

Small and Medium Scale Enterprises and Nigeria Economic Growth

Deborah Oluwadunmininu Oluremi

Department of Economics, Faculty of the Social Sciences, Delta State University, Abraka,
Nigeria.
Oluremid44@gmail.com

Owen Affor Maku

Department of Economics, Faculty of the Social Sciences, Delta State University, Abraka,
Nigeria

doi: <https://doi.org/10.37745/ijssber.2013/vol12n57189>

Published November 23, 2024

Citation: Oluremi D.O. and Maku O.A. (2024) Small and Medium Scale Enterprises and Nigeria Economic Growth, *International Journal of Small Business and Entrepreneurship Research*, Vol.12, No.5, pp.,71-89

Abstract: *Globally, small and medium-sized businesses (SMEs) are acknowledged as key contributors to economic expansion. SMEs are seen as vital components of the Nigerian economy since they contribute significantly to job creation, income generation, and poverty alleviation. However, despite all these achievements of SMEs their performance in Nigeria has been a subject of concern for several years. This study measured empirically how SMEs have affected Nigeria's economic growth using key macroeconomic indicators as the Commercial Bank Loan, Patent Application, Trade, Value Added Tax, among others. The study employed Bound tests and Co-Integrating Regression on data collected from World Bank database, United Nations Conference on Trade and Development (UNCTAD) data statistics, CBN Statistical Bulletin and World Investment Reports (2023). The study discovered that while patent applications has a negative effect on Nigerian economic growth, loans from commercial banks, inflation, value-added tax, labour force participation, and SME trade have a favorable impact. In order to support SMEs and growth in the Nigerian economy, it was suggested that a combination of fiscal and monetary policies be used by the Nigerian government. Policymakers should streamline loan application processes, reducing bureaucratic hurdles, and improving credit scoring mechanisms. The government should also foster more public finance, private led initiatives to provide SMEs with all they need to thrive in the economy.*

Keywords: Small and Medium Scale Enterprises, Economic Growth, Nigeria

INTRODUCTION

SMEs are highly regarded as the core in any economy as they perform a vital role in growth, employment creation, poverty reduction, innovative thinking and entrepreneurship (Adeosun and Shittu, 2021). This assertion holds particularly true for Nigeria, a country in West Africa with a rich and diverse economic landscape. With about 200 million people (World Bank, 2021), Nigeria has a vast pool of entrepreneurial talents and resources that can be harnessed through SMEs to stimulate economic development. There can be no overstatement of the importance of SMEs in Nigeria as they provide a substantial contribution to both the creation of jobs and the GDP. It has long been acknowledged that small and medium-sized businesses (SMEs) play a critical role in reducing poverty, fostering economic growth, and creating jobs in both developed and developing countries (UNCTAD, 2020).

In Nigeria, where unemployment rates have been a longstanding challenge SMEs have contributed significantly to job creation and poverty reduction crediting SMEs as a critical component of the economy, SMEs have emerged as important sources of employment, absorbing a large section of the workforce. National Bureau of Statistics (NBS) claims that SMEs employ more than 84% of Nigeria's workers and comprise roughly 96% of all enterprises in the nation (NBS, 2020). They have become significant contributors to Nigeria's GDP as well; in 2017, they accounted for almost 48% of the total (National Bureau of Statistics, 2018). This significant contribution highlights how they support economic expansion.

The Nigerian Government recognizes SMEs as its key catalyst to achieving growth and development as they can enhance a country's economic resilience by diversifying economic activities, reducing dependence on a few sectors, and providing a buffer against external shocks (Aikor, 2021). SMEs are seen as a means to diversify the economy away from its heavy dependence on oil revenue. This diversification is crucial for Nigeria to withstand economic shocks and ensure long-term sustainability given Nigeria's vulnerability to global commodity price fluctuations (CBN, 2018). SMEs also fosters entrepreneurship and innovation. Innovation is an essential component of competitiveness and economic success, and SMEs frequently play a key role in promoting innovation at the local level (OECD, 2017). They provide a platform for individuals with creative ideas and entrepreneurial ambitions to start and grow businesses. In the context of Nigeria, SMEs are known for their adaptability and agility in responding to market demands and technological changes. These businesses often operate in dynamic and competitive environments, fostering innovation and adaptability.

Publication of the European Centre for Research Training and Development-UK

Despite all these achievements of SMEs their performance in Nigeria has been a subject of concern for several years. According to data from the Nigerian Bureau of Statistics (NBS), Approximately 96% of Nigerian enterprises are SMEs, and they account for 50% of the country's GDP (NBS, 2022). Despite their significant presence, the performance of these enterprises remains subpar. SMEs in Nigeria are less productive than their counterparts in other African nations (Aremu et al., 2015). For example, Ghana's SME sector has been identified as a significant contributor to employment and economic growth. The Association of Ghana Industries (AGI) reported that SMEs in Ghana contribute approximately 70% to Ghana's GDP and account for about 92% of businesses in the country (International Trade Centre, 2016). We see a higher ratio of SMEs' contributions to production. Also, according to the Small Business Institute (SBI) and the Small Business Project (SBP), SMEs contributed approximately 52% of total economic output in South Africa in 2019 (Small Business Institute, 2021). Which has reportedly grown since then. We can therefore conclude that despite SMEs prevalence in the Nigerian economy, their contribution to the Gross Domestic Product (GDP) remains relatively low.

One of the primary benefits of SMEs is their potential to create jobs. However, the low productivity of these enterprises has limited their capacity to absorb the ever-increasing Nigerian labor force. In 2019, SMEs employed approximately 84% of Nigeria's workforce (Babalola and Oni, 2021). Despite this high employment rate, the productivity of these jobs remains a concern. SMEs underperforming may be unable to sustain or create jobs which results in increased unemployment rates. This is particularly problematic in a country like Nigeria, where unemployment is already a significant concern (World Bank, 2021). The underperformance of SMEs contributes to income inequality as job opportunities become concentrated in larger, more established enterprises, leaving many Nigerians with limited income-generating options (Adesoun and Shittu, 2021). Plunging the nation further into underdevelopment.

The Nigerian Small and Medium Businesses Development Agency (SMEDAN, 2018) reports that a large number of Nigerian SMEs fail during the first five years of operation as a result of a variety of hurdles including; inadequate financing and infrastructure deficits. Corporate Affairs Commission (CAC) in Nigeria, also record a significant number of business registrations but also note a concerning number of deregistration due to business failures (Corporate Affairs Commission, 2022). The issue of SME failure is not transient; rather, it persists over various economic cycles and policy changes. This continuity of failure highlights the structural and systemic challenges that hinder SME sustainability (Abdul, 2022). A plethora of research, reports, and surveys conducted by both governmental and non-governmental entities consistently highlight the issue of high SME failure rates.

Publication of the European Centre for Research Training and Development-UK

Nigeria, endowed with abundant natural resources, has always seen SMEs as the key to diversify its economy away from over-dependence on oil but SMEs' sectoral distribution data reveal their limited impact on diversification. (The National Bureau of Statistics, 2021) explains that Nigeria's oil industry continued to dominate the country's economy and contribute a sizable portion of its GDP. Non-oil sectors such as agriculture, manufacturing, and services, where SMEs are prominent, have shown slower growth in comparison. An analysis of export data also indicates that oil and gas exports continue to dominate Nigeria's trade balance, while non-oil exports, which SMEs often contribute to, remain modest (Central Bank of Nigeria Economic Report, 2021).

The Nigerian government has put in place a number of efforts to help SMEs and enhance their performance because it recognizes the potential of SMEs in all economies, but particularly in developing ones like Nigeria. Among these are the Central Bank of Nigeria's (CBN) intervention funds and the National Enterprises Development Programme (NEDEP). National Enterprises Development Programme (NEDEP) was introduced to provide training, access to finance, and market linkages to SMEs. However, a report by (Surya et al., 2021) indicates that the impact of NEDEP has been limited, with many SMEs still facing challenges in accessing these resources. The CBN has introduced several intervention funds to provide affordable financing for SMEs. Despite these funds, Nigerian SMEs continue to face a huge credit gap, which ultimately leads to their demise, as reported by (Babandi and Barjoyal, 2021).

The poor performance and early demise of Nigerian SMEs have a significant impact on the economic development and progress of the nation. The average lifespan of SMEs in Nigeria is approximately four to five years, according to a 2017 survey conducted by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). (Nigerian MSME Report, 2022) also noted that within SMEs' first five years of commencement of business, about 95 per cent shutdown their activities. While (Adeforiti, 2023) reports that between 2017 and 2020, their decline rate was 4.5 per cent such that in contrast to about 41,543,028 SMEs units that were in operation in the country in 2017, their number dropped to 39,654,385 units in 2020. Their continual decline has contributed greatly to their continuous failure vis-a-vis the poor record of their performance with respect to the economic wellbeing of Nigeria, which has continued to manifest as high unemployment, high poverty rate, and low degree of economic development. SMEs' importance in the Nigerian economy and the limited success of government interventions, there is a pressing need for in-depth study on how SMEs affect the economy of Nigeria. A comprehensive study is crucial in identifying the specific challenges that hinder SMEs success and the harnessing of their full potential and provide evidence-based recommendations for policy improvements.

REVIEW OF RELATED LITERATURE

Empirical Review

SMEs are indispensable in the achievement of economic expansion in nations most especially in developing countries. (Mujahid et al., 2019). Several studies have underlined the important role that SMEs play as economic engines of growth on account of their heavy involvement in stimulating innovation, fostering entrepreneurship, increasing productivity and diversity. For instance, (Edokobi et al., 2018) explains that the creation of jobs, government spending on SMEs, using econometric regression models like the Ordinary Least Square (OLS), lending rates to SMEs and commercial bank credit to SMEs and SMEs all affect economic growth favourably. SMEs' contributions to economic growth are also prominent in the non-oil sector, as they provide diversification and resilience to the Nigerian economy, reducing its over dependence on oil revenue in their investigation of how SMEs impact Nigeria's economic expansion. Using the Vector Autoregression (VAR) Technique, the authors of the paper Small and Medium Scale Enterprises (SMEs) and Economic Growth in Nigeria (John and Ebri, 2021) found that the growth rate of SMEs' output has a positive effect on the GDP, a measure of economic growth. SME's contribution to GDP growth has been found to be 61%. Similarly, (Ayo-Balogun and Ogunsanwo, 2019) studied the Nigerian Economy with the time period 1981-2015 on the Impact of SMEs on the Growth of Nigerian economy using data from CBN Statistical Bulletin and Nigerian Bureau of Statistics which they analyzed using unit root test, trend analysis and regression analysis. It was demonstrated that SMEs and economic expansion have a statistically significant positive association. They also looked into the effect of SMEs on GDP using a Vector Autoregression (VAR) model 99% of fluctuation in economic increase was explained by SMEs activities in their country.

The government of Nigeria have acknowledged SMEs' significance in the Nigerian economy and has established numerous initiatives support measures to promote their advancement. For instance, SMEDAN supplies monetary assistance and skills enhancement, and market linkages for SMEs (Oluwashola, 2024). This is essential for SMEs' expansion and sustenance. (Andrew et al., 2023) investigates the impact of government actions in form of trade facilitation on African SMEs performance. They applied propensity scoring techniques and regression analysis to a sample of 39,461 business records from 27 African countries. According to the report, trade facilitation harms African SMEs, although tax administration and business licensing requirements improve SMEs' operations. The competitive institutional environment (from foreign enterprises) exacerbates trade facilitation's detrimental impact on African SME performance. Also, (Opeyemi et al., 2023) using data from 1981 to 2019, studied the influence of liberalized commerce on the earnings of the Nigerian SME. The findings revealed that a short-term rise of 1% in gross fixed

Publication of the European Centre for Research Training and Development-UK
capital formation impacted SMEs' performance by about 5%. The findings indicated that the exchange rate and taxes had an inconclusive short-run impact on how well SMEs perform. The findings indicate that trade liberalization has a favorable influence on SMEs' performance and help the AfCFTA's operation in reaching its equitable growth goals.

Despite these efforts, SMEs in the Nigerian economy have been faced with major hurdles. SMEDAN conducted a study in 2017 and reported that the normative longevity of SMEs in Nigeria is around 4 to 5 years. Nigerian SMEs confront several obstacles to their expansion and success. Among these difficulties is restricted access to finance. According to a Central Bank of Nigeria (CBN) survey, the bulk of SMEs rely on private finances or unregistered sources, while only 20% have access to official financing. They reiterate that one of the main issues facing Nigerian SME start-ups is financial access (Central Bank of Nigeria, 2019). (Babandi and Barjoyal, 2021) conducted a study to determine the obstacles preventing Nigerian small companies from receiving funding from financial institutions. Using 296 SMEs in a quantitative self-administered survey, four barriers were identified by the mixed research approach as preventing Nigerian SMEs from receiving funding from financial institutions: prejudice against women; excessive interest rates; lack of access to financial institutions; and owners' and managers' insufficient training, experience, and education. Inadequate infrastructure is another critical challenge for SMEs in Nigeria. Power outages, poor road networks, and limited access to reliable water supply affect their operations and increase production costs. For any economy, infrastructures available for use by businesses affects their productivity greatly. (Olaniyi et al., 2023) examined how Nigeria's infrastructure affected the nation's economic performance between 1990 and 2019. According to the study, infrastructure improved economic performance during the time period in a positive and significant way. Additionally, the complex and time-consuming regulatory environment poses a significant burden on SMEs. (Ajayi, 2016) studied the effects of cumbersome bureaucratic procedures and concluded that they increase compliance costs and divert valuable resources from core business activities, which inhibits SMEs' growth prospects. Business license applications must pass formal procedures that result in bureaucracy and administrative difficulties. These procedures frequently cause delays and negatively impact the effective performance of most Nigerian enterprises. The majority of Nigerian entrepreneurs face additional bureaucratic obstacles as a result of government regulations on acceptable trading areas

In short, empirical evidence highlights several obstacles encounter by SMEs in Nigeria, including limited access to finance, inadequate infrastructure, complex regulatory environment, market access constraints, and the shortage of skilled labor. Addressing these challenges through targeted policies and support programs is essential to realizing the complete potential of SMEs in contributing to Nigeria's economic growth and development.

Theoretical Review

This study adopts the theoretical foundation of the Endogenous growth model. The Endogenous growth theory posits that economic expansion is propelled by factors within the economic system itself rather than external forces alone. The theory as articulated by Paul Romer in the late 20th century, challenges the neoclassical assumption of exogenous technological progress. Instead, it argues that growth is endogenously determined by factors within the economy. It represents a paradigm shift in understanding long-term economic growth. Departing from traditional models, it asserts that growth is not solely driven by external factors but is fundamentally shaped by internal dynamics within an economy.

(Heckman et al., 2018) have underscored and backed up the positive correlation between education funds, skills training, and economic progress. As noted by Anderu, S.K. (2021), human capital is a critical driver of economic growth, particularly in developing economies. In the context of Nigeria, this is especially relevant for SMEs, as a skilled workforce is necessary for driving productivity and innovation. Human capital development through education and vocational training can ensure that labor force participants possess the necessary skills to contribute meaningfully to SME growth. Furthermore, policies that enhance the capacity of SMEs through human capital improvements can lead to higher productivity, enabling them to better compete in both domestic and international markets. Further explaining that measures of human capital, like the country's engagement in the work force, student enrollment rate and overall labor force are significant factors that determine the Nigerian economic growth in Nigeria.

The Endogenous Growth Model offers a strong theoretical framework for investigating how SMEs contribute to Nigeria's economic expansion. This model offers a comprehensive understanding of the various roles that SMEs play in the Nigerian economy by analyzing internal elements like innovation, human capital, and technology. It does this by enhancing the viewpoints of the empowerment theory and Schumpeter's innovation and entrepreneurship theory.

Theoretical Framework

The model has its foundation from the Endogenous Growth Theory, with an emphasis on how small and medium-sized businesses (SMEs) contribute to economic expansion. Here, Real GDP is used as a measurement for economic growth (Y), Commercial Bank Loan to SMEs stands as a proxy for capital (CBL), Labour is measured by Labour Participation rate (LPR), and Patent Application is a proxy for technological advancement (PA). Control variables, such as Government Spending (G), Exports (X), the volume of SMEs Trade is used as a proxy for Poverty Reduction by SMEs (TR) and Inflation Rate, are incorporated to take into consideration additional elements that could affect Nigeria's economic growth.

Publication of the European Centre for Research Training and Development-UK

In addition to the key variables of SMEs, several control variables were included to account for other factors that may influence economic growth in Nigeria. The inclusion of VAT (Value Added Tax) is particularly important, as it is a major source of government revenue, and higher VAT rates can stimulate economic activity by increasing consumption. Inflation rate is included as a control variable because moderate inflation can signal a growing economy, stimulating demand and investment, while extreme inflation can destabilize economic growth.

In light of this, the model's functional form based on the underlying theory of Endogenous Growth Theory is specified as:

$$Y = AK^\alpha (HL)^{1-\alpha} \quad (1)$$

Where:

Y = Real GDP (economic growth)

A = Total Factor Productivity (TFP)

K = Physical Capital

H = Human Capital

L = Labour

The investment equation is modified to include the contributions of SMEs.

$$I = sY + \beta CBL \quad (2)$$

Where:

Y = Real GDP (economic growth)

I = Investment

s = Savings rate

CBL = Commercial Bank Loan to SMEs

The savings rate (s) is specified as:

$$s = s_0 + \gamma PA \quad (3)$$

Where:

s_0 = Base savings rate

PA = Patent Application by SMEs

The growth rate of human capital (gH) is specified as:

$$gH = \delta LPR \quad (4)$$

Where:

gH = Growth rate of human capital

LPR = Labour Participation Rate by SMEs

Control variables are incorporated:

X - M = Net Exports

$$G = gY \quad (5)$$

The inflation rate is included as a control variable to account for potential influences on economic growth. This model specification captures the key relationships between economic growth and

Publication of the European Centre for Research Training and Development-UK
 SME activities in Nigeria, integrating concepts from Endogenous Growth Theory and the adjusted
 Endogenous Growth Model for Nigerian SMEs.

RESEARCH METHODOLOGY

This study uses annual data from 1992 to 2022 sourced from the World Bank, UNCTAD, CBN Statistical Bulletin, and World Investment Reports (2023). The empirical approach follows the theoretical framework established earlier, with a focus on key variables such as SMEs' contributions to economic growth in Nigeria. Standard econometric methods were used in this study, such as the Autoregressive Distributed Lag (ARDL) model and the Augmented Dickey-Fuller (ADF) test to verify stationarity to investigate long-run relationships between the variables.

Data and Sources

The annual data used for this empirical study were sourced from World Bank database, United Nations Conference on Trade and Development (UNCTAD) data statistics, CBN Statistical Bulletin and World Investment Reports (2023) for a period of 1992 to 2022.

Our model specification follows the theoretical framework above. The theoretical framework establishes a link between economic expansion and factors that drive it like, SMEs inclusive. Real GDP is used as a measurement for economic growth (Y), Commercial Bank Loan to SMEs serves as a stand in for capital (CBL), Labour is measured by Labour Participation rate (LPR), and Patent Application is used as an alternative for technological advancement (PA). Control variables, such as Government Spending (G), Exports (X), the volume of SMEs Trade is used as a proxy for Poverty Reduction by SMEs (TR) and Inflation Rate, are incorporated to account for its effect on economic growth which cannot be attributed only to the other key variables. Using the logarithmic transformation of the variables, the empirical specification of the model can then be written as:

$$LnRGDP_{Gt} = \beta_0 + \beta_1 LnCBL_t + \beta_2 LnLPR_t + \beta_3 LnPA_t + \beta_4 LnTR_t + \beta_5 LnINFR_t + \beta_6 LnVAT_t + U_t. \quad (8)$$

Where:

β_0 is the intercept term.

β_{1-6} represents the slope coefficients

μ represents the stochastic error term (assumed to be normally distributed with a mean of 0 and constant variance)

Table 1: Variable Description

VARIABLES	DESCRIPTION
LRGDP	Log of real gross domestic product
LCBL	Log of commercial banks loans
LLPR	Log of labour participation rate
LPA	Log of patent application
LTR	Log of Trade by SMEs
LINFR	Log of inflation rate
LVAT	Log of Value Added Tax

Source: Author's Compilation

Estimation Techniques

Unit Root Test

The stationarity of the series is the first step in the empirical assessment of our model using the Augmented Dickey-Fuller (ADF) test. The ARDL (Autoregressive Distributed Lag) model is particularly suited to this study due to the mixed integration orders of the variables. Unlike traditional cointegration tests, which demand that every variable be integrated of the same order (I(1)), the ARDL model permits both I(0) and I(1) variables to be present, making it appropriate for the diverse time series data in this study. This model is advantageous in exploring both short- and long-term relationships between the variables while accounting for potential lag effects. A time series is considered stationary when its variance, mean, and auto-covariance remain constant over time and the covariance between two periods is dependent on the interval's lag. On the other hand, a non-stationary series is one whose mean, variance, and auto-covariance change over time. (Petrica et al., 2017).

Long-run Cointegration Test

This test utilized the Autoregressive Lag Bound Cointegration test to investigate the characteristics of the variables' long-term association as a result of their mixed integration.

RESULTS AND DISCUSSIONS

We present the result of the unit root test in order to determine the order of integration for each variable studied. This will enable us ascertain their stationarity.

Table 2: Presentation of ADF Unit Root Test

Variables	ADF Level		ADF First Difference		Order of integration
	t-statistics	p. value	t-statistics	p. value	
LRGDP	-0.266775	0.6310	-2.885123**	0.0594	I (1)
LCBL	-1.577929	0.4812	-5.526658*	0.0001	I (1)
LLPR	-2.423458	0.1441	-4.529321*	0.0015	I (1)
LPA	-1.993500	0.2879	-7.286325*	0.0000	I (1)
LTR	-0.758215	0.8159	-3.016341**	0.0451	I (1)
LINFR	-3.102201	0.0375**	-	-	I (0)
LVAT	1.780282	0.3826	-4.380079*	0.0018	I (1)

Source: Author's computation

* Denotes 1% level of significant. ** denotes 5% level of significant.

From the above table, it is revealed that, the variable LINFR is stationary at level, at first difference LRGDP, LCBL, LLPR, LPA, LTR and LVAT were discovered to be motionless. At certain points, the ADF statistics' observed values fall short of their critical values except for the variable RGDP and TR. The observed ADF statistics values are higher than their critical values at initial difference. As a result, at 1% and 5%, the variables' null hypothesis is rejected. If the ADF t-statistic value is greater than the critical values, one can assume, a priori, that a variable is stationary when doing the ADF tests. Consequently, the mixed nature of the integration of variable calls for further evaluation of the long-term relationship between variables. To achieve this the study employed the Autoregressive Distributive Lag Model (ARDL).

Presentation of Co-Integration Tests (Bound Testing Approach)

Table 3 contains the results of cointegration test that was conducted for LRGDP and LTR functions. The ARDL bound test null hypothesis: No long run relationship exists. There is a long-term link between the variables if the upper bound is higher than the F-statistic.

Table 3: Co-integration Bound Test

	Real Gross Domestic Product Function	Degree of freedom
F-statistics	13.43682	6
ConintEq(-1)	Coefficient	Prob. value
Critical values	-0.614728 I (0) Bound	0.0000 I (1) Bound
Significance (5%)	2.45	3.61

Source: Author's computation.

Table 3 demonstrates that the F-statistics value is higher than the models' upper bounds on the 5% critical values. This clearly shows that the dependent and independent variables have a long-term equilibrium connection since the F-statistic is higher than the lower and upper bound at 5% level of significance while in the ARDL ECM results speed of adjustment CointEq(-1) (speed of adjustment) is negative, less than 1 and statistically significance going by the probability value which is less than 0.05 clearly shows that there is high speed of adjustment if there is any disequilibrium from the short run to the long run. As a result, the alternative hypotheses are accepted and the null hypotheses are rejected. Hence, the tests imply that there are long-run relationship co-integrating between SMEs and economic growth. We therefore conclude that these models have pass the cointegration test.

Co-integrating Regression Tests of the Models

Table 4 contains includes long-term projections of the correlation among the independent variables and economic growth.

Publication of the European Centre for Research Training and Development-UK

Table 4: Long-Run effect of SMEs growth on economic growth (Fully Modified Least Squares)

Variables	Real Gross Domestic Product Function		
	Coefficient	Standard Error	P value
LCBL	0.055829	0.012328	0.0001
LLPR	0.304617	0.069602	0.0002
LPA	0.102009	0.028955	0.0017
LTR	-0.492190	0.040161	0.0000
LINFR	0.025676	0.010794	0.0257
LVAT	0.099930	0.016979	0.0000
Intercept	4.832830	0.344576	0.0000

Source; researcher's computation

Table 4 shows that LCBL is positively associated with economic growth, both LLPR, LPA, LTR, and LVAT are long-run significant predictors of real Gross Domestic Product in Nigeria since they are significant 1% while LINFR is significant at 5% to LRGDP. The significance of variables in the model implies that it has statistically effect on RDGP. The following is a more in-depth interpretation of each variable in relation to the Log of Real Gross Domestic Product (LRGDP).

LCBL (Log of Commercial Bank Loans): There is a statistically significant increase of 0.055829 units in the log of real GDP for every unit increase in the log of commercial bank loans. This implies that having greater access to commercial bank loans promotes economic expansion. Credit availability by individuals and businesses may boost economic activity and promote general growth.

LLPR (Log of Labour Participation Rate): A one-unit increase in the log of the labour participation rate corresponds to a substantial 0.304617-unit increase in the log of real GDP. This indicates that a higher level of labor force participation contributes significantly to economic growth. More people actively participating in the workforce can lead to increased productivity and output.

LPA (Log of Patent Applications): Interestingly, the log of patent applications (LPA) shows a negative impact on real GDP, with a coefficient of -0.102009. While this may seem counterintuitive, it is possible that the impact of patent applications on GDP is not immediate. The process of innovation, which patent applications signify, can take time to translate into tangible economic output. Moreover, this negative association might reflect inefficiencies in translating intellectual property into commercial success in Nigeria's current economic environment, where challenges like infrastructure and access to finance might hinder innovation's immediate economic impact.

LTR (Log of Trade by SMEs): The log of trade by Small and Medium Enterprises (SMEs) reveals a substantial positive impact, with a coefficient of 0.492190. This suggests that a substantial

Publication of the European Centre for Research Training and Development-UK
positive impact on economic growth is linked to an increase in SME commerce. Increased economic output, the creation of jobs, and general economic growth could result from SMEs engaging in more trade.

LINFR (Log of Inflation Rate): A one-unit increase in the log of the inflation rate is associated with a 0.025676-unit increase in the log of real GDP. The positive coefficient suggests that moderate inflation might be conducive to economic growth. This result aligns with the idea that a certain level of inflation can stimulate economic activities.

LVAT (Log of Value Added Tax): The log of Value Added Tax (VAT) shows a positive impact on the log of real GDP, with a coefficient of 0.099930. This implies that an increase in VAT collection is associated with higher economic growth. It could be indicative of increased consumption and economic transactions subject to VAT.

Summary

In summary, this in-depth interpretation indicates that financial factors, labor force participation, trade by SMEs and inflation are positively associated with economic growth, while factors related to patent applications have negative associations. These findings provide valuable insights into the dynamics of the Nigerian economy and can guide policymakers in addressing challenges and fostering growth. However, it's essential to consider the limitations of the study and explore potential causation mechanisms in further research.

CONCLUSION

The analysis reveals nuanced insights into the dynamics of economic growth in Nigeria. Firstly, the positive correlation between access to commercial bank loans and real GDP underscores the pivotal role of credit availability in stimulating economic activity. Secondly, heightened labor force participation significantly contributes to economic output, emphasizing the importance of workforce engagement in driving growth. Thirdly, the positive association between trade by SMEs and real GDP highlights the critical role of small businesses in fostering economic expansion through increased trade activities.

Additionally, while moderate inflation appears to stimulate economic activities, the relationship between patent applications and economic growth suggests a nuanced relationship between innovation and immediate economic output. Also, the positive impact of Value Added Tax collection on real GDP reflects heightened economic activity subject to taxation, indicative of a thriving economy. In conclusion, policymakers should devise strategies to promote credit access, enhance labor market participation, support SMEs, manage inflation judiciously, foster innovation,

Publication of the European Centre for Research Training and Development-UK
and ensure efficient tax collection mechanisms to sustain and bolster Nigeria's economic growth trajectory.

Finally, even though this study offers insightful information about how SMEs contribute to Nigeria's economic expansion, future research could explore the causality between GDP and patent applications, especially when considering statistics on the lag between economic production and innovation. Additional research could also concentrate on the effects of digital transformation on SME performance, considering the increasing role of technology in the business landscape.

Policy Implications

- i. While promoting credit access and financial inclusion is crucial, the implementation of such policies faces significant barriers, such as low financial literacy and resistance from established financial institutions. To overcome these challenges, policymakers could focus on educating underserved communities about the benefits of financial inclusion and incentivize banks to offer credit products that cater to SMEs. Additionally, expanding access to international trade for SMEs could be hindered by inadequate infrastructure and export barriers. To address this, the government should focus on improving infrastructure and creating trade facilitation agreements that benefit SMEs.
- ii. The analysis shows that SMEs promote employment. Investment in education and training programs become crucial, as an education and skilled workforce is likely to participate more actively in the labor market
- iii. While innovation is crucial for long-term economic development, the study suggests that the immediate contribution of patent applications to economic output may be limited. Policies should be designed to bridge this gap and ensure that innovative activities eventually translate into tangible economic benefits.
- iv. Policymakers should prioritize initiatives that facilitate trade for SMEs. The positive impact of SME trade on economic growth underscores the need for targeted policies that empower and facilitate international trade activities for small and medium-sized enterprises.
- v. Control variable, Inflation and Value Added Tax (VAT) both show a positive correlation with economic growth implying Central banks and monetary authorities may consider adopting a moderate inflation target as part of their monetary policy framework. This implies a need for careful calibration to balance the positive impact of moderate inflation on economic activities with the potential risks associated with higher inflation rates. Also, VAT collection being linked to higher economic growth, indicates heightened consumer spending and economic transactions subject to VAT. Policymakers should consider policies that promote consumer confidence, encourage spending, and boost economic activities.

Recommendations

The research recommends as follows:

- i.** Financial inclusion and access to credit should be promoted. Policy makers should implement policies to promote financial inclusion and enhance access to credit, particularly for small and medium enterprises (SMEs) and individuals in underserved communities. This could involve initiatives such as expanding the reach of financial services through digital banking, mobile money, and agent banking networks. Additionally, incentivize banks to increase lending to SMEs by offering guarantees, reducing lending rates, and providing targeted credit facilities. Collaborate with financial regulators and industry stakeholders to develop and implement frameworks that promote responsible lending practices while mitigating credit risks.
- ii.** Investments should be made in Human Capital Development and Labour Market Reforms. Government should prioritize investments in education, skills development, and training programs to enhance the quality and productivity of the workforce. This includes revamping the education curriculum to align with the needs of the labor market, promoting vocational and technical education, and providing lifelong learning opportunities for workers to adapt to changing job requirements. Furthermore, enact labor market reforms to address issues such as labor market flexibility, wage inequality, and informal sector employment. Foster public-private partnerships to create job opportunities, especially for youth and women, through initiatives such as apprenticeships, internship programs, and skill development initiatives tailored to industry needs.
- iii.** Supporting innovation, entrepreneurship, and SME development is crucial to their preservation and development which in turn boasts their contribution to the Nigerian economy. An enabling environment should be created for innovation, entrepreneurship, and SME development by implementing supportive policies and regulatory frameworks. This includes streamlining business registration processes, reducing bureaucratic barriers to entrepreneurship, and providing incentives for innovation-driven enterprises. Establish technology hubs, incubators, and accelerators to nurture startup ecosystems and facilitate knowledge exchange and collaboration among entrepreneurs, researchers, and industry stakeholders. Additionally, leverage public procurement policies to support SMEs and promote innovation by providing preferential treatment to locally-owned businesses and startups in government contracts and procurement processes.

REFERENCES

- Abdul, K. (2022), An Investigation into the Challenges to SMEs Development in Africa. International Journal of Economics, Commerce and Management, Vol X, Issue 1.
- Adeforiti, A. (2023). The Effect of Small-Medium Enterprises (SMEs) on Nigerian Economic Growth. DOI:10.13140/RG.2.2.31455.84646

Publication of the European Centre for Research Training and Development-UK

- Adeosun, O. T., & Shittu, A. I. (2021). Small-medium enterprise formation and Nigerian economic growth. *Review of Economics and Political Science*. 7(4), 286-301. <https://doi.org/10.1108/REPS-07-2020-0089>
- Aikor., T. (2021). SMEs: Key to Socio Economic Development of Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)* V(XII) DOI: 5. 2454-6186. 10.47772/IJRISS.2021.51256.
- Ajayi, B. (2016). The impact of entrepreneurial orientation and networking capabilities on the export performance of Nigerian agricultural SMEs. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 2(1), 1–23. <https://doi.org/10.1177/23939575156197>.
- Anderu, S.K. (2021), Human capital and economic growth in Nigeria. *Future Business Journal* 7, Article 49
- Andrew, E.H., Davide, M.P., & Ishael, T. (2023), The impact of trade facilitation on African SMEs' performance. *Small Business Economics*. 62(1). DOI: 10.1007/s11187-023-00756-4
- Aremu, M.A., Aremu, M. A., & Olodo, H.O. (2015). Impact of Strategic management on the performance of Small Medium Enterprises (SMEs) in Nigeria. *Journal of Sustainable Development in Africa* 17(1). <https://jsd-africa.com/Jsda/V17No1-Spr15A/PDF/Impact%20of%20Strategic%20Management%20on%20the%20Performance.Moriam%20Adeyemi%20Aremu.pdf>
- Ayo-Balogun, A. O., & Ogunsanwo, A. O. (2019). Impact of Small and Medium Enterprises on the Growth of Nigerian Economy. Paper presented at the 1st National Conference of WITED, Ilaro Chapter, The Federal Polytechnic, Ilaro, August 13-16, 2019.
- Babalola, J.B., & Oni, A.A. (2021). The Dynamics of Higher Education and Graduate Employability in Nigeria. *Revista Universitara de Sociologie*, Year XVII, Issue 2.
- Babandi, I. G., Barjoyal, B.B. (2021) Barriers to Accessing Financial Institutions Funding for Nigerian SMEs. *International Journal of Business and Economics Research*. 10(6), 219-226. doi: 10.11648/j.ijber.20211006.12
- Central Bank of Nigeria (CBN). (2018). Development Finance Initiatives in Nigeria: An Overview. [Online] Available at: <https://www.cbn.gov.ng/Out/2018/CCD/Development%20Finance%20Initiatives%20in%20Nigeria.pdf>
- Central Bank of Nigeria Economic Report (2021). <https://www.cbn.gov.ng/Out/2021/RSD/May%202021%20Economic%20Report.pdf>
- Central Bank of Nigeria. (2019). CBN Annual Report 2019. Retrieved from <https://www.cbn.gov.ng/Out/2019/rsd/2019%20Annual%20Report%20and%20Statement%20of%20Accounts%20of%20the%20Bank%20.pdf>

Publication of the European Centre for Research Training and Development-UK

- Corporate Affairs Commission, (2022). Entity Registrations. <https://www.cac.gov.ng/resources/registration-statistics/>
- Edokobi, T.D., Otugo, N.E., & Scholastica, U. (2018). Effect of Small and Medium Enterprises on Economic Growth in Nigeria. *Sumerianz Journal of Business Management and Marketing*, 1(2), 73-78.
- Heckman, J. J., Humphries, J. E., & Veramendi, G. (2018). Returns to Education: The Causal Effects of Education on Earnings, Health, and Smoking. *Journal of Political Economy*, 128(3), 854-908.
- International Trade Centre (2016). SME Competitiveness in Ghana: Alliances for Action. ITC, Geneva. <https://intracen.org/file/smecompetitivenessinghana2016finalagilowrespdf>
- John, E. I., & Ebri, W. E. (2021). Small and Medium Scale Enterprises (SMEs) and Economic Growth in Nigeria. *IAR Journal of Business Management*, 2(1), 38-43.
- Mujahid, N., Begam, A., & Nargis. (2019). SMEs Output and GDP Growth: A Dynamic Perspective. *Journal of Asian Business Strategy*, 9(1), 53-65. <https://doi.org/10.18488/journal.1006.2019.91.53.65>
- National Bureau of Statistics (NBS). (2018). National Accounts - Gross Domestic Product, 2017. Retrieved from <https://nigerianstat.gov.ng/download/892>
- National Bureau of Statistics (NBS). (2020). National Employment Report: Unemployment and Underemployment Report Q4 2019. Retrieved from <https://nigerianstat.gov.ng/download/1025>
- Nigerian Bureau of Statistics (NBS). (2022). Employment Statistics in Nigeria. Retrieved from <https://www.nigerianstat.gov.ng/>
- Nigerian MSME Report (2022). Fuel for Africa's next Billion Businesses. Small Medium Enterprises Agency of Nigeria. <https://smedan.gov.ng/wp-content/uploads/2022/07/Kippa-MSME-Report.pdf>
- OECD, (2017). Enhancing the Contributions of SMEs in a Global and Digitalised Economy at the Meeting of the OECD Council at Ministerial Level, Paris June 7-8, 2017
- Olaniyi, O., Tella, S. A., & Onanuga, A. T. . (2023). Physical Infrastructure and Economic Performance in Nigeria: A Ridge Regression Analysis. *Acta Universitatis Danubius. (Economica)*, 19(4), 113–124. Retrieved from <https://dj.univ-danubius.ro/index.php/AUDOE/article/view/2373>
- Oluwashola. A. (2024). Empowering Nigeria's Small and Medium Enterprises (SMEs): Overcoming Challenges for Economic Prosperity. Proshare. <https://proshare.co/articles/empowering-nigerias-small-and-medium-enterprises-smes-overcoming-challenges-for-economic-prosperity?menu=MSMEs&classification=Read&category=Entrepreneurship>

Publication of the European Centre for Research Training and Development-UK

- Opeyemi, O., Olujide, O., & Uche, O. (2023), The Effect of trade Liberalization on SMEs performance in Nigeria. *Problems and Perspectives in Management*. 21(1), 425-437.
- Petrică, A., Stancu, S., & Ghițulescu, V. (2017). Stationarity – The Central Concept in Time Series Analysis. *International Journal of Emerging Research in Management and Technology*. 6. 6-16. 10.23956/ijermt/V6N1/107.
- Small and Medium Enterprises Development Agency (SMEDAN). (2018). *National Survey of Micro, Small & Medium Enterprises (MSMEs) 2017*. Retrieved from [https://smedan.gov.ng/images/NATIONAL%20SURVEY%20OF%20MICRO%20SMALL%20&%20MEDIUM%20ENTERPRISES%20\(MSMES\),%20%202017%201.pdf](https://smedan.gov.ng/images/NATIONAL%20SURVEY%20OF%20MICRO%20SMALL%20&%20MEDIUM%20ENTERPRISES%20(MSMES),%20%202017%201.pdf)
- Small Business Institute (2021). Promotion and Development of Small Business in South Africa, COVID-19 and beyond; Local maybe lekker, but is it possible? https://www.smallbusinessinstitute.co.za/wp-content/uploads/2019/02/LocalMayBeLekkerButIsItPossible_.pdf
- Surya, B., Menne, F., Sabhan, H., Suriani, S., Abubakar, H., & Idris, M. (2021). Economic growth, increasing productivity of SMEs, and open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 20.
- The Nigerian Bureau of Statistics, (2021). <https://nigerianstat.gov.ng/download/1241288>
- United Nations Conference on Trade and Development (UNCTAD). (2020). World Investment Report 2020. Retrieved from https://unctad.org/system/files/official-document/wir2020_en.pdf
- World Bank. (2021). *Global Economic Prospects, January 2021: COVID-19 Crisis Update*. World Bank Publications.