-political of Nigeria (Yusuf & Mohd, 2023). This theory is relevant to this study as it identified the likely causes and motivations for insecurity which is the main explanatory variable of this study.

### **2.2. Empirical Review**

Nwachukwu et al. (2023) examined the macroeconomic determinants of SME performance in Nigeria covering the period of 1986 and 2021. The independent variables included exchange rate, inflation rate, interest rates and general private expenditure, while dependent variable was proxied with SMEs' contribution to gross domestic product. The study estimation was based on the autoregressive distributed lag (ARDL) model. The result of the study showed that interest rate does not exert significant effect on SMEs contributions to GDP in Nigeria and exchange rate exerted more negative significant influence on SME performance than positive influence. Again, general private consumption exerted more positive significant influence on SME performance than negative influence and inflation exerted more negative





significant influence on SME performance than positive influence in Nigeria. Unlike the current study, this reviewed study did not include insecurity as a key variable in its model.

Mokuolu and Oluwaleye (2023) investigated small and medium-sized businesses' (SMEs) role in reducing unemployment in Nigeria. The dependent variable was measured with industrial growth, while independent variables were measured with small and medium scale enterprises contribution to export, commercial bank credits to SMEs and SMEs contribution to gross domestic product. Time series data was obtained for the study were sourced from CBN Statistical Bulletin. Estimation method was ARDL model. The study revealed that SMEs contribution to export posed positive insignificant impact on unemployment reduction in Nigeria in the long run and a negative insignificant impact on industrial growth in short run. The study concluded that SMEs have a positive relationship with unemployment reduction in Nigeria. This used SMEs as independent variable which is the dependent variable in the current study.

Udoh et al. (2023) the effect of selected economic policies on the growth of SMEs in Nigeria. The study proxied the dependent variable with small and medium enterprises productivity, while independent variables were exchange rate, interest rate, inflation rate, taxes, government expenditure, tariff and degree of trade openness. The time frame was from 1986 to 2017, a thirty-two-year study. The annualized secondary data was analyzed using the Autoregressive Distributed lag (ARDL). The study found that economic policy (proxies: monetary policy, fiscal policy and trade policy) had no positive significant effect on the growth of SMEs in Nigeria. The study concluded that major determinants of SMEs growth are policies directed on interest rate stabilization, exchange rates management and inflations rate targeting, tax rate reduction and stability, and government expenditure (spending) on infrastructure targeting. The time scope of this study was 2017 which is seven years ago while the current study updated the scope to 2022.

Manzoor et al. (2021) investigated the role of SMEs in rural development and access of SMEs to finance. The study examined the intervening role of access of SMEs to finance in the link between SME's evolution and rural development, in the context of Pakistan. This study used primary data through a survey, which was obtained mainly with the instruments of self-administrated questionnaires method. The explanatory variables were SME's evolution, access of SMEs to finance, and rural development while dependent variable was SME's annual growth. In total, 338 entrepreneurs operating SMEs in rural areas completed a survey for the study. Through a multi-stage stratified random sampling technique, entrepreneurs were selected from three districts. Confirmatory factor analysis and structural equation modeling were used to test hypotheses. This study revealed that SME's evolution has a positive and optimistic influence on rural development. Further, the study also reveals that on SME's progress a positive influence happens by the access of SMEs to finance. Particularly, the study finds that access of SMEs to finance significantly mediated the effect of SME's evolution on rural development. This study used primary data with limited data and scope, the current study used national data that is wider in scope and with better implication.

Ashogbon et al. (2022) examined the effect of interest rate on the growth of SMEs in Nigeria, using annual time series data from 2000-2019. The secondary data for the study were sourced



from the World Development Indicator (WDI) and the Central Bank of Nigeria Statistical Bulletin. The data collected were small and medium scale enterprises GDP which is the dependent variable while commercial bank total credit to private sector, commercial bank loans to SMEs, percentage of commercial bank loans to SMEs, monetary policy rate (MPR), inflation, exchange rate, reserve requirement and lending rates of commercial banks to SMEs are the independent variables. Descriptive and inferential statistics were employed, the Autoregressive Distribution Lag (ARDL) were used to test the long run relationship of the variables. The results showed that lending rates of commercial banks have a negative effect on SMEGDP. This study did not include insecurity as one of the explanatory variable.

Ayunku and Eweke (2020) examined the impact of banks credit and macroeconomic dynamics on small and medium scale enterprises in Nigeria using annual data from 1992 – 2016. The dependent variable was proxied with SMEs performance, while independent variables were interest rate, inflation rate and exchange rate, banks credit to SMEs and government tax revenue. This study used annual time series data for the period 1992 - 2016, sourced from Central Bank of Nigeria (CBN) Statistical Bulletin and National Bureau of Statistics. The long-run and short-run relationship amongst the variables were examined via the non-linear ARDL model. The non-linear ARDL results suggested that in both long and short-run estimations, that a rise in banks credit, government tax revenue and negative shocks in interest rate, inflation rate and exchange rate will trigger a fall in SMEs performance in Nigeria. Furthermore, it was observed that negative shocks tend to be larger in magnitude than positive ones. This study did not include insecurity as a key variable unlike the current study.

### 3. Research Methodology

This study employed ex post facto research design as secondary annual time series data were sourced specifically on one dependent variable and three explanatory variables. The data used were extracted from CBN Statistical Bulletin 2022 edition. The variable of interest which was performance of SMEs and measured with SMEs contributions to real gross domestic products while independent variable was proxied with three variables namely; insecurity index, inflation rate, and interest rate. The preliminary tests were conducted using Augmented Dickey-Fuller to determine the level of integration of the variables of interest. Consequent upon the findings of the above tests, the study employed auto-regressive distributed lag as the method to estimate the specified model. Residual post-diagnostic test was also conducted along with descriptive statistics.

#### Model Specifications

This study adopts the model as used by Udoh et al. (2023) in a study titled selected economic policies on small and medium enterprises productivity in Nigeria. Their model was stated as:

$$\text{GSMEP} = f(\text{INTR}, \text{INF}, \text{TAXS}, \text{GVEX}, \text{TARR}, \text{DTOP}) \dots \text{Equ.1}$$



Where: GSMEP = Growth of Small and Medium Enterprises (proxy for SMEs Productivity),  
INTR = Interest Rate, INF = Inflation, TAXS = Taxes, GVEX = Government Expenditure,  
TARR = Tariff, DTOP = Degree of Trade Openness.

The model for this current study is specified thus:

$$\text{RGDPSME} = f(\text{INSC}, \text{INFL}, \text{INTR}) \dots \text{Equ.2}$$

The above functional relationship can be specified further as:

$$\text{RGDPSME} = \beta_0 + \beta_1 \text{INSC} + \beta_2 \text{INFL} + \beta_3 \text{INTR} + U_t \dots \text{Equ.3}$$

Where: SMERGDP =SMEs contribution to real gross domestic product, INSC = Insecurity index, INFL = Inflation rate, INTR = Interest rate,  $U_t$  = Error term

Thus,  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ , &  $\beta_3$  are parameters to be estimated

## 4. Data analysis and discussion

### Descriptive Statistics

Descriptive statistics showed a set of summaries that displayed the descriptive coefficients of a set of data which serves as a representative of a population. The variables used in this study include the contribution of small and medium scale enterprises to gross domestic product (GDP), interest rate, insecurity index, and inflation rate. Thus, in order to present a foundation on which the econometric analysis is built, Table 1 shows the summary of the descriptive statistics.

**Table 1. Summary of Descriptive Statistics**

	SMEGDP	INTR	INSC	INFL
Mean	9865.958	17.27625	6.146250	12.53542
Median	9316.777	17.10000	6.055000	11.99000
Maximum	23288.43	24.85000	9.310000	23.80000
Minimum	2633.319	11.55000	2.340000	0.200000
Std. Dev.	6605.508	2.880856	2.404058	4.953448

Source: Researchers' Computation, 2024.

The contribution of small and medium-scaled enterprises to gross domestic product (SMEGDP) was found to possess an average value of ₦9,865.958 million with maximum contribution of ₦23,288.43 million and minimum at ₦2,633.319 million. The statistics further shows a standard deviation value of 6,605.508, a value lower than the mean value and



could connote the absence of volatility. Interest rate, a measure of the cost of debt capital shows an average value of 17.28%, maximum at 24.85% and minimum at 11.55%. With a standard deviation value of 2.88%, it is safe to state that interest rate equally not volatile. The insecurity index measures the degree of safety enjoyed by small and medium-scale enterprises and the mean value was at 6.14%, minimum was 2.34% while the maximum-security index in Nigeria for the study period was 9.31%. In the place of inflation rate, the statistics show that on the average, inflation rate in Nigeria for the period of the study was 12.53% while it was 23.80% on the highest but was as low as 0.20% with standard deviation value of 4.95%. This shows that inflation rate in Nigeria has been double digits on the average.

### Test for Stationarity

In every time series analysis, it is important to check for the properties of the variables and one way this can be done is through the unit root test for stationarity. This test is important in order to avoid producing spurious regression. Although there are a number of frameworks provided for the investigation of stationarity among time series data, the most used one is the Augmented Dickey Fuller (ADF) test. In Table 3, a summary of the ADF unit root result is presented.

**Table 2. ADF Unit Root Test**

Var	t-test	Cri-val	Prob.	t-test	Cri-val	Prob.	Stationarity
SMEGDP	0.076	-2.998	0.9566	-5.988	-3.004	0.0001	I(1)
INTR	-2.034	-2.998	0.2711	-5.516	-3.004	0.0002	I(1)
INSC	-1.051	-2.998	0.7167	-4.735	-3.004	0.0012	I(1)
INFL	-4.606	-2.998	0.0014	-	-	-	I(0)

Source: Researchers' Computation 2024.

The unit root test result shows that SMEGDP, INTR, and INSC are all stationary at first difference while INFL was stationary at level. This confirms that the variables have mixed stationarity. As a result, it is most appropriate to employ the Autoregressive Distributed Lag (ARDL) test to validate the hypotheses formulated. However, before the examination of the ARDL test, the lag length at which the test is to be performed is to be investigated through the Vector Autoregression (VAR) lag length criteria. These criteria include the Akaike Information Criterion (AIC), Schwarz Information Criterion (SC), Hannan-Quinn Information Criterion (HQ) among others. However, Gujarati (2004) asserted that in the selection of lag length, the AIC and SC are put into consideration and the lag at which the lowest value occurs is used in the ARDL test. In Table 4, the study provides the result of the lag length criteria.



**Table 3. Lag Length Criteria**

VAR Lag Order Selection Criteria						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	- 326.360 0	NA*	1.30e+08*	30.03273 *	30.2311 0*	30.0794 6*
1	- 315.863 0	16.222 71	2.21e+08	30.53300	31.5248 6	30.7666 5

Source: Researchers' Computation, 2024.

The result of the VAR lag length shows that both the AIC and SC supports the ARDL test to be carried out at lag 0. This implies that the best fit for the ARDL test is at the present period which constitutes no lag. Therefore, the ARDL test is conducted at no lag period.

### Presentation of Results

The presentation of the ARDL results is in two forms. First, the short-run form is presented followed by the ARDL Bounds Test result and long-run co-integration. In table 4, the short-run ARDL result is summarized.

**Table 4. ARDL Short-Term Result**

Dependent Variable: D(SMEGDP)				
Method: ARDL				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
D(SMEGDP(-1))	-0.319845	0.206370	- 1.549858	0.1396
D(INTR)	-405.5174	206.9575	- 10.95942	0.0007
D(INSCL)	-1303.885	910.8730	- 61.43146	0.0000
INFL	-142.5773	111.1850	-	0.0069



			9.282343	
C	3350.512	1576.857	2.124805	0.0486
R-squared	0.358950	Mean dependent var		927.5034
Adjusted R-squared	0.208115	S.D. dependent var		2355.070
S.E. of regression	2095.728	Akaike info criterion		18.32991
Sum squared resid	74665267	Schwarz criterion		18.57787
Log likelihood	-196.6290	Hannan-Quinn criter.		18.38832
F-statistic	22.379752	Durbin-Watson stat		2.315898
Prob(F-statistic)	0.000502			

Source: Researchers' Computation, 2024.

The result in table 4 shows that past period contribution of SME to GDP has negative influence on the present period SME contribution to GDP. By implication, given the coefficient of past period contribution of SME to GDP of -0.3198, it means that any 1% change in the past period contribution to GDP will produce about 31.98% change in the current period contribution. However, from the probability value of 0.1396, it can be stated that the negative influence of past period SMEGDP to the present period SMEGDP is not significant.

As part of the objective of the study is to investigate the influence of insecurity on growth of the small and medium-scaled enterprises. The result from table 4 shows that the insecurity index has huge negative influence on the contribution of small and medium-scaled enterprises to GDP. The coefficient is presented as -1,303.885 and it implies that with a unit change in insecurity index, the performance of small and medium-scaled firms in Nigeria will decrease by ₦1,303.885 million. When the probability value is considered in order to determine significance, it was observed that the influence of insecurity on performance of SMEs to GDP is significant with a probability value of 0.0000.

The ARDL result shown in table 4 indicated that inflation rate has a negative influence on SMEGDP with a coefficient of -142.57. The implication of this is that as inflation rate increases by 1%, the contribution of SMEs to GDP reduces by ₦142.57 million. This relationship was also found to be statistically significant at the study's 5% level of significant



with probability value of 0.0069. The result further shows that interest rate also exerts negative influence on the performance of SMEs to GDP with a coefficient of -415.51 and a probability value of 0.0007. This relationship explains that as interest rate increases, at least by 1%, the performance of small and medium-scaled enterprises decreases by, at least, ₦405.51 million.

Individual effects were considered through the t-test statistic but in measuring the collective or joint effect of insecurity, inflation, and interest rates, the F-test statistic is measured. In this result, the F-statistic has a value of 22.37 while its probability was at 0.0005 and this implies that the independent variables, that is, insecurity index, inflation, and interest rates have joint or collective relationship with SMEGDP in Nigeria.

### ARDL Long-Run Result

The ARDL long-run effect is measured through the ARDL Bounds test. The summary of the result is presented in table 5.

ARDL Long Run Form and Bounds Test				
Dependent Variable: D(SMEGDP, 2)				
F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	10.206 32	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
Actual Sample Size	22		Finite Sample: n=35	
		10%	2.618	3.532
		5%	3.164	4.194
		1%	4.428	5.816
			Finite Sample:	



			n=30	
		10%	2.676	3.586
		5%	3.272	4.306
		1%	4.614	5.966

Source: Researchers' Computation, 2024.

The Bounds test result shows a F-statistic value of 10.20632, while the I(0) test is at 2.79 and the I(1) test is at 3.67 at the study's 5% level of significance. Thus, with the F-statistic value greater than the I(1) bound test score, it can be said that a long-run co-integrating relationship exist between insecurity, inflation, and interest rates and the performance of small and medium-scaled enterprises.

**Table 6, Diagnostic Test**

Test	Obs*R-squared	Prob.
Autocorrelation Test	3.308442	0.0689
Heteroskedasticity Test	6.021191	0.1976

Source: Researchers' Computation, 2024.

The result of the autocorrelation test suggests that the model and its residuals are free from serial correlation with an Obs\*R-squared value of 3.308442 and a probability value of 0.0689. The foundation of asserting that there is no autocorrelation in the model is from the null hypothesis that states that residuals are not serially correlated and with the probability being greater than the study's level of significance, we cannot reject the null hypothesis. In a similar manner, the heteroskedasticity test has a null hypothesis that states that residuals are homoscedastic. To validate this hypothesis, the probability value of the Obs\*R-squared is considered. The probability has a value of 0.1976, and being greater than the level of significance, the null hypothesis cannot be rejected. Thus, it can be said that the model is free from the problem of heteroskedasticity.

### **Discussion of Major Finding.**

The first null hypothesis one stated that insecurity does not have significant effect on SME contribution to the real gross domestic product, the findings rejected this position as it was revealed that level of insecurity actually had a significantly negative effect on SME contribution to the real gross domestic product with a huge negative coefficient of -1,303.885. It is a general consensus that security of lives and properties is vital to the growth and development of any sector of the economy especially important one like SMEs. Thus, the increasing level of insecurity in Nigeria since the return of democratic system of government in 1999 has worsen and negatively impaired the major sector of Nigerian economy.





The second null hypothesis stated that inflation does not have significant effect on SME contribution to the real gross domestic product, the findings from the results does not support this position and subsequently rejected. The results revealed that inflation rate with a coefficient of -142.57 has a negative and significant influence on SMEGDP with probability value of 0.0069. High inflation rate is not only capable of increasing the cost of doing business but also capable of discouraging funding of SMEs. The negative relationship between inflation and inflation and SME is supported by both empirical and theoretical backings.

The third null hypothesis that said interest rate does not have significant effect on SME contribution to the real gross domestic product, was equally rejected as the findings indicated otherwise with a negative coefficient of -415.51. Theoretically, inflation and interest rates tend to move together and have a causal relationship. Thus, higher inflation is an invitation to an increase in interest rate as the monetary authority usually increases interest rate as a measure of controlling inflation rate.

Conclusively, it is not a surprise that all the explanatory variables had a significant and negative influence on SMEs' contributions to real gross domestic products in Nigeria. These findings confirmed the a priori expectation which believes that an increase in the three independent variables of insecurity, inflation rate and interest rate would negatively affect the operations and consequently the outputs of SMEs in any economy.

## **5. Conclusion and Recommendation**

The contributions of SMEs to the economic growth and subsequent development of an emerging economy like Nigeria cannot be overemphasised. The level of insecurity and economic influence of the inflation rate were considered to be a clog in the wheel of attainment of any country's developmental goals. Findings from the study revealed that all the explanatory variables had a significant and negative influence on SMEs' contributions to real gross domestic products in Nigeria. The study concluded that insecurity and inflation have a significant and negative influence on the performance of SMEs in Nigeria. The study, therefore, recommended that governments, both at the federal and state levels, should design proactive and practical policies and measures to reduce the level of insecurity in Nigeria so as to guarantee a safe and more secure environment for the SMEs to thrive and contribute significantly to Nigeria's economic growth. Also, the Central Bank of Nigeria should implement new measures to drastically reduce the inflation rate and equally bring down the interest rate to a single digit number to enhance the performance of SMEs in Nigeria.



## 6. References

- Abubakar, W. A., Sule, Y. H., & Tijjani, M. (2023). Insecurity and economic development in Nigeria. *Journal of Economics and Allied Research*, 8(1), 283-295.
- Adaramola, O. A., & Dada, O. (2020). Impact of inflation on economic growth: Evidence from Nigeria. *Investment Management and Financial Innovations*, 17(2), 21-13.
- Afolabi, F. O., & Adenle, O. E. (2021). Problems and prospects of financing small scale businesses in Nigeria. *International Journal of Management, Social Sciences, Peace and Conflict Studies (IJMSSPCS)*, 4(3), 269 – 278.
- Agogbua, S. N., Mgbatogu, C. D., & Nzewi, U. C. (2022). Impact of insecurity on Nigerian economic growth and development. *International Journal of Development and Economic Sustainability*, 10(5), 1-13.
- Agwu, M. O., & Emeti, C. I. (2015). Issues, challenges and prospects of small and medium scale enterprises (SMEs) in Port-Harcourt City, Nigeria. *European Journal of Sustainable Development*, 3(1), 101-114.
- Alimi, R. S. (2015). Inflation and financial sector performance: The case of Nigeria. *Timisoara Journal of Economics and Business*, 7(1), 55–69.
- Ashogbon, M.B.A., Onyenebo, I.N., & Orefuwa, F. I. (2022). Does interest rate affect the growth of small and medium scale enterprises (SMEs) in Nigeria? *Nigerian Journal of Management Sciences*, 23(2), 343-355.
- Ayunku, P. E., & Eweke, G. E. (2020). Banks credit, macroeconomic dynamics and the performance of small and medium scale enterprises in Nigeria: A non-linear ARDL approach. *European Journal of Business and Management Research*, 5(1), 1-7.
- Beland, D. (2005). The political construction of collective insecurity: From moral panic to blame avoidance and organized responsibility. *Centre for European Studies, Working Paper*.
- Global Peace Index, (2022). Global peace ranking. *Institute for Economics and Peace*.  
[www.ikipedia.com](http://www.ikipedia.com)
- Inim, V., Samuel, U. E., & Abner, I. P. (2020). Other determinants of inflation in Nigeria. *European Journal of Sustainable Development*, 9(2), 338-348.



- Magajil, S., Musa, I., & Salisu, A. (2022). Impact of insecurity on youth unemployment in Nigeria: Ordinary least square estimation technique (OLS). *Indiana Journal of Economics and Business Management*, 2(1), 4-9.
- Manzoor, F., Wei, L., & Sahito, N. (2021). The role of SMEs in rural development: Access of SMEs to finance as a mediator. *PLoS ONE*, 16(3), 1-18.
- Mokuolu, J. O., & Oluwaleye, T. O. (2023). The role of small and medium scale enterprises in unemployment reduction in Nigeria. *Nigerian Journal of Banking and Financial Issues (NJBFI)*, 9(1), 127-137.
- Ndubuisi-Okolo, P. U., & Anigbuogu, T. (2019). Insecurity in Nigeria: The implications for industrialization and sustainable development. *International Journal of Research in Business Studies and Management*, 6(5), 7-16.
- Nto, P. O. O., Mbanasor, J. A., & Osuala, A. E. (2015). Influence of monetary policy variables on loan supply to small and medium scale enterprises in Nigeria. *International Journal of Economics and Finance*, 4(7), 157-164.
- Nwachukwu, N., Ezu, G. K., & Amakor, I. C. (2023). Effect of selected macroeconomic variables on performance of small and medium enterprises in Nigeria: 1986-2021. *International Open Access Journal*, 2(3), 256-272.
- Obamuyi, T.M. (2009). An investigation of the relationship between interest rates and economic growth in Nigeria (1970-2006). *Journal of Economic and International Finance*, 3(4), 14-27.
- Odekunle, B., Oluganna, E., & Olubiyi, E. A. (2023). Forecasting inflation and exchange rates under financial uncertainty: New evidence from Nigeria. *Gusau International Journal of Management and Social Sciences, Federal University, Gusau*, 6(1), 145-163.
- Okoli, U. V., Oladipo, A. O., & Onugha, C. B. (2023). Impact of insecurity on economic activities in Awka metropolis. *Social Sciences Research*, 9(1), 137-150.
- Olaoye, C. O., Adedeji, A. Q., & Ayeni-Agbaje, R. A. (2018). Commercial bank lending to small and medium scale enterprises and Nigeria economy. *Journal of Accounting, Business and Finance Research*, 4(2), 49-55.



- Olatunji, T. E., & Ibikunle-Falayi, O. R. (2018). The effect of interest rate regulation on credit extension to SMEs in Nigeria. *International Journal of Research in Business Management*, 6(5), 17-29
- Onime, B. E. (2018). Insecurity and economic growth in Nigeria: A diagnostic review. *European Scientific Journal*, 14(4), 377-391.
- Pate, H. A., & Haruna, A. D. (2015). The impact of insecurity and poverty on sustainable economic development in Nigeria. *International Journal of Humanities Social Sciences and Education*, 2(2), 32-48.
- Prieto, J. (2021). A multidimensional approach to measuring economic insecurity: The case of Chile. *International Inequalities Institute*, III(70), 1-47.
- Udoh, F. S., Inim, V. E., Emiesefia, J. A., & Akyuz, M. (2023). Selected economic policies on the growth of small and medium enterprises in Nigeria. *Open Journal of Business and Management*, 11, 1948-1970.
- Umaimah, A. U., & Aliyu, U. (2022). Effects of exchange rate on food inflation in Nigeria: A non linear ARDL approach. *Gusau International Journal of Management and Social Sciences*, Federal University, Gusau, 5(1), 195-204.
- Yusuf, A. & Mohd, S. (2023). Growth and fiscal effects of insecurity on the Nigerian economy. *The European Journal of Development Research*, 35, 743–769.