Determinants of Informal Financing among Micro, Small, and Medium Enterprises in Kwara State, Nigeria

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ABSTRACT

MSMEs significantly contribute to economic growth and job creation. However, MSMEs in Nigeria face difficulties in accessing formal finance due to factors such as stringent collateral requirements, small business size, high interest rates, limited credit history, and cumbersome loan procedures. These challenges are worsened in Kwara State where the problem is reportedly endemic. This underscores the need to investigate the factors driving SMEs' reliance on informal financing in the region. The study adopted a survey research design and targeted a population of 5,378 SME owners in Kwara State. A combination of stratified and random sampling techniques was used to select a sample size of 357, determined using Krejcie and Morgan's (1970) formula. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings revealed that size of business ($\beta = 0.602$, $p = 0.001$), business location ($\beta = 0.513$, $p = 0.020$), collateral security ($\beta = 0.551$, $p = 0.000$), and financial literacy ($\beta = 0.622$, $p = 0.000$) all had significant positive effects on SMEs' reliance on informal financing. The study concludes that business size, location, collateral security, and financial literacy have a significant positive impact on SMEs' reliance on informal financing. The studies highlight the following major policy recommendations: (i) the government should promote cooperative business models to help SMEs pool resources, scale their operations, and enhance their bargaining power with financial institutions. (ii) Efforts should be made to improve financial access in rural areas by establishing bank branches and mobile banking services to serve currently underserved communities (iii) Financial institutions should accept movable assets as collateral, supported by government-backed loan guarantees to reduce lender risk and improve SMEs' access to formal credit (iv) The government should promote peer learning by pairing financially literate SME owners with less-informed peers to encourage responsible borrowing and better financial decisions.

Keywords: informal finance; location of the SMEs business, Size of Business, Financial literacy, Collateral Security

1.0 INTRODUCTION

MSMEs are globally acknowledged as main drivers of economic growth, innovation, employment generation, and poverty reduction. In Nigeria, they contribute significantly to the GDP and national employment. Data from the National Bureau of Statistics (NBS) and SMEDAN indicate that Nigeria is home to over 40 million MSMEs, accounting for more than 80% of employment in the economy. In Kwara State, MSMEs play an equally vital role, supporting urban and rural livelihoods through activities in trade, agriculture, services, and small-scale manufacturing. Despite their importance, MSMEs in Nigeria face challenges in accessing formal finance, including stringent collateral involved in diverse activities such as market trading, farming, agro-processing, tailoring, shoemaking, welding, crafts, and small-scale services like barbing, hairdressing, and food vending. Although the government has introduced initiatives like the Kwara State Social Investment Programme and various SME funding schemes to enhance access to formal finance, formal credit remains largely inaccessible to many SME owners. In this context, the study seeks to explore the factors that may hinder SME owners from accessing formal financing in the subsequent paraphrase.

The size of a business appears to influence MSMEs' reliance on informal financing. In Kwara State, micro and small enterprises which constitute the majority of MSMEs often operate with limited capital and low creditworthiness, making it difficult for them to access formal loans from financial institutions. These smaller businesses typically lack audited financial

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statements, bankable business plans, or established credit histories, leading them to depend more on informal financing such as personal savings, family loans, cooperative societies, and daily thrift collectors (*ajo* or *esusu*). Consequently, the smaller the business, the more likely it is to rely on informal financing.

The location of SMEs business seems to influences their financing choices. MSMEs located in urban areas are more likely to have physical access to banks, microfinance institutions, and government funding programs. However, many still prefer informal financing due to its flexibility and quicker access to funds. In contrast, MSMEs in rural and peri-urban areas face considerable challenges, including limited bank branches, poor infrastructure and digital connectivity, and low awareness of formal financing options. In these areas, informal financial systems such as community thrift groups, farmers' cooperatives, and rotating credit associations are more common and trusted, often filling the gap left by formal institutions. As a result, an MSME owner in rural and underserved regions seems to rely more heavily on informal financing due to location of their business.

The collateral requirements imposed by formal financial institutions seem to be a key factor in driving MSMEs in Kwara State toward informal financing. Many micro and small enterprises lack the assets typically accepted as collateral such as land titles, fixed property, or equipment. Formal lenders often require documentation and guarantees that these businesses are unable to provide. As a result, MSMEs are frequently compelled to seek funding from informal sources such as family, friends, cooperative societies, and moneylenders, who usually do not demand formal collateral though some may rely on informal guarantees or social trust. Consequently, the absence of acceptable collateral can push MSME owners toward informal financing, which, while more accessible, is often riskier or more costly.

Financial literacy appears to be another factor influencing MSME owners' reliance on informal financing in Kwara State. Financial literacy can shape the financing decisions of MSMEs owners as many of them in the informal sector lack fundamental financial knowledge, including how to keep financial records, manage cash flow, and evaluate loan terms. MSMEs owners with higher levels of financial literacy are better equipped to explore a range of financing options, compare interest rates, manage loan repayments, and build creditworthiness for future access to formal finance. In contrast, in low-literacy environments, informal financing is often perceived as safer due to its simplicity and social familiarity. Therefore, limited financial literacy tends to increase MSMEs' dependence on informal sources such as *ajo*, cooperatives, and informal lenders, while higher financial literacy can open access to both formal and informal financing options.

In view of the problems statement outlined in above, this research is designed to answers the following research questions;

i. To what extent does the size of business affect informal financing among MSMEs owners in Kwara State?
ii. What effect does location of business have on informal financing among MSMEs owners in Kwara State?
iii. In what ways does collateral security affect informal financing among MSMEs owners in Kwara State?
iv. What effect do financial literacy have on informal financing among MSMEs owners in Kwara State?

The following research hypotheses were formulated in null form to answer the above research questions;

H_{01}: There is no significant relationship between size of business and informal financing among MSMEs owners in Kwara State.
H_{02}: Location of business does not significantly affect informal financing among MSMEs owners in Kwara State.
H_{03}: Collateral security has no significant effect on informal financing among MSMEs owners in Kwara State.
H_{04}: there is no significant effect of financial literacy on informal financing among MSMEs owners in Kwara State.

2.0 LITERATURE REVIEW

Business size typically refers to the scope and operational capacity of a company, commonly assessed by factors such as the number of employees, annual turnover, or total assets. Small and Medium Enterprises (SMEs) are usually categorized according to these benchmarks. The smaller firms often facing greater challenges in obtaining external funding due to limited credit history and inadequate financial documentation (Ayyagari, Beck, and Demirgüç-Kunt, 2017).

Collateral security refers to assets that a borrower pledges to a lender to secure a loan. If the borrower defaults, the lender can seize the collateral to recover the loaned amount. For small businesses, the inability to provide adequate collateral is a significant barrier to accessing formal credit (Stiglitz and Weiss, 2015). Martínez (2017), the location of a business affects its access to financial services, infrastructure, and customer base. Businesses situated in rural or remote areas often experience limited access to banks and formal financial institutions, which can lead to increased dependence on informal financing sources.

Financial literacy can be defined as the capacity to understand and effectively utilize a range of financial skills, such as budgeting, personal financial management, and investing. For entrepreneurs, it plays a vital role in making sound financial decisions and sustaining their businesses over the long term (Lusardi & Mitchell, 2014). Informal financing involves securing funds from non-institutional sources like family, friends, moneylenders, or rotating savings and credit associations (ROSCAs). This practice is especially prevalent among micro and small enterprises in developing countries because it is more accessible and requires less documentation (Allen & Qian, 2018). In the same vein, Nguyen and Canh (2020) conceptualize informal finance as short-term, unsecured funding obtained from private moneylenders, other businesses, or relatives and friends of business owners.

Existing literature highlights the contributions of previous studies on the determinants of informal financing among SMEs owners. Henrekson and Johansson (2010) contend that employment growth is primarily driven by a relatively small number of rapidly expanding firms. Similarly, Kerr (2013) observed that in South Africa, large firms contribute more significantly to job creation than micro and small enterprises. This highlights the importance of supporting SMEs so they can scale up and play a more prominent role in employment generation and overall economic development. Despite their relevance, small businesses in developing countries such as Nigeria often face challenges in realizing their full growth potential. For example, Adeniran (2020) estimated that over 70% of small businesses in South Africa fail. Previous studies, including those by Hussen (2015) and Buckley and Webster (2016), have identified limited access to finance as a major obstacle to small business growth. Likewise, Muriithi (2017) and Adisa (2014) found that many micro and small enterprises in Africa rely heavily on internal sources of funding, particularly personal savings. However, capital structure theory emphasizes that both internal and external financing are essential for business development, with external finance exerting a particularly strong positive influence on expansion (Cheng & Degryse, 2020). The lack of access to external financing partly explains the low survival rate of African businesses, estimated at less than 20%. While entrepreneurs are often able to establish their ventures with personal funds, sustaining and expanding them remains difficult without additional capital. Consequently, internal funding alone is insufficient for long-term growth, causing many enterprises to stagnate at early stages. This makes informal financing a vital alternative for supporting and sustaining business growth.

Wiyani and Prihantono (2016) note that MSME owners often favor the informal financial sector because they consider it more accessible, with fewer requirements and no collateral obligations. Additionally, the Know Your Customer (KYC) procedures are less strict, allowing borrowers to maintain a greater level of privacy. Wiyani et al. (2016) also note that MSME owners believe the informal sector offers quicker assessment periods, leading to faster processing of transactions. This is particularly advantageous for small businesses that often face cash flow challenges and require quick access to working capital. Although many studies acknowledge that informal lenders tend to charge higher interest rates than formal institutions, borrowers often perceive the benefits of informal finance such as speed and flexibility as outweighing the costs. Mazanai and Fatoki (2019) found that banks are frequently hesitant to lend to small businesses due to issues such as information asymmetry, the high cost of servicing small loans, perceived risks, and the absence of collateral. Consequently, many small enterprises are excluded from the formal financial system. Research by Satta (2024) and Fjose (2025) also indicates that most MSME owners in Africa heavily depend on informal financing sources. Although previous studies (Santos, 2019; Babajide, 2021; Madestam, 2024) mainly examined the barriers to accessing formal finance, there is limited research on the factors that influence the use of informal finance among MSME owners in Nigeria. It is important to note that many entrepreneurs rely on informal finance to start their businesses. Therefore, the

characteristics of informal financing often regarded as success factors in enhancing financial access should not be overlooked when designing strategies to strengthen financial support mechanisms for small businesses.

Babajide (2021) examined the relationship between formal and informal finance, highlighting a link through savings but noting only a weak connection in terms of credit. Similarly, Sagrario and Ray (2018), in their study in Philippines, suggested that the relationship between the two systems can be either vertical where informal lenders act as intermediaries for formal institutions or horizontal, where they compete directly with formal banks. Mrak (2019) further observed that interest rates in the informal financial sector are generally higher. In Zambia, Sebatta (2024) investigated the factors influencing individuals' decisions to use informal finance and found that education level, household size, and repayment terms play significant roles in participation. Likewise, Okurut (2025) investigate how personal characteristics affect the demand and supply of informal credit in Uganda. The findings revealed that age, education, dependency ratio, household expenditure, and regional location as the major determinants of informal credit. In Botswana, Botlhole (2019) reported that individuals seeking small, short-term consumption loans from the informal sector often face higher interest rates compared to those borrowing from formal institutions. In addition, informal lenders frequently accept non-traditional forms of collateral, such as ATM cards and valuable household items.

Similarly, Olufemi, Samson, and Ezekiel (2024) explored the challenges entrepreneurs face in accessing finance from both the formal and informal sectors in Nigeria. Their study found that access to financial resources and a supportive regulatory framework significantly contribute to entrepreneurial success. Additionally, a strong entrepreneurial background and robust social networks were positively associated with improved business performance. Conversely, high interest rates had a detrimental effect on business success, highlighting the need for targeted economic and financial policy reforms. Stephen and Flora (2022) conducted a systematic literature review to identify the determinants of informal finance among micro and small enterprises in Africa. Drawing from 30 primary studies, the findings emphasized the critical role of informal finance as a viable alternative for micro and small businesses. Informal finance supports business start-ups, sustains existing enterprises, promotes business growth, and improves the livelihoods of business owners and their communities. The study also suggested that informal finance models can be further refined to serve as effective tools for small business promotion.

Oluyemi, Ayodele, and Daniel (2023) explored disruptive financial innovations among Nigerian micro-entrepreneurs. Their study revealed that credit history and asset-based financing are key determinants of access to formal financing for young micro-entrepreneurs operating in informal settings. Additionally, gender and networking capabilities significantly influence access to informal financing, while awareness plays a crucial role in accessing both formal and informal financing options within this demographic.

Selamawit and Nigus (2014) investigated the determinants of access to finance for SMEs. Their findings showed that factors such as the age of the business operator, educational level, possession of fixed assets, and number of employees, lending procedures, and loan repayment terms significantly influenced credit accessibility. MSEs managed by individuals over 40 years old, with TVET or higher education, ownership of fixed assets, and employing more than six people were more likely to secure credit from formal financial institutions. In contrast, those operated by individuals aged 31–35, lacking formal education, without fixed assets, and employing only 1–2 people had lower chances of accessing formal credit. Additionally, a negative perception of lending procedures and loan repayment terms further reduced the likelihood of obtaining formal credit.

Atieno (2020) reported that 67% of MSME owners in Kenya obtained credit from informal financial markets. Among those who did not apply for credit, only 15% indicated no need for it, implying that the majority still required funding but faced barriers to access. The study emphasized that informal financing offers more accessible credit options for SMEs and highlighted the importance of enhancing the capacity of informal financial systems to more effectively support SME lending. However, Mwangi and Kimani (2015) identified several challenges that limit participation in Kenya's informal financial markets, including weak governance structures, low levels of member

engagement, and high default rates. Similarly, Sile and Bett (2015) investigated the factors influencing the use of informal finance in Kenya. Their findings revealed that perceptions of formal financial institutions and internal business regulations play a significant role in determining reliance on informal financial services.

This study is grounded in two key theoretical frameworks: Information Asymmetry Theory and Behavioral Finance Theory. Information Asymmetry Theory, introduced by Akerlof (1970), posits that lenders often lack adequate information about borrowers, leading to problems such as adverse selection and moral hazard. Adverse selection occurs when lenders are unable to distinguish between high-risk and low-risk borrowers, while moral hazard arises when they cannot effectively monitor how borrowed funds are utilized. In contrast, informal lenders who typically have close social ties with borrowers are often better positioned to overcome these information gaps, making them more accessible and attractive to MSMEs. The lack of reliable information deters formal lenders, particularly when dealing with SMEs located in remote or rural areas. Behavioral Finance Theory, developed by scholars such as Kahneman, Tversky, Thaler, and Shiller (2018), examines how psychological factors and cognitive biases influence financial decision-making. This theory is particularly relevant to the study as it sheds light on why MSME owners might prefer informal financing options. Their choices may be shaped by perceived convenience, a sense of familiarity, or lower perceived risk, even when formal financing alternatives could offer more favorable economic terms.

well-suited for the study, as it enables the collection of standardized, quantitative data in a cost-effective and time-efficient manner and is useful for generating or refining hypotheses (Samuel, 2017). The study population consists of 5,378 registered MSME owners in Kwara State (KWACCIMA, 2024). Kwara State was purposefully selected due to its high level of financial exclusion among MSME owners, as highlighted by the 2024 National Bureau of Statistics (NBS) report on poverty incidence. The state is divided into three senatorial districts: Kwara Central, Kwara South, and Kwara North, which collectively comprise 16 local government areas. Two local government areas will be selected from each senatorial district: Asa and Ilorin East (Kwara Central), Irepodun and Ifelodun (Kwara South), and Baruten and Kaima (Kwara North). These areas were chosen based on their high concentration of MSMEs, vibrant commercial activity, and the prevalence of financial exclusion among MSME owners (KWACCIMA & NBS, 2025).

This selection ensures a diverse and comprehensive representation of economic and social conditions across rural regions. The study focuses on registered MSME owners, as registration with the Corporate Affairs Commission (CAC) and compliance with Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) standards are required for KWACCIMA membership. Additionally, these selected areas consistently face challenges in accessing formal financial services from deposit money banks and microfinance institutions, as documented in KWACCIMA records.

Table 1 - Population of the study

S/N	LGA in the State	Population of MSMEs	Proportion of sample size	Sample Size
1	Asa	1,201	(1,201×357) ÷ 5,378	79.72
2	Ilorin East	1,089	(1,089×357) ÷ 5,378	72.28
3	Irepodun	743	(743×357) ÷ 5,378	49.32
4	Ifelodun	967	(967×357) ÷ 5,378	64.19
5	Baruteen	704	(704×357) ÷ 5,378	46.73
6	Kaima	674	(674×357) ÷ 5,378	44.74
	Total	**5,378**		**357**

Source: KWACCIMA, (2025)

3.0 METHODOLOGY

This study adopts a cross-sectional research design, collecting data from different units of analysis at a single point in time. This design is

Table 1 presents the total population of 5,378 MSME owners whose views were sampled to examine the determinants of informal financing among MSME owners in Kwara State. A sample

size of 357 was determined using the statistical table developed by Krejcie and Morgan (1970), a method further supported by Hill, Brierley, and McDougall (2020), who affirm that this sample size is adequate for generating valid research results. The study used a stratified random sampling method to select its participants. This approach was favored due to the relatively homogeneous characteristics of MSME owners and the geographic distribution of their businesses. MSMEs were grouped into six strata based on location: Asa, Ilorin East, Irepodun, Ifelodun, Baruteen, and Kaima. A proportionate number of participants were then randomly selected from each stratum based on its representation in the total population.

Data were gathered using a structured questionnaire designed in line with the guidelines of Jenkins and Dillman (2020). The instrument was divided into two sections. The first section collected demographic information, including gender, age, marital status, educational level, and academic/professional qualifications. The second section focused on the key research variables used to examine the determinants of informal financing among MSME owners in Kwara State, such as business size, business location, collateral security, and financial literacy. Each variable was measured using five items on an interval scale. To encourage precise and thoughtful responses while minimizing neutral or biased choices, a five-point Likert scale was employed (Nielsen, 2016). The collected data were analyzed using a combination of descriptive and inferential statistical techniques, including Partial Least Squares Structural Equation Modeling (PLS-SEM), to adequately address the research objectives;

Model Specification

$$IF_i = (SB_i, LB_i, CS_i, FL_i) \quad \ldots\ldots (1)$$

Where,

IFi = Informal Financing

$$IF_i = (SB_i, LB_i, CS_i, FL_i) \quad \ldots\ldots (2)$$

Where:

SB_i = Size of business

LB_i = Location of business

CS_i = Collateral security

FL_i = Financial literacy

Accordingly, Equation (2) is reformulated as a multiple linear relationship, as shown below:

$$IF_i = \beta_0 + \beta_1 SB_i + \beta_2 LB_i + \beta_3 CS_i + \beta_4 FL_i + \varepsilon_i \quad \ldots. (3)$$

Equation 3 relates to the determinants of informal financing.

β_0 = constant parameter

β_1, β_2, β_3, β_4 = Coefficients of the regressors

ε = error term

The a-priori expectation of the model is $SB_i > 0$ or < 0; $LB_i > 0$ or < 0; $CS_i > 0$; $FL_i > 0$

4.0 RESULTS AND DISCUSSION OF FINDINGS

Table presents and analyzes results obtained from the administered questionnaires. Of the 357 questionnaires distributed, 337 were successfully retrieved and deemed usable. The collected data were organized and presented according to the sequence of the research questions outlined in the previous section. Descriptive statistics, mainly sample percentages, were applied to analyze the respondents' demographic characteristics. In addition, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used for the inferential analysis.

Table 2. Analysis of Questionnaire Distributed to the respondents

	Distributed	Returned	Invalid	Valid/useful
Respondents	357	337	20	337
Total	357	337	20	337
Percentage	**100**	**94.39**	**5.60**	**94.39**

Source: Author's Computation (2025).

Table 3 displays the results of the measurement model, assessing the reliability and validity of the constructs related to informal financing among SMEs. It reports the factor loadings of individual items, Cronbach's alpha (for internal consistency), composite reliability (CR), and average variance extracted (AVE), confirming that each construct satisfies the required reliability and validity standards. The constructs examined include size of business, location of business, collateral security, and financial literacy. The factor loadings presented in the table demonstrate how effectively each item measures its corresponding construct. All constructs have factor loadings of 0.70 or higher, indicating a strong relationship between the items and their respective constructs. Cronbach's alpha is used to measure the internal consistency of the items. All constructs demonstrated strong reliability, with Cronbach's alpha values ranging from 0.917 to 0.982, indicating that the items consistently measured their respective underlying constructs. Composite reliability (CR), considered a more accurate measure of reliability in PLS-SEM compared to

Cronbach's alpha, also exceeded the recommended threshold for all constructs, further confirming high internal consistency. The Average Variance Extracted (AVE) assesses the proportion of variance captured by a construct relative to the variance caused by measurement error. All constructs reported AVE values above the 0.50 benchmark, ranging from 0.704 to 0.859, thereby providing evidence of strong convergent validity. Overall, the constructs in the model satisfy the requirements for indicator reliability (factor loadings), internal consistency reliability (Cronbach's alpha and CR), and convergent validity (AVE). Hence, the measurement model is robust and suitable for further analysis (Hair et al., 2014).

Table 4 reports the assessment of discriminant validity using the Fornell and Larcker criterion, which measures the extent to which each construct in the study is distinct from the others. The diagonal values show the square root of the Average Variance Extracted (AVE) for each construct, whereas the off-diagonal values represent the correlations among the constructs.
The constructs assessed include Informal Finance (IF), Size of Business (SB), Location of Business (LB), and Financial Literacy. Each construct shows a higher correlation with its own indicators than with those of other constructs, thereby confirming the presence of discriminant validity.

The R^2 value for informal financing is 0.804, indicating that the model explains 80.4% of the variance in informal financing. This high R^2 value suggests that the predictor's size of business, location of business, collateral security, and financial literacy collectively account for 80.4% of the variation in informal financing, demonstrating a well-fitting model. Among these predictors, financial literacy emerges as the strongest determinant of informal financing among SMEs, followed by size of business, collateral security, and location of business. The path coefficient (β) between size of business and informal financing is 0.602, with a t-value of 3.070 and a p-value of 0.001. Since the t-value exceeds the critical value of 1.96 and the p-value is below 0.05, the relationship is statistically significant. Thus, hypothesis H_{1a} is supported, indicating that a one-unit increase in business size results in a 60.2% rise in informal financing among SMEs. For hypothesis H_{1b}, the relationship between business location and informal financing yields a path

Table 3. Result of Measurement Model

Construct	Items	Loading	Cronbach's Alpha	CR	AVE
Informal Financing	IF_1	0.803	0.979	0.879	0.859
	IF_2	0.850			
Financial Literacy	FL_1	0.855	0.965	0.868	0.704
	FL_2	0.820			
	FL_3	0.871			
	FL_4	0.833			
Location of Business	LB_1	0.812	0.917	0.845	0.707
	LB_2	0.801			
	LB_3	0.841			
	LB_4	0.704			
Collateral Security	CS_1	0.735	0.982	0.883	0.705
	CS_2	0.857			
	CS_3	0.806			
	CS_4	0.802			
Size of Business	SB_1	0.710	0.959	0.765	0.791
	SB_2	0.821			
	SB_3	0.879			

Source: Author`s Computation, (2025).
Note: CR= Composite Reliability; AVE= Average Variance Extracted.

Table 4 Discriminant Validity using Fornell and Larcker Criterion

	1	2	3	4	5						
1. IF	0.808										
2. SB	0.688	0.822									
3. LB	0.626	0.698	0.711								
4. CS	0.638	0.657	0.679	0.736							
5. FL	0.635	0.635	0.661	0.635	0.721						

Source: Author`s Computation, (2025)

coefficient of 0.513, a t-value of 2.909, and a p-value of 0.020. These findings demonstrate a statistically significant positive relationship, implying that a one-unit improvement in business location leads to a 51.3% increase in informal financing.

Similarly, the path coefficient between collateral security and informal financing is 0.551, with a t-value of 2.663 and a p-value of 0.000. This statistically significant relationship ($t > 1.96$, $p < 0.05$) supports hypothesis H_{1c}, indicating that a one-unit increase in collateral security is associated with a 55.1% increase in informal financing among SMEs. Additionally, financial literacy is positively related to informal financing, with a path coefficient of 0.622, a t-value of 4.003, and a p-value of 0.000. These results confirm a strong and statistically significant effect of financial literacy on informal financing ($p < 0.05$), thereby supporting hypothesis H1d. The findings suggest that a one-unit increase in financial literacy could lead to a 62.2% rise in informal financing. Overall, the evidence indicates that higher financial literacy substantially improves access to informal financing among SMEs in Kwara State, Nigeria.

Discussion of Findings

Table 5 Path Coefficients of Size of business (SB), Location of business (LB), Collateral security and financial literacy (FL) as determinants of informal financing among SMEs.

H	Relationship	Beta	Std-Error	T-Value	P-Value	R^2	Decision
H_{1a}	SB -> IF	0.602	0.058	3.070	0.001	0.804	Supported
H_{2b}	LB -> IF	0.513	0.060	2.909	0.020		Supported
H_{3c}	CS -> IF	0.551	0.046	2.663	0.000		Supported
H_{4c}	FL -> IF	0.622	0.066	4.003	0.000		Supported

Source: Author`s Computation, (2025).
Note that: p < 0.05*, p < 0.01 and Acceptance criterion is 1.96.**

This section presents the key findings in relation to the study's research objectives. It examines the tested hypotheses concerning the determinants of informal financing among SME owners in Kwara State, drawing insights from the predictive model and the study's results. The findings are also compared with existing literature and relevant theoretical frameworks. The discussion is structured according to the sequence of the research questions, as outlined below;

Effect of Size of Business on Informal Financing among SMEs Owners

The first research question, aligned with the first research objective, sought to assess the extent to which the size of a business influences informal financing among SME owners in Kwara State. The standardized path coefficient results indicated a strong positive relationship between business size and informal financing. Hypothesis H_{01} stated that there is no significant relationship between business size and informal financing among SME owners in the state. However, the a priori expectation was that the two variables would be positively related. Consequently, the null hypothesis was rejected in favor of the alternative. This finding is consistent with previous studies, including those by Hussen (2015), Buckley and Webster (2016), Laminiano and Francisco (2021), Nguyen and Canh (2021), and Stephen and Flora (2022), which also reported that business size significantly affects access to informal financing among SME owners. However, the current result contrasts with findings by Wallalage and Fernandez (2019) and Olufemi, Samson, and Ezekiel (2024), who reported a negative and insignificant relationship between business size and informal financing among SMEs. Additionally, behavioral theory supports the study's findings by suggesting that the behavior of small business owners can attract informal financial support. However, medium-sized businesses may be more likely to access formal financing due to the structured and formal nature of their operations.

Effect of Location of Business on Informal Financing among SMEs Owners

The study also hypothesized that there is no significant relationship between business location and informal financing among SME owners in Kwara State, Nigeria. However, the findings revealed a positive and significant relationship between business location and informal financing, leading to the rejection of the null hypothesis and acceptance of the alternative. This result aligns with the findings of Mazanai and Fatoki (2012), Wiyani and Prihantono (2016), Santos (2019), Babajide (2021), Madestam (2024), Satta (2024), and Fjose (2025), who also reported a significant positive relationship between business location and informal financing among SMEs. Conversely, the result contrasts with the studies by Robert (2021) and Yilmaz, Marius, and

Gavreletea (2021), which found a negative and insignificant relationship between these variables. The theory of information asymmetry helps explain this relationship by highlighting how unequal access to information between lenders and borrowers can influence SMEs' financial decisions. In particular, SMEs located in rural or remote areas of Kwara State are more likely to rely on informal financing due to limited visibility, inadequate formal documentation, poor access to formal financial institutions, and a high level of perceived risk by formal lenders resulting from information gaps.

Effect of Collateral Security on Informal Financing among SMEs Owners

Regarding collateral security, the results indicate a positive and significant relationship between collateral requirements and informal financing among SME owners in Kwara State. This finding is consistent with the studies of Selamawit and Nigus (2014), Deresse and Zerihun (2017), Adeshola and Olugbenga (2022), and Olufemi, Samson, and Ezekiel (2024), who also reported a significant positive link between collateral security and informal financing among SMEs in Kwara State, Nigeria. However, this outcome contradicts the findings of Scheba and Turok (2020) and Mutsonziwa and Fanta (2021), who found differing results. This result supports the behavioral theory, which posits that SME owners' perceptions, fears, biases, and emotional responses to collateral requirements influence their financing decisions. The demand for collateral in formal financial institutions often leads to avoidance behavior, particularly among risk-averse or financially less literate entrepreneurs. As a result, informal financing becomes a more attractive option because it is perceived as emotionally safer, socially embedded, and less demanding in terms of documentation and guarantees.

Effect of Financial Literacy on Informal Financing among SMEs Owners

With regards to financial literacy and informal financing among SMEs, the results revealed a positive and significant relationship between the two variables, leading to the rejection of hypothesis H_{04}. The study found that financial literacy positively influences informal financing among SME owners in Kwara State, Nigeria. This indicates that improved financial skills, knowledge, and understanding of basic financial concepts are associated with increased engagement in informal financing practices among MSME owners. This finding is logical, as individuals with greater financial awareness and competence are better positioned to understand the functions and benefits of various financing options, including informal ones. Moreover, SME owners who understand financial systems are more likely to make informed decisions, resulting in more effective and satisfactory use of available financing channels. The result aligns with the findings of Mwangi and Kimani (2015), Sile and Bett (2015), Mabwe and Dundu (2018), Wang and Kong (2019), and Adam and Hunter (2019), who emphasized the significant influence of education and financial literacy on SMEs' financing choices. However, it contradicts the conclusions of Jasir (2018) and Mago (2020), who argued that many MSMEs opt for formal financial services, particularly credit, due to behavioral biases rather than adequate knowledge and skills.

These findings support the behavioral theory, which emphasizes the role of psychological factors, cognitive biases, and personal attitudes in shaping decision-making processes. When applied to financial behavior, this theory helps explain why financially literate SME owners in Kwara State may still prefer informal financing. Even with an understanding of financial products, budgeting, interest rates, and credit options, their actual decisions may be influenced by behavioral biases (Morgan and Pontines, 2014).

5.0 CONCLUSION AND RECOMMENDATIONS

This section concludes the study on the determinants of informal financing among SME owners in Kwara State Nigeria. It presents a summary, conclusion, and recommendations based on the study's findings. Also, this section outlines the study's contributions to knowledge, offers suggestions for future research.

The study investigates the determinants of informal financing among SME owners in Kwara State Nigeria, with the purpose of providing empirical evidences on the relationship between size of business, location of business, collateral security and informal financing. This evidences further supports the existing theories and literature on SMEs informal financing. In this context, the findings contribute to a broader course on SMEs informal financing and provide valuable insights for other studies, as well as for policymakers and financial institutions to foster more inclusive financial systems.

Based on the reported findings, the following key conclusions were drawn in line with the research objectives outlined preceding paragraph. Consistence with the above findings, the study established a positive and significant relationship between business size, business location, collateral security, financial literacy, and informal financing among SMEs in Kwara State, Nigeria.

Building on the study's findings and conclusions, and recognizing the need to further encourage SMEs formal financing in Kwara State Nigeria, the study offers the following recommendations:

i. Government should encourage business expansion through cooperative models so SMEs can form clusters or cooperatives to pool resources, increase their scale, and enhance their bargaining power with financial institutions.
ii. Government should expand financial infrastructure to rural areas and establish rural branches or mobile banking services to reach underserved areas.
iii. Government should encourage financial institutions to accept movable assets such as (equipment, inventory and vehicles) as collateral, supported by platforms like the National Collateral Registry (NCR). Also, Government-backed loan guarantees can reduce risk for lenders and enable SMEs to borrow without traditional collateral.
iv. The government should promote the use of peer learning and mentoring systems by pairing financially literate SME owners with their less-informed counterparts to foster a culture of responsible borrowing and sound financial decision-making.

Practical Implication of the study

Improving SMEs' access to formal financing in Kwara State requires a multi-pronged approach that addresses structural barriers and behavioral challenges. By expanding business size through collaboration, bridging location gaps with digital tools, easing collateral constraints, and enhancing financial literacy, policymakers, financial institutions, and SME support agencies can collectively create a more inclusive and sustainable financing ecosystem for small businesses in the state.

Contribution to Knowledge

This study provides valuable contributions to the field of behavioral finance in terms of concepts, theories, and methodologies.

i. The study, for the first time, measures the degree of difference of financial inclusion of MSMEs owners in the North Central, Nigeria using analysis of variance.
ii. Unlike the prior studies that measures the determinants of financial inclusion using supply side factors, the study for the first time measure the determinants of financial inclusion using push-pull Lee`s theoretical framework
iii. The study extends the contribution of the previous studies on the determinants of financial inclusion to variables such as (financial literacy, size of business, level of education, social network and risk preference, proximity to financial service, government financial support and financial service quality).

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