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Entrepreneurship Development on Financial Performance of Small-Scale Industry in Nigeria between 2014 and 2024

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Abstract

The aim of this study is to examine the impact of entrepreneurship development on the financial performance of small-scale industries in Nigeria from 2014 to 2024. Specifically, the study sought to find out the impact of entrepreneurship training and skills acquisition, finance, government support programs, and net profit margin on the return on assets of small-scale industries. A quantitative research approach was used in an ex post facto research design. Panel secondary data was employed in this study. The data was collected from 200 small-scale industries in Nigeria. Multiple regression analysis was employed in analyzing the data for the study. Descriptive statistics and the Hausman test were also employed in validating the results. The results show that entrepreneurship training and skills acquisition, finance, government support programs, and net profit margin have positive and significant effects on the return on assets of small-scale industries. It can be concluded that entrepreneurship development has an impact on the financial performance of small-scale industries in Nigeria. It is recommended that there should be an improvement in entrepreneurship training, finance, and government support programs in order to ensure the sustainability of small-scale industries.

Keywords: Access to Capital, Entrepreneurship growth, Financial Success, Small-Scale Industries.

1.0 Introduction

The development of entrepreneurship is increasingly being acknowledged as a critical stimulator of economic growth, industrialization, and employment creation in developing economies, such as Nigeria. The role of small-scale industries (SSIs) is central to this aspect since they represent the foundation of innovation, productivity, as well as job creation opportunities. In Nigeria, small-scale industries represent a significant faction of the economy since they form a significant proportion of Gross Domestic Product (GDP) contributions as well as income redistribution across different regions (SMEDAN, 2023).

In spite of this, small-scale industry performance over the years has varied. Although numerous such outfits are instituted in a year, most of them underperform due to lack of funds, poor managerial ability, minimal accessibility to markets as well as poor facilitation from the government. Small-scale industries' performance thus continues to be lower than levels predicted despite numerous efforts of intervention made to that end through initiatives from the government to facilitate entrepreneurship.

Development of entrepreneurship involves a chain of well-organized projects directed at nurturing entrepreneurial skills, broad access to finance, as well as institutional support and policies for small business proprietors. If well executed, it fosters improved productivity, innovation, and profitability. The drivers of entrepreneurship development, such as entrepreneurship education and skills acquisition (ETS), access to finance (ACF), and government support programs (GSP), play a significant role in improving the financial performance of small-scale industries (SSIs).

Otherwise, financial performance looks at whether organizations are effective in utilizing resources so that they continue to be profitable and stay in operation. This can be determined from such indices as Return on Assets (ROA) and Net Profit Margin (NPM). In that sense, it is critical to grasp entrepreneurial development's dependence on financial performance when addressing ways to enhance sustainability for small-scale enterprise back within Nigeria.

In the last decade (2014–2024), numerous programmes have emerged from the Nigerian government and its finance institutions, such as the Bank of Industry (BOI) SME Loan Scheme, YouWin Programme, N-Power Entrepreneurship Scheme, as well as SMEDAN Business Empowerment programmes. In spite of these programmes, small businesses' operational performance is still limited. It is thus essential to empirically explore the extent to which entrepreneurship development influences small-scale industries' financial performance in Nigeria.

In spite of several efforts directed at optimizing entrepreneurship in Nigeria, contributions from small-scale industries are still sub-optimal in the economy. Access to affordable credit facilities still proves challenging for most small-scale operators, while a good number of them are inadequately exposed to modern methods of business operations as well as technology adoption. Government initiatives are often unevenly targeted or inadequately tracked in several instances, with minimal implications on firm performance.

Poor performance of SSIs, oftentimes measured in terms of weak profit margins and lower return on assets, provides mixed evidence on whether economic developments through entrepreneurship are successful. It has been researched that while government support, along with training, can make a difference when it comes to entrepreneurial performance, empirical studies on both contributions to performance indicators in Nigeria are also not abundant. In addition, various previous studies focused largely on qualitative research or survey-based evidence while disregarding time-series or panel-based evidence that depicts long-term trends. This study overcomes that gap through the utilization of 2014-2024 panel data in running a statistical analysis of the influence of entrepreneurship training, access to finance, and government support on the profitability as well as overall performance of small-scale industries within Nigeria.

The study tries to answer the following questions:

i. How does entrepreneurship training and skills acquisition affect the financial performance of small-scale industries in Nigeria?
ii. To what extent does access to finance influence the profitability of small-scale industries?
iii. What is the effect of government support programmes on the performance of small-scale industries in Nigeria?
iv. What is the relationship between net profit margin and return on assets of small-scale industries?

The general objective of this research study is to examine the effect of entrepreneurship development on the financial performance of small-scale industries in Nigeria between 2014 and 2024. Specifically, it aims to:

i. Assess the effect of entrepreneurship training and skills acquisition (ETS) on the financial performance (ROA) of small-scale industries in Nigeria.
ii. Evaluate the impact of access to finance (ACF) on the profitability of small-scale industries.
iii. Determine the influence of government support programmes (GSP) on the financial performance of small-scale industries.
iv. Examine the relationship between net profit margin (NPM) and return on assets (ROA) among small-scale industries in Nigeria.

The following hypotheses are written in their null form:

H_{01}: Entrepreneurship training and skills acquisition have no significant effect on the financial performance of small-scale industries in Nigeria.

H_{02}: Access to finance has no significant impact on the profitability of small-scale industries in Nigeria.

H_{03}: Government support programmes have no significant influence on the financial performance of small-scale industries in Nigeria.

H_{04}: Net profit margin has no significant relationship with Return on assets of small-scale industries in Nigeria.

2.0 Literature Review

2.1 The Concept of Entrepreneurship Development

Evolution of entrepreneurship entails systematic enhancement of individuals' knowledge, skills, and attitudes so that they are enabled to detect entrepreneurial opportunities, mobilize resources needed for such opportunities, as well as run enterprises efficiently. This trajectory entails both training, economic empowerment, as well as institutional support structures that are designed to create as well as sustain business ventures (Adewale & Ojo, 2021).

In the Nigerian context, it is essential for the development of entrepreneurship as a means of reducing unemployment, boosting innovation, and achieving industrialization. The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), National Directorate of Employment (NDE), and Bank of Industry (BOI) are among those governmental organizations that have introduced a host of policies for enhancing the entrepreneurial skills and output of small-scale enterprises.

Small-Scale Industries

Small Scale Industries (SSIs) are firms that occupy 10-49 employees and possess assets ranging from ₦5 million-₦50 million without lands and buildings (SMEDAN, 2023). They are critical actors in Nigeria's economic scene since they provide jobs, promote proper income allocation, as well as support local manufacturing efforts. But SSIs are challenged with numerous issues such as limited access to finance, weak managerial abilities, poor infrastructural setups, as well as weak formulation of policies.

Financial Performance

Financial performance refers to the efficiency at which an organization utilizes its resources to generate profit and sustain its operations. It measures the ability of an organization to manage assets, equity, and liabilities with the aim of optimizing profit (Pandey, 2020). The two main indicators used in this study are:

Return on Assets (ROA): Indicates the ability of a company to translate its asset base into net income.

Net Profit Margin (NPM): This shows what proportion of each naira generated is realized as profit after paying all expenses.

Both high ROA and NPM are good performance signs whereas low or negative represent inefficiency as well as distress situations (Brigham & Houston, 2020; Gitman et al., 2015).

Entrepreneurship Training and Skills (ETS):

These include workshops, vocational programs, and managerial education that are formulated to sharpen the business skills of businessmen. This kind of education enhances creativity, innovation, as well as decision-making skills that lead to better financial outcomes (Fayolle & Gailly, 2015; Nabi et al., 2017).

Access to Finance (ACF):

Financial capital is the life of every enterprise. Access to cheap credit avails companies a chance to expand operations, acquire equipment, as well as embracing new technologies (Beck & Demirguc-Kunt, 2006). Small-scale industries within Nigeria usually cannot access finance owing to high interest charges, requirements for securities, as well as institutional constraints.

2.2 Theoretical Review

2.2.1 Schumpeter's Theory of Innovation (1934)

Schumpeter's theory shows us how critical innovation is to entrepreneurs. According to him, an entrepreneur is one who introduces new products, methods of producing things, or methods of marketing that contribute to economic expansion. In small-scale industries (SSIs), entrepreneurial training (ETS) and access to finance (ACF) are essential drivers that facilitate innovation, which in turn results in improved productivity as well as profits.

2.2.2 Resource-Based View Theory (Barney, 1991)

The Resource-Based View of the firm (RBV) asserts that firms can sustain advantage over competitors using unique internal resources physical or non-physical that are valuable, rare, and difficult to replicate. The emergence of entrepreneurship fosters such advantage through improved abilities in individuals (through education) and financial resources (by accessing capital). Therefore, firms with educated entrepreneurs and capital see improved performance financially.

2.2.3 Human Capital Theory (Becker, 1964)

Human Capital Theory asserts that investments in education and training render employees more efficient while assisting organizations in performing better. In terms of venture creation,

this implies that those who acquire skills and knowledge of administration through training are in a position to make better decisions, earn greater incomes, and continue to expand. This supports a good association between ETS and NPM from the regression findings.

2.2.4 Financial Intermediation Theory (Goldsmith, 1969)

This theory says that financial intermediaries, like banks and microfinance institutions, are very important for gathering savings and giving loans to businesses. When small industries can easily get money, they can invest in good projects, which helps them do better financially. This shows how important the ACF variable is in this study.

2.3 Empirical Review

Adewale and Ojo (2021) investigated the impact of entrepreneurship training and financial accessibility on the performance of small and medium enterprises in Lagos State, Nigeria. The study specifically focused on SMEs operating in manufacturing and trading sectors within Lagos metropolis. The researchers employed a panel data research design using data collected from selected SMEs covering the period 2010 to 2019. The data were analysed using descriptive statistics and panel regression analysis. The findings revealed that entrepreneurship training programmes and improved financial access significantly enhanced the profitability and operational efficiency of SMEs.

Brigham and Houston (2020) examined the relationship between financial management practices and firm performance among corporate firms in the United States. The study used financial data obtained from various companies and applied financial ratio analysis alongside econometric modelling techniques. The findings revealed that profitability indicators such as net profit margin have a significant positive relationship with return on assets, indicating that efficient profit management improves overall financial performance.

More so, Eze and Nwankwo (2020) examined the effect of entrepreneurship education on the performance of small-scale enterprises in South Eastern Nigeria, particularly focusing on Anambra State and Enugu State. The study adopted a survey research design and collected primary data from 150 small business owners using structured questionnaires. Multiple regression analysis was used for data analysis. The findings indicated that entrepreneurship education and skill acquisition significantly improved innovation capacity, productivity, and profitability of small-scale enterprises in the region.

Yusuf and Adebisi (2020) examined the influence of government support programmes on the financial performance of small and medium enterprises in South Western Nigeria, specifically focusing on Ogun State and Oyo State. The study employed panel data collected from SMEs between 2012 and 2018. Panel regression techniques were used for data analysis. The findings revealed that government intervention programmes such as grants, tax incentives, and entrepreneurship development schemes significantly improved the financial performance and sustainability of SMEs.

Furthermore, Okeke (2019) studied the relationship between financial accessibility and the growth of small-scale industries in Anambra State, Nigeria, with particular attention to manufacturing and service oriented small businesses located in Onitsha and Awka. The study utilised secondary data obtained from financial institutions and SME development agencies covering the period 2008 to 2017. Ordinary least squares regression analysis was employed to analyse the data. The results showed that access to credit facilities and financial support

significantly influenced the growth and financial performance of small-scale industries in the state.

Acs et al. (2018) analysed the relationship between entrepreneurial capability and business performance across several developed and developing countries using the Global Entrepreneurship and Development Index dataset. The study employed panel econometric modelling techniques to examine the influence of entrepreneurial skills, innovation, and knowledge on firm performance. The findings demonstrated that entrepreneurial capabilities significantly improve productivity and financial outcomes of firms. Beck and Demirguc Kunt (2016) investigated the role of financial accessibility in improving the performance of small and medium enterprises across developing economies in Africa, Asia, and Latin America. The study utilised cross country firm level data obtained from the World Bank Enterprise Survey. Econometric panel regression techniques were applied to analyse the relationship between financial accessibility and firm productivity. The findings indicated that firms with better access to financial services experienced higher productivity levels, increased investment capacity, and improved profitability.

Storey (2016) investigated the impact of government policies on small business development in the United Kingdom, particularly focusing on government intervention programmes aimed at supporting SMEs. The study utilised secondary data obtained from government policy reports and business performance statistics. Econometric analysis was employed to evaluate the effectiveness of these policies. The findings revealed that government financial support, training programmes, and regulatory incentives significantly improved the sustainability and performance of small businesses. Ayyagari et al. (2011) investigated the contribution of small firms to economic growth and productivity across developing countries in Asia, Africa, and Latin America. The study utilised firm level panel data obtained from international enterprise surveys. Econometric regression techniques were applied to analyse the data. The results revealed that improved access to finance and favourable policy environments significantly enhanced firm productivity, investment capacity, and profitability.

Olawale and Garwe (2010) conducted a study on the determinants of growth of small and medium enterprises in Gauteng Province, South Africa. The study focused on SMEs operating in manufacturing, retail, and service sectors within the province. Data were collected using structured questionnaires administered to SME owners. Multiple regression analysis was employed to analyse the data. The findings revealed that limited access to finance, inadequate managerial skills, and weak government support significantly constrained SME growth and performance.

2.3.1 Research Gap

The majority of the available literature on entrepreneurship training, financial accessibility, and SME performance has provided valuable insights, but there are still some gaps to be addressed in future studies. An example is that Adewale and Ojo (2021) and Okeke (2019) concentrated on manufacturing and trading SMEs, thus disregarding other emerging industries, including technology, agriculture, and creative businesses, which are gradually taking over the Nigeria economy. In the same way, geographical focus of research such as that of Eze and Nwankwo (2020); Yusuf and Adebisi (2020) was confined to South Eastern and South Western regions of Nigeria, excluding the North and rural areas where SMEs are experiencing unique challenges such as infrastructural shortages and social-political unrest. Lastly, despite the emphasis by

Storey (2016); Olawale and Garwe (2010) on the role of government interventions, not many Nigerian studies have critically assessed the gap between policy formulation and real experiences of the SMEs, especially in the context of bureaucratic inefficiency and corruption.

Therefore, sectorial, geographic, and policy gaps which highlight the necessity for more comprehensive studies on the development of SMEs.

3. Research Methodology

This study utilizes a quantitative *ex-post facto* research design, which identifies cause-and-effect relationships by interpreting previously existing data without any manipulation of the variables. This type of approach is appropriate because it utilizes the 2014-2024 secondary panel data to test the effect of entrepreneurship development indices, namely entrepreneurship training (ETS), access to capital (ACF), and government support initiatives (GSP), on the financial profitability of small-scale industries in Nigeria. Population of study: All the registered small-scale industries (SSIs) of Nigeria. According to the 2024 survey conducted by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) and the National Bureau of Statistics (NBS), there are roughly 1.9 million small-scale industries located all across the 36 states of the federation and the Federal Capital Territory (FCT). For this study, 200 small-scale industries were selectively sampled. These were sampled using the Taro Yamane formula, through which the sample size can be easily estimated at 5% significance level: A stratified random sampling technique was used to ensure sectoral representation.

3.0 Measurement of Variables

Dependent Variables: Return on Assets (ROA) = $\frac{\text{Net Profit}}{\text{Total Assets}} \times 100$

Independent Variables

Net Profit Margin (NPM)

NPM= $\frac{\text{Net Profit}}{\text{Total Revenue}} \times 100$

Entrepreneurial Training Score (ETS): ETS is measured using a numerical score or index derived from survey responses or training participation records.

Access to Capital or Finance (ACF): ACF is measured as the amount of capital obtained or the value of financial credit available to the entrepreneur, often expressed in monetary units. Greater access to finance is expected to enhance productivity and profitability, thereby increasing ROA.

Government Support Programme (GSP): GSP is measured using a binary indicator or index score showing whether the entrepreneur benefits from government programmes.

Error Term (μ): The error term captures other factors affecting entrepreneurial performance that are not included in the model. These may include managerial ability, market competition, technological factors, economic conditions, and industry specific characteristics**.**

3.1 Model Specification

The study employs a multiple regression model to examine the impact of IFRS sustainability reporting and corporate governance on financial performance of Nigerian manufacturing firms. The model is based on the Keynesian fiscal framework. The functional relationship is specified as:

$ROA_{it} = f(NPM, ETS, ACF, GSP)$

$ROA_{it} = \beta_0 + \beta_1 NPM_{it} + \beta_2 ETS_{it} + \beta_3 ACF_{it} + \beta_4 GSP_{it} + \mu_{it}$

Where: ROA_{it} = Return on Assets, NPM_{it} = Net Profit Margin (financial performance indicator), ETS_{it} = Entrepreneurship Training and Skills, ACF_{it} = Access to Finance (₦ thousands), GSP_{it} = Government Support Programmes (₦ thousands), $\beta_1,\beta_2,\beta_3,\beta_4$ = Coefficients of respective variables, β_0 = constant, i = the entrepreneur (cross sectional unit) t = the time period (year) and μ_{it} = Error term.

4. Analysis of Data

Table 4.1: Descriptive Analysis

	ROA	NPM	ETS	ACF	GSP
Mean	4.413615	6.955821	1.206457	0.818245	0.288088
Median	4.440000	6.790000	1.000000	0.000000	0.000000
Maximum	21.75000	29.19000	7.000000	8.517193	7.591206
Minimum	-7.880000	-14.45000	0.000000	0.000000	0.000000
Std. Dev.	3.744181	6.778222	1.076312	2.317108	1.375770
Skewness	0.019806	0.053847	0.931971	2.520219	4.632549
Kurtosis	3.166024	2.892561	4.377999	7.479389	22.72454
Jarque-Bera	2.669323	2.120304	492.3160	4166.275	43512.68
Probability	0.263247	0.346403	0.000000	0.000000	0.000000
Sum	9705.540	15295.85	2653.000	1799.320	633.5064
Sum Sq. Dev.	30813.53	100985.6	2546.268	11801.04	4160.252
Observations	2199	2199	2199	2199	2199

Source: Eview 7 Output

The descriptive statistics for the study variables, which include Return on Assets (ROA), Net Profit Margin (NPM), Entrepreneurial Training and Skills (ETS), Access to Capital or Finance (ACF), and Government Support Programmes (GSP), are presented in Table 4.1. These descriptive statistics highlight the characteristics of the study variables employed in the panel data analysis, covering a total of 2,199 firms from 2014 to 2024. The mean value of the ROA is 4.41. This implies that on average, the small-scale industries are able to earn a return of 4.41 percent on their asset base. The median value of 4.44 implies symmetry in the distribution of the data points. The maximum value of 21.75 implies that some of the firms are able to earn a high return on their asset base. The minimum value of -7.88 implies that there are losses for the firms. A standard deviation of 3.74 implies moderate variability in the profitability of the firms.

The Net Profit Margin variable has an average of 6.96 and a median of 6.79. This implies that most firms have an average net profit of seven percent. The maximum of 29.19 indicates that some firms have higher profit margins. On the other hand, the minimum of -14.45 implies that

some firms incur losses. The standard deviation of 6.78 implies that the firms have varying levels of profitability.

The Entrepreneurial Training and Skills (ETS) variable has mean of 1.21 and a median of 1.00. This implies that most firms have low levels of training. The maximum of 7.00 implies that some firms have higher levels of training and skill acquisition. Finally, the standard deviation of 1.08 implies that the firms have moderately variable levels of training and skill acquisition.

The Access to Capital or Finance (ACF) variable has mean of 0.82 and a median of zero. This implies that most small-scale industries have low levels of access to capital. The maximum of

8.52 implies that some firms have higher levels of access to capital. Finally, the standard deviation of 2.32 implies that the firms have substantial variability in the levels of access to capital.

From descriptive statistics, it is evident that Government Support Programmes (GSP) possess a mean equal to 0.29 and a median equal to 0. This indicates that small-scale industries hardly receive government support. The maximum value is equal to 7.59. This indicates that some small-scale industries greatly benefit from government support schemes. The standard deviation is equal to 1.38.

From skewness measurement, return on assets (ROA) and net profit margin (NPM) are approximately symmetrically distributed around the mean value, given that skewness is approximately equal to zero. On the contrary, ETS, ACF, and GSP are not symmetrically distributed around the mean value because skewness is positive. This indicates that these variables are skewed to the right or left. From kurtosis measurement, ETS, ACF, and GSP are leptokurtic because kurtosis is greater than 3.

From Jarque-Bera test measurement, ROA and NPM are normally distributed because the probability value is greater than 0.05. On the contrary, ETS, ACF, and GSP are not normally distributed because the probability value is less than 0.05. From these descriptive statistics, a clear characterization of small-scale industries is obtained.

Table 4.2: Regression Analysis

Dependent Variable: ROA
Method: Panel Least Squares
Sample: 2014 2024
Periods included: 11
Cross-sections included: 200
Total panel (unbalanced) observations: 2199

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.025470	0.135249	22.36960	0.0000
NPM	0.025472	0.011485	2.217774	0.0267
ETS	0.784256	0.071353	10.99116	0.0000
ACF	0.236542	0.033289	7.105642	0.0000
GSP	0.247305	0.055679	4.441601	0.0000

R-squared	0.088979	Mean dependent var	4.413615
Adjusted R-squared	0.087318	S.D. dependent var	3.744181

S.E. of regression	3.576980	Akaike info criterion	5.389186
Sum squared residuals	28071.76	Schwarz criterion	5.402137
Log likelihood	-5920.410	Hannan-Quinn criter.	5.393918
F-statistic	53.57196	Durbin-Watson stat	1.335525
Prob(F-statistic)	0.000000		

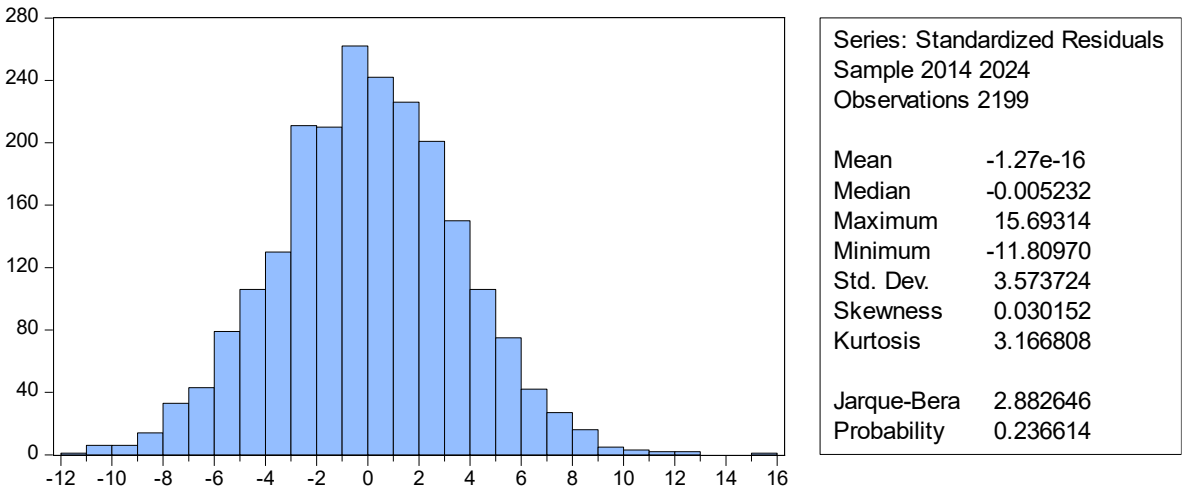
Source: Eview 7 output

The regression analysis examines the effect of entrepreneurship development on the financial performance of small-scale industries in Nigeria between 2014 and 2024.

The estimated model is expressed as: $ROA_{it} = \beta_0 + \beta_1 NPM_{it} + \beta_2 ETS_{it} + \beta_3 ACF_{it} + \beta_4 GSP_{it} + \mu_{it}$

The results of the regression analysis show that the coefficient of Net Profit Margin (NPM) is equal to 0.025472 with a p-value of 0.0267. This indicates a positive and statistically significant impact of NPM on ROA. It implies that a high profit margin results in a high profitability of small-scale industries. The coefficient of Entrepreneurial Training and Skills is equal to 0.784256 with a p-value of 0.0000. It implies a strong positive and significant impact of entrepreneurial training and skills on the financial performance of small-scale industries. The coefficient of Access to Capital or Finance is equal to 0.236542 with a p-value of 0.0000. It implies a positive and significant impact of access to capital or finance on the financial performance of small-scale industries. The coefficient of Government Support Programmes is equal to 0.247305 with a p-value of 0.0000. It implies a positive impact of government support programs on the financial performance of small-scale industries. The coefficient of determination (R-squared) of the regression analysis results is equal to 0.088979. It implies that approximately 8.9 percent of the total variation in ROA is explained by the explanatory variables of the regression analysis results. The results of the regression analysis show an F-statistic of 53.57 with a p-value of 0.0000. It implies a positive and statistically significant impact of the explanatory variables on the financial performance of small-scale industries.

4.3 Normality Test of Residuals



Source: Eview 7 Output

The figure illustrates the normality test for the standardized residuals based on the regression model developed for the data sample from 2014 to 2024, with a total of 2,199 observations. This test for normality is based on a combination of a histogram and a Jarque-Bera test, and it

is used to determine if the residuals from the regression model follow a normal distribution, a requirement for conducting a valid regression analysis. From the histogram, it is clear that the

residuals have a near-normal distribution, with a distribution that is mostly symmetrical and bell-shaped. This is a clear indication that the residuals are normally distributed. In addition, the mean for the standardized residuals is -1.27e-16, a value very close to zero. This is a clear indication that the residuals are well centered at zero, a requirement for a valid regression analysis. Furthermore, the median for the residuals is -0.005232, a value very close to zero. This is a clear indication that the residuals are well distributed, with a balance between extreme values. The residuals range from a maximum of 15.69314 and a minimum of -11.80970, a clear

indication that there are extreme values. However, these extreme values have no significant impact on the distribution of the residuals. The standard deviation is 3.573724, a clear indication of the degree of volatility in the residuals. This is a moderate standard deviation, a clear indication that the residuals are well distributed.

4.4 Hausman Test for Model Selection

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section and period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.336460	4	0.6741
Period random	0.491741	4	0.9743
Cross-section and period random	2.345005	4	0.6726

Source: Eview 7 Output

The Hausman test was conducted to check which of the two models, namely the Fixed Effects Model or the Random Effects Model, is more suitable for the description of the data. The results of the test revealed that the p-value for the cross-section and temporal random effects is 0.6726. Since this value is higher than 0.05, which is a standard level of significance, it is clear that the null hypothesis cannot be rejected. Hence, it can be stated that the Random Effects Model is more suitable for the description of the data. It is for this reason that it is believed that the results of regression derived from the Panel Least Squares method are efficient.

4.5 Discussion of the Findings

The findings of the present study revealed that entrepreneurship training and skills acquisition (ETS) has a positive and significant effect on the financial performance of small-scale industries in Nigeria, as reflected by the Return on Assets (ROA). Therefore, the regression analysis revealed that the coefficient of the independent variable is positive and the p-value is less than 0.05. Hence, the coefficient of the independent variable is significant. Therefore, the first null hypothesis that entrepreneurship training and skills acquisition have no significant effect on the financial performance of small-scale industries in Nigeria is rejected. This implies that small-scale industries in Nigeria will perform better if their entrepreneurs receive adequate managerial training and skill acquisition. This view is consistent with the findings of Olawale

and Garwe (2010), which revealed that managerial training and entrepreneurship competence have significant impacts on the performance and sustainability of small and medium-sized enterprises. Acs, Szerb, and Lloyd (2018) also argued that entrepreneurship knowledge and skill acquisition play an important role in improving the productivity and innovation of small-scale industries.

The study further shows that access to finance (ACF) has a positive and significant impact on the profitability of small-scale industries. This has led to the rejection of the second null hypothesis, which stated that access to finance has no significant impact on the profitability of small-scale industries in Nigeria. This means that if small-scale entrepreneurs are provided with adequate financial resources such as loans and credits to invest in business activities, they will be able to increase production levels and acquire modern technology to improve efficiency, hence enhancing profitability. This is in agreement with Beck and Demirgüç-Kunt (2006), who argued that access to finance is a critical determinant of small business growth and performance. On the same note, Ayyagari et al. (2011) observed that access to external finance has a significant impact on the performance and productivity of small businesses in developing economies.

The findings also show that government support programs have a positive and significant impact on the financial performance of small-scale industries. Therefore, the third null hypothesis, which states that government support programs have no significant impact on the financial performance of small-scale industries in Nigeria, can be rejected. This implies that governmental interventions in the form of grants, subsidies, tax reliefs, and entrepreneurship development programs have a positive impact on improving the operational capacities of small-scale industries. Government support programs offer entrepreneurs the necessary resources and institutional support needed for business development. This finding corroborates the findings of Storey (2016), which stated that government policies and support programs play a crucial role in supporting the development of small businesses. Further, the OECD (2021) stated that public sector support programs have a positive impact on improving entrepreneurial development and the competitiveness of small-scale industries.

In addition, the findings show that there is a positive and significant relationship between the Net Profit Margin (NPM) and Return on Assets (ROA). Therefore, the fourth null hypothesis is rejected, which stated that there is no significant relationship between the net profit margin and ROA for small-scale industries in Nigeria. The implication of this is that small-scale industries that record higher profit margins are able to generate higher returns from their assets, as they are able to manage their operating costs while maximizing revenue generation. Therefore, profit margins are a reflection of good cost management and pricing strategies, which are responsible for improved financial performance. This is in line with Brigham and Houston (2020) who argued that profitability indicators such as net profit margin are significant determinants of a firm's financial performance. Similarly, Pandey (2015) found that small-scale industries with good profit margins are able to generate higher returns from their assets due to good operational efficiency and cost management.

The findings of the study, therefore, show that entrepreneurial training, finance, government support programs, and profit efficiency are significant factors that can enhance the financial performance of small-scale industries in Nigeria.

Conclusion

The aim of this research work is to investigate the impact of entrepreneurship development on the financial performance of small-scale industries in Nigeria using panel data analysis from

the years 2014-2024. Based on the analysis of the panel data, the research findings conclude that entrepreneurship development in terms of training and acquisition of skills, finance, government support programs, and net profit margin have a positive impact on the financial performance of small-scale industries in Nigeria in terms of return on assets. It can therefore be concluded that entrepreneurship development plays a crucial role in improving the financial performance of small-scale industries in Nigeria.

Recommendations

1. Government agencies such as SMEDAN and the Bank of Industry should intensify entrepreneurship training and capacity building programmes to enhance managerial and technical skills among small scale industry operators.
2. Financial institutions should provide more accessible and affordable credit facilities to small scale industries in order to enable them expand operations and improve productivity.
3. Government support programmes such as grants, tax incentives, and business development services should be strengthened and properly monitored to ensure that they effectively reach small scale entrepreneurs.
4. Small scale industry operators should adopt sound financial management practices in order to improve their profit margins and overall financial performance.

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