Economic Environmental Factors and Productivity of Small and Medium Scale Enterprises (SMEs) in the Manufacturing Sector of Oyo State

Akinbo T. M. (PhD)
Department of Management and Accounting
Lead City University, Ibadan
Oyo State, Nigeria
akinbotm@lcu.edu.ng

Oladeji A. A.
Department of Business Administration and Management Studies
The Polytechnic, Ibadan
Oyo State Nigeria
s4shola@yahoo.com

Abstract

Small and Medium Enterprises (SMEs) play a critical role in the economy, particularly in providing employment opportunities and promoting economic growth. However, a significant number of Small and Medium Enterprises (SMEs) fail within the first few years of operation due to various factors. The study aims to investigate the influence of the economic environmental factors on the productivity of small and medium enterprises (SMEs) in the manufacturing sector in Oyo State. An ex-post facto research design was employed in this study. The CBN Statistical bulletin provided quarterly secondary data for the study, spanning from 2001 to 2023. The research hypotheses were tested in the study using econometric techniques. Specifically, SPSS version 27.0 was used to conduct a multiple regression analysis. The findings revealed that economic environment, measured by exchange rate, inflation rate, money supply growth rate interest rate have significant impact on SMEs productivity in Oyo State with R-Square (0.709) which indicates that 71% variations in SMEs productivity in Oyo State can be explained by the considered economic environmental factors. Also, the F-statistic (2.179) at P-value (0.02) indicates that the general model was statistically significant. This means the independent variables (exchange rate, inflation rate, money supply growth rate and interest rate) are the good predictors of level of SMEs' productivity in Oyo State. This study concluded that SMEs productivity in Oyo State is significantly influenced by economic environmental factors. Based on these findings, it is recommended that the Central Bank of Nigeria should keep the currency rate at an investment-friendly level. Also, policies that would improve business conditions and the business climate, thus encouraging SMEs to obtain funding from the capital market should be developed by the federal government and its agencies.

Keywords: Economic Environmental Factors, Productivity, SMES, Exchange Rate, Inflation Rate, Money Supply, Interest Rate.

Introduction

The economy has a big influence on how successful small and medium-sized enterprises are. According to a study by Adeleke (2018), the growth and profitability of SMEs are impacted by economic factors like interest rates, inflation, and exchange rates. According to the report, Nigerian SMEs were particularly vulnerable to inflation because it raised manufacturing costs and decreased investor confidence in addition to consumer spending. In a similar vein, rising interest rates hurt SMEs by making borrowing more expensive and making it harder for them to get finance for expanding their businesses. Due to their substantial contributions to job creation and economic growth, small and medium-sized firms (SMEs) are a vital part of the economy. The performance of SMEs Akoja & Balieogu is, in turn, significantly impacted by the economic climate (2020).

In general, the success of SMEs is greatly influenced by the economic climate. While a negative economic climate may result in fewer business prospects and slower growth, a good economic climate may lead to additional opportunities and growth for these businesses. As a result, governments need to give top priority to establishing an environment that is favorable to the growth of SMEs. On the other hand, SMEs can operate better under an advantageous economic climate, which includes low lending rates, a stable economy, and supportive government policies. Aurifeille, Jaunkalns, and Ramond's (2020) investigation, for example, found that low interest rates helped SMEs in France by encouraging borrowing and investment in business expansion. Favorable government initiatives for SMEs, such as tax breaks, subsidies, and incentives, can also boost their competitiveness and encourage expansion.

Concerns have been raised about the economic climate and the performance of small and medium-sized businesses (SMEs) on regional and international scales. In emerging economies, small and medium-sized enterprises (SMEs) account for up to 60% of employment and 40% of GDP, according to a study conducted by the International Finance Corporation (IFC) (IFC, 2018). These businesses do, however, encounter obstacles that prevent them from reaching their full potential and making a greater economic impact. These obstacles include issues related to policy environments, technology, market access, and financial availability.

Many believe that, compared to Europe, the economic climate in Nigeria and across Africa presents significant obstacles to the effectiveness of SME activities. The performance of small-scale businesses is highly sensitive to the economic environment as a stimulus, which is a composite of numerous characteristics like inflation, interest rates, money supply, currency rates, government taxes, and many more, as empirical studies have demonstrated (Shane, 2014; Adeli et al., 2016; Saghir & Aston, 2017).

Researchers have examined the impact of a number of economic parameters, including the money supply, exchange rate, inflation, interest rate, and exchange rate (Abel, 2012; Saghir & Aston, 2017; Chukwuma & Chukwuma, 2015; Gikombo & Mbugua, 2018). (Bekeris, 2012; Batarseh, 2021). The impact of these elements on a firm's success, however, has not been universally supported by the findings of these empirical investigations. For instance, Saghir & Aston's (2017) conclusion that inflation had no effect in the UK contrasted Abel's (2012) finding that inflation had a major impact on business performance in Kenya. Lawal and Akanbi

(2020) discovered a very low positive influence of exchange rate on business performance, in contrast to Halim (2012) who reported a considerable positive impact of exchange rate on productivity.

Aside from this, the majority of these research focused on overall business performance, making it difficult to clearly see how the variables specifically affected small businesses. Moreover, Nigeria has not drawback of not having benefited as much from research endeavours in this field as several other African nations, as well as the majority of Asian and European nations. An empirical analysis of the literature reveals that the majority of Nigerian researchers who have worked on this topic have employed data from both the pre- and post-deregulation/liberalization periods. Due to the fact that most of these variables were formally regulated during the pre-deregulation era, this makes it difficult to fully capture the consequences of the majority of these variables, which result from their volatilities. All of these shortcomings of earlier empirical works in this field diminish any knowledge built upon them and emphasize the need for additional research into the matter.

The above discussion makes it clear that, despite their significance, economic factors have not been thoroughly examined in regard to how they affect small businesses in Nigeria. This is an issue in need of an empirical resolution. Given the aforementioned proven fact, the purpose of this study is to examine the potential relationship between economic environmental factors and the productivity of small and medium-sized enterprises (SMEs) operating in Oyo State's manufacturing sector.

Research Objectives

In pursuit of the research aim stated in the previous section, the following research objectives are generated

i. To examine the effect of exchange rates on SMEs productivity in Oyo State.
ii. To determine the influence of inflation rates on SMEs productivity in Oyo State.
iii. To ascertain the effect of money supply growth rates on SMEs productivity in Oyo State.
iv. To examine the extent to which interest rates affect SMEs productivity in Oyo State.

Research Hypotheses

The following research null hypotheses are formulated based on the above stated research objectives:

H_{O1}: Exchange rate has no significant impact on SMEs productivity in Oyo State
H_{O2}: Inflation rate does not have a significant impact on SMEs productivity in Oyo State
H_{O3}: Money supply growth rate has no impact on SMEs productivity in Oyo State
H_{O4}: Interest rate does not significantly impact SMEs productivity in Oyo State

Literature Review

Conceptual Review

Economic environment

The term "economic environment" refers to any external economic variables that have an impact on enterprises' and consumers' purchasing decisions and, in turn, on a company's

performance (Akingunola, 2019). For small and entrepreneurial businesses, the state of the economy is crucial. The performance of these kinds of organizations is typically heavily influenced by the state of the economy as a whole (Bello, Dogara, Joshua, Yashim, & Araga, 2022). This is due to the fact that a growing economy creates a favorable environment for both the creation of new businesses and the expansion of existing ones. On the other hand, a contraction may result in business bankruptcies and liquidations.

Inflation, interest rates, currency rates, and money supply are among the factors that Pasha and Myers (1998), Achillah (2011), and Orogbu et al. (2018) have highlighted as components of the economic environment. All of these elements must be stable for there to be an overall stable entrepreneurial environment, which inevitably promotes the healthy expansion of small businesses. According to Asiedu (2002), low inflation, a steady currency rate, price stability, and a low and stable interest rate are all necessary for economic stability.

Exchange rate

The rate at which one currency can be exchanged for another is known as the exchange rate, according to Ugwu, Njeze, & Oluka (2023). It might be stated as a direct quote or an oblique one. The relative costs of domestic and imported items are influenced by exchange rates, as is the demand for local goods by international consumers (Ncube & Ndou, 2011). Exchange rates can fluctuate for a variety of causes, such as a nation's rate of inflation. The value of one country's currency relative to that of another country or economic zone is known as the exchange rate. (Adam, 2021). A fixed exchange rate system, also known as a pegged exchange rate system, sets the value of one currency against the value of another single currency, a basket of other currencies, or another unit of measurement, such gold (Adetayo, 2013).

Inflation rate

According to Melberg (2016), an economy's inflation rate is the overall, steady rise in the cost of goods and services. The percentage change in the price index is used to calculate the inflation rate (consumer price index, wholesale price index, producer price index etc). Hossain (2018) argues that although high inflation has a negative impact on economic performance, zero inflation is just as detrimental for the economy since it eventually causes economic stagnation because mild inflation is necessary for economic growth. As a result, there is more money chasing fewer things in circulation. Additionally, low-income earners have less purchasing power. It has been suggested by Bello et al. (2022) that low to moderate levels of inflation can benefit the business sector by stimulating productivity. However, high inflation can be harmful to a business's performance and profitability because it might raise input costs and lower product demand in the end (Myers, 2001).

Money supply growth rate

The total stock of assets that are widely accepted as a medium of exchange within an economy at a given time is known as the money supply, according to Ristanović (2010). The degree of financial liberalization or sophistication in a nation influences the choice of goods to include in the money supply assessment. Almost everything is significantly influenced by money.

However, an excess of money can be detrimental to an economy rather than beneficial. The money supply will rise in proportion to the pace of growth in output and income, according to Bannock (2015) and Batarseh (2021), which will lower people's standard of living and cause prices to rise.

Interest rate

Interest rates are the rent paid by borrowers for the use of credit and the compensation that lenders receive for giving up liquidity, according to Ibimodo (2015). Similar to other pricing, interest rates ration the finite supply of credit among numerous competing requests. According to Bernhardsen (2018), the real interest rate is the one at which the production gap is equal to zero and inflation is steady. The interest rate is frequently discussed when monetary policy is being decided. However, Anyanwoncha (2013) notes that while there are several reasons why interest rates are levied, one of them is to guarantee that the creditor reduces their exposure to inflation. A nominal quantity of money today has less purchasing power in the future due to inflation. High interest rates can have a negative impact on financial organizations whose primary business is lending money since they discourage potential borrowers and raise the default risk of an existing loan portfolio (Bello et al., 2019).

Concept of SMEs

SMEs have different meanings in different countries (Gunasekaran, Forker and Kobu, 2000). Nonetheless, the number of employed people appears to be a consistent trend (Adams & Hall, 1993). Other factors used to classify businesses include assets, sales turnover, and/or capital employed. For example, Small and Medium Scale Enterprises (SMEs) are defined by the Central Bank of Nigeria (2013) as any business with between 11 and 300 employees and an asset base (excluding land) of between N5 million and N500 million. According to SMEDAN, small businesses are those whose total assets (excluding land and buildings) are more than ten million naira but not more than one hundred million naira, and whose workforce consists of more than 10 but not more than forty-nine employees (NBS-SMEDAN National Survey, 2017).

Theoretical Framework

This study is anchored on both Schumpeter's Theory of Innovation and Contingency Theory.

Schumpeter's Theory of Innovation:

Joseph Schumpeter (1934) introduced the renowned theory of innovation in enterprise. Schumpeter considered the scenario of a closed, capitalist economy in stationary equilibrium. He said that by bringing an innovation and pushing the economy to new heights of development, entrepreneurs upend the economy's fixed cyclical flow. Because the entrepreneurs' actions disrupt the usual cyclical flow, their actions constitute a state of disequilibrium. Any nation's quick economic progress can be attributed to the innovations made by its entrepreneurs. When discussing innovation, he brought up novel combinations of the forces of production. According to Schumpeter, an innovator is a man who brings a completely new idea rather than someone with typical managerial skills.

Contingency Theory

The contingency theory, which was created in 1964 by Austrian psychologist Fred Edward Fiedler, serves as additional support for this study (Fiedler, 1967; Bello, 2015). As per the theoretical framework, the performance of a corporation is determined by how well its design is aligned with the environment in which it functions (Donaldson, 1995). According to contingency theory, SSEs need to be in line with other organizational components and/or the outside world in order to be effective. Within SSEs, contingency decisions have mostly been understood in terms of internal and external fit. While internal fit, also known as horizontal alignment, calls on SSEs to collaborate in order to convey the same message and achieve the same goal, external fit, also known as vertical alignment, mandates that SSE practices meet the environmental conditions encountered by the business. Subpar performance will result in the end if this fit between the environmental context and SSEs techniques is not achieved.

Empirical review

In this aspect, previous studies related to the impact of inflation rate, exchange rate, money supply growth rate and interest rate on SMEs performance are critically reviewed.

Exchange Rate and SMEs Performance

The impact of fluctuating exchange rates on Nigerian SMEs was investigated by Atayi et al. (2020). They investigated the impact of interest rates on Nigerian SMEs using annual time series data spanning from 2000 to 2019. SMEG GDP was the dependent variable. The MPR, inflation, exchange rates, reserve requirements, and commercial bank lending rates to SMEs were examples of independent factors. The total amount of credit provided to the private sector by commercial banks, the percentage of loans given to SMEs, the MPR, and the MPR were also included. According to the findings, LRCM reduces SMEGDP. In particular, SMEGDP falls by 1.6 percent while LRCM rises by 1 percent. With a 1% increase in RR, SMEGDP increases by 0.005%. According to the study, LRCM would decrease if MPR and INFR were reduced. The SMEs' financial capacity would be strengthened by this reduction in LRCM, boosting their GDP contribution. The impact of exchange rates on the Nigerian manufacturing sector was examined by Agu, Nnaemeka, and Nneka (2016) through a study of a subset of Enugu-based manufacturing firms. Questionnaires and interviews were the main methods of data collecting. The questionnaire was distributed in 246 copies in total, with 230 copies being returned. For this study, a descriptive research strategy was chosen. The statistical method of linear regression was used to examine three hypotheses. The results show that trade liberalization significantly reduces the amount of goods created in Nigeria ($r = 0.893 > r = 0.544$; $tc = 29.976 > tt = 4.321$; $p<.05$).

Nnenna et al. (2020) examined the impact of economic factors on small and medium-sized businesses in southeast Nigeria. They investigated the effects of interest rates and currency on small and medium-sized businesses. Resource-based theory was applied in the study. Research using cross-sectional surveys was done. There were 296 samples and 1560 participants in the study. Several regression analysis techniques were used to test the theories. Studies show that south-east Nigerian SMEs suffer from inflation. The detrimental effects of interest rates on SMEs in southeast Nigeria are significant. South-east Nigerian SMEs are negatively impacted

by the currency rate, according to the report. The report suggested controlling inflation to promote economic expansion. Ejiogu, Chima, and Nwede (2017) studied the relationship between Nigerian manufacturing firms' performance and exchange rates. Using the Statistical Package for Social Sciences as a tool, the Spearman's rank order correlation coefficient was used to analyze the data (SPSS). The study's conclusion is that exchange is beneficial and positively correlated with organizations' performance. In conclusion, globalization has an impact on Port Harcourt's manufacturing companies' performance. As a result, the study suggested that in order for businesses to maintain a competitive edge over rival businesses, they should carefully consider how to use their capacity and production processes. This involves ensuring that the necessary knowledge and skills are learned and that they are dedicated to providing customers with high-quality goods and services.

Inflation Rate and SMEs Performance

Onakoya et al. (2024) investigated the missing relationship between inflation and the growth of small and medium-sized enterprises (SMEs) in Nigeria. The study aims to investigate the impact of inflation, interest rates, and exchange rates on the growth of small and medium-sized enterprises (SMEs) in Nigeria. The Central Bank of Nigeria (CBN) and the Federal Office of Statistics provided secondary data for the analysis, which covered the period from 2001 to 2022. (FOS). The finance of Nigerian SMEs is positively and statistically considerably impacted by the interest rate. On the other hand, finance for SMEs in Nigeria is negatively impacted by inflation. The study found that funding for SMEs was unaffected by exchange rates. According to the study, the monetary authorities in Nigeria should put policies into place to lower inflation and give priority to the expansion of SMEs by creating specific channels through various financial institutions that would enable them to receive low-interest loans. Both their growth and inflation will be aided by this.

Emeh (2021) conducted a study on the inflation rate and the development of entrepreneurship in an emerging economy. The moderating effect of inflation on job creation was tested by the study using the Analysis of Moment Structures (AMOS), but the results only showed a negative moderating effect. The study came to the conclusion that trade deregulation is related to local limits on job growth, but market access and trade competition are not.

Victor (2017) carried out research on Nigeria's Persistent Inflation Causes. The purpose of this study was to determine the degree to which the stated variables contributed to the increase in the general price level as well as the traditional and institutional inflation determinants accountable for the instability phenomena. The variables had a long-term co-movement, according to the data. Additionally, the statistical significance of the Real Effective Exchange Rate, Lagged Consumer Price Index, Real Broad Money, and Real Profits in influencing the Consumer Price Index was demonstrated by the ordinary least squares estimate. According to the short-run connection, sixty percent of the disequilibrium errors resulting from the shock of the previous year converge to the long-run equilibrium in the current year. The analysis came to the conclusion that markup pricing by the company caused import prices to be passed through to domestic prices throughout the analyzed period, which caused inflation in Nigeria.

Money Supply and SMEs Performance

Zaagha (2020) looked into how Nigeria's private sector financing was impacted by the country's money supply. Examining how much monetary policy influences private sector finance in Nigeria was the aim of the study. The Central Bank of Nigeria Statistical Bulletin provided the time series data from 1985 to 2018. The dependent variables in this study were credit to the private sector, credit to the core private sector, and credit to small and medium-sized firms. The independent variables included the private sector demand deposit and the broad, big, and narrow money supply. Typical Least Squares (OLS), The empirical results showed that the money supply explains 82.1 percent of the variation in credit to the core private sector, 85.2 percent of the variance in credit to the private sector, and 23.4 percent of the variation in credit to small and medium-sized firms. The study comes to the conclusion that there is a substantial correlation between the money supply and the sectors of small and medium-sized businesses, the private sector, and the core private sector.

Using ordinary least square regression, Echekoba and Ubesie (2018) evaluated the impact of financial deepening on the expansion of the Nigerian economy from 1990 to 2016. (OLS). This study's primary goal is to assess how market capitalization, money supply, and private sector credit affect Nigeria's economic expansion. The study's three independent factors all had a significant impact on Nigeria's financial deepening, according to the findings. Therefore, it was advised that measures be taken to lower the high rate of nonperforming credits in order to guarantee that loans from the private sector are channeled into the economy's actual sector.

Adeniyi et al. (2018) looked into the connection between Nigerian deposit money banks' loans and advances and monetary policy tools. The Toda and Yamamoto Granger non-causality model was applied to annual time series data spanning the years 1981–2016 in order to investigate the link between Deposit Money Bank loan and advance amounts and monetary policy variables in Nigeria. The results showed that structural modifications to the monetary policy framework had a major positive influence on the loans and advances made by Deposit Money Banks in Nigeria. It was determined that structural changes to the monetary policy rate and system had a major effect on the loans and advances made by deposit money banks in Nigeria.

William, Zehou, and Hazimi (2019) examined the variables influencing domestic lending to Ghana's private industry. Panel data covering the years 1961–2016 are analyzed using the Johansen cointegration and vector auto-regression model in this work. The study's conclusions showed that while there is no long-term correlation between the variables, there is a strong short-term correlation between broad money, gross capital formation, and domestic lending to the private sector. Additional diagnostic examinations revealed that gross capital creation. They came to the conclusion that in order to improve the financial health of domestic banks in order to provide credit facilities to the private sector for economic growth, it is required to address the money supply and gross capital formation.

Otalu, Aladesanmi, and Mary (2014) evaluated the effect of monetary policy on the performance of deposit money banks in Nigeria. They used the money supply, interest rate,

liquidity ratio, and cash reserve ratio as stand-ins for monetary policy. Regression analysis was utilized in the study to look at the connection between Nigerian bank performance and monetary policy. The diagnostic test's findings demonstrated that the interest rate, money supply, liquidity ratio, and cash reserve all have a substantial impact on the amount of credit that commercial banks are able to create. Specifically, the generation of credit by deposit money institutions appeared to be statistically influenced by the money supply and cash reserve ratio.

Interest Rate and SMEs Performance

In Lagos State, Nigeria, Okwu, Bakare, and Obiwuru (2013) investigated the business climate, interest rates, job creation, and employment capacities of small and medium-sized businesses. The study used a descriptive methodology to look at how SMEs in Lagos State's business environment create jobs and how they can hire people. The results showed that while sociocultural factors like availability and labor service costs did not limit the firms, they did work against SMEs due to poor access to external capital, high interest rates, competitive pressures, many taxes and other levies, and unethical practices.

Using the Generalized Method of Moments methodology, Odusanyaa et al. (2018) investigated the factors influencing the profitability of 114 companies listed on the Nigerian Stock Exchange (NSE) between 1998 and 2012. (GMM). The findings demonstrate that contemporaneous business profitability is significantly impacted favorably by lagged profitability. However, the profitability of a company is significantly impacted negatively by short-term leverage, interest rates, and financial risk. Therefore, among other suggestions made by the study, it is recommended that the cost of borrowing for the real sector of the economy be lowered in order to minimize production costs and increase productivity and profitability. Additionally, the government should implement the necessary macroeconomic policies in order to reduce inflationary pressure in the economy. Orogbu et al. (2017) investigated the impact of SMEs on the economic development of Nigeria. Quantitative techniques and secondary data on SMEs, government tax revenue, currency rate, interest rate, and inflation were employed in the study. From 1970 to 2016, an Ordinary Least Squares (OLS) estimate was utilized in the study. The paper states that SMEs are adversely affected by the exchange rate, inflation, interest rate, and government tax revenue. According to the study, small and medium-sized businesses are adversely affected by government tax revenue, inflation, loan rates, and currency rates.

According to Ashogbon et al. (2022), Nigerian SMEs are impacted by lending rates. They used annual time series data from 2000 to 2019 to evaluate the impact of loan rates on the growth of Nigerian SMEs. SMEG GDP was the dependent variable. The independent factors in the study were the MPR, inflation, currency rates, reserve requirements, and lending rates for SMEs by commercial banks. The amount of money that commercial banks lent to the private sector overall, to SMEs specifically, as well as the percentage of those loans, were all assessed over time, as was the monetary policy rate. Autoregressive distribution lag was one of the inferential and descriptive statistics used (ARDL). The data shows that SMEGDP is decreased

by LRCM. More specifically, SMEGDP decreases 1.6% while LRCM increases by 1%. The SMEGDP increases by 0.005 percent with a 1 percent increase in RR.

2.4 Conceptual Framework

A conceptual framework is an organized structure that clearly shows how two concepts or variables are related (Grant and Osanloo, 2014). The conceptual framework (figure 2.1) described below essentially explains the relationship between the independent variable, economic environmental factors (Exchange rate, inflation rate, money supply and interest rate) and dependent variable, SMEs productivity in Oyo State.

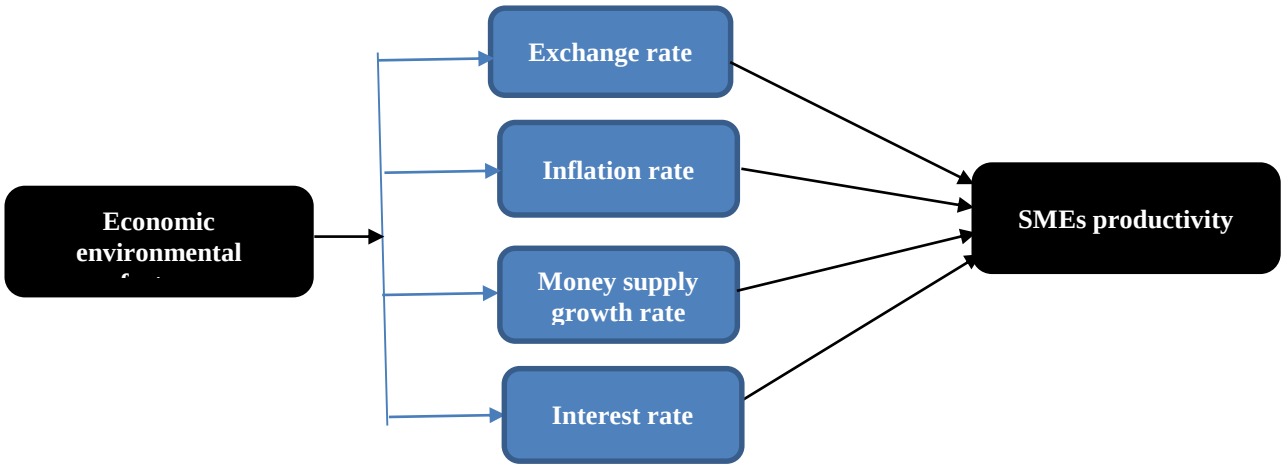

Figure 2.1: Conceptual framework (Author's construct)

Methodology

Research Design

An ex-post facto research design is employed in this study. The CBN statistical bulletin provided quarterly secondary data for the study, spanning from 2001 to 2023. The research hypotheses were tested in the study using econometric techniques. Specifically, SPSS version 27.0 was used to conduct a multiple regression analysis.

Source of Data

Nigeria was the location of the investigation. The Federal Office of Statistics (FOS) and the Central Bank of Nigeria (CBN) statistical bulletin provided the secondary data that was analyzed. In order to examine the research's stated objective, the investigator chooses relevant factors that affect the productivity of SMEs, including the expansion of SMEs in Nigeria.

Model Specification

The research used multiple regression analysis to investigate the influence of economic environmental factors on the SMEs productivity in Nigeria. The study's dependent variable is SMEs productivity, which is measured as SMEs output (SMEO). The explanatory variables consist of Exchange Rate (EXTR), Inflation Rate (INFR), Money supply growth rate (MSGR) and Interest Rate (INTR). Hence, the multiple regression model is defined in the following manner:

SMEO = f (EXTR, MSGR, INFR, INTR,)……eqt.1

$SMEO = \beta_0 + EXTR\beta_1 + INFR\beta_2 + MSGR\beta_3 + INTR\beta_4 + \mu$……..eqt. 2
Where: β_0 is constant of the equation
$\beta_1, \beta_2, \beta_3$ and β_4 are coefficients of the independent variables
μ = Error terms

Data Presentation, Analysis and Interpretation
This chapter deals with the presentation of data sourced from secondary sources (Central Bank of Nigeria Statistical Bulletin).

Data Presentation

Table 1: Study's Variables and data

Years	SMEs Output	Exchange rate	Inflation rate	Money supply growth rate	Interest rate
2000	32.99	77.21	38.4	12.4	21.55
2001	42.70	81.30	38.5	13.7	21.34
2002	45.48	88.95	46.5	10.8	30.19
2003	45.34	100.63	62.7	20.1	22.88
2004	45.00	107.07	66.4	19.8	20.82
2005	47.74	106.58	68.0	21.3	19.49
2006	48.56	105.02	79.7	18.2	18.70
2007	62.04	106.41	82.6	8.9	18.36
2008	53.84	80.03	91.2	17.9	18.70
2009	54.42	96.21	101.5	19.2	22.62
2010	54.95	96.89	112.6	11.8	22.51
2011	55.67	101.35	124.8	9.6	22.42
2012	55.53	98.72	141.8	21.1	23.79
2013	55.14	96.84	153.0	14.7	24.69
2014	56.81	95.77	162.5	21.1	25.74
2015	56.18	107.34	176.7	5.8	16.93
2016	55.45	131.30	204.3	18,4	27.49
2017	56.79	158.07	246.4	2.5	30.68
2018	56.22	157.80	274.6	11.9	31.00
2019	53.91	163.97	307.5	6.3	30.57
2020	45.07	131.30	355.9	31.4	28.64
2021	45.35	74.13	15.63	17,5	28.48
2022	52.03	105.98	21.34	16.5	25.31
2023	49.43	98.32	28,92	52.3	26.13

Source: Central Bank of Nigeria Statistical Bulletin, 2000-2023

The table 1 above presents the variables for this study. It presents the values of Small and medium enterprise output, exchange rate, Inflation rate which is measured by Consumer price index, money supply growth rate and Interest rate.

Data Analysis

Table 2: Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857[a]	.709	.742	6.27384
a. Predictors: (Constant), Interest_Rate, Inflation_Rate, Money_Supply, Exchange_Rate				

Table 2 above shows the coefficient of determination (R-Square =0.709). This value indicates that 71% variations in performance of SMEs productivity can be explained by economic environmental variables (exchange rate, inflation rate, money supply and interest rate). Hence, 29% of variation in the dependent variable (SMEs productivity) could be explained only by other factors that were not included in the study model and not investigated in this study.

Table 3: ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	297.146	4	74.287	2.179	.023[b]
	Residual	647.861	19	34.098		
	Total	945.007	23			
a. Dependent Variable: SMEs						
b. Predictors: (Constant), Interest_Rate, Inflation_Rate, Money_Supply, Exchange_Rate						

In the table 3, the F-statistic (2.179) at P-value of 0.02 less than significant level 0.05 reveals that the overall model was statistically significant and the independent variables (exchange rate, inflation rate, money supply and interest rate) are good predictors of SMEs productivity in Oyo State. This implies that the SMEs productivity is strongly enhanced by the independent variables as p-value 0.02 is less than significant level 0.05.

Table 4: Regression coefficient

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	45.565	7.770		5.864	0.000
	Exchange_Rate	0.144	.066	.553	2.190	0.041
	Inflation_Rate	-0.512	.002	.021	.101	0.021
	Money_Supply	0.416	.030	.048	.215	0.032
	Interest_Rate	-0.419	.393	-.282	-1.065	0.000
a. Dependent Variable: SMEs						

In the table 4 above, the constant value 45.565 indicates that the SMEs productivity is 45.565 holding all the independent variables (exchange rate, inflation rate, money supply and interest rate) involved constants. Basically, the regression coefficient of exchange rate (0.144) indicates that a unit change in exchange rate leads to 0.144 change in SMEs productivity, the inflation rate with coefficient (-0.512) shows that a unit change in inflation rate results to a negative change in SMEs by 0.512. The coefficient of money supply (0.416) indicates that a unit change in money supply growth rate will result 0.416 change in SMEs productivity, and the interest rate with coefficient (-0.419) indicates that a unit change in interest rate will result to a negative change in SMEs productivity by 0.419.

Hypotheses interpretation

Hypothesis one

Based on the findings, the research null hypothesis one stated that exchange rate has no significant impact on SMEs profitability in Oyo State should be rejected and conclude that exchange rate has a significant impact on SMEs productivity in Oyo State as P. value (0.04) is less than significant level (0.05).

Hypothesis two

Considering the result from the findings, the study's research null hypothesis two which stated inflation rate does not have a significant impact on SMEs productivity in Oyo State should be rejected based on the fact that P. value (0.021) is less than 5% level of significant (0.05). Therefore, it is concluded that inflation rate has a significant impact on SMEs productivity in Oyo State

Hypothesis three

With regards to this study's findings, the research null hypothesis three that stated that money supply growth rate has no impact on SMEs productivity in Oyo State should be rejected and conclude that money supply growth rate has no impact on SMEs productivity in Oyo State as the P. value (0.032) is less than 5% level of significant.

Hypothesis four

With reference to the result of findings, the research null hypotheses four that stated that interest rate does not significantly impact SMEs productivity in Oyo State should be rejected as the P. value (0.000) is less than significant level 5% (0.05). Based on this result, it is deduced that the interest rate has significantly impacted SMEs productivity in Oyo

Discussion of Findings

The results indicate that the exchange rate significantly affects the productivity of SMEs in Oyo State, as indicated by the fact that the p. value (0.04) is below the significant level (0.05). This study concurred with that of Ejiogu, Chima, and Nwede (2017), who investigated the relationship between Nigerian manufacturing firms' performance and exchange rates. The study's conclusion is that exchange is beneficial and positively correlated with organizations' performance. In conclusion, globalization has an impact on Port Harcourt's manufacturing

companies' performance. Agu, Nnaemeka, and Nneka (2016) conducted a study on the impact of currency rates on the Nigerian manufacturing sector, which provided additional support for this research. The results show that trade liberalization significantly reduces the amount of goods created in Nigeria ($r = 0.893 > r = 0.544$; $tc = 29.976 > tt = 4.321$; $p<.05$).

The results of this study indicate that the productivity of SMEs in Oyo State is significantly impacted by the inflation rate, as evidenced by the fact that the p. value (0.021) is below the five percent threshold of significance (0.05). This study supported that of Emeh (2021), which looked at the inflation rate and the growth of entrepreneurship in emerging economies. The study came to the conclusion that trade deregulation is related to local limits on job growth, but market access and trade competition are not. Onakoya et al. (2024) investigated the relationship between inflation and the growth of small and medium-sized enterprises (SMEs) in Nigeria was examined. The inflation rate has a negative impact on Nigerian SMEs' funding. Also Victor, (2017) conducted a study on the Causes of Persistent Inflation in Nigeria. The study concluded that inflation in Nigeria, during the studied period, was driven by the pass-through of import prices to domestic prices via markup pricing by the firm.

The results of the study show that the money supply growth rate significantly affects the productivity of SMEs. The research of Zaagha (2020), which examined the impact of money supply on financing for the private sector in Nigeria, provides support for this study. The results showed that the money supply explains 82.1 percent of the variance in credit to the core private sector, 85.2 percent of the variation in credit to the private sector, and 23.4 percent of the variation in credit to small and medium-sized businesses. The study comes to the conclusion that there is a substantial correlation between the money supply and the sectors of small and medium-sized businesses, the private sector, and the core private sector. Additionally, Adeniyi et al. (2018) looked into the connection between Nigerian Deposit Money Bank Loans and Advances and Monetary Policy Instruments. The results showed that there is a reciprocal association between MPR and the loans and advances made by Deposit Money Banks in Nigeria. MPR in particular turned out to be a key factor in Deposit Money Bank advances and loans in Nigeria. It was determined that structural changes to the monetary policy rate and system had a major effect on the loans and advances made by deposit money banks in Nigeria. Based on the results, it is deduced that Oyo State's SMEs' productivity has been considerably impacted by the interest rate, as evidenced by the fact that the p. value (0.000) is less than the significant threshold of 5 percent (0.05). This study is in line with that of Okwu, Bakare, and Obiwuru (2013), who used Lagos State, Nigeria, to analyze the business environment, interest rates, job creation, and employment capacities of small and medium-sized firms. The results showed that while sociocultural factors like availability and labor service costs did not limit the firms, they did work against SMEs due to poor access to external capital, high interest rates, competitive pressures, many taxes and other levies, and unethical practices. Additionally, Odusanyaa et al. (2018) used the Generalized Method of Moments approach to investigate the factors influencing the profitability of 114 companies listed on the Nigerian Stock Exchange (NSE) between 1998 and 2012. (GMM). The findings demonstrate that financial risk, interest rates, and short-term leverage all significantly lower corporate productivity.

Conclusion and Recommendations

Conclusion

This study investigated the economic environmental factors and productivity of Small and Medium Scale Enterprises (SMEs) in the manufacturing sector of Oyo State. Basically, the findings reveals R-Square value of 0.709 showing that 71% of the variations in SMEs productivity can be explained by the level of exchange rate, inflation rate, money supply and interest rate in the country. The F-statistic (2.179) with P-value of 0.02 less than significant level 0.05 reveals that the overall model was statistically significant and that the exchange rate, inflation rate, money supply and interest rate are good predictors of SMEs productivity in Oyo State. The results of the study show that several factors such as exchange rate, inflation, money supply growth rate and interest rate directed at small and medium scale Enterprises development stand the test of time. It is, therefore, concluded that these economic environmental factors; exchange rate, inflation rate, money supply and interest rate have strongly influenced the performance of Small and medium scale (SMEs) in Oyo State.

Recommendations

In line with the result of findings, the following recommendations are suggested:

i. The performance of Nigeria's small businesses an be improved if the Central Bank of Nigeria maintains an investment-friendly exchange rate. Additionally, policies that would improve business conditions and the business climate and encourage SMEs to obtain funding from the capital market should be developed by the federal government and its agencies.

ii. This study has significant policy implications. First, policymakers should collaborate to increase productivity and supply in Nigeria in order to boost output levels. This would help lower prices for goods and services, or inflation, and support economic growth. The only way to drastically lower inflation is to raise output levels (GDP).

iii. The monetary authorities should guarantee a sufficient amount of money supply that favourably impacts funding for the private sector in Nigeria. This is due to the fact that money has an impact on both the degree of financial intermediation and the absolute price and amount of commerce.

iv. Interest rates must be lowered on investible funds through monetary or fiscal policy actions in order to promote output and raise income in order for there to be any discernible economic activity. This will make it possible for the economy to have a sizable amount of investment, which will then spur economic growth.

References

Abel, K.C. (2012). *The effect of macroeconomic variables on profitability of small and micro enterprises industry in Nairobi County (Master's thesis)*, School of Business, University of Nairobi

Achillah, L. (2011). Influence of macroeconomic factors on strategic planning in commercial banks in Kenya. University of Nairobi MBA Project. *Journal of Management 3(4) 155-365*

Adetayo, A. J. (2013). Transport infrastructure and the Nigerian environment: a review. *International review of business and social sciences, 1(6), 49-66.*

Adeniyi1, A.M., Adeyemi, A.K, Salawudeen O.S. and Fagbemi, T.O. (2018). Monetary Policy and Bank Credit in Nigeria: A Toda-Yamamoto Approach. ACTA Universitatis Danubius, 14(5), 718-739.

Adeleke, B., Folorunso, O. A., & Falohun, A. (2018). Economic environment and small and medium-sized enterprises in Nigeria. *Journal of Policy and Development Studies, 12(3), 8-16.*

Ajayi, A. (2016) Impact of External Business Environment on Organisational Performance of Small and Medium Scale Enterprises in Osun State, Nigeria. Scholedge *International Journal of Business Policy & Governance 3, (10)155-166*

Akoja, H. R. A & Balieogu (2020), Financing industrial development in Nigeria: a study of the small and medium enterprises in Kwara State. *Global Journal of Management and Business Research, 10 (3), 46-60*

Aurifeille, J. M., Jaunkalns, R., and Ramond, O. (2020). Small and medium-sized enterprise financing in France. In Small and medium-sized enterprise (pp. 57-75). Springer, Cham.

Adeli, O, Fazel, H.E, Khatami, S.F. & Ghasami, B. (2016). The effect of economic factors on business intelligence: Case study Iran Khodro Technology in Tehran Province. *Mediterranean Journal of Social Sciences, 7(3) 233-345*

Adam, G. (2021). Influences on growth of SMEs: An international comparison. *Entrepreneurship and Regional Development*, 5(1), 73–84.

Agu, E. Nnaemeka, G. & Nneka, R. (2016). *Human resource management: a graphic approach.* Owerri: Career publishers.

Akingunola, R. O (2019). Small and Medium Enterprise Enterprises and Economic Growth in Nigeria: An Assessment of Financing Options. *Pakistan journal of business and economic review, 2 (1), 78 -97.*

Asiedu, D.T. (2002). Impact of economic environment of small and medium enterprises in Nigeria. Journal of contemporary research in business, 4(1): 1- 14

Bannock, (2015). Measurement of business performance in strategy research: A comparison of approaches. *The Academy of Management Review 11(4):*801-814

Batarseh, A. (2021). The nature of the relationship between the money supply and inflation in the Jordanian economy (1980–2019). *Business Perspective, 16*(2), 38-46

Bekeris, R. (2012). The impact of macroeconomic indicators upon SME's profitability. International Business School at Vilnius University, Lithuania *Journal of Social Science 91(3): 266-455*

Bernhardsen, D. (2018). Some exploratory models for assessing small firms' marketing performance. European Journal of Marketing, 24, 11.

Bello, A.B. (2015). Relevance of Fiedler's leadership theory to management of school organisation. *ATBU Journal of Science, Technology & Education, 3*(2): 182-189

Bello, E.I. (2018*). Effects of interest rate on access to credit by micro and small enterprises (MSES) in Kaduna state (Master's thesis),* Kaduna State University, Kaduna, Nigeria.

Bello E. I., Adeyeye M. M., Usman A., Samuel, A. M. & Iyakwari, A.D. (2019). Nexus between financial development and the growth of small enterprises in Nigeria. Bingham *Journal of Economics and Allied Studies (BJEAS), 3*(1): 51-61.

Bello, I.E., Dogara, M., Joshua, Y.B., Yashim, D.A., & Araga, S.E. (2022). Economic environment and the performance of small scale enterprises in Nigeria. POLAC International Journal of Economics and Management Sciences, 8(1), 1-11

Central Bank of Nigeria, (2013*), Statistical Bulletin.* Abuja: Central Bank of Nigeria.

Chukwuma, N.K & Chukwuma, E (2015). Implications of economic factors on small scale business performance in Nigeria. *International Journal of Research in Business Management. 1(3) 23-30*

Ejiogu, F. Chima, D. & Nwede, H. (2017). Nigeria's Infrastructure Deficit in Business Day Newspaper, 15th July, 2019. Emergence of Small and Medium Enterprise Industries Equity Investment Scheme (SMIEIS). Paper presented at the national summit on SMIEIS organized by the Banker's Committee and Lagos Chamber of Commerce and Industry (LCCI). Lagos: Nigeria.

Emeh, L. (2021). Deficit, Decay and Deprioritization of Transport Infrastructure in Nigeria: Policy Options for Sustainability. *International Journal of Economics and Finance, 8*(3)

Echekoba, F.N. &Ubesie M.C. (2018) Assessment of Financial Deepening on the Growth of Nigerian Economy: 1990-2016. International Journal of Academic Management Science Research (IJAMSR), 11 (4), 70-82.

Fiedler, F.E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill

Gunasekaran, A., Forker, L. & Kobu, B. (2000). Improving operations performance in a small company: A case study. *International Journal of Operations & Production Management.* 20(3), 1–14.

Grant, C. and Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Developing a 'blueprint' for your "house". *Administrative Issues Journal.* 4. 10.5929/2014.4.2.9.

Halim**,** F.A. (2017). The impact of macroeconomic variables on SMEs in Malaysia. *Journal of Physics.1* (3): 5-65. doi: 10.1088*/1742- 6596/890/1/012138*

Hossain, G. N. (2018). Founder competence, the environment, and venture performance. *Entrepreneurship Theory and Practice, 18, 77-89.*

Ibimodo, A. B. (2015). Perceived causes of success in small business. American Journal of Small Business 12(1): 41-5.

IFC. (2018). Small and Medium Enterprises (SMEs). Retrieved from https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/industries/financial+institutions/sme-finance/why-sme-finance

Lawal, K. A. A. &Akanbi, S A. (2020). An analysis of long-run relationship between exchange rate and small and medium enterprises performance (SMES) in Nigeria: An ARDL perspective. *International Journal of Management, Social Sciences, Peace and Conflict Studies (IJMSSPCS), Vol.3 No.3 September, 2020; p.g. 337 - 348*

Myers, C. (2001). Capital Structure. *Journal of Economic perspective, 2(3) 130-158.*

NBS-SMEDAN. (2017). National survey of micro, small and medium enterprises (MSMEs). Published 2019.

Ncube, M. &Ndou, E. (2011). Inflation targeting, exchange rate shocks and output: evidence from South Africa. African Development bank group. *Journal of Macro Economics 4(5) 122-455*

Odusanyaa I. A, Yinusab, O. G and Bamidele . M. I (2018) Determinants of Firm Profitability in Nigeria: Evidence from Dynamic Panel Models. SPOUDAI Journal of Economics and Business, Vol.68 (2018), Issue 1, pp. 43-58

Onakoya, Adegbemi Babatunde & Oladejo, Titilope Idowu & Daud, Kolawole, 2024. "Inflation and Small and Medium-Scale Enterprises (SMES) Growth in Nigeria," International Journal of Research and Innovation in Social Science, International Journal of Research and Innovation in Social Science (IJRISS), vol. 8(3), pages 987-1000, March.

Orogbu, L., Onyeizugbe, C.U., &Chukwuma, E. (2018). Economic environment of small and medium scale enterprises: Implications on economic growth in Nigeria. *Journal of Economics, Management and Trade, 19*

Melberg, J.L. (2016). Entrepreneurship and the concept of fit: A model and empirical test. *Strategic Management Journal, (14) 2, 137-153.*

Nnanna, F.O. (2001). Financing and promoting small enterprise industries: concepts, issues and prospects; Bullion: *Central Bank of Nigeria, (25) 3.*

Ogechukwu, A.D. (2019). The role of small enterprise industry in national development in Nigeria. *Universal Journal of Management and Social Sciences 1(1), 23-41.*

Okwu, E. Bakare, O. & Obiwuru, B. (2013). Development crisis of the power supply and implications for industrial sector in Nigeria. *Kamla-Raj Journal, 6, 83-92.*

Otalu, Aladesanmi & Mary (2014). Monetary policy and commercial banks performance in Nigeria: an assessment of credit creation role. The International Journal of Business and Management, 2(7), pp. 45 -51.

Ristanović, V. (2010) Macroeconomic determinant of economic growth and World economic financial crisis. .*Journal of Economics and Organization, 1(5): 17 – 33.*

Saghir, E. & Aston, T. (2017). *Impact of various economic factors in accessing finance within the business sector: Cases from UK financial services companies.* University of Wales Trinity Saint David London Campus, University of Brunel.

Samuelson, M. &Nordhaus, O. (2010). The relationship between stock returns and inflation: New evidence from Wavelet analysis. *Journal of Empirical Finance 1(2)* 435-444.

Shane, M. (2014). Africa's aborted industrialization. Modernization strategies impede organic industrial growth. *Journal of Social Science, 11(*2): *130-245.*

Uchechukwu, Solomon & Okere, Wisdom & Okoye, Nonso & Chika, Akunna. (2023). Economic Environment and Performance of Small and Medium Scale Enterprise in Nigeria. 10.59781/8009NBWY.

Ugwu, F. I., Njeze, V. A., & Oluka, U. K. (2023). Economic Environment and The Performance of Small And Medium Entreprises (Smes) In Nigeria. Advance Journal of Business and Entrepreneurship Development, 7(2). Retrieved from https://aspjournals.org/ajbed/index.php/ ajbed/article/view/40

Victor, J. (2017). Failure rates for female-controlled businesses: Are they any different? *Journal of Small Business Management,* 41(3), 262-277.

William, O., Zehou, S. and Hazimi, B.H., (2019). Determinants of domestic credit to the private sector in Ghana: Application of Vector Auto Regressive Method. Advances in Social Science, Education and Humanities Research, 3(9),90-119..

Zaagha A. S. (2020). Money Supply and Private Sector Funding in Nigeria: A Multi-Variant Study. Copyright © CC-BY-NC 2020, CRIBFB | ASFBR Asian Finance & Banking Review; Vol. 4, No. 1; 2020