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Micro, Small and Medium Enterprises (MSMEs) Financing and Unemployment Rates in Nigeria

Humphrey Enechukwu*, Rufus Akintoye, Charles Ogboi

Babcock University, Nigeria. *Email: enechukwu0334@babcock.edu.ng

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ABSTRACT

Globally, a low unemployment rate is highly desirable and generally associated with favorable economic conditions and a growing economy. Incidentally, the unemployment rates in Nigeria are progressively on the increase. Studies have shown sufficient micro, small, and medium enterprise (MSME) financing has the capability of solving the problem of unemployment rates in Nigeria. Concidentally, the extent to which MSME financing has impacted unemployment rates in Nigeria has remained uncertain. Consequently, this study investigated the effect of MSME financing on unemployment rates in Nigeria. In addressing this concern, the study employed an *ex post facto* research design, using a time series of secondary data extracted from the Central Bank of Nigeria, Nigerian Statistics Bulleting, World Development Indicator, and World Income Inequality Database for a period of 32 years spanning from 1992 to 2023. The vector error correction model was adopted for the data analysis. The finding showed that MSME financing had a joint significant effect on unemployment rates in Nigeria. The study recommended that the government and policymakers should expedite economic policy to ensure sufficient financing of the MSMEs in Nigeria.

Keywords: Deposit Money Banks Credit to MSME, Development Banks Credit to MSMEs, Micro Finance Banks Credit to MSMEs, MSME, Unemployment Rate

JEL Classifications: E24, G32

1. INTRODUCTION

The incidence of unemployment and increase in unemployment rates is one of the developments that aggravate the challenge of poverty. Unemployment rate is a measure of the percentage of people in a given population who are not currently employed but are actively seeking work. This is typically measured by a government agency or other organization through a survey of households. The unemployment rates can be used to assess the health of an economy and the labor market, and is considered a key economic indicator. Labour is often the only asset and main determinant of household income as well as whether people will live in or out of poverty (World Bank, 2023). This makes it very important for deliberate efforts to be made to ascertain whether people work, how long they work, and the types of jobs they are engaged in to make ends meet. Employment is a key channel through which growth translates into poverty reduction but many developing countries, including Africa, have grown rapidly over the past decades without a substantial reduction in poverty (Zuzana et al., 2020).

The “unemployment crisis” has a long history and is rooted in a larger framework of poverty, violence, instability, and bad Government. Nigerian policy norms and practices to combat unemployment among the youths mostly focus on job creation and skill development, with supplemental programs that are tailored to certain populations of poor and vulnerable people. Every government or country that seeks to improve income distribution and its citizens’ well-being must make sure employment opportunities are available at all economic level (Umoh and Ekpo, 2022). Over one-third of Nigeria’s population is under 24, making up a sizable and expanding “youth” population.

This group's demographic potential for growth and production coexists with widespread youth unemployment among working-age individuals. A high unemployment rate can be a sign of economic recession, while a low unemployment rate can indicate an expanding economy. However, the unemployment rate does not always tell the full story about the state of a nation. The Nigeria Bureau of Statistics (2023) reports that unemployment rate was 4.1% in Q1 2023, 4.2% in Q2 2023, 5% in both Q3 and Q4 2023. Currently, the unemployment rate as reported by Nigeria Bureau of Statistics NBS is 5.3% in Q1 2024. This compares favorably to rates in other developing nations where working, even for short shifts and in low-paying occupations, is necessary to make ends meet, especially in nations where there is lack of social security for the jobless.

Obi and Ugulu (2022) opined that unemployment is a major challenge facing the socio-economic life of most developing nations and it deters the development agenda, security of lives and properties, and peaceful co-existence of a nation. Micro and Small Enterprises provide employment opportunity and income generating system to those who do not have access to the formal sector employment (Wakuma, 2018). In Nigeria, 35% of individuals aged 15-34 are unemployed, either available for work and actively seeking employment or working fewer than 20 h/week. Additionally, 28% of young workers are classified as underemployed, engaged in 20-39 hours of work weekly. Unemployment and the dearth of jobs is a major worry for people in Nigeria, with most of the youths taking up work opportunities in the informal sector; rural youths finding work mainly in agriculture, small-scale home enterprises, and construction, and older urban youths in informal retail, home enterprises, manufacturing, construction, and professional services (Price, 2019). Statistics on underemployed Nigerian youth, sit uncomfortably with the large numbers in informal employment, many of them women, and with limited access to-statutory-occupational-security and social protection (International Labour Organization, 2023).

The significance of micro, small and medium enterprise financing in mitigating and resolving the problem of unemployment in Nigeria has been advanced by studies as important. For instance, Bello (2022) revealed that there is a close relationship between MSMEs financing and reducing unemployment rate in Nigeria. Also, Adegbie et al. (2023) posited that since micro, small and medium enterprises are one of the highest employers of labour, efforts geared towards financing the MSMEs is a right initiative towards reducing unemployment in Nigeria. Evidently, micro, small and medium enterprises financing have the capacity to resolve the lingering problem of unemployment in Nigeria. Effective and adequate financing of the MSMEs is significant in so many ways. First, such efforts geared towards financing the MSMEs closes the financial and capital deficits gaps that have obstructed their growth. Secondly, it tends to solve the level of unemployment rates in Nigeria as this will provide the entrepreneur's good opportunities to expand their capital base and operational activities.

Thirdly, since MSMEs account for 96% of all firms in Nigeria and provide about 50% of the nation's GDP, the sector will contribute more to the GDP of Nigeria if it receives proper funding. Fourth, MSME financing increases the likelihood of lowering unemployment rates because 73% of MSMEs are sole proprietorships, which are in dire need of funding. Additionally, financing opportunities will increase employment because many young people will be working on worthwhile projects.

Ogunleye et al. (2020) confirmed that the aggregate commercial banks financing and the manufacturing and food processing business financing contributed to poverty eradication in the short run and long run respectively in the country, Nigeria. An estimated $340 million was disbursed by commercial banks to MSMEs in 2020, although in absolute terms, commercial banks have committed $285 million as of September 2023 in lending to businesses and individuals (PWC, 2024). The report further stated that 25% of loans disbursed by commercial banks and microfinance banks went towards loans to MSMEs with commercial banks committing funds towards only medium sized enterprises.

This study aimed to examine the implications and challenges of unemployment and offered the opportunities and importance adequate MSME financing bring to mitigating the growing issues of unemployment rates in Nigeria. While studies have written extensively on MSMEs in Nigeria, fewer of these studies have attempted the problem of unemployment from the perspective of MSMEs financing as the case in this current study. This current study provides a novelty in research, as the study offered the underlying realities of capital and financing as the major pressing needs of the MSMEs in Nigeria. Some of the existing studies have found mixed results and expressed divergent opinions. For instance, Mafruhat et al. (2023) found that MSMEs financing had positive and significant effect on economic growth capable of reducing unemployment rates, but on the contrary, Akin et al. (2020) found that MSMEs financing exerted insignificant effect on employment as high interest rates erodes expected profits of the MSMEs in Nigeria. These divergent results creates a reflection of inconsistencies and inclusiveness in research in this regards, creating gaps in literature. In addressing these gaps, this study provides new empirical evidence of the impact of MSME financing in resolving the problem of unemployment in Nigeria. The following research objective, research question, and research hypothesis have been developed as a result of this study's motivation to solve the issue of rising unemployment and its challenges in Nigeria:

- Research objective: To investigate the effect of micro, small and medium enterprises financing on Unemployment rate in Nigeria.
- Research question: How does micro, small and medium enterprises financing affect Unemployment rate in Nigeria?
- Research hypothesis: Micro, small and medium enterprises financing have no significant effect on unemployment rate in Nigeria.

The remainder of the study was structured as follows: An empirical and literature review were provided in section 2. Methodology was examined in section 3. Data analysis, findings, and a discussion of the findings were presented in section 4. The study's conclusion and recommendations were presented in section 5.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1. Literature Review

2.1.1. Unemployment rate

Unemployment rate has been described by some scholars simply as the ratio that measures the proportion of a countries working age population that are un-employed or under-employed. In other words, unemployment rate is the number of people unemployed divided by people in the labor force. So, if for instance in Nigeria, 27.818 million people are out of work and 100 million people are in the labor force, then the unemployment rate would work out to be 27.818% {(27.818 m/100 m) × 100}. Labour is often the only asset and main determinant of household income as well as whether people will live in or out of poverty (Nigeria Bureau of Statistics, 2023). This makes it very important for deliberate efforts to be made to ascertain whether people work, how long they work, and the types of jobs they are engaged in to make ends meet. Before now the NBS described unemployment as working below 20 hours or did not work but searching and available but currently unemployment is described as not in employment, actively searching and available (did nothing for pay or profit). According to Nigeria Bureau of Statistics (2023), unemployment rate stood at 4.1% in Q1 2023, 4.2% in Q2 2023, and 5% in both Q3 and Q4 2023 and 5.3 in Q1 2024.

Obi and Ugulu (2022) opined that unemployment is a major challenge facing the socio-economic life of most developing nations and it deters the development agenda, security of lives and properties, and peaceful co-existence of a nation. Employment is a key channel through which growth translates into poverty reduction but many developing countries, including Africa, have grown rapidly over the past decades without a substantial reduction in poverty (Zuzana et al., 2020). Micro and Small Enterprises provide employment opportunity and income generating system to those who do not have access to the formal sector employment (Wakuma, 2018).

2.1.2. Deposit money banks credit to MSMEs Financing

Deposit money banks (DMBs) are commercial banks and other financial institutions that carry out financial functions and services of demand deposits mobilization, loan administration, and financial advisory among other services. The DMBs accept deposits from their customers, give out business, auto and mortgage loans out of these deposit mobilizations, create products like savings and certificates of deposit for its customers and offer other services that contribute to economic growth and wellbeing of the customers. They act as financial intermediaries that channel surplus money from depositors to organizations and individuals that may need them for various purposes. Credit creation is the most crucial function of the DMBs as this facilitates the engagement by companies and individuals in productive entrepreneurship ventures that produce goods and services, generate employment and grow the economy.

Deposit Money Banks' credit to MSMEs is a measure of the proportion of credits by the financial institutions for the establishment and growth of businesses that are channeled strictly to MSMEs activities in a nation. In all economies, developing and developed, access to bank credit is crucial in facilitating establishment of businesses, job creation, and transforming small businesses into strong enterprises. When an SME has access to credit facilities, it improves the execution of its entrepreneurial endeavors (Maziri and Chivandi, 2020).

2.1.3. Development banks credit to MSMEs

Development banks or development financial institutions are financial institutions that provide risk capital for economic development projects on a non-commercial basis. They are usually set up by governments or non-profit organizations to take on the responsibility of financing key projects that the traditional commercial banks will not be able to handle. The development banks exist to alleviate financing challenges that are faced by business segments that cannot be accommodated by the deposit money banks particularly the MSMEs (CBN, 2010). Nwankwo and James (2017) stated that Development Financial Institutions are created for the purposes of improving on the gaps of regular financial institution like commercial banks who have failed in providing credits to micro, small, medium enterprises. They therefore act as catalysts for accelerated economic growth and human resources development.

2.1.4. Micro finance banks credit to MSMEs

Microfinance bank can be seen as an institution projected to benefit the low-income class of a developing country like Nigeria, both in rural and urban areas. Microfinance banking is about providing financial services to the economically poor and low-income household, who are customarily not served by the conventional financial institution (CBN, 2005). The word "micro" suggests the smallness of the amount involved and which makes it peculiar to the poor who specifically need them to run their small business and earn a living. Micro finance banks services offer include microcredit, saving, payment systems, insurance, pension, and other non-financial services such as business advisory services, entrepreneur development services, and market linkage services (Olufolahan et al., 2023). Its financial services target small-scale entrepreneurial activities of the poor who may otherwise be financially excluded. The micro-finance program must be such that can serve as seed capital to provide fund for the development of promising ideas or products. There are many school leavers with promising ideas and many handicraft workers who need only small seed capital to move out of poverty.

2.2. Theoretical Review

2.2.1. Finance gap theory

Wai-chung Yeung (2017) claimed that economist Hirschman introduced the Finance Gap Theory in his 1958 book "The Strategy of Economic Development," where he discussed the difficulties developing nations face in obtaining sufficient funding for their economic development initiatives. This theory is also referred to as the Financing Gap Theory. According to the Finance Gap Theory, there is frequently a discrepancy between the financial resources needed for development initiatives and the resources that are accessible from both domestic and foreign sources, necessitating the creation of novel approaches to close this gap. Many MSMEs still exist with excellent and promising ventures and business concepts that, if money is available, can be used profitably; nevertheless, they are unable to secure financing from the official financial system. There is a disparity for both equity financing and credits.

The notions and ideas that form the foundation of the theory are predicated on a few assumptions. The existence of funding restrictions and investment demands is one of the presumptions. The Finance Gap Theory acknowledges that developing nations may confront financial obstacles that make it more difficult for them to raise the necessary funds for these projects, but it also expects that these nations would have significant investment demands for economic development initiatives. In his work, Schumpeter, 1911), covered the difficulties caused by financial limitations as well as the investment requirements of developing nations. The theory's relevance of external assistance is another presumption. According to the hypothesis, external help such as investments or foreign aid is essential to closing the funding gap. It recognizes the need of foreign assistance in meeting the financial needs for development, especially for emerging and developing nations.

2.2.2. Schumpeter theory of economic growth and development

Joseph Schumpeter, an Austrian economist, is linked to the Schumpeterian theory of economic development and growth. In his book "The Theory of Economic Development" (Schumpeter, 1911), Joseph Schumpeter developed his theory of economic development and examined the roles that innovation, entrepreneurship, and dynamic economic processes play in promoting growth and development. He popularized the idea of entrepreneurship and innovation and held that the creative individual is the backbone of capitalism and the primary engine of economic expansion. In simple terms, the Schumpeter theory of growth and innovation states that economic growth is driven by entrepreneurs who create new products, services, and production methods that disrupt the status quo and lead to increased productivity. This disruption, known as "creative destruction," causes old businesses to fail and new businesses to emerge, driving the cycle of growth and innovation. Schumpeter contended that efficient financial sector can assist in expanding output through the provision of credit, coupled with other non-financial services to the MSMEs which ultimately expand income level through investment in productive ventures (Olufolahan et al., 2023). The authors further opined that Schumpeter theory is the only theory of financial development and industrial growth that gives a comprehensive explanation of the direct and indirect linkage effect of efficient financial sector and development of MSMEs.

2.3. Empirical Review

2.3.1. MSMEs financing and unemployment rates

Deepika and Diwakar (2024) looked at MSMEs as the growth engine for India to achieve sustainable development. This study was completely based upon secondary data and with the help of the annual report of MSMEs (2022-23 December). The study objective was to reveal the employment generation through MSMEs in India. The study concluded that the growth in the number of enterprises through the establishment of MSMEs eliminate unemployment in rural and urban areas in India. This research outcome is in agreement with the work of Elfine et al. (2024) which states that MSMEs credit helps MSME players to develop their businesses and increase the number of their staff. However, it contradicts the study outcome of Nnabu et al. (2017) which states that bank credit to SMEs and personal savings has no effect on unemployment.

Elfine et al. (2024) carried out a study on the analysis of MSME Loans on Economic Growth in Central Sulawesi in 2015-2022. The aim of this research was to analyze the influence of MSME credit on economic growth in Central Sulawesi. This research used a simple regression method. The study covered the period from 2015 to 2022, using quarterly data. The data used includes MSME credit and the Constant Price GRDP of Central Sulawesi. The data used in this research are sourced from Bank Indonesia and the Central Statistics Agency of Central Sulawesi. The study found that MSMEs credit will help MSME players to develop their businesses, increase the number of workers and impact on economic growth. This finding conformed to the work of Saleh and Usman (2024) which concluded that MSMEs are key tools for poverty reduction through employment creation. On the other hand, it counters the study result of Chukwu et al. (2024) which found that commercial banks credit to SMEs causes increasing trend in unemployment rate.

Saleh and Usman (2024) examined MSMEs as a panacea for poverty reduction in Minna, Niger State of Nigeria. The paper tried to ascertain the contribution of micro, small, and medium enterprises (MSMEs) in their capacities to reduce poverty in the State. The study was descriptive in nature and based on secondary data. Relevant information was collected from various research papers, journals, magazines of national and international publications, annual reports from MDAs, books, statistics, and websites of both public and private sector. The authors discovered that MSMEs are key tools for poverty reduction by stimulating employment in Niger State. The result is in tandem with the outcome of Endris and Kasseg (2022) that stated that MSMEs contribute to creating employment and alleviating poverty. However, the study outcome did not agree with research result of Malamulo (2018) which confirmed that expansion of MSMEs does not lead to youth employment.

In order to ascertain the impact of small and medium scale financing on employment reduction in Nigeria from 2005 to 2021, Chukwu et al. (2024) conducted research. Commercial banks' credit to SMEs, microfinance banks' credit and lending rate were adopted as the independent variables while unemployment rate was used as the dependent variable. The study used multiple regression analysis technique. The data constituted annual time series spanning 2005-2021 which were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin 2021 edition and the National Bureau of Statistics (NBS) various issues. The results indicate that the trend of commercial banks credit to SMEs, micro finance bank loans and lending rate caused increasing trend on unemployment rate in Nigeria. The result of Chukwu et al. (2024) agreed with the study of Okolie et al. (2018) that showed that bank credit to MSMEs in Nigeria did not have a positive and significant influence on Nigeria employment market. Conversely, the research by Jackie et al. (2022) concluded that MSMEs create employment and reduce poverty.

Ekpenyong and Agbo (2024) modelled the impact of financial inclusion on poverty reduction in Nigeria. The objective of the study was to empirically investigate the impact of financial inclusion on poverty reduction in Nigeria for the period 1987 to 2022. To achieve the study objective, time series data were collected from the publications of Central Bank of Nigeria, National Bureau of Statistics and World Development Indicators of the World Bank data. The Ordinary Least Squares regression technique was used to estimate the variables coefficient. The results indicate that financial inclusion has a positive impact on reduction of poverty index, contributes to employment generation and income and enhances the quality of life of citizens. The result is in tandem with the work of Banerjee et al. (2017) which stated that SME finance has significant potential for creating jobs and increasing house hold income. On a contrary note, the research by Chukwu et al. (2024) stated that commercial and micro finance banks credit caused increase in unemployment rate in Nigeria.

In Cross River State, Nigeria, Atah et al. (2023) looked at the reengineering of small-scale businesses as indicators of youth employment and poverty reduction. Data for the study were gathered through the use of questionnaires in a survey research design. The complete research population of 260 registered businessmen and women were given the identical instrument. The multivariate analysis of variance (MANOVA) statistic was used to test the hypothesis at the 0.05 level of significance after the data had been evaluated using means and standard deviation. The study came to the conclusion that financial assistance had no discernible impact on adolescent employment or poverty alleviation. This research outcome is in agreement with the work of Nnabu et al. in 2017 which states that bank credit to SMEs and personal savings has no effect on unemployment. However, it contradicts the study outcome of Mafruhat et al. (2023) that concluded that MSMEs create employment and reduce poverty.

Maran and Jeevarathinam (2023) used secondary data from 2006 to 2016 taken from the Ministry of MSME's annual report 2020-2021 to examine the MSME sector's present status and performance in the Indian economy following the Covid 19 era. The manufacturing, trade, and electrical sectors were the primary subjects of the study. The authors discovered that there were 633 businesses involved in all types of economic activity, and that these businesses produced 11.10 crore job opportunities across the nation's sectors. The result of Maran and Jeevarathinam (2023) is in tandem with the outcome of Endris and Kasseg (2022) that stated that MSMEs contribute to creating employment and alleviating poverty. However, the study outcome did not agree with research result of Malamulo (2018) which confirmed that expansion of MSMEs does not lead to youth employment.

In order to ascertain how small and medium-sized businesses contribute to the economic development of Kogi State, Nigeria, Attah and Wada (2023) conducted research. Examining how small and medium-sized businesses affect the creation of jobs in the State and their effect on reducing poverty was the main goal. Survey design techniques were used in this study, which used data from primary and secondary sources. 134 SMEs in the state of Kogi comprises the study population. The population's sample size of 100 was chosen using Taro Yamane's formula. The survey was distributed to the 100 respondents and was designed using a 5-point Likert scale approach. According to the study, small and medium-sized businesses in Kogi State, Nigeria, significantly reduce poverty and have a favorable impact on creating jobs. The results indicate that Kogi State, Nigeria's economic growth is significantly influenced by small and medium-sized businesses. The result of Attah and Wada is in accord with the work of Zafar et al. (2018) which concluded that SMEs provide jobs that help Pakistan economy reduce poverty. But Okolie et al. (2018) study showed that bank credit to MSMEs in Nigeria did not have a positive and significant influence on Nigeria employment market.

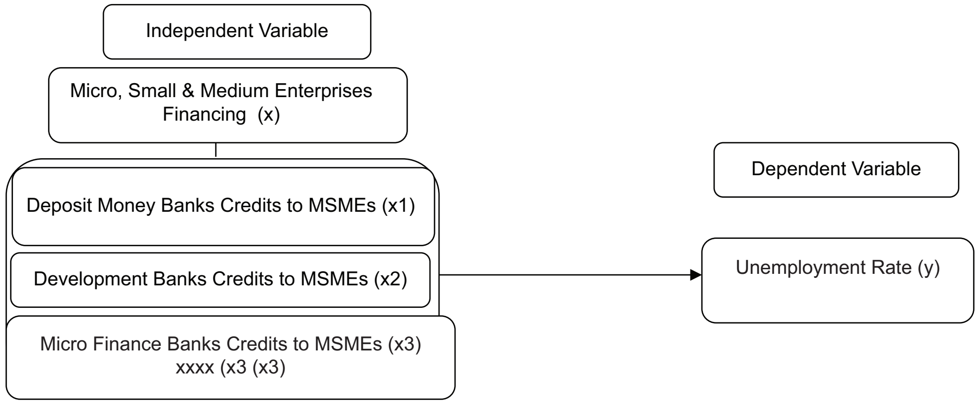
Eneanya (2023) examined the influence of ICT entrepreneurship training on employment generation in post-COVID-19 epidemic in Ikeja Local Government, Lagos State, Nigeria. The study's design was a questionnaire. Secondary sources, including published works, books, journal articles, government documents, and newspapers, were used to gather data. A random sample of 128 respondents was taken. The findings showed that ICT Entrepreneurship training has promoted job creation and reduction of youths' unemployment in Ikeja Local Government of Lagos State and the author concluded that ICT entrepreneurship training promotes job creation and reduction of youths' unemployment in Lagos State. Eneanya (2023) research result agreed with Jackie et al. (2022) which stated that MSMEs create employment and reduce poverty. On the contrary, Nnabu et al. (2017) concluded that SME development increases production but has failed to address the problem of reducing unemployment and poverty.

3. METHODOLOGY

This study examined the effect of micro, small and medium enterprise financing in Nigeria. An *ex-post facto* research design was employed using a time series data for a population of 32 years spanning from 1992 to 2023. A purposive sampling technique was adopted for the selection of the period. The study extracted the data used from the Central Bank of Nigeria Statistics Bulletin, World development indicators database, World income inequality database and Transparency International. The Validity and reliability of data were premised on the statutory audit of the financial statements of the government agencies by the office of the Auditor General of the Federation. Descriptive and inferential (multiple linear regression) statistics were used to analyze the data at 5% significance level. The study employed deposit money banks credit to MSMEs, development banks credit to MSMEs, and micro finance banks credit to MSMEs as measures of micro, small and medium enterprise financing in this study.

3.1. Research Conceptual Model

The diagram below demonstrates the researcher's conceptual model indicating the nexus between micro, small and medium enterprises financing and unemployment rate in Nigeria



Source: Researchers (2025)

3.2. Model Specification

3.2.1. Functional relationship

$$Y_t = \beta o + X_t + \mu_t$$

$$UNEMPR_t = \beta_0 + \beta_1\ DMBC_t + \beta_2\ DVBC_t + \beta_3\ MFBC_t + \mu_t$$

Where: UNEMPR = Unemployment rate, MSME = Micro, small and medium enterprises, DMBC = Deposit money banks to MSMEs, DVBC = Development banks credit to MSMEs MSME, and MFBC = Micro finance banks credit to MSMEs.

t = Time series, β = Coefficient, μ = Error terms/stochastic value.

4. DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

4.1. VAR Lag Order Selection Criteria - MSMEs Financing and Unemployment Rate

The VAR lag order selection criteria table (Table 1) provides critical insights into the optimal lag structure for the vector autoregression (VAR) model analyzing the relationship between the Unemployment rate and MSMEs Financing.

Based on the results in Table 1, lag 1 is identified as optimal. This is evidenced by the lowest values for the final prediction error (FPE = 0.000713), Akaike Information Criterion (AIC = 4.098630), Schwarz Criterion (SC = 4.845935), and Hannan-Quinn Criterion (HQ = 4.337699). While lag 2 shows an improvement in the likelihood ratio (LR = 13.65418), the higher FPE and AIC values at lag 2 suggest that a more complex model is unnecessary. Thus, lag 1 is preferred as it offers the most efficient balance between model simplicity and predictive accuracy.

4.2. Cointegration Test - Unemployment Rate and MSMEs Financing

The Cointegration Test results (Table 2) evaluate the long-term relationship between Unemployment rate and MSMEs Financing.

The Cointegration Test confirms a single long-term relationship between the Unemployment rate and MSMEs Financing. This finding is critical for subsequent analyses, as it suggests that any short-term deviations from equilibrium will eventually adjust towards this long-term relationship, justifying the use of vector error correction models for further exploration.

4.3. VECM Results - MSMEs Financing and Unemployment Rate

The vector error correction model (VECM) presented in Table 3 aims to explore the dynamic relationship between the Unemployment rate (UNEMPR) and various financing sources for micro, small, and medium enterprises (MSMEs) in Nigeria, specifically focusing on deposit money banks credit (DMBC), development banks credit (DVBC), and micro finance banks credit (MFBC). The model results indicate both short-run and long-run dynamics, as well as the cointegration relationship among the variables. The results of the target model was extracted using system of equation.

The coefficient for the cointegrating equation (C[1]: CointEq1) is −0.4963, which is statistically significant at the 1% level (P = 0.0018). This negative value indicates that deviations from the long-run equilibrium are corrected at a rate of approximately 49.63% per period. Such a robust adjustment coefficient suggests a strong long-term relationship among the variables, where the unemployment rate will tend to revert towards its equilibrium level following disturbances, highlighting the importance of maintaining stability in MSME financing to support employment levels. Examining the short-run dynamics, the lagged dependent variable (C[2]: D[UNEMPR(−1)]) displays a coefficient of 0.8905, significant at the 1% level ($P < 0.0000$). This indicates that a prior increase in the unemployment rate has a strong positive effect on the current period's unemployment rate, suggesting persistence in employment levels. This finding underscores the inherent stability in the unemployment rate, as previous performance significantly influences current conditions.

Among the financing sources, the coefficient for DMBC (C[3]: D[LOG(DMBC[−1])]) is 0.2529 and significant at the 5% level (P = 0.0347). This positive relationship implies that an increase in credit from Deposit Money Banks to MSMEs significantly contributes to enhancing unemployment rates. Conversely, the coefficient for Development Banks Credit (C[4]: D[LOG(DVBC[−1])]) is −0.1274 and statistically insignificant (P = 0.8240). This suggests that financing from development banks reduces unemployment but does not exert a meaningful

Table 1: Measurement of variable

Variable	Abbreviation	Measurements	Sources
Dependent variable			
Unemployment rate	UNEMPR	Rate of employment at year end	World Development Indicator database
Independent variable MSMEs financing			
Deposit money banks credit to MSMEs	DMBC	Total Deposit money banks credits to MSMEs within the period	CBN statistical bulletin
Development Banks Credits to MSMEs	DVBC	Total Development banks credits to MSMES within the period	CBN statistical bulletin
Micro Finance Banks credit to MSMEs	MFBC	Total Micro Finance credits to MSMEs	CBN statistical bulletin

Source: Researcher 2025

Table 2: VAR lag order selection criteria - MSMEs financing and unemployment rate

Lag	LogL	LR	FPE	AIC	SC	HQ
1	−45.47945	NA	0.000713*	4.098630*	4.845935*	4.337699*
2	−36.16978	13.65418	0.001166	4.544652	6.039263	5.022791

Source: Researcher's Computation using Eviews 2025. LR: Sequential modified LR test statistic (each test at 5% level), FPE: Final prediction error, AIC: Akaike information criterion, SC: Schwarz information criterion, HQ: Hannan-Quinn information criterion. *Indicates lag order selected by the criterion

Table 3: Cointegration test - MSMEs financing and unemployment rate

Hypothesized	Trace			Max.		
No. of CE(s)	Eigenvalue	Statistic	Probability**	Eigenvalue	Eigenvalue	Probability **
None*	0.619093	48.26573	0.0457	0.619093	28.95599	0.0332
At most 1	0.341062	19.30974	0.4708	0.341062	12.51378	0.4978
At most 2	0.201564	6.795958	0.6015	0.201564	6.753012	0.5188
At most 3	0.001431	0.042946	0.8358	0.001431	0.042946	0.8358

Source: Researcher's Computation using Eviews 2025. Trace test indicates 1 cointegrating eqn (s) at the 0.05 level, *Denotes rejection of the hypothesis at the 0.05 level and **MacKinnon-Haug-Michelis (1999) P values

impact on employment levels, indicating potential limitations in the effectiveness of this financing source in the context of job creation. The coefficient for Micro Finance Banks Credit (C[5]: D[LOG(MFBC[−1])]) is 0.2231 and significant at the 5% level (P = 0.0292). This finding indicates that credit from microfinance institutions positively affects unemployment rates, further emphasizing the role of diversified financial support for MSMEs in fostering employment. The significant effects of both DMBC and MFBC reinforce the notion that improved access to credit is crucial for stimulating employment growth within the MSME sector.

The overall model diagnostic statistics reveal an R-squared value of 0.5050, indicating that approximately 50.50% of the variation in the unemployment rate is explained by the model. The adjusted R-squared of 0.4018 suggests that the model retains a reasonable explanatory power, considering the number of predictors used. The F-statistic of 4.896 (P = 0.0031) signifies that the model is statistically significant as a whole. Additionally, the Durbin-Watson statistic of 1.9902 implies the absence of autocorrelation in the residuals, ensuring the reliability of the results.

4.4. Granger Causality Results - MSMEs Financing and Unemployment Rate

The Granger causality tests, as presented in Table 4, investigate the potential predictive relationships among the Unemployment rate (UNEMPR) and the financing channels for micro, small, and medium enterprises (MSMEs), specifically deposit money banks credit (DMBC), development banks credit (DVBC), and micro finance banks credit (MFBC). The analysis is conducted using the Chi-squared (χ^2) statistic to determine whether past values of one variable provide statistically significant information about future values of another variable, thereby implying a causal relationship.

Examining the results for UNEMPR as the dependent variable reveals that DMBC has a statistically significant influence on employment outcomes, indicated by a χ^2 statistic of 5.0541 and a P = 0.0485, which is just below the 5% significance threshold. This implies that past fluctuations in DMBC significantly contribute to changes in UNEMPR, suggesting that increased access to credit for MSMEs may enhance employment levels. Conversely, while LOG (MFBC) exhibits significance with a χ^2 statistic of 7.8215 and a P = 0.0200, it is essential to note that LOG (DVBC) does not show a statistically significant predictive capability towards UNEMPR, with a χ^2 statistic of 2.3627 and a P = 0.3069. Thus, the results collectively suggest that DMBC and MFBC are relevant predictors of unemployment rate changes, while DVBC appears to lack a significant direct influence.

When the analysis is reversed to assess whether UNEMPR Granger-causes changes in the financing variables, the findings indicate no significant relationships. For example, the χ^2 statistic for LOG(DMBC) is 1.6247 with a P = 0.2024, suggesting that past unemployment rates do not significantly predict future DMBC levels. Similar results are observed for LOG(DVBC) and LOG(MFBC), with χ^2 values of 0.7134 and 0.0002, respectively, both yielding high P-values (0.3983 and 0.9876). This lack of causality in the opposite direction further strengthens the notion that financing mechanisms primarily drive employment changes rather than vice versa.

The aggregate Chi-squared statistic for all three financing channels collectively influencing UNEMPR stands at 16.7901 with a corresponding P = 0.0101, indicating that together, DMBC, DVBC, and MFBC have a statistically significant combined effect on employment outcomes. This result underscores the importance of a multifaceted approach to MSME financing, suggesting that while DMBC is the most influential factor, the combination of various financing sources may yield synergistic effects on employment generation.

4.5. Diagnostic Tests Results - Unemployment Rate and MSMEs Financing

The estimated VEC model is further validated through Residual Serial Correlation LM Tests to check for autocorrelations, where the null hypothesis states that there is no serial correlation. Additionally, Residual Heteroskedasticity Tests are conducted, with the null hypothesis indicating no heteroskedasticity in the error term. The results of these tests are shown in Table 5, which includes the inverse roots of the AR.

The results presented in Table 5 show that the test for heteroskedasticity, with a probability value of 0.299, leads to the acceptance of the null hypothesis of no heteroskedasticity in the error term. Additionally, the LM Test for serial correlation, which yielded an insignificant value (Prob. = 0.664), indicates that there is no serial correlation present. Furthermore, the stability condition assessment for the model reveals that no roots lie outside the unit circle, suggesting that the VECM models meet the stability condition. At 5% level of significance, the F-statistic is 4.896, with a degree of freedom of 4, 27 and probability of F-statistics of 0.0031 which is less than the chosen significance level of 0.05 for thus study, therefore, the study rejected the null hypothesis which states that "Micro, small and medium scale financing have no significant effect on unemployment rate in Nigeria," rather accepted the alternative and concluded that micro, small and medium scale financing had significant effect on unemployment rate in Nigeria.

4.6. Discussion of Findings

This Model revealed mixed results as some individual elements of the study model exhibited different characteristics. However, the result of the combined explanatory variables of the F-statistics showed a significant effect, suggesting that micro, small and medium enterprises financing had a significant effect on unemployment rate. This result is consistent with some other prior studies that have found similar results (Okolie et al., 2018; Maran and Jeevarathinam; Nnabu et al., 2017; Endris and Kasseg, 2022; Eneanya, 2023; Nwanna and Okeke, 2022; Okolie et al., 2018). For instance, the study carried out by Okolie et al., 2018) showed that bank credit to MSMEs in Nigeria did not have a positive and significant influence on Nigeria employment market. Obi and Ugulu (2022) had a similar result, while also similar with the one obtained by Maran and Jeevarathinam (2023) which concluded that MSMEs development is positive to employment creation. In addition, the study of Nnabu et al. (2017) found that bank credit to SMEs and personal savings had effect on unemployment. Endris and Kasseg (2022) concurs with the research of Eneanya

Table 4: VECM results - MSMEs financing and unemployment rate

Dependent variable: D (UEMR)	Coefficient	Standard error	t-statistic	Probability
C(1): CointEq1	−0.4963***	0.1412	−3.5160	0.0018
C(2): D (UNEMPR[−1])	0.8905***	0.1405	6.3375	0.0000
C(3): D (LOG[DMBC(−1)])	0.2529**	0.1102	2.2955	0.0347
C(4): D (LOG[DVBC(−1)])	−0.1274	0.1282	−0.1323	0.8240
C(5): D (LOG[MFBC(−1)])	0.2231**	0.0937	2.3817	0.0292
C(6): C	−0.0254	0.0536	−0.4741	0.6397
R-squared	0.5050	Mean dependent var		-0.0377
Adjusted R-squared	0.4018	S.D. dependent var		0.3275
S.E. of regression	0.2533	Akaike info criterion		0.2686
Sum squared resid	1.5402	Schwarz criterion		0.5488
Log likelihood	1.9711	Hannan-Quinn criter.		0.3582
F-statistic	4.896***	Durbin-Watson stat		1.9902
Probability (F-statistic)	0.0031			

Source: Researcher's computation using Eviews 2025. UEMR: Unemployment rate, DMBC: Deposit money Banks credit to MSMEs, DVBC: Development Banks Credit to MSMEs MSME, and MFBC: Micro Finance Banks Credit to MSMEs. *, ** and *** denote 10%, 5% and 1% levels of significance respectively

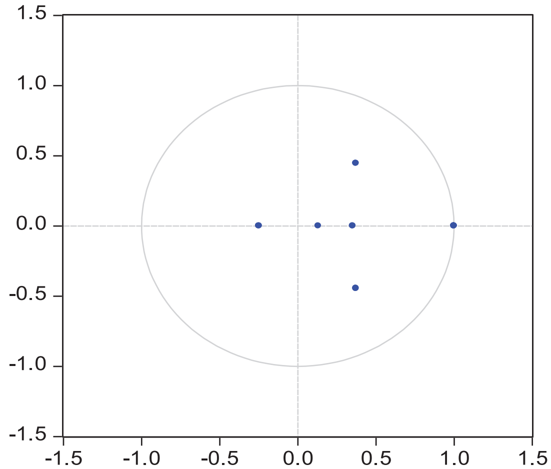
Table 5: Granger causality results - MSMEs financing and unemployment rate

Dependent variable	Test results	LOG (DMBC)	LOG (DVBC)	LOG (MFBC)	All	Conclusion
UNEMPR	χ^2	5.0541**	2.3627	7.8215**	16.7901**	LOG (DMBC), LOG (MFBC) → UNEMPR
	P-value	0.0485	0.3069	0.0200	0.0101	
LOG (DMBC)	χ^2	1.6247	2.2715	0.0407	3.4741	None
	P-value	0.2024	0.1318	0.8402	0.3241	
LOG (DVBC)	χ^2	0.7134	0.0584	0.0499	0.8583	None
	P-value	0.3983	0.8091	0.8233	0.8355	
LOG (MFBC)	χ^2	0.0002	1.4530	0.2240	1.8664	None
	P-value	0.9876	0.2280	0.6360	0.6006	

Source: Researcher's computation using E-views 2025. UNEMPR: Unemployment rate, DMBC: Deposit Money Banks credit to MSMEs, DVBC: Development Banks credit to MSMEs MSME, and MFBC: Micro Finance Banks Credit to MSMEs. *, ** and ***Denote10%, 5% and 1% levels of significance respectively

Table 6: Diagnostic Tests Results - MSMEs Financing and Unemployment rate

Test	Test-stat.	df	Probability
VEC residual heteroskedasticity	210.027	100	0.299
VEC residual serial correlation LM tests	13.120	16	0.664



Source: Researcher's computation using E-views 2025

(2023) which concluded that entrepreneurship training promotes job creation and reduce unemployment, Than and Penpokaai (2020) which concluded that training offered by MSMEs create job opportunities and reduce poverty.

On the contrary, some other previous studies have documented results that are not consistent with the result found in this model (Malamulo, 2018). Example, the study conducted by Malamulo (2018) discovered that MSME activities do not lead to youth employment. Abdulkareem (2023) disagreed with the study. He discovered that unemployment and poverty situation in Nigeria have been on the increase despite the government poverty alleviations programs via the SMEs channel; Adegbie et al. (2023) examined the effect of microfinance on unemployment rate and concluded that there is no relationship found between microfinance activities and unemployment rate. Bello (2022) found that community empowerment through MSMEs in Sampang District in Indonesia has not empowered the people optimally.

5. CONCLUSION, RECOMMENDATIONS AND IMPLICATIONS OF THE STUDY

The study investigated the effect of micro, small and medium enterprise financing on unemployment rate in Nigeria. The study measure of micro, small and median enterprises using regression analysis revealed a significant long-run relationship between unemployment rates and MSMEs" financing, characterized by a robust adjustment mechanism towards equilibrium. Financing from deposit money banks and micro finance banks demonstrates a significant positive impact on unemployment, whereas development banks credit showed a negative but insignificant effect. The result of the hypothesis tested revealed that micro, small and medium enterprises' financing had a significant effect on unemployment rates in Nigeria based on F -statistics values of 4.896 and P = 0.0031.

5.1. Implication of Findings

The study examined the effect of micro, small and medium enterprises financing on unemployment rate in Nigeria and the result of the analysis has implications on the micro, small and medium enterprises (MSMEs) in Nigeria. The findings indicated that enhanced credit availability to MSMEs via dmbc and mfbc significantly predicts higher unemployment rates, thereby affirming the critical role of financial support in fostering economic development. Contrariwise, the lack of predictive power of UNEMPR on the financing variables implies that MSMEs should prioritize improving access to credit from the microfinance banks and deposit money banks who are willing to assist them obtain loans as a strategic approach to enhance employment outcomes in the economy. Also result from the VECM analysis revealed a significant long-run relationship between unemployment rates and MSME financing, characterized by a robust adjustment mechanism towards equilibrium. The strong persistence of unemployment rates highlights the importance of prior levels in influencing current outcomes. Financing from deposit money banks and micro finance banks demonstrates a significant positive impact on unemployment, whereas development banks credit does have negative but not significant effect on unemployment. These findings underscore the necessity for MSMEs to prioritize their need to enhance the accessibility and effectiveness of financing options from the banks to support employment growth in Nigeria, thus facilitating broader economic development. In conclusion, the Granger causality analysis demonstrated a possible compelling link between MSME financing, particularly through Deposit Money Banks, and unemployment rate outcomes.

5.2. Contribution to Knowledge

In contributing to knowledge, the policymakers will find this work useful in policy direction and in making impactful future policies in relation to providing enabling environment for micro, small and medium enterprises financing and possibilities of government and the stakeholders intensifying efforts towards poverty reduction in Nigeria. It will serve as vital information to the policymakers in Nigeria, the extent micro, small and medium enterprises financing could impact on the MSMEs having access to financing and improving poverty reduction in Nigeria and the extent the existing policies have impacted on poverty. This study provided the significance of micro, small and medium enterprise financing in mitigating the challenges of growing unemployment menace in Nigeria. A novelty research that provided an empirical evidence and highlighting great opportunities and prospect where there is an effective and sustainable MSME financing.

5.3. Recommendations

With the result that micro, small and medium enterprises' financing had a significant effect on unemployment rates in Nigeria, the government through the Central Bank of Nigeria should give more focus on funding through the Development banks to ensure enhanced and significant contribution to employment creation as their financing was negative to unemployment. Furthermore, because the deposit money banks and microfinance banks financing had positive and significant effect on unemployment, the study recommended that the Central Bank of Nigeria should exercise more intensive monitory and oversight functions directing the financial institutions to make positive and significant impact on MSMEs financing in Nigeria by ensuring their finances are deployed optimally to employment creation ventures. It is imperative also for other banks to understudy the development banks approach to identify the reason behind their success in unemployment reduction.

REFERENCES

Abdulkareem, A. K. (2023), Financial inclusion and poverty reduction among the operators in the small and medium scale enterprises in Lagos State. Ilorin Journal of Economic Policy, 10(1), 15-31.

Adegbie, F.F., Ajayi, A., Aguguom, T.A., Otitolaiye, E.D. (2023), Diversification of the economy, tax revenue and sustainable growth in Nigeria. International Journal of Innovative Research and Scientific Studies, 6(1), 115-127.

Akin George, O., Adefisayo, A.E., Ojo, L.B., Aransiola , I.J., and Ayomitunde , A. T. (2020). Reinvestigating enterpreneurial financing and poverty eradication in Nigeria: Any difference from the case of SMEs? Journal of Accounting and Finance and Management, 10(3), 77-87.

Atah, C., Ushie, G.B., Chukwurah, M., Idike, I.M., Ochui, M.O. (2023), Re-engineering small-scale business entreprises as predictors of youth employment and poverty alleviation. Journal of International Cooperation and Development, 6(1), 30-45.

Attah, E.Y., Wada, J. (2023), Assessing the contribution of small and medium entreprises to the economic growth of Kogi State, Nigeria. African Journal of Economics and Sustainable Development, 6(1), 129-136.

Banerjee, P.K., Mamum, A.A., Hague, M., Amin, M.R., Islam, E. (2017), SME's Finance and Inclusive Growth: Bangladesh Perspective. Mirpur, Dhaka: Bangladesh Institute of Bank Management, p1-58.

Bello, S.A. (2022), Bank of industry micro, small and medium enterprises financing and poverty reduction in North-Central Nigeria. Journal of Global Economics and Business, 3(8), 1-18.

Central Bank of Nigeria. (2005), Central Bank of Nigeria Statistical Bulletin. Vol. 16. Nigeria: Central Bank of Nigeria, p1-512.

Central Bank of Nigeria. (2010), N200 Billion Intervention Fund for Re-Financing and Restructuring of Banks Loans to the Manufacturing Sector. Abuja: CBN.

Chukwu, M.K., Dimoji, F.A., Uwakwe, U.E. (2024), Impact of small and medium scale financing on unemployment reduction: Evidence from Nigeria (2005-2021). International Journal of Business and Law Research, 12(1), 131-143.

Deepika, S., Diwakar, B. (2024), MSMEs: The growth engine of India to achieve sustainable development. Educational Administration: Theory and Practice, 30 (5), 2018-2089.

Ekpenyong, G.U., Agbo, L.E. (2024), Modelling the impact of financial inclusion on poverty reduction in Nigeria. International Journal of Financial Resources and Business Development, 5(7), 235-240.

Elfine, L.A., Rita, Y., Edhi, T., Yunus, S., Musdayati, M. (2024), Analysis of MSMEs loans on economic growth in central sulawesi in 2015-2022. Golden Ratio of Data in Summary, 4(2), 187-195.

Endris, E., Kassegn, A. (2022), The role of micro, small and medium enterprises (MSMESs) to the sustainable development of Sub-Saharan Africa and its challenges: A systematic review of evidence from Ethiopia. Journal of Innovation and Entrepreneurship, 11(20), 1-18.

Eneanya, A.N. (2023), Entrepreneurship training and job creation on post Covid in Ikeja local Government area, Lagos State, Nigeria. Journal of Local Government Research and Innovation, 4, 1-9.

International Labour Organization. (2023b), ILO Supports Nigeria to Unveil Ambitious Decent. Geneva: International Labour Organization.

Jackie, E.A., Chen, H., Ahakwa, I., Atingabili, S., Ansah, K.A. (2022), Relationship between local business and employment creation for poverty reduction in Northern Ghana: The Moderating Role of Local Economic Development (LED) Policy. SAGE Open, 1-18.

Mafruhat, A. Y., Hernawati, N., Hariz, M. (2023), Effectiveness of MSMEs financing to poverty alleviation in developing countries and opportunities to reduce poverty due to Covid 1: Experience from Indonesia. Jurnal Kajian Ekonomi dan, 14(2), 81-90.

Malamulo, T.C. (2018), The Nexus between Growth of Micro, Small and Medium Enterprises and Youth Employment in Eritrea. Development Finance Centre Graduate School of Business, University of Cape Town [Thesis], p1-106.

Maran, K.P., Jeevarathinam, M. (2023), Recent developments and performance metrics of micro, small and medium enterprises in India. Seybold Report, 18(5), 2422-2426.

Maziri, E.T., Chivandi, A. (2020), Modelling key predictors that stimulate the entrepreneurial performance of small and medium-sized enterprises and poverty reduction: Perspectives from SME managers in an emerging economy. Independent Research Journal in the Management Sciences, 20(1), 1-15.

Nigeria Bureau of Statistics. (2023), The Nigeria Labour Force Statistics Report Q 2022 Q1 2023. Abuja: Nigerian Bureau of Statistics.

Nnabu, B.E., Udude, C., Egbeoma, N.E. (2017), Commercial bank credit to small and medium scale enterprises (SMEs) and unemployment reduction in Nigeria. Jounal of Humanities and Social Science, 22(7), 93-102.

Nwankwo, O., James, S.O. (2017), Empirical study of bank of industry loan to the development of MSMEs in Nigeria (2002-2013). Journal of Banking and Financial Dynamics, 1, 1-8.

Nwanna, I., Okeke, I.C. (2022), Micro finance credit and poverty alleviation in Nigeria (2008-2019). International Journal of Banking and Finance Research, 8(1), 49-60.

Obi, C.K., Ugulu, J. (2022), Does unemployment cause economic growth in Nigeria? Himalayan Economic and Business Management, 3(1), 59-66.

Ogunleye, A., Aderibigbe, E.A., Lucas, B.O., Ishola, J.A., Aderemi, J.A. (2020), Re-investigating entrepreneurship financing and poverty eradication in Nigeria: Any diffrence from the case of MSMEs. Journal of Accounting and Management, 10(3), 77-87.

Okolie, P.I., Anidiobu, G.A., Ugwuanyi, W.N. (2018), Enterpreneurship financing and its effect of unemployment rate in Nigeria: The MSMEs perspective 2001-2017. International Journal of Academic Research in Economics and Management Sciences, 7(3), 251-266.

Olufolahan, T.J., Ajisafe, R.A., Akinyele, O.D., Fagbemi, F. (2023), Efficiency of microfinance banks and performance of MSMEs in South West Nigeria. Journal of Banking and Finance Management, 4(1), 22-36.

Price, R.A. (2019), Youth Employment Needs in Nigeria; K4D Helpdesk Report 691. Brighton, UK: Institute of Development Studies.

Pricewaterhouse Coopers (2024), Building resilience-strategies for MSMEs success in a changing landscape. PWC-s MSMEs survey. 1-58

Saleh, A., Usman, M. (2024), MSMEs: A panacea for poverty reduction in minna metropolis, Niger State, Nigeria. Journal of Political Discourse, 2(2), 105-121.

Schumpeter, J.A. (1911), The Theory of Ecconmomic Development: An Inquiry into Profit, Capital, Credit, Interest and Business Cycle. United States: Havard University Press.

Than, S.M., Penpokai, N. (2020), Small and medium enterprises development and poverty reduction in Myanmar. International Journal of Scientic and Engineering Research, 11(10), 1-9.

Umoh, U., Ekpo, M.U. (2023), Enterpreneurship and poverty eradication in Akwa Ibom State: An appraisal. Covenant Journal of Entrepreneurship, 7(1), 17-29.

Wai-Chung Yeung, H. (2017), Strategy of economic development. Regional Studies, 51(2), 348-349.

Wakuma, D. (2018), The role of micro am]nd small enterprises in creating employment and poverty reduction in Jima Genet Woreda, Ethiopia. International Journal of Finance and Banking Research, 4(6), 91-100.

World Bank. (2023), The World Bank in Nigeria. Available from: https://www.worldbank.org/en/country/nigeria/overview#1 [Last accessed on 2023 Oct 25].

Zafar, M., Waqas, M., Butt, M. N. (2018), The role of small and medium enterprises on poverty reduction in developing countries: A case of Pakistan. Pakistan Business Review, 20(3), 703-713.

Zuzana, B., Thierry, K., Thierry, U.Y. (2020), Access to Finance among Small and Medium-Sized Enterprises and Job Creation in Africa. Germany: IZA Institute of Labour Economics, p1-25.