Inflation and Small and Medium-Scale Enterprises (SMES) Growth in Nigeria

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ABSTRACT

Small Medium Enterprises (SMEs) are important to the economy because they help achieve macroeconomic goals. This has led monetary authorities to adopt policies that foster SMEs' development and success. This has made the study focus on Inflation and Small and Medium-Scale Enterprises (SMEs) Growth in Nigeria. The objectives of the study are to examine how inflation rates, interest rates and exchange rates have affected SMEs growth in Nigeria, secondary data that spanned from 2001 to 2022 used for the study analysis were sourced from Central Bank of Nigeria (CBN) and the Federal Office of Statistics (FOS). The variables' stationarity was tested using unit root tests to test the time series data. Cointegration, Ordinary Least Square (OLS) and Error Correction Model (ECM) were used for analysis. Many diagnostic tests were performed on the study residuals. The interest rate positively and statistically significantly affects Nigerian SMEs' funding. In contrast, inflation has a negative impact on Nigerian SMEs' funding. The exchange rate had no effect on SMEs funding, according to the research. The study recommended that the monetary authorities should implement policies to reduce inflation and prioritize SMEs growth in Nigeria by establishing dedicated channels via different financial institutions to provide them with low-interest loans. This will boost their growth and help reduce inflation.

Keywords: Monetary Policy, SMEs, Interest rate, Inflation rate, Exchange rate, Error Correction Model (ECM).

INTRODUCTION

Inflation has been a growing problem in Nigeria for quite some time. When interest rates are high, investors are scared off, and the currency falls in value, which makes importing basic materials more expensive and difficult (CBN, 2022). Economic growth and price stability are the two primary goals of microeconomic policies, according to a large number of economists, central bankers, lawmakers, and credit administrators (Bresser-Pereira, 2019). Incremental price makes market economies difficult to manage in many developing countries (Wang, 2016). Inflation at non-significant levels benefits borrowers at the expense of creditors and is bad for those living on fixed incomes.

SMEs drive growth and development in any economy. Most economies, especially emerging ones, depend on them since they make up most companies, provide jobs, and boost global economic growth (World Bank, 2022). They are vital to global economic development architecture and processes (Manasseh et al., 2019) and are garnering more attention as the drivers of economic growth and development, especially in poor nations. SMEs in developing economies account for 90% of enterprises globally, 40% of GDP, and more

than 50% of employment, according to the World Bank (2022).

SMEs make up the majority of enterprises in Nigeria, producing over 70% of jobs and contributing over 45% to the GDP. Over 80% of Nigeria's employment and 49.78% of GDP come from SMEs, according to the SMEDAN/NBS MSME Survey (2017) (PwC, 2020). Eniola (2014) stated that SMEs employ 70% of the country's workforce, notwithstanding crude oil extraction. Any economy's growth depends on SMEs. It drives industrialization, modernization, rural-urban development, and gainful employment, increasing per capita income, promoting equitable income distribution, and improving citizens' welfare and quality of life. Various governments, national and international organizations are increasingly concerned about encouraging the survival of SMEs to guarantee economic growth and development.

Financial issues like hyperinflation and deflation, high-interest rates, and rising currency rates have an impact on SME performance. Financial ability and access to equity or debt financing limit SMEs' ability to meet investment, financing, and transaction demands Watambwa and Shilongo (2021). High lending rates in Nigeria have also hampered SMEs' growth, which raises production costs. Nnenna et al. (2020) noted that poor government budget implementation and raw material assessment have continued to hurt Nigerian SMEs. Unfortunately, little is known about how macroeconomic factors affect Nigeria's industrial sector.

Existing research on the effects of macroeconomic variables on the performance of SMEs has not resolved disagreements over the kind and extent of these effects. Ogundele et al. (2020) and Rokas (2012) state that macroeconomic factors do not significantly impact the performance of SMEs; however, Orogbu et al. (2017) and Cheptot (2014) came to the opposite conclusion. This is the problem identified in this study that made the researcher to focus more on the impact of inflation on the SMEs growth in Nigeria. Nevertheless, in order to strengthen the study, the researcher has chosen to include inflation with interest rates, exchange rates, and the inflation rates in addition to how these factors impact SMEs growth in Nigeria, which is measured by their liquidity ratio of SMEs.

The main objective of this study is to examine the impact of inflation on SMEs growth in Nigeria, while the specific objectives include:

1. Examine how inflation rates affect Nigerian SMEs growth.
2. Determine how interest rates affect Nigerian SMEs growth.

LITERATURE REVIEW

Conceptual Review

There is no universally agreed-upon definition of SMEs in the literature, perhaps due to the fact that different countries utilize different criteria and definitions. A number of criteria are used to identify small and medium-sized enterprises (SMEs), including the number of employees, total capital invested, plant capacity, sales turnover, and profit margin (Dababneh and Tukan in Manasseh et al., 2019). Similarly, defining SMEs on a global scale is a challenge for the World Bank. The World Bank Research Group (2019) notes that national standards differ significantly. Micro, small, or medium-sized businesses are determined using the same standard criteria by the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA), according to the World Bank Research Group (2019).

The National Policy on SMEs classifies enterprises by size, industry, organization, manpower, technology, and location (Ogonu and Okejim, 2018). Thus, the complex interconnections between these aspects are crucial to understanding business nature, qualities, performance, concerns, and challenges. For policy and planning, size is the most practical categorization foundation. This analysis used the SMEDAN National Policy on SMEs' definitions of SMEs due to other nations' and financial institutions' differing views. Note

that admission into the industry is straightforward, and just personal finances and conviction are required, depending on firm activities.

Olusola, et al. (2022) defined inflation as a situation where there is an excessive demand for goods and services in the economy. Inflation occurs when the demand for goods and services surpasses the available supply (Achua, et al., 2020). The reason may be attributed to excessive spending by both the private sector and the government, resulting in a deficit or temporary reduction in productivity. Price increases might also occur as a consequence of rising production costs. Failure to control imported raw material price increases will lead to inflation.

However, inflation affects Nigerian SMEs growth in numerous ways, and individuals with fixed incomes and firms that are into product which demand is highly elastic bear its weight (Omotosho, 2019). These people can't purchase as much when prices rise. Savings are discouraged, and economic development is reduced since investment requires savings. Due to the increased prices, they must charge to pay their costs, businesses cannot foresee demand for their products, making it difficult to determine what, where, and for whom to manufacture in the future. It also raises concerns about future pricing, interest rates, and currency rates, which increase trade partner risks and discourage commerce. Inflation makes the nominal value unclear, making investment planning harder (Austin and Okezie, 2019).

Theoretical Review

Contingency Theory

The need for small and medium-sized enterprises (SMEs) to comprehend and adapt to macroeconomic dynamics in order to improve performance is best shown by continuity-contingency theory, which is why it will serve as the foundation for this study. It was contingency theory that Lawrence and Lorsch developed in 1967. According to the contingency hypothesis, there is no optimal method for running a business. There will be a difference in the environmental requirements of company owners and management. The elements outside of management's control determine the problem's solution(s) (Mohammed et al., 2021). When an organization's internal characteristics align with its external environment, it will be better able to adapt, according to contingency theory. They think that companies may be saved by being adaptable to their environments. Uncertainty and change, they argued, impact internal organizational characteristics. To improve operational performance, SMEs need to know how the macroeconomic climate affects them. They can therefore better anticipate macroeconomic events and how they will affect business operations, which will ultimately lead to improved performance. According to Mohammed et al. (2021), performance might be enhanced if one's actions are tailored to the specific environment and circumstances.

Keynesian Theory

This study is also anchored on Keynesian Economic Theory in 1936, which serves as the study's foundation. This idea posits that small-scale firms are crucial for the economic growth of a nation. Keynes (1936) posited that the government has the potential to counteract economic instability by implementing effective economic policies. The idea posits that the government intervenes in the economic environment via its economic policies in order to facilitate the efficient allocation of resources, regulate markets, and create a conducive business climate that promotes the growth of small-scale firms.

Keynes (1936) posits that small-scale firms thrive in an environment characterised by policies that maintain a stable interest rate, currency rate, and inflation rate, which may have a stimulating impact on the functioning of these enterprises. Small-scale firms that possess the capacity to comprehend their operational environment while acknowledging the dynamic nature of the business environment will not only be proactive in adapting to changes but also make informed choices that improve their performance. The

hypothesis is based on the following assumptions:

1. The theory contends that the interaction of various environmental factors affects how small-scale businesses operate in their environment. Thus, small-scale operators should be informed about their economic environment, even when it is external to them, in order to be proactive in their operations.
2. The theory also implies that small-scale firms thrive in a stable economic environment characterised by fixed exchange rates, interest rates, inflation rates, and so on.
3. The study is based on Keynesian economic theory, which offers a contemporary perspective on enhancing the performance of small businesses via entrepreneurial innovation in a stable economy.

Utilising Keynesian economic theory to analyse the research topic provides guidance in studying the essential components of the economic environment that significantly impact the development of small and medium-sized enterprises (SMEs), while also emphasising the role of entrepreneurs as catalysts for change.

Empirical Review

Ashogbon et al. (2022) explored how lending rates affect Nigerian SMEs. To assess how loan rates affect Nigerian SME growth they used 2000–2019 annual time series data. The dependent variable was SMEG GDP. The MPR, inflation, currency rates, reserve requirements, and commercial bank SME lending rates were independent variables. Commercial banks' total lending to the private sector, loans to SMEs, the proportion of loans they allocated to SMEs, and the monetary policy rate were also evaluated throughout time. Inferential and descriptive statistics were utilized, including autoregressive distribution lag (ARDL). The statistics demonstrate that LRCM lowers SMEGDP. Specifically, LRCM rises 1% and SMEGDP falls 1.6%. A 1% RR increase boosts SMEGDP by 0.005%.

In their study, "Small-Medium Enterprise Formation and Nigerian Economic Growth," Adeosun and Shittu (2021) examine how entrepreneurship, namely SMEs, affects Nigeria's economy. This article also examines how small company growth affects the economy. The paper focused on secondary data from 1990 to 2016 on macroeconomic indicators such as registered SMEs, nominal GDP, employment, total labor force, and population. Forecasting was utilized to find missing trends. Long-term correlation is assessed using the dynamic error correction model (ECM) approach and the Johansen co-integration test. The number of small and medium-sized enterprises (SME) has increased, boosting the economy. However, micro- and medium-sized organizations had no bigger economic effect than established corporations. Entrepreneurship is vital to economic growth and unemployment reduction since employment elasticity is positive and large. Using the Error Correction Model (ECM), the research examines how the growth of small and medium-sized businesses affects the Nigerian economy.

Nnenna et al. (2020) looked at the effects of economic variables on small and medium-sized enterprises (SMEs) in Nigeria. The effects of interest, currency, and inflation on small and medium-sized businesses in the southeast were the focus of the study. Researchers in this study relied on cross-sectional survey data. A total of 296 participants were selected from a population of 1560 for the research. Multiple regression analyses were used to assess the hypotheses of the research. South-East Nigerian SMEs are hit hard by inflation, loan rates, and currency rates. Effective inflation management was recommended in the study as a means to enhance economic growth.

Nnenna et al. (2020) examined how economic variables affect small and medium-sized firms in southeastern Nigeria. They studied how inflation, interest, and currency rates affect small and medium-sized enterprises. The research used resource-based theory. Cross-sectional survey research was utilized. The study had 1560 participants and 296 samples. Multiple regression analysis was employed to test the hypotheses. Inflation hurts south-east Nigerian SMEs, according to studies. Interest rate negative impacts on southeast Nigerian

SMES are considerable. The analysis also found that the exchange rate hurts south-east Nigerian SMEs. The study recommended regulating inflation to boost economic growth.

Atayi et al. (2020) examined how exchange rate variations affect Nigerian SMEs. Using annual time series data from 2000 to 2019, they examined how interest rates affect Nigerian SMEs. The dependent variable was SMEG GDP. Independent factors included the MPR, inflation, currency rates, reserve requirements, and commercial bank lending rates to SMEs. Commercial banks' total private sector credit, SMEs' loans, SMEs' proportion of loans, the MPR, and the MPR were also included. The research analyzed data using descriptive and inferential statistics. Long-term variable relationships were examined using the autoregressive distribution lag (ARDL) model. The results showed that LRCM hurts SMEGDP. Specifically, LRCM increases by 1% and decreases SMEGDP by 1.6%. SMEGDP rises 0.005% with a 1% increase in RR. The study implied that lowering MPR and INFR would lower LRCM. This decrease in LRCM would improve SMEs' financial capabilities, increasing their GDP contribution.

Gherghina et al. (2020) examined how SMEs affect economic development via investments and innovation. The research argues that SMEs are crucial to local economic development since they create jobs, reduce poverty, and boost growth. However, these businesses confront several financial challenges. This research examines how investments and innovation affect selected Romanian regions' economic growth as measured by turnover for active businesses, focusing on SMEs from 2009 to 2017. The quantitative findings of many log-log linear regressions show that investments improve turnover. The association was validated for all active enterprises countrywide, including micro, small, medium, and big corporations. All firms, particularly the big ones, saw a turnover boost from innovation spending. SMEs showed no statistically meaningful association. Size boosted turnover for active firms and micro-units nationwide. Furthermore, the estimated results show that active micro-units boost regional economic growth. Managers and policymakers may utilize the study findings to support and help SMEs flourish.

Orogbu, et al. (2017) examined how SMEs affect Nigerian economic development. The study used quantitative methods and secondary data on SMEs, government tax income, currency rate, interest rate, and inflation. The research used an Ordinary Least Squares (OLS) estimate from 1970 to 2016. The exchange rate, inflation, interest rate, and government tax income negatively affect SMEs, according to the report. The research found that government tax income, currency rate, interest rate, and inflation negatively impact small and medium firms.

The studies reviewed above have all made important contributions to our understanding of the relationship between inflation and the growth of SMEs in Nigeria. This highlights the need to seriously consider the need to rein in inflation, which has a negative impact on Nigeria's small and medium-sized businesses (SMEs) and, by extension, the livelihoods of Nigerians. The problem is that most of these studies just utilized inflation in Nigeria without ever identifying it, and none of them took into account the ways in which different monetary policy tools influence the development of small and medium-sized enterprises (SMEs) in Nigeria. This is where the researcher intends to fill these gaps.

METHODOLOGY

Research Design

The study uses an ex-post facto research design. The research used quarterly secondary data from 2001 to 2022, obtained from the CBN statistics bulletin. The study used econometric methods to test the research hypotheses. Specifically, a unit root test was used to see if the variables were stationary and a cointegration test to see how the dependent and independent variables were related over time. Subsequently, the Error Correction Mechanism (ECM) was run using EViews 10.0.

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Source of Data

The investigation was conducted in Nigeria. The data analysed was sourced from the Central Bank of Nigeria (CBN) and the Federal Office of Statistics (FOS), and it was of secondary nature.

To analyse the stated goal of the research, the researcher selects pertinent aspects that impact productivity, such as the growth rate in real GDP. The factors included are the inflation rate, capacity utilisation, and environmental factors. The primary focus will be on the impact of the inflation rate on SMEs growth in Nigeria, while the environmental element will be considered a control variable. The environmental element encompasses infrastructure amenities, technological advancements, and political stability. Conversely, periods with a growth rate in real GDP above the average should be regarded as favourable and designated as (i).

Model Specification

The research used multiple regression analysis to investigate the influence of inflation on the growth of small and medium-sized enterprises (SMEs) in Nigeria. The model consists of inflation which is measured as Inflation, consumer prices (annual %), exchange rate which is measured as Interest rate spread (lending rate minus deposit rate, %) and interest rate which is measured as Official exchange rate (LCU per US$, period average). All these variables are strategies that monetary authorities use to have an impact on the real economy. The study's dependent variable is SMEs growth, which is measured as SMEs liquidity ratio (SMELR). The explanatory variables consist of Inflation Rate (INFR), Interest Rate (INTR), and Exchange Rate (EXTR). Hence, the multiple regression model is defined in the following manner:

$$SMELR = f(INFR, INTR, EXTR) \quad \text{——————————} \quad (i)$$

$$SMELR = \beta_0 + INFR\beta_1 + INTR\beta_2 + EXTR\beta_3 \quad \text{——————————} \quad (ii)$$

PRESENTATION OF DATA AND DISCUSSION OF RESULTS

Presentation of Data

Econometric analysis seeks to identify and build relationships between economic variables. This section will assess Nigeria's inflation and SMEs growth. The link between monetary policy tools, inflation rate, including interest rate, exchange rate, and SME liquidity ratio, is examined. This is done via regression. EViews is the computational devices.

Unit Root Test

This section begins with the unit roof test to determine data stationarity using the Augmented Dickey Fuller (ADF) test. Table 4.1 shows the enhanced dickey fuller findings, including the test statistic and crucial values.

Table 4.1: Unit Root Test (Adf-Test) at Level Form

Variables	ADF-test	Prob. Value	1% critical value	5% critical value	10% critical value	Order of integration
SMELR	-2.804233	0.0747	-3.788030	-3.012363	-2.646119	I (0)
INFR	-2.850180	0.0693	-3.808546	-3.020686	-2.650413	I (0)
INTR	-3.634203	0.0144	-3.808546	-3.020686	-2.650413	I (0)

EXTR	1.992903	0.0996	-3.831511	-3.029970	-2.655194	I (0)

Researcher's Computation, 2023.

DECISION RULE

The findings show alternative time-series variable integration orders. It seems that SMELR, INFR and EXTR is not stationary. If the unit root of the ADF computed value exceeds the absolute critical value, reject the null hypothesis (H_0). The table above shows that the unit root null hypothesis is accepted. So, variables aren't stationary. Therefore, the investigation needs the initial first difference for each variable.

Table 4.2: (ADF and Critical Values in Absolute Terms)

Variables	ADF-test	Prob. Value	1% critical value	5% critical value	10% critical value	Order of integration
SMELR	-4.516731	0.0022	-3.808546	-3.020686	-2.650413	I (1)
INFR	-4.249644	0.0042	-3.831511	-3.029970	-2.655194	I (1)
INTR	-3.934203	0.0144	-3.808546	-3.020686	-2.650413	I (0)
EXTR	-4.574165	0.0145	-3.808546	-3.020686	-2.650413	I (1)

Researcher's Computation, 2023

The preceding examples make it easy to assign meaning to each variable.

H0: Monetary policy variables have unit roots.

H1: Monetary policy variables are unitless.

The null hypothesis says that the test statistic is less than the important values that were tabulated. This is true because all of the variables (liquidity ratio of SMEs, inflation rate, interest rate and official exchange rate) have unit roots.

Co-Integration Test

Tale 4.2 indicates that the interest rate is stable at its level since the absolute augmented dickey fuller (ADF) value of -3.934203 is larger than the 1%, 5%, and 10% critical values of -3.808546, -3.020686 and -2.650413. This suggests a long-term link between the dependent and independent variables. Thus, the dependent and independent variables co-integrate.

Table 4.3: Economic Opinion, Interpretation/Appriori Criteria

Variable	Expected Signs	Estimate	Remark
SMELR	POSITIVE	$\beta > 0$	Conform
INFR	POSITIVE	$\beta > 0$	Conform
INTR	POSITIVE	$\beta < 0$	Does not Conform
EXTR	NETAGIVE	$\beta < 0$	Conform

Researcher's Computation

Table 4.3 shows that all independent variables match the research work expectation except interest rate. The

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sign of inflation rate indicates that an increase in inflation rate increases the liquidity ratio of SMEs in Nigeria in the long run, which is consistent with economic theory and conventional wisdom that expansionary monetary policy will increase liquidity ratio.

Testing of Hypotheses:

The null hypotheses explored in this research are reported here to derive important conclusions.

The Impact of Inflation, Interest and Exchange Rates on the Financial Performance of Small and Medium Enterprises (Smes) In Nigeria.

H_{01}: The inflation rate does not have a significant impact on the financial performance of small and medium enterprises (SMEs) in Nigeria.

H_{02}: The interest rate does not exert a significant impact on the financial performance of small and medium-sized enterprises (SMEs) in Nigeria.

Table 4.4: Regression Result SMELR (Dependent Variable)

Variable	**Coefficient**	**Robust Std Error**	**t**	**p> /t/**
INFR	-1.323617	1.336643	-0.990255	0.0352
INTR	-10.35156	2.738040	-3.780647	0.0014
EXTR	0.027956	0.049103	0.569336	0.5762
CONSTANT	147.7036	26.06762	5.666171	0.0000
R-squared	0.662645	**Mean dependent var**		58.26089
Adjusted R-squared	0.623085	**S.D. dependent var**		26.40263
S.E. of regression	20.90506	**Akaike info criterion**		9.080825
Sum squared resid	7866.385	**Schwarz criterion**		9.279196
Log likelihood	-95.88907	**Hannan-Quinn criter.**		9.127555
F-statistic	5.165794	**Durbin-Watson stat**		1.305561
Prob(F-statistic)	0.009450			

Source: Researcher's Computation, 2023

From table 4.4 above, the estimated model is stated as:

SMELR =147.7036 – 1.323617 INFR – 10.35156 INTR + 0.027956 EXTR

Interpretations

– 10.07061 = LR, when all other variables are zero.

INFR: A decrease in inflation rate increases **SMELR** by **1.323617**.

INTR: A decrease in the interest rate will increase the **SMELR** by **10.35156**

EXTR: An increase in the exchange rate will increase the **SMELR** by **0.027956**

R^2: 0.662645, meaning independent factors explain 66.26% of **SMELR** variance. The research had to look for the Error Correction Model (ECM), the dickey filler ECM, and serial or autocorrelation error because

the error term doesn't have a unit root. The Durbin-Watson statistic value of 1.305561, which is much less than 2 and cannot be close to 2, demonstrates this.

Absolute dickey fuller interpolated

Table 4.5: ECM Result SMELR (Dependent Variable)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	61.29159	5.247600	11.67993	0.0000
D (SMELR (-1))	0.113220	0.195463	0.579239	0.0016
D (INFR (-1))	-0.766941	1.167749	-0.656769	0.0220
D (INTR (-1))	-3.662371	2.478648	-1.477568	0.0017
D (EXTR (-1))	-0.094074	0.222606	-0.422602	0.0790
ECM	0.761781	0.269748	2.824044	0.0135
R-squared	0.742501	**Mean dependent var**		63.35648
Adjusted R-squared	0.679108	**S.D. dependent var**		21.65739
S.E. of regression	17.06530	**Akaike info criterion**		8.755297
Sum squared resid	4077.143	**Schwarz criterion**		9.054016
Log likelihood	-81.55297	**Hannan-Quinn criter.**		8.813610
F-statistic	3.320230	**Durbin-Watson stat**		1.866979
Prob(F-statistic)	0.034777			

Researcher's Computation

SMELR =61.29159 + 0.113220 D (SMELR (-1)) – 0.766941D (INFR (-1)) -3.662371D (INTR (-1)) – 0.094074D (EXTR (-1)) + 0.761781ECM

As seen above, the error term is bigger than the crucial values; hence, the Error Correction Model (ECM) has no unit root.

The Relationship between SMEs liquidity Ratio Inflation, Interest and Exchange Rate in Nigeria

H_{03}: There is no significant relationship between inflation, interest rate and the financial performance of small and medium-sized enterprises (SMEs) in Nigeria.

H_{04}: There is no significant causal relationship between inflation, interest rate and the financial performance of small and medium-sized enterprises (SMEs) in Nigeria.

Table 4.5 shows the relationship between the Nigerian SMEs liquidity ratio, inflation, interest and exchange rates. Their correlation value of -0.173590, -0.657279 and 0.005200 indicate a significant negative and positive links. The data also shows that monetary policy negatively affected Nigerian SMEs' liquidity ratios. This means that open market operations, interest rates, reserve ratios, and other monetary instruments improved SMEs' company growth.

Table 4.9: The Relationship between SMEs Performance in Nigeria, Inflation, Interest and Exchange Rate.

	SMELR	INFR	INTR	EXTR
SMELR	1.000000	-0.173590	-0.657279	0.005200

INFR	-0.173590	1.000000	0.044093	0.376846
INTR	-0.657279	0.044093	1.000000	0.048032
EXTR	0.005200	0.376846	0.048032	1.000000

Researcher's Computation

General Discussion of Findings

SMELR = 61.29159 + 0.113220 D (SMELR (-1)) – 0.766941D (INFR (-1)) -3.662371D (INTR (-1)) – 0.094074D (EXTR (-1)) + 0.761781ECM

Table 4.5 shows that SMEs liquidity ratio will rise by 61.29159 units when no change occurs in any of the explanatory variables, according to the intercept or constant term β0 in the regression results obtained from the previous section. Keeping all other explanatory variables constant, a one-unit change in the lagged one value of SMEs liquidity ratio will result in a 0.113220 rise in SMEs growth in Nigeria. With all other explanatory variables held constant, a one-unit change in inflation rate values will result in a – 0.766941 reduction in the SMEs growth in Nigeria. The SMEs growth in Nigeria value will fall by 3.662371 for every one-unit change in the lagged value of interest rate, all other explanatory variables being held constant. And lastly, the value of SMEs growth in Nigeria will fall by 0.094074 for every unit change in the value of the exchange rate. However, the ECM result shows that all the explanatory variables will improve the financial performance of SMEs in Nigeria by 0.761781 in the long run.

The above results also show that the model fits well, since variables outside of the model can only explain 23.82% of the changes in SMEs growth in Nigeria. The R^2 value of the equation, which is 0.761781, accounts for 76.18% of changes in SMEs growth in Nigeria that are explainable by inflation, interest and official exchange rates.

For the purpose of determining if the model's variables exhibit serial correlation, the Durbin-Watson statistic is used. As the DW number becomes closer to two (2), the stronger the evidence that there is no serial correlation. In this case, a DW value of 1.866979 indicates that there is no serial correlation, according to the results shown above. Since the error correction model (ECM) does not account for autocorrelation, it will be used as a post-diagnostic test to examine the cointegration of the variables over the long term rather than to fix the autocorrelation issue.

This study's F-probability value (0.034777) shows that the 3.320230 F-statistic, which measures the combined significance of the explanatory factors, is statistically significant at both the 5% and 10% levels.

The t-statistics for both inflation and interest rates lags are less than 5%, which means they significantly explain the impact of inflation and interest rates on SMEs growth in Nigeria. In contrast, the model does not find any significant relationship between official exchange rate and SMEs liquidity ratio. The results shown above provide sufficient evidence to support the alternative hypothesis that inflation and interest rates significantly affect SMEs financial performance in Nigeria and to reject the null hypothesis that they do not.

Comparison of Result with Previous Findings

The Nigerian SMEs financial performance, inflation and official exchange rates have all been the subject of much research. There has been no consensus among these researchers on how to evaluate the connection between inflation rate and SMEs financial performance in Nigeria. The effect of inflation on SMEs growth in Nigeria has been the subject of mixed results in the literature. In their study, Ashogbon et al. (2022) used Nigeria as a case study to examine how interest and inflation rates with some other monetary instrument affect SMEs growth in Nigeria. They concluded, among other things, that the sole obligation of inflation and

interest rates are detrimental to the financial performance of SMEs in Nigeria and to implement an effective enforcement strategy, they contended that Nigeria is woefully underequipped in this area, particularly in terms of personnel, technology, and communication infrastructure. This aligns with the researcher's conclusion that a portion of Nigeria's inflation and interest rates are significantly affecting the financial performance of the SMEs in Nigeria.

Using an Error Correction Model (ECM) strategy, Adeosun and Shittu (2021) looked at the relationship between monetary policy and the growth of the SMEs in Nigeria. Inflation and official exchange rates were shown to have a long-run connection with bidirectional and unidirectional causation. This ties in with the researcher's findings as well; using OLS and ECM, the researcher examined how inflation rate affect SMEs financial performance in Nigeria and found that negative and a significant effect in the short term.

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

This study examined how inflation rate affects Nigerian small and medium-sized firms. The first long-run coefficients are, as expected, positive, and their p-values (0.0220) are statistically significant at the 5% level. This means that when the average monetary policy rate went up, the liquidity rate of small businesses in Nigeria went down by 0.766941 units. Small and medium-sized firms and Nigerian monetary policy are linked, according to the study.

SME development has been proven in different disciplines, particularly in developing nations; hence, the research demands an expansionary monetary policy to boost SMEs in Nigeria. SME development is considered an effort to meet Nigeria's economic and socio-economic goals. SMEs may create jobs, income, and trade. The Nigerian government has developed SME policies and incentives. This research analyzed how such efforts affected Nigeria's economic development and found that SMEs have a favorable association with Nigeria's monetary policy and have considerably influenced it over time.

Conclusion

This academic research examines how inflation affects SMEs growth in Nigeria, though the researcher uses inflation and exchange rates with exchange rate to capture inflation. The findings corroborated with other prior research showing how monetary instruments affect SMEs development. This means that expansionary monetary measures, such as lower loan interest rates, would boost Nigerian SMEs. The coefficient of determination shows that inflation, exchange and interest rates jointly explained 74% of SMEs' growth variation in Nigeria. These findings suggest that the Nigerian government should create and execute measures to help small and medium-sized enterprises succeed. To better serve SMEs, the country's monetary policies and macroeconomic indices should be changed. The country's many tiers of government must likewise create huge infrastructure. These methods can boost Nigeria's economy.

This analysis concludes that monetary instruments used throughout the review period-controlled SMEs growth in Nigeria. These multiple regression analysis results show that inflation, interest and exchange rate affect Nigeria's economy. The study analysis also shows that SMEs' liquidity rates and average monetary policy in Nigeria are negatively correlated, whereas exchange rates and money supply are favorably correlated. Additionally, liquidity ratios and interest rates promote Nigeria SMEs financial inefficiency, according to the research. High interest rates prevented investors from accessing funding to boost productivity. During the period under review, commercial banks did not cooperate and did not follow credit guidelines; there was no broad and effective monetary market; the Central Bank of Nigeria (CBN) did not have the capacity or autonomy to use its powers; and there was no coordination between monetary and fiscal policies to control financial sector credit volume. Statistically significant exchange rates and exchange rates

occurred.

Policy Implementations and Recommendations

This academic research found that inflation affects Nigerian SMEs. Nigeria should create and execute laws, rules, and policies that relate institutional development to entrepreneurial growth and survival. SME owners should also benefit from the Nigerian government's business climate. This will increase their survival rate. Thirdly, the government should invest in extensive infrastructure improvements. Such initiatives should prioritize electricity production, distribution, security, and transport. All these techniques will boost Nigeria's economy.

Regarding the study's results and policy implementation, the researcher makes the following recommendations:

1. To boost manufacturing, the Nigerian government should expand support for SMEs via its agencies.
2. The government should plan an inflation reduction. Protecting small and medium-scale enterprises in the nation by tightening import restrictions and giving them tax breaks in their first 5 to 10 years may accomplish this.
3. The government, particularly the monetary authorities, should lower interest rates to single digits to encourage small businesses to borrow from banks and boost the economy.
4. Government agencies, organized civil society, and Nigerians should buy "Made in Nigerian Goods" to support SMEs and strengthen the currency.

Based on the study's observations and issues, the following suggestions were made: To effectively implement monetary policy measures in the Nigerian economy, the Central Bank of Nigeria should have complete authority. Central banks in emerging economies, which are always susceptible to political intervention and politics, should have complete autonomy. Commercial banks and other financial intermediaries have violated prudential guidelines, but the Central Bank of Nigeria and other financial authorities can persuade them to follow credit regulations. Any violation of the rules should be penalized to dissuade others. For the financial system to work efficiently using monetary and capital market strategies, the policy should be carefully organized to achieve optimal adherence. Every development policy needs good implementation to succeed. Insufficient implementation of monetary policy procedures will not produce the intended results. Global history shows that monetary policy must be random to build the correct macroeconomic framework; therefore, the Central Bank's monetary policy relies heavily on fiscal policy. However, these two phenomena must be stated for successful effects. As a result, monetary authorities require competent and wise administration of monetary policy tools.

Suggestions for further studies

Thus, further research is needed on how monetary policy affects Nigerian SMEs and how SMEs might boost GDP by utilizing factors not addressed in this paper.

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