

MODERATING EFFECT OF FINANCIAL KNOWLEDGE OF BANK CREDITS USAGE ON SME's PERFORMANCE IN PLATEAU STATE.

¹DICKSON Kingsley

¹Department of Business Administration, Nasarawa State University Keffi

Abstract

The main purpose of this paper is to establish the moderating effect of financial knowledge in the relationship between bank credits usage and performance of SMEs in Plateau State. Thus, this study seeks to establish whether financial knowledge moderates the relationship between bank credits usage and performance of SMEs in a developing economy like Nigeria. Descriptive survey research design was employed in the study and data were collected from 373 SMEs located in Jos North and Jos South of Plateau state, Nigeria. SmartPLS (bootstrapping procedure) was used to test for the moderating effect of financial knowledge in the relationship between bank credits usage and performance of SMEs in Plateau State. The findings reveal a positive and significant moderating effect of financial knowledge in the relationship between bank credits usage and performance of SMEs in Plateau State. Based on the findings, the following recommendations were made- organizing financial training programmes (by regulatory bodies of SMEs, government agencies along with financial institutions) to educate managers of SMEs on the need for financial knowledge in management of their business; players in the financial services sector should increase awareness about financial products and services as well as build confidence and the ability to compare products and use them.

Key words: *Financial knowledge, Bank credits usage, SMEs, Performances, Moderating*

INTRODUCTION

Access to finance refers to the possibility that individuals or enterprises can access financial services including credit, deposit, payments, insurance, and other risk management services (Honohan 2008). Access to finance is defined as the ability of individuals, households, entrepreneurs, and companies to access and utilize various financial services if they choose to do so (Adomako et al., 2016). One major obstacle to performance of Nigerian SMEs is that they face bigger challenges in accessing finance as compared to larger firms, this problem has forced them to rely more on internal funds, or cash from friends and family, to launch and initially run their enterprises. It has also led to inadequate working capital for small and medium enterprises, stiffer competition from larger companies and difficulties in sourcing raw materials.

The International Finance Corporation (IFC) estimates that 65 million firms, or 40% of formal micro, small and medium enterprises (MSMEs) in developing countries, have an unmet financing need of \$5.2 trillion every year, which is equivalent to 1.4 times the current level of the global MSME lending. This is why Aremu et al. (2011) said most SMEs in Nigeria die within their first five years of existence, a smaller percentage goes into extinction between the sixth and tenth year while only about five to ten percent survive, thrive and grow to maturity. World Bank (2020) said that 600 million jobs will be needed by 2030 to absorb the growing global workforce, which makes SME development a high priority for many governments around the world. In emerging markets, most formal jobs are generated by SMEs, which create seven out of ten jobs. However, access to finance is a key constraint to SME growth, it is the second most cited obstacle facing SMEs to grow their businesses in emerging markets and developing countries. Financing is key to firms' performance growth because without it, it may be difficult for SMEs to expand their operations, make innovations, and invest in production facilities and new staff.

Another challenge to performance growth of sustainable small and medium scale enterprises (SMEs) throughout the developing world is a lack of knowledge, skills, attitude and awareness to cope and direct the finances of their organization in a strong, transparent, and professional way. Financial literacy is the degree to which one understands important financial concepts and possesses the capacity and confidence

to handle personal funds of appropriate, brief period decision-making and solid long-term financial foresight (Remund, 2010). The reasons why business people make inappropriate, inadequate and ineffective financial decisions may be associated to lack of personal financial knowledge, lack of time to learn about personal financial management, complexities in financial transactions and the extensive variety of choices in financial products/services. Lack of business management skills can magnify financial barriers for SMEs. Low degree of financial literacy can prevent the performance level of SMEs from adequately assessing and understanding different financing provision, and for navigating complex loan application procedures.

In the bid to enhance SMEs performance, several intervention programmes have been put in place, in Nigeria, the Development Finance Project which is an initiative of the World Bank supports the establishment of the Development Bank of Nigeria (DBN), a wholesale development finance institution that provides long-term financing and partial credit guarantees to eligible financial intermediaries for on-lending to MSMEs. The project also included technical assistance to DBN and participating commercial banks in support of downscaling their operations to the underserved MSME segment. As of May 2019, the Development Bank of Nigeria credit line to Private Finance Initiatives (PFIs) for on-lending to MSMEs has disbursed US\$243.7 million, reaching nearly 50,000 end-borrowers, of which 70% were women, through seven banks and ten microfinance banks.

Another Innovative Initiative to Increase SME finance is Public Credit Guarantees. Public Credit Guarantees schemes are mechanisms through which an external third party, known as the guarantor, promises to repay the lender all or part of the loan if the borrower defaults. When a credit is guaranteed, the creditor faces lower risk, and can offer better lending conditions and require lower collateral. Public credit guarantee schemes are particularly important in developing countries, where they are the main type of guarantee scheme (Beck et al., 2010). Despite the interventions made to improve the performance of SMEs in Nigeria, they have not played the expected vital and vibrant role in the economic growth and development of the country as supported by Gbolagade (2013).

Previous studies have only investigated the direct effect of access to finance and performance (Babajide, 2017; Musunguzi, 2014) or a combination of other variables (Murtala& Shariff, 2016; Songling et al.,2018). Others investigated the moderating role of financial literacy in the relationship between access to finance relying on data collected from other developing countries such as Uganda and Ghana (Bongomin et al., 2017; Samuel et al., 2016).Uganda and Ghana which may face similar challenges with a country like Nigeria but differ in economic perspective. Therefore, this research study aims at testing the following research hypotheses-

- i. Ho₁: Bank credits usage has no significant effect on SMEs performance
- ii. Ho₂: Owner-manager financial knowledge has no significant moderating effect on bank credits usage and SME's performance.

LITERATURE REVIEW

Conceptual Clarifications

Financial knowledge is defined as the understanding of key financial terms and concepts needed to function daily (Huston, 2017). It was defined by Potrich et al. (2016) as a particular kind of capital acquired in life through the ability to manage income, expenditure and savings in a safe way. The Organization of Economic Co-Operation and Development (OECD), added that financial knowledge is an important determinant of whether the individual is financially literate, involving questions related to concepts such as simple and compound interest, risk and return and inflation (OECD, 2011).Financial knowledge is about understanding exactly how business performance and business situation are measured by the psychological model to ease, strengthen, or enhance decision making (Lusardi & Mitchell, 2014). It is an important constituent in the making of financial decisions for individuals and businesses. It is a generally held argument that improved financial knowledge is said to result in more responsible financial behavior and hence effective financial decisions (Tang et al.,2015). Empirical evidence has shown that a higher level of knowledge is positively

related to individuals engaging in a number of best practice financial behaviors, such as possessing an adequate emergency fund, monitoring credit reports, avoiding checking account overdrafts, avoiding revolving debt, owning a dedicated retirement account, and having insurance protection (Robb, 2014).

The terms usage and access to financial services has been used conjointly and interchangeably by many studies even though they overlap, they distinctly mean different things. Whereas access refers to the availability of a supply of reasonable quality of financial services, use refers to the actual consumption of financial services (Nunoo & Andoh 2012). Credit usage refers to the amount of credit a borrower has used compared to how much credit that have been extended by a lender (Black, 2020). Juma and Han (2018) gives an illustration of credit worthy individuals in advanced financial markets, still they might not use some of the financial services even though they are readily available and they can afford to pay. Arun and Kamath (2015) in attempt to define access and usage in an accurate and comprehensive way, identified levels of availability of financial product, actual ownership of the product, the use of the product over a specified time and how much the product is used to address the consumer's needs. Researchers have noted that experience gained through the usage of financial products is directly associated with financial knowledge (Agarwal et al., 2013; Nicolini et al., 2013). Juma and Han (2018) posited that access to financial services hypothetically has a positive correlation with the actual use of such services.

Performance can be defined as the accuracy and competence of doing assigned tasks to achieve the desired goal (Carson & Thau, 2014). Performance is the evaluation of outcomes of an organization as a result of management decisions on resources and execution of those decisions (Liden et al., 2013). Small-scale enterprises' performance includes growth, resulting from expansion in sale operations or assets used in generating profitability. It is generally about the success of the business (Chatterjee & Das, 2016). Financial performance refers to the degree to which financial objectives have been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms. It includes profit, sales, growth and market share. Non-financial performance, on the other hand, is the qualitative measures that cannot be expressed in monetary units such as customers' satisfaction, competitiveness and innovation. Indicators of non-financial performance include quality of service to customers, customer satisfaction, level of employee satisfaction and environmental and social contributions (Marie et al., 2014; Kaymak & Bektas, 2017).

Bank Credit Usage and SMEs Performance

The study by Juma and Han (2018) analysed the impact of access and actual use of financial services and its ultimate consequential reflections on SMEs performance in developing economies. The study population was 520 SMEs managers from region of Morogoro and Dar es Salaam in Tanzania out of which 311 was selected for the study. The study data was from a primary source which was collected via the administration of questionnaires. By recognizing the important distinction between access and actual use of financial services the study used the partial least square-structural equation modelling (PLS-SEM) to estimate the conceptual model. The study reveals that firm use of financial services has a significant mediating role on firm access to financial services-firm performance relationship. Mulenga and Macmillan (2021) in their study sought to determine how the uptake and use of loans affects MSME development and growth in Lusaka Zambia. A mixed method study was adopted for this study. Data was collected from shop owners at Chelston big market in Lusaka. Quantitative data was analysed using descriptive statistics while qualitative data was analysed using thematic and content analysis. The study established that the resentment in the use of debt financing was influenced by collateral demands, high interest rates and tenure of loan products.

Financial knowledge, Bank credit usage and SMEs Performance

Olawale (2021) examined if financial knowledge moderates the relationship between usage of financial products and performance of SMEs in South Africa. The cross-sectional survey method was used for data collection in a quantitative study. Descriptive statistics, Pearson correlation and hierarchical regression were used for data analysis. The Cronbach's alpha was used as a measure of reliability. The findings indicated that the relationship between usage of financial products and financial literacy is significant. The findings also

showed that financial knowledge moderates the relationship between usage of financial products and performance of SMEs. In a related study Bongomin et al. (2017) examined the moderating effect of financial knowledge in the relationship between usage of financial products and growth of SMEs in developing economies. Cross sectional research design was employed in the study and data were collected from 169 SMEs located in Jinja and Iganga central markets. ModGraph (Excel programme) was used to test for the moderating effect in the study. The findings reveal a positive and significant moderating effect of financial knowledge in the relationship between usage of financial products and growth of SMEs in developing economies.

Theoretical Framework

The research dwell on the Resource Based view (RBV) Theory to discuss the effects of financial literacy on access to finance and performance relationship, contending that financial literacy has no significant effect on the effect of access to finance and SME performance. The RBV postulates that firms can gain and sustain a competitive advantage by deploying a bundle of resources, tangible and intangible assets and organizational capabilities (Barney, 1991; Grant, 1991; Penrose, 1959). The firm's resources include financial (liquid and illiquid), human (knowledge, skills and competencies), technological, marketing and physical resources (Agyapong & Attram (2019). The main idea of the RBV is that a firm can achieve sustained competitive advantage and eventual superior performance if it acquires and controls valuable, rare, inimitable and non-substitutable resources and capabilities, as long as it has the ability to absorb and apply them (Barney 1991). There is implication of RBV on the issue of financial literacy moderating the relationship between access to finance and firm performance. Financial skills and knowledge have implication on how a firm select, uses, manages and disposes financial assets (Agyapong & Attram, 2019; Nunoo et al., 2015). Moreover, a manager's financial literacy level is a demonstration of the level of financial knowledge he or she possesses or has acquired over time (Gustman et al, 2012).

METHODOLOGY

Research design is a detailed arrangement or pattern of analysis of data that concur with the objectives of the study (Astalin, 2013). The research design used in this study was descriptive survey which is defined by Devin (2015) as an attempt to explore and explain a topic in the dark while creating a fuller picture of the topic. That is, it seeks to answer questions such as who, what, where and how to any provided topic. The target population of the study consist of 5,429 SMEs that are operating business in Plateau State and respondents were top managers and owners of these firms. The sample size for the study is 373 and was determined using the formula given by Fowler (2009). The calculations in determining the sample size is as shown below-

$n = N / 1 + N (e^2)$ where:

n = desired sample size, N = population, e = margin of error

The margin of error is the figure which shows the accuracy of responses from the sample in relation to responses from the whole population. Thus the desired sample size is given by:

$$5,429 / 1 + 5,429 (0.05^2) = 373$$

In this research, convenience sampling method was adopted because of the locational limitations and supplemented with snowball sampling owing to the lack of a database of entrepreneurs in Plateau State and Nigeria in general. This research used primary data to answer the research questions through distribution of semi-structured questionnaires with items adopted from past studies, which were deemed reliable and valid. The data collected in this study were analyzed using SmartPLS software. To test the hypothesis a structural equation modelling (SEM) was executed.

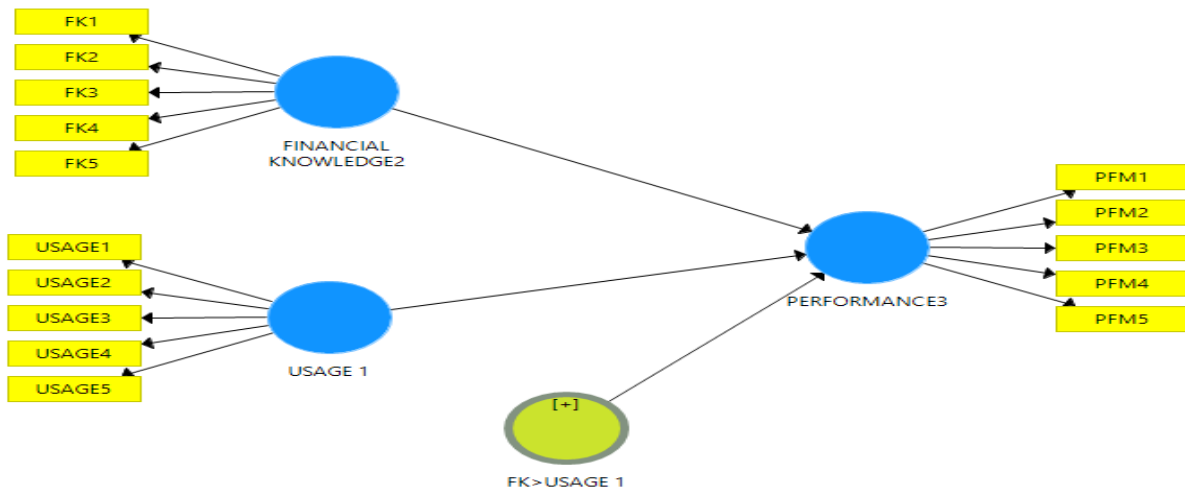


Figure1 Specified path model of the study

Source: SmartPLS output

RESULTS AND DISCUSSION

On the process of data collection questionnaires were administered to SME owners and managers in Plateau State. A total of three hundred and seventy-three questionnaires were distributed to respondents and were retrieved. From the questionnaire retrieved, twenty responses (20) were not included in the overall data set for reasons such as incomplete response; hence the sample size was further reduced to three hundred and fifty-three (353) for further operations.

Respondent profile

Regarding the SME profiles, 72% of the SMEs were aged between 2 and 10 years, 21% were between 11 and 20 years, while 7% had been in business for more than 20 years. Of these SMEs, 81% employ fewer than 20 workers, while 19% employ between 20 and 35 workers. About 75% of the surveyed SMEs generate an average annual turnover of less than N4 million, while 25% have a turnover of less than N5 million per year.

Table 1: Sample Small- and Medium-Sized Entity Profile Characteristics

Demographic Variable	Frequency n=353	Percentage %
Experience (years)		
2-10 years	254	72
11-20 years	74	21
Over 20 years	25	7
Number of Employees		
Under 20	286	81
20-35	67	19
Annual Turnover in Naira		
Less than 4 Million	265	75
Less than 5 Million	88	25

Measurement Model Assessment

According to Hair Jr et al. (2013), reflective measurement model involve the assessment of internal consistency with emphasis on composite reliability, indicator reliability, convergent validity otherwise known as the Average Variance Extracted (AVE) and Discriminant validity.

Based on the measurement model analysis conducted, all the construct indicators made it to the final analysis, this is consistent with the suggestion of Hair et al. (2014) which pegs indicators loading to at least 0.7.

Construct Reliability

The results of composite reliability and other relevant coefficients displayed in table 2 reveals that the entire constructs met the requirements for CR and AVE using a threshold of 0.6 to 0.7 and 0.4 to 0.7 respectively.

Table 2 Assessment of Composite Reliability and Average Variance Extracted

Constructs	Indicators	Factor Loading	CR	AVE
Financial Knowledge	FK1	0.897	4	0.753
	FK2	0.873		
	FK3	0.812		
	FK4	0.851		
	FK5	0.854		
Usage	Usage1	0.917	0.921	0.595
	Usage2	0.900		
	Usage3	0.905		
	Usage4	0.872		
	Usage5	0.890		
Performance	PFM1	0.880	0.952	0.712
	PFM2	0.914		
	PFM3	0.883		
	PMF4	0.894		
	PFM5	0.905		

Convergent Validity of Indicators

Using a threshold internal consistency of 0.708 which when squared will give AVE of at least 0.5. The results of Average Variance Extracted (AVE) displayed in table 2 reveals that the entire constructs met the requirements for Convergent Validity.

Discriminant Validity of Indicators

Results as presented in table 3 reveals that discriminate validity is established since the values of HTMT are lower than the 0.85 or 0.9 thresholds.

Table 3 Assessment of Discriminant Validity, Hetrotrait and Monotrait Criterion (HTMT)

		1	2	3	4	5
1	Financial Knowledge	-				
2	Usage	0.660	0.390	-		
3	Performance	0.856	0.471	0.741	0.734	-

Structural Model Assessment

PLS-SEM structural model analyses involve five major stages, assessing structural model for collinearity, assessing coefficient of determination (R^2), assessing effect size f^2 , Assessing Stone-Geisser Q^2 Predictive Relevance, assessing path coefficient. But before then the model fit must be established.

Model's Goodness of Fit (GoF)

In this study, the result obtained from the analysis of 353 respondents produced a fit of 0.020 which is less than <0.08 the maximum fit index, it is therefore considered suitable for analysis.

Assessing Structural Model for Collinearity

Based on the results presented in table 4, and criteria provided for reflective construct, there is no collinearity problem.

Table 4 Collinearity Assessment of Structural Model

Constructs	VIF
Financial Knowledge	1.000
Usage	1.700
Performance	

Assessing Coefficient of Determination (R^2)

The R-Square value on table 5 show 0.767, meaning that 76.7% of SMEs performances were influenced by financial knowledge and use of bank credits variables. Meanwhile, the remaining 23.3% was affected by other factors not mentioned in the study. Also the R^2 of the present study can be recognized as substantial.

Table 5: Coefficient of Determination (R^2)

	R Square	R Adjusted Square
SMEs performance	0.818	0.812

Assessing Effect Size f^2

Hair et al. (2014) provided a yardstick of assessing effect size f^2 of a construct as; 0.35 as large effect size, 0.15 as Medium size and 0.02 as small size. In line with the above guideline, an f^2 analysis was conducted using PLS 3.0 and the results presented in table 6.

Table 6 Assessing Effect Size f^2

Constructs	f^2	Effect
Financial Knowledge-----Performance	0.610	Large
Usage-----Performance	0.483	Large

Criteria: According to Cohen (1988) and Hair et al. (2014) It is assessed as: 0.02=small, 0.15=medium, 0.35=large.

Assessing Stone-Geisser Q^2 Predictive Relevance

The results in table 7 reveals that all the constructs that perform exogenous role in one way or the other, in the structural model have predictive relevance since their Q^2 values are greater than Zero.

Table 7 Stone-Geisser Q^2 Predictive Relevance

Constructs	$Q^2 (=1-SSE/SSO)$
Financial Knowledge	0.573
Usage	0.135
Performance	0.518

Assessing Path Coefficient and Hypotheses Testing

In assessing the path coefficient, various relationships that were hypothesized earlier are tested to establish the nature of the relationship as well as its significance. As a guide to this section, relevant hypotheses are re-stated.

Ho₁: Bank credits usage has no significant effect on SMEs performance in Plateau State.

Ho₂: Financial knowledge has no significant moderating effect on bank credits usage and SMEs performance in Plateau State.

In order to assess the path coefficient in line with the hypotheses postulated in this study a bootstrapping command was carried out using PLS-3.0 and the results displayed the path coefficient or the direct effect, t-statistic and the p-value in the table 8. Based on the direct effect on two-tailed test at 95% level significance as postulated in the hypotheses, all of the relationships were rejected.. These are the relationship between usage of bank credits and SMEs performance (Ho₁) which reveals a $\beta = 0.76$ and a P-value of 0.000 respectively, their t-value 6.801 was found to be greater than the threshold of 1.65 proposed in (Hair et al., 2011) for a two-tailed test. Hence the alternate hypothesis was accepted.

A possible explanation for this result is that bank credit obtained by SMEs enabled them to improve businesses in terms of increased business profit, employees, sales turnover, business diversification and increased business capital and assets. Extant studies indicate that usage of bank credit has a positive impact on the performance of SMEs. The Financial Sector Deepening, (2015) citing Beck and Demigurc-Kunt (2006) opines that when SMEs are credit constrained it severely affects their possibilities to grow and innovate. Mbugua et al., (2014) also opine that as a result of scarcity of finance, small enterprises are unable to expand, modernize or meet urgent orders from customers. The obtained result for this study confirms the importance of using bank credits to SMEs performance as acknowledged in existing literature. This consistency with prior studies strengthens the RBV that identifies finance as a strategic VRIN resource (valuable, rare, inimitable, and non-substitutable) that can foster SMEs performance. By contrast, the present result is not consistent with previous studies that found no significant relationship between usage of bank credits and SMEs performance. However, the result of this study suggests that usage of bank credits is a key strategic asset that contributes to SMEs performance.

Hypotheses	Relationships	Standard Beta	Standard Error	T Statistics	P-Values	Decision
Ho ₁	USAGE->PFM	0.176	0.05	6.801	0.000	Reject
Ho ₂	FK -> USAGE ->PFM	0.188	0.054	1.337	0.001	Reject

Table 8: Result of Direct Relationship and Moderation Test

Where: FK = Financial knowledge, USAGE = Usage of bank credits, PFM = Performance

Assessing the Moderating Role of Financial Knowledge

This section assesses the moderating role of financial knowledge in the relationship between usage of bank credits and SME’s performance. The corresponding hypotheses are reproduced as follows;

Ho₂: Owner-manager financial knowledge has no significant moderating effect on bank credits usage and SMEs performance in Plateau State. PLS-SEM adopts bootstrapping procedure in order to assess moderating effect in a given relationship through assessing the indirect effect report, to establish if moderation effect exists. As illustrated in table 9, the moderating effects of financial knowledge on bank credits usage and SME’s performance (Ho₂) is not accepted with $\beta = 0.188$ significant at t-values of 1.337. Also since the 95% Bootstrapping Confidence Interval results of [LL= 0.008, UL= 0.263], did not straddle a 0 in between the upper and lower interval, it suggests that there is moderation (Preachers & Hayes, 2008). The study result is consistent with Han et al. (2018), who proposed that as firms in developing economies use more of formal financial services there will also be improvement in the firm performance. Researchers have noted that experience gained through the usage of financial products is directly associated with financial knowledge (Nicolini et al., 2013; Agarwal et al., 2013). Greater financial knowledge should enhance understanding of all costs and benefits associated with using financial service; whereas, a lack of knowledge

of financial markets and instruments makes it difficult to judge actual costs and benefits (Nunoo & Andoh, 2011).

Table 9: Moderation Test

Hypothesis	Indirect Relationship	Std Beta	Std Error	T Statistics	LCI	UCI	P-Values	Decision
Ho ₃	FK-> USAGE-> PFM	0.188	0.054	1.337	0.008	0.263	0.001	Rejected

Where: FK = Financial knowledge, Usage = Bank credits usage, PFM = SMEs performance

CONCLUSION AND RECOMMENDATIONS

This study analyzed the moderating effect of financial knowledge on bank credit usage on SME's performance in Plateau State. The research from the analysis established that usage of bank credits has a significant positive effect on SMEs performance. The study concludes that bank credit usage among small-scale enterprise managers has a positive effect on their firm's performance. The results also show that financial knowledge has a significant positive moderating effect on bank credits usage and SMEs performance. The study therefore concludes that financial knowledge among small and medium scale enterprise managers has a significant positive moderating effect on bank credits usage and SMEs performance.

Based on the research objectives and the analyses carried out in the study, the following recommendations were drawn:

- (i) Organizing financial training programmes (by regulatory bodies of SMEs, government agencies along with financial institutions) to educate managers of SMEs on the need for financial literacy in management of their business. This will make small-scale enterprises to expand and grow, which will contribute greatly to the Nigerian economy.
- (ii) Players in the financial services sector should increase awareness about financial products and services as well as build confidence and the ability to compare products and use them.

References

- Adomako, S., Danso, A. & Ofori D. J. (2016). The moderating influence of financial literacy on the relationship between access to finance and firm growth in Ghana, *Venture Capital*, 18 (1) 43-61.
- Aremu, M. A., & Adeyemi, S. L. (2011). Small and Medium Scale Enterprises as A Means of employment generation and capacity building in Nigeria. *Journal of Sustainable Development*, 4(1), 200-206.
- Arun, T., Rajalaxmi, K. (2015). Financial inclusion: Policies and practices. *IIMB Management Review*, 27(4), 267-287.
- Atkinson, A., & Messy, F. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) Pilot Study of OECD Working Papers on Finance, Insurance and Private Pensions, 15. OECD Publishing.
- Demirgüç-Kunt, Beck, T., & Honohan P. (2008). Finance for all? Policies and Pitfalls in Expanding Access: *The World Bank Economic Review*, 22 (3), 397–430.
- Babajide F. (2017). Access to finance and firm performance: Evidence from African countries: *Review of Development Finance* 7 (1) 6–17.
- Barney, J., & Hesterly, W. (2012). Strategic management and competitive advantage: Concepts and cases (4th Ed.). *Upper Saddle River, NJ: Prentice Hall*
- Beck, T. & Cull, R. (2014). Small and medium-sized enterprise finance in Africa. *African Growth Initiative (working paper 16)*. Washington DC: Brookings.

- Bongomin, G. O., Joseph, M. N., John, C. M., & Charles, A. M. (2017). The relationship between access to finance and growth of SMEs in developing economies: Financial literacy as a moderator. *Review of International Business and Strategy* 27: 520–38.
- Bogdan W., Marek S., George I., Daniela F., Ramona P., & Roxana B. (2018). The impact of credit availability on small and medium companies. *The International Journal of Entrepreneurship and Sustainability Issues*, 5 (3).
- Chakraborty, A., & Mallick, R. (2012). Credit gap in small businesses: Some new evidence. *International Journal of Business*, 17, 65-80.
- Einav, L., Jenkins, M., & Levin, J. (2013). The impact of credit scoring on consumer lending. *The RAND Journal of Economics*, 44, 249-274.
- Fatoki, O. O., & Smit, A. V. (2011). Constraints to credit access by new SMEs in South Africa: a supply side analysis. *The African Journal of Business and Management*, 5 (4), 1413–1425.
- Fatoki, O. (2014). The financial literacy of micro entrepreneurs in South Africa. *Journal of Social Science*, 40 (2) 151-158.
- Fornell, C., & Larcker, D.F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18 (3), 382-389.
- Hair, J. F., Hult G. T., M, Ringle, C. M. (2017a) A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Thousand Oaks, CA: Sage.
- Hair, J., F., Hult, G., T., M, Ringle, C. M. (2017b) A Primer on Partial Least Squares Structural Equations Modeling (PLS-SEM), Thousand Oaks: SAGE.
- Hussain, J., Salia, S., Karim, A. Is knowledge that powerful? Financial literacy and access to finance: An analysis of enterprises in the UK. *Journal of Small Business Enterprise Development*, Vol. 25, 2018, pp. 985–1003
- Huston, S. J. (2017). Measuring Financial Literacy. *The Journal of Consumer Affairs*, 44(2), 296–316.
- Ihua, U. (2009). SMEs key failure-factors: A comparison between the United Kingdom and Nigeria. *Journal of Social Sciences*, 18 (3), 199-207.
- Javed, M. J., Muhammad A., Khan, A. I. (2011). Determinants of business success of small and medium enterprises. *International Journal of Social Science*, 2, 274–280.
- Joseph, M., Dhanuraj, P., & Joseph, K. A. (2017). Influence of financial inclusion and financial self-efficacy on the credit behaviour of BPL households. *International Journal of Research in Economics and Social Sciences (IJRESS)*, 7, 52–66.
- Juma, B. M., Han D. P. (2018). Financial literacy of SME managers on access to finance and performance: the mediating role of financial service utilization. (IJACSA) *International Journal of Advanced Computer Science and Applications*, 9, (9).
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.
- Nunoo, J., Andoh, F.K. (2012). Sustaining small and medium enterprises through financial services utilization: Does financial literacy matter? A paper presented at the Agricultural & Applied Economics Association's 2012 AAEA Annual Meeting, Seattle, Washington, 12–14.
- Robb, C. A. (2014). The personal financial knowledge conundrum. *Journal of Financial Service Professionals*, 69–73.
- Ross, S., Westerfield, R., & Jaffe, J. (2013). *Corporate finance*. (10th Ed.). New York, NY: McGraw-Hill, Irwin
- Samuel, A., Albert D. (2014). Financial literacy and firm performance: the moderating role of financial capital availability and resource flexibility: *International Journal of Management & Organizational Studies*, 3 (4).
- Tang, N., Baker, A., & Peter, P. C. (2015). Investigating the disconnect between financial knowledge and behavior: The role of parental influence and psychological characteristics in responsible financial behaviors among young adults. *The Journal of Consumer Affairs*, 376–406.
- World Bank. 2013. Global Financial Development Report 2014: Financial Inclusion. Accessed December 20, 2022. http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR_2014_Complete_Report.pdf