

Micro, Small and Medium Scale Enterprises and the Willingness to Pay for Cost of Credit from Conventional Deposit Money Banks in Kwara State, Nigeria

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ABSTRACT

Micro, small, and medium enterprises (MSMEs) play a vital role in economic development, yet access to formal credit remains their major challenge in Nigeria. While existing studies focus on supply-side constraints such as collateral and lending rates, little attention has been paid to the demand side. This study addresses the gap by estimating MSMEs' willingness to pay (WTP) for finance costs from conventional deposit money banks in Kwara State using a contingency valuation approach. A survey of 400 MSMEs across five local governments employed the Double Dichotomous Choice Contingency Valuation Method (DBDC-CVM) to estimate mean WTP and binary probit regression to evaluate determinants. Results show SMEs are willing to pay an average annual interest rate of 28.18% of formal credit given the hypothetical scenario. Loan tenure has the highest positive impact on WTP, while interest rate and collateral significantly reduce acceptance probability. Other positive factors include business revenue, size, tenure, education, and age, while gender and credit history are not significant. The study reveals MSMEs' WTP is jointly predicted by financial, economic, and demographic factors. Findings suggest policies expanding MSMEs' access to finance should prioritise financial education, reduced collateral burden, and longer loan tenure.

KEYWORDS

Willingness to Pay (WTP), Micro, Small and Medium Scale Enterprises (MSMEs), Cost of Credit, Kwara State.

1 | INTRODUCTION

The importance of Micro, Small and Medium Scale Enterprises in economic growth and development cannot be overemphasised. Most industrialised nations in the world today have adopted MSME driven development strategies as a means of economic growth, employment and prosperity (Ekunnrin & Yaru, 2024). World Bank (2022) reported that MSME constitutes more than 90% of businesses, creating around 70% of employment worldwide. According to SMEDAN and NBS (2021), SMEs constitute more than 84% of the country's workforce and contribute around 50% to the GDP. SMEs have remained constrained by inadequate financing, thereby limiting their potential for economic development and employment (Aderinto et al. 2023).

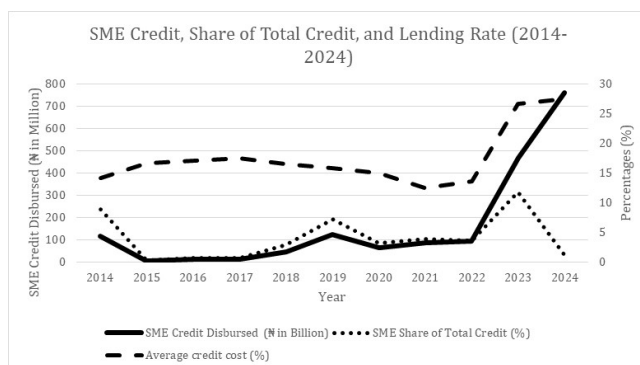
The persistent financial gap for MSMEs has been revealed in the vast literature reviewed, such as Ashogbon et al. (2022), Omeje et al. (2024) and Ajirowo (2024). This arises from supply-side factors such as perceived high loan cost, lack of collateral, regulatory constraints for SMEs, and financial challenges within lending institutions, as well as demand-side factors such as low financial literacy and business size (Olabisi, 2022; Akan et al., 2023). In Nigeria, commercial banks do not

regard finance to SMEs as a viable investment (Ekpu, 2015), while the Central Bank of Nigeria (CBN) tight money policy in 2023 further constrained access to credit. In light of this, some SMEs have developed preference for informal finance sector and learnt to manage their business without pursuing growth opportunities, hence leading to underperformance (Udeh & Ezeaku, 2022).

Stylised evidence suggests the urgency of this inquiry. The Federal Government of Nigeria with the CBN put some policies in place for SMEs, but they achieved less than their objectives (CBN, 2020). Using the average of the five most used banks according to Statista (2023), the table below shows the total amount of funds disbursed to SMEs (2014-2024) in terms of their liquidity portfolio in relation to their lending rate or cost of borrowing funds.

Table 1: SME Credit Disbursement and Interest Rate Trends in Nigeria (2014–2024).

Year	SME Credit Disbursed (₦ in Billion)	SME Share of Total Credit (%)	Average Credit Cost (%)	Total Credit to Private Sector (₦ in Billion)
2014	116.07	8.8	14.1	1319.0
2015	2.97	0.2	16.6	1475.0
2016	10.75	0.7	17.0	1535.7
2017	10.75	0.7	17.5	1535.7
2018	44.82	2.9	16.5	1545.5
2019	123.93	7.1	15.8	1745.5
2020	62.51	3.2	15.0	1953.4
2021	83.74	3.8	12.5	2203.7
2022	93.45	3.6	13.5	2595.8
2023	465.37	11.8	26.6	3943.8
2024	758.5	1.0	27.5	75850.0

Figure 1: SME Credit Disbursement and Interest Rate Trends in Nigeria (2014–2024).

Sources: CBN Statistical Bulletin (various years) 2014-2024

Figure 1 above presents the trend analysis of SME credit disbursement by Deposit Money Banks in Nigeria from 2014 to 2024, alongside the SME share of total credit and the average lending rate. It shows a sharp drop from 2014 to 2015 and gradual recovery up to 2019. Throughout this period, average lending rates fluctuation was gentle, until 2023 when they spiked, while the lending rates rise in 2024 coincided with fall in MSMEs' share of credit disbursed.

While previous studies such as Addo and Asante (2023) and Ahmed (2019) have dealt with the challenges of accessing finance by MSMEs, limited attention has been paid to

willingness to pay (WTP) for finance costs, particularly within the context of conventional deposit money banks in Kwara State. This study addresses this gap using a double bounded contingency valuation method (DBDC-CVM). Willingness to pay involves the highest level of cost of finance (in terms of interest rate and related fees) which a small and medium enterprise can afford considering their anticipated returns, level of risk and other sources of funding (Babatunde, 2024). It should be noted that while credit may be available, MSMEs do not necessarily utilize the services offered due to their high costs (Ajayi & Yusuf, 2020).

Existing literature in Nigeria such as Isimoya and Oluwaleye (2023), and Ashogbon et. al. (2022) investigated concepts which includes the constraints to finance access and government interventions. However, little to no attention was paid to the product design itself, and whether MSMEs even deem it worthy of acceptance. As a result, there may occur disconnection between the cost of financial products and their affordability. Therefore, this study estimates the mean maximum willingness to pay for cost of credit in Kwara State, Nigeria. This will close the gap between credit cost and affordability for MSMEs and close the gap at the sub-national level where local economic conditions vary.

The study focuses entirely on MSMEs located in Kwara State, and formal credit obtained from conventional deposit money banks was studied. Other financing sources such as microfinance banks, cooperative societies, fintech and informal credit sources are outside the scope of this study. The study seeks to answer the following questions:

RQ1: What is the average maximum interest rate that SMEs in Kwara State are willing to pay for formal credit obtained from conventional deposit money banks?

RQ2: What economic, financial and demographic factors predict SMEs' willingness to pay for finance costs?

RQ3: How do loan characteristics such as interest rate, collateral requirement and repayment tenure affect SMEs' willingness to accept formal credit?

This study contributes to the literature in four important ways. First, it provides one of the few demand-side estimates of SMEs' willingness to pay for finance costs in Nigeria using DBDC-CVM framework. Second, it provides an estimated average maximum WTP interest rate of 28.18%, which provides useful evidence for financial institutions designing MSME lending products. Third, it identifies the economic, financial and demographic factors that significantly predict MSMEs' WTP for formal credit, thereby providing relevant insights for policy makers in improving MSME financing. Lastly, it is significant for its contribution to academic literature by integrating the neoclassical theory of firms and Contingency Valuation Method (CVM).

2 | LITERATURE REVIEW

Conceptual Review

Yusuf et al. (2024) describes WTP in credit settings as the maximum interest rate that a business owner is willing to accept to secure funding, given their business performance. Also, Brealey et al. (2023) describes cost of credit as the effective interest rate on liabilities, the rate is determined by the credit worthiness of the borrower and risk Assessment by the lender. In this context, it refers to the payments in terms of charges involved in the borrowing of money.

Small and Medium Scale Enterprises (MSMEs) are classified based on their capital size or employee count, which must fall within specific limit. The classification adopted by The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). This is because it is more recent, widely accepted and agrees with other developing countries' definitions. This is the same definition adopted by the Central Bank of Nigeria in its description of MSME (Akinbode & Imhonopi, 2015).

Table 2: Classification of MSME in Nigeria

S/N	Size Category	Employment	Assets (in million Naira) excluding land and building)
1.	Nano/Homestead	1-2	Less than ₦3 million
2.	Micro enterprises	3-9	₦3 million – ₦25 million
3.	Small enterprises	10 – 49	₦25 million - less than ₦100 million
4.	Medium enterprises	50 – 199	₦100 million – less than ₦1,000 million

Source: *Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2021).*

Government and CBN intervention programmes have been established for the assistance of MSMEs survival or growth (Abu et. al. 2024; Osita et. al. 2024). These include several schemes, programmes and policies formed by the Central Bank of Nigeria (CBN) over the years, specifically to tackle the problem of MSME financing. However, these programmes, which targeted MSMEs, achieved less than the minimum expectation of their function (CBN, 2009; CBN, 2015; CBN, 2017; CBN, 2019; CBN, 2020).

Theoretical Review

The neoclassical theory of firms posits that the main aim of a firm is to maximize total revenue and minimise total cost (Marshall, 1890). The cost of credit constitutes an important part of a firm cost of production. Therefore, a firm will be willing to pay credit only when the expected returns from the investment financed by such credit exceed the total cost of borrowing. Also, firms possess full information when making decision and certainty (Varian, 2019). The key idea is that Marginal Cost (MC) = Marginal Revenue (MR). In the context of this study, MSMEs'

willingness to pay for the cost of credit is a function of their expectation that borrowed funds will generate revenue that is enough to cover the financing costs. The foundation of this theory perfectly aligns with the CVM framework, where MSMEs WTP for cost of credit is revealed based on expected benefits. While the neoclassical theory of production traces back to Alfred Marshall and other early economists, the Cobb and Douglas (1928) production function provided a formalised framework for analysing input-output relationships in firms.

The Behavioural Theory of the Firm by Simon (1947) was applied to firm by Cyert and March (1963). Following the review by Parker (2018), the theory challenges the assumption of full rational choice by firms. This is the central theme of bounded rationality. By implication, MSMEs do not compare the cost and the benefit of investment, MSMEs choose a "good enough" option, use rules of thumb and seek solutions when problems arise. This theory explains why an MSME's stated WTP in a survey might be based on simple rules or imitation rather than precise calculation, and why the owner's experience and education are important determinants. Furtherance to Simon (1947) behavioural theory of firms, Kahneman and Tversky (1979) introduced the prospect theory to explain how individual assess their losses and gain perspectives in an asymmetric manner.

This study integrates the Neoclassical Theory of the Firm and the Behavioural Theory of the Firm. The neoclassical framework provides the rational basis which supports the estimation of WTP, assuming that MSMEs compare the expected benefits of credit with its associated costs and accept financing when expected utility is positive. On the other hand, the Behavioural Theory of Firm is employed to explain the variation in WTP

which occur due to education and experience that improve the decision making capacity among MSME owners.

Empirical Review

A few studies have focused on a mix of economic, demographic and financial factors on MSMEs finance decision using varying methods analyses. Empirical studies such as Ashogbon et al. (2022), Sanni et al. (2020) and Babarinde et al. (2019) revealed that interest rate affects MSMEs use of loan finance. Furthermore, collateral is a required loan condition that adds cost to credit. Prior studies (Seyefar, 2019; Brutscher et al., 2017; Bellucci et al., 2015; Rithaa et al. 2019) show that MSMEs sees collateral as a major constraint to credit. Also, duration required for loan repayment is too small for the firm to make the required returns (Saari, 2020; Rahman et al., 2017).

Further, studies such as Serrasqueiro et al. (2023) and Saidu (2019) argued that firm size has a negative relationship with profitability. On the contrary, Omeje et al. (2024) analysis using firm-level data collected from various sectors in Nigeria and quantitative approach, posits that firm size is an important factor. Education of MSMEs contributed to their skill and success in both business and use of loan (Yaqub et al., 2021; Isimoya & Oluleye 2022). Ahmed (2019) argued that experienced MSMEs moved towards credit more as their source of finance. Ajirowo (2024) explains the growth of MSME in terms of access to

capital. Owner's age contributes to the willingness of MSMEs to use loan from deposits money bank (Sahinidis et al. 2021). Table 3 below is a summary of findings by previous studies.

Table 3. Empirical Review Summary

Author	Country	Method	Focus	Main Finding
Chilembo (2021)	Zambia	Regression	Access to finance	Collateral constrains SMEs
Brutscher et al. (2017)	Europe	Experiment	Loan characteristics	Longer tenure increases demand
Sanni et al. (2020)	Kwara, Nigeria.	PLS-SEM	Credit accessibility	Credit improves performance
Omeje et al. (2024)	Nigeria	Firm-level analysis	Firm size	Larger firms perform better
Seyefar, (2019)	Nigeria	PLS-SEM	Bank loan usage	Collateral and interest rate constrain SMEs
Bellucci et al., (2015)	Italy	3-Stage Least Squares	Collateral	Collateral constrains SMEs
Rithaa et al. (2019)	Kenya	Regression	Credit accessibility	Collateral constrains SMEs
Saidu (2019)	Nigeria	Regression	Financial performance	Firm size reduce performance
Yaqub et al. (2021)	Nigeria	Regression	Loan impact on development	Financial education improves business growth
Isimoya & Oluleye 2022	Ekiti, Nigeria	Regression	Financial literacy	Financial education improves business growth
Babarinde et al. (2019)	Kwara, Nigeria	Probit regression	Business performance	interest rate constrains SMEs
Ahmed (2019)	Jordan	Thematic analysis	credit accessibility	Financial education and business experience increases loan demand
Ajirowo (2024)	Kwara, Nigeria	Regression	credit accessibility	Access to capital improves growth
Sahinidis et al. (2021)	Greece	Regression and factor analysis	Business age/experience	Business experience increases loan demand
Ashogbon et al. (2022)	Nigeria	Autoregressive Distribution Lag	Credit accessibility and growth	interest rate constrains SMEs growth

The empirical review of literature on MSME loan financing in Nigeria and other countries are largely focused on access to credit, determinants of borrowing, and the impact of finance on firm performance. Although the existing literature provides important insights into SME financing, several limitations remain. First, there is need for exploration of regional context ensure sectorial comparison. Most of these studies are conducted at national level using secondary data, which may conceal sub-national variations in financing behaviour. Second, the supply side is adequate with empirical literature, while the demand side question of how much MSMEs are willing to pay for formal credit is limited. Lastly, few studies employ stated-preference techniques such as contingent valuation to estimate MSMEs' willingness to pay for finance costs. Hence, evidence on the acceptable cost of credit from the perspective of SMEs remains limited. This study addresses these gaps by employing a double-bounded contingent valuation approach using primary data from SMEs in Kwara State.

3 | METHODOLOGY

Theoretical Framework

This study integrates the Neoclassical Theory of the Firm and the Behavioural Theory of the Firm. The neoclassical framework provides the rational basis which supports the estimation of WTP, assuming that MSMEs compare the expected benefits of credit with its associated costs and accept financing when expected utility is positive. This is because willingness to pay (WTP) for credit is fundamentally a question of rational valuation, additional profit is compared to the cost of pursuing it ($MR=MC$). On the other hand, the Behavioural Theory of Firm is employed to explain the variation in WTP which occur due to education and experience that improve the decision-making capacity among MSME owners. Since concept of willingness to pay is implicitly rooted in utility-

based reasoning, utility is interpreted at the firm level for this study. This is necessary because expected profitability or benefit is derived from access to credit, and not individual consumer satisfaction (Nikhil, 2021).

The decision logic (profit maximisation) is that MSMEs will accept credit if expected benefit exceeds cost. Mathematically:

$$E(\pi) = E(R) - C \quad (1)$$

Where; $E(\pi)$ is expected profit/benefit, $E(R)$ expected return from investment, and C is the cost of credit.

The Neoclassical Theory of the Firm can be extended to a utility-maximization framework, which is necessary for empirical estimation. Let $U(Y)$ be utility derived from income Y , $U(Y - WTP)$ be utility after paying WTP, P be probability of accepting the payment scenario, π is the net profit from investment and X be vector of individual characteristics (independent variables). In a dichotomous choice format, an individual accepts the bid amount B if the utility after pay the cost exceed the utility before pay the cost. Mathematically, an MSMEs maximise their expected utility when choosing a loan option where;

$$U(Y - B) \geq U(Y) \quad (2)$$

Assuming the profit is known and expected, the mean maximum WTP (B) can be restated as:

$$U(Y - WTP + \pi) = U(Y) \quad (3)$$

This implies that an MSME is indifferent between accepting and not accepting the credit.

The willingness to pay for cost of finance is best elicited by Contingency Valuation Method (CVM). The CVM is a widely used technique in economics for eliciting individuals' willingness to pay (WTP) for goods or services that are not traded in the market (Carson, 2011). Willingness to pay (WTP) for credit is fundamentally a question of rational valuation, where additional profit is compared to the cost of pursuing it (Brealey et al., 2023). CVM enables respondents to express their mean maximum willingness to pay or accept in hypothetical scenarios. The method includes the use of double-bounded dichotomous choice (DBDC) bid questions. This choice format primarily helps to reduce starting point bias which is a latent problem in CVM, and improve statistical efficiency (Hanemann et al., 1991; Cooper, 1993).

Despite the strength of CVM and widespread application, it has been criticized for potential hypothetical and strategic biases. This is because respondents state preferences under hypothetical scenarios rather than actual market conditions. To minimize the effect of these weaknesses, this study employed a realistic loan scenario, incorporated follow-up bid questions through a double-bounded dichotomous choice format, and

used consistency checks to improve response reliability through pilot study. The pilot study was used to examine the responses for stability, logical consistency and low random variation, using its descriptive statistics. Items that showed irregular or inconsistent response patterns were reviewed and refined. These procedures are consistent with established recommendations in the contingent valuation literature (Cooper, 1993).

Reponses from DBDC produces a set of two binary responses that are sequential. This bivariate response which are probabilistic (i.e., yes or no) is best estimated using bivariate probit model (Wooldridge, 2020). Therefore, to derive the probit model, MSME is assumed to have an indirect utility function. $V(Y, B, X)$.

The probability of acceptance is given by:

$$P(Yes) = P[V(Y - B, X) + \varepsilon_1 > V(Y, X) + \varepsilon_0] \quad (4)$$

Where; ε_1 and ε_0 are unobserved factors not captured, Y = income, B = credit cost (bid in percentage) and X = vector of MSME characteristics (size, sector, age, collateral, credit history)

$$P(Yes) = \phi(\alpha + \beta B + \gamma X) \quad (5)$$

Where; β is the coefficient associated with the bid amount B , γ is the coefficient for respondent characteristics X and $\phi(\cdot)$ is the cumulative distribution function of the standard normal distribution.

From the estimated probit model, the mean WTP is computed as:

$$E(WTP) = -\frac{\alpha}{\beta} \quad (6)$$

This represents the average maximum cost that MSMEs in Kwara State are willing to pay for credit from conventional deposit money banks.

The theoretical foundation for this study provides the basis for selecting the variables for the model used. The neoclassical theory of firms posits that firms maximise profit by comparing their marginal revenue with marginal cost, which also include credit cost. Hence, economic characteristics which include business size, annual revenue, and business experience are included in the model. These are variables that determines a firm's productive capacity and profitability. Also, the neoclassical theory of production focuses on efficient combination of inputs to generate output. Credit is a form of capital for business, which adds to input and increase in output and efficiency. In light of this, firm-level economic variables become worthy of inclusion. Financial variables such interest rate (bid amount), credit history, loan tenure and collateral are also incorporated to capture the cost and conditions of

borrowing. Bid amount represent the cost of credit itself, as needed in CVM framework. Collateral is a condition required for credit access and while credit worthiness is explained by credit history. They are critical determinants of credit acceptance or rejection. The neoclassical theory of firms assumes borrowing decision is made after the comparing expected return and financing cost overtime. Hence, loan tenure explains the time factor. It affects the distribution of cash flow obligation, thereby influencing the ability of an MSME to meet repayment schedules.

Although rationality is a central theme of economics as a field in general, sometimes it often appears unrealistic. In the context of MSMEs operating under uncertainty and information constraints, rationality could only be possible given specific boundaries (Parker, 2018). The behavioural theory of the firm introduces the concept of bounded rationality, which posits that cognitive limitations and heuristics influence decision. Similarly, prospect theory adds the concept of risk perception and loss aversion in financial decisions. These theories justify the inclusion of demographic characteristics such as the owner's age and education level to explain the cognitive and information constraints. In addition, they also explain the sensitivity of MSME to repayment burden and financial risk.

Model Specification

The model is a Binary Probit Regression Model. From equation 5, the willingness to pay is expressed as:

$$P(\text{Yes}) = \phi(\alpha + \beta B + \gamma X)$$

P(Yes) is the probability that the respondent is willing to pay for MSME finance cost.

This can be restated econometrically as;

$$WTP_i = \alpha + \beta B + \gamma X + \epsilon_i \quad (7)$$

The above equation 10 can be specified linearly as thus:

$$WTP_i = \beta_0 + \beta_1 \text{Size} + \beta_2 \text{InR} + \beta_3 \text{Coll} + \beta_4 \text{CreH} + \beta_5 \text{Ten} + \gamma_1 \text{Rev} + \gamma_2 \text{Age} + \gamma_3 \text{EdL} + \gamma_4 \text{BEx} + \gamma_5 \text{Male} + \epsilon_i \quad (8)$$

Where; β is the coefficient of key parameters of interest, γ is the coefficient of control variables, *Size* represents size of MSMEs, *InR* represents interest rate, *Coll* represents required collateral, *CreH* represents credit history, *Ten* represents loan tenure, *Rev* represents annual revenue, *Age* represents the age of the MSME owner, *EdL* represents education level of MSME owner, *BEx* represents business experience of MSME, *Male* is for 1 when gender is male, while ϵ_i is the error term.

Analytical Techniques

The data was analysed using binary probit regression.

Diagnostic tests including correlation analysis, multicollinearity checks, heteroskedasticity test, model specification test, joint hypothesis test and receiver operating characteristic analysis. The pseudo- R^2 also confirmed model validity and goodness of fit.

Dependent Variable

Willingness to pay (WTP_i): It is a stated preference that measures the mean maximum monetary value an individual place on a product. It is measured as a bivariate variable (yes or no), where yes means $WTP = 1$ and no means $WTP = 0$.

Independent Variables

The key independent variables include; size of MSMEs, interest rate, required collateral and credit history. The control variables are: loan tenure, annual revenue, the age of the MSME owner, education level of MSME owner, business experience of MSME and gender.

1. Interest Rate (Bid Amount): This is an economic characteristic that constitute the main cost of borrowing money, expressed as a percentage of the loan principal, paid over a specific period. This is measured in percentage, given the existing range in the credit market, and as used in the hypothetical scenario.
2. Loan Tenure: This explains the time factor. It captures the effect of repayment structure on MSMEs' WTP. It is measure categorially, where short-term loans referred to repayment period of one year or less, medium term loans referred to repayment period above a year but not more than 3 years, while long-term loans referred repayment period of more than 3 years. It is a multivariate variable where short-term = 1, medium-term = 2, and long-term = 3. This is based on the threshold used by the word bank group (2021), recent studies such as Uchechi et al. (2025), and a much older study by Glennon and Nigro (2005)
3. Collateral: This is an economic factor which is a criterion for credit access for MSMEs. It is a bivariate variable where yes = 1 and no = 0
4. Credit History: This is an economic characteristic that explains credit worthiness of an MSME. It is a bivariate variable where yes = 1 and no = 0.
5. Business Size: This is an economic characteristic that explains MSMEs' productive capacity. It is a multivariate categorical variable, classified based on the categories given by SMEDAN (2021). Although lots respondents may not know their actual asset value, efforts were made to improve

6. accuracy through guidance and clarification during questionnaire administration by the research assistant. Nano and micro = 1, small = 2, and medium = 3.
7. Annual Revenue: This is an economic characteristic that explains profitability or liquidity control of MSMEs. It is a multivariate variable. 1 is for Less than ₦5 million, 2 is for ₦5 million–₦20 million, 3 is for ₦20 million–₦50 million, and 4 is for more than ₦50 million.
8. Business Experience/Age: This is an economic factor that explains the skill from experience by MSMEs. By adapting Ingele (2021) classification, the fundamental idea and decline stages were removed. They represent the before and after the existence of a business which is beyond the scope if this study. This is a multivariate categorical variable. 1 is for start-up stage, 2 is for early stage, and 3 is for mature stage.
9. Education Level: This demographic factor explains information constraint of MSMEs. Using the UNESCO international Standard Classification of Education (ISCED) 2011, as used in recent studies such as OECD (2023), Imhangbe and Sanni (2025), and Bala et al. (2024). Hence, the study classified education into four categories. This is a multivariate categorical variable, where no education = 0, primary = 1, secondary = 2 and tertiary = 3. While this may obscure the differences within tertiary education, it provides sufficient variation for the purposes of the analysis.
10. Owner's age: This is a demographic factor that This explains the level of cognitive ability of MSMEs. This study Adopts the category commonly used, as used in recent studies such as Cader et al. (2021) and Olowoyeye (2019). This is a multivariate variable. 1 is for less than 30yrs, 2 is for 30-40yrs, 3 is for 40-50yrs, and 4 is above 50yrs.

Study Area and Population

The research was conducted in five selected local governments in Kwara State. The selected local government are clusters of MSMEs with significant population of MSMEs, based on the data obtained from Kwara State ministry of business, innovation and technology. These local governments are: Ilorin West, Ilorin East, Ilorin South, Asa and Offa.

Sampling and Sample Size

The sample size was determined using the formula provided by Cochran (1977). This is most appropriate for samples whose population variance is unknown, or very large. The formula is expressed as;

$$\text{sample size} = \frac{(Z)^2 p(1-p)}{(e)^2} \quad (12)$$

Where; n = sample size, Z = z-score corresponding to the desired

confidence level, p = estimated proportion of the population (standard deviation proxy), e = margin of error (confidence interval).

The chosen confidence level is 95% (1.96 z-score), therefore the sample size is determined as:

$$\text{sample size} = \frac{(1.96)^2 \times 0.5 \times (1-0.5)}{(0.05)^2} \quad (13)$$

$$\text{sample size} = 384.16 \quad (14)$$

This sample size is consistent based on the statistical power requirement for CVM, population characteristics, survey design and resource constraint. This sufficient large sample is required for the estimation of WTP to ensure reliability and control of biases. Therefore, this serves as the rationale for the chosen sample size of 400. Minimum recommended per bid level is 40-60 responses (Mitchell & Carson, 1989).

Multi-stage sampling technique was employed to ensure representativeness, cost effectiveness and operational feasibility (Cochran, 1977; Kish, 1965; Kothari, 2004). This also account for the wide geographical spread of MSME and their homogeneity in the study area (Saunders et al. 2019). In the first stage, five local government (Ilorin West, Ilorin South, Ilorin East, Asa and Offa) were selected because of high cluster of MSMEs in these Local Governments Areas (LGA). In the second stage, they were further stratified into sectors as; agriculture, trading, services and manufacturing. In the final stage, MSMEs respondents were randomly selected based on accessibility within each sector. A total of 400 respondents were sampled as determined using the CVM standard formula for a simple random sample (Bryman, 2016). Although random selection was employed within each sector (based on accessibility), the focus of the study on five high LGAs with high MSME concentration, the findings generalisation on MSME in less commercialised areas may be limited.

Data Collection

MSMEs, particularly the micro and small ones are known to operate as sole business, where the property of owners and the business are not separate. According to Organisation of Economic Cooperation and Development (OECD) (2019) and World Bank (2022), a large share of MSMEs in Nigeria is sole-proprietorship, which reflects the dominance of owner-control. Most of these businesses lacks recordkeeping practices (Aderinto 2025). This has eventually made obtaining quantitative data from these businesses a very difficult task. Due to this, this study uses quantitative data obtained from primary source using questionnaire, given the absence and unreliability of secondary data from MSMEs. Survey-based data collection is known to provide a practical means of

55058126, 10.1177/095008042095058126 the source (Saunders et al., 2019; Bryman, 2016). In this vein, primary data were collected result, error reduction and cost effectiveness (Asteriou & Hall, 2011). Content validity was further established through expert

using a structured questionnaire carefully designed using CVM, which is appropriate for eliciting respondents WTP under hypothetical scenarios (Carson et al., 2001). The initial bids were selected based on the prevailing lending rates reported by major deposit money banks. the bid was made into five versions (A-E), with each versions initial bid having a difference of 2% each. The instrument was divided into three sections: (A) MSME's Characteristics, (B) Willingness to Pay (WTP), and (C) MSME's Demographic Information. This structure ensures systematic data collection and facilitates effective analysis of WTP for cost of finance and its determinants.

A total of 451 questionnaires were administered to MSMEs owners. Out of these, 412 were returned, representing response rate of 91.4%. After removing incomplete responses and data cleaning, 400 valid responses were retained for analysis. The questionnaire was administered using kobocollect. This tool requires face-to-face interviews, and was conducted by trained research assistants who resides in each of the locality. Where necessary, the questions were interpreted in Yoruba to ensure adequate comprehension. Respondents were also guided through the hypothetical loan scenarios and space to seek clarification providing responses was provided.

Validity and Reliability

Although Cronbach's alpha and factor analysis are commonly used to measure internal consistency, these techniques were not appropriate for this study. This because the items were neither designed to measure a single latent construct nor make use of multiple likert questions. A more fundamental concern in CVM research is hypothetical bias. Following O'Connor et. al. (1999), follow-up questions which include an upper bid or lower bid, and open-ended questions were administered immediately after the dichotomous and categorical questions (Hanemann et al., 1991). A pilot study was conducted to examine the responses for stability, logical consistency and low random variation, using its descriptive statistics. In studies using Likert scale, a standard deviation in the range of about 0.5 to 1.5 is often cited as the acceptable level of variability among respondent (Garcia-Alvarez et. al, 2015). Response from pilot test were using standard deviation. All variables fall within the range of 0.5-1.5 standard deviation (average revenue is 0.81, collateral is 0.5, business age is 0.7, age is 0.8, and business size is 0.6), except loan history, with 0.48. Items that showed irregular or inconsistent response patterns were reviewed and refined. This ensures the reliability of the instrument. Also, the face validity was assessed during pilot testing. This approach ensured that the instrument consistently captured respondents' views in a reliable manner suitable for the study's context. The choice of pilot test owes to its hands-on approach to evaluation, more accurate

review by specialists in economics and survey research. This ensures the content, face and construct validity by identifying the necessary adjustments and revision needed the improve clarity and relevance (Kothari, 2004; Bryman, 2016). The result of the responses shows a consistent pattern with theoretical expectations, indicating acceptable measurement stability.

4 | FINDINGS

This section presents the findings of the study in five parts. First, are the description tables which give a brief summary of the variables. These are descriptive statistics table for the continuous variable and the cross-tabulation for the categorical variables. Table 1 below reports the descriptive statistics for IBID which includes its mean, median, mode, maximum, minimum, standard deviation and coefficient of variation. The rest are categorical variables which are presented in cross-tabulation in Table 2. This includes their description, frequency, frequency of when WTP is 1, frequency of when WTP is 0, and the percentage of acceptance. Second, is the correlation matrix using spearman rho. Third is the diagnostic tests conducted. Fourth is the regression analyses identify the determinants of MSMEs WTP and their intensity. And the fifth one contains the single-bound dichotomous choice and the double-bound dichotomous choice estimates of WTP. These are followed by a discussion of the coefficient and findings, and how each agrees or contrast with the existing literature.

Descriptive Statistics

The survey included 400 respondents. Table 4 summarises the descriptive statistics of IBID, and Table 5 is the descriptive statistics for other categorical variables.

Table 4. Descriptive Statistics for Initial Bid Value

Variables	Description	Mean	Mode	Std. Dev.	Min	Max	COV
IBID	Bid amount	31	-	2.8319	27	35	9.14
	Interest rate						

Where IBID is the initial bid (interest rate).

In Table 4 above, the mean bid amount is 31%. The bid values were closely bounded within a relatively small range of 27%-35%. This reveals that the bid value represents the true prevailing interest rate range of deposit money banks. Standard deviation of 2.8 implies that dispersion is minimal. This helps in avoiding excessive noise in responses due to extreme values. The coefficient of variation of 9.14 reveals that there is low relative variability. This leads to the conclusion that the bid design is accurate and stable.

Table 5. Descriptive statistics for the categorical variables

Category	Total (N)	Percentage	WTP=1	WTP=0	% WTP=1
-	400	-	117	283	29.25%
Gender					
Male	195	49%	67	128	34.4%
Female	205	51%	155	50	75.6%
Business Experience (Bex)					
Less than 1 year	17	4%	0	17	0%
1–5 years	221	55%	6	215	2.7%
More than 5 years	162	41%	111	51	68.5%
Age of respondent (Age)					
Under 30 years	149	37%	3	146	2%
30-40 years	105	26%	1	104	1%
41-50 years	112	28%	87	25	77.7%
Above 50 years	34	9%	26	8	76.5%
Tenure of loan (Ten)					
Short-term loan	186	47%	6	180	3.2%
Medium-term loan	165	41%	66	99	40%
Long-term loan	49	12%	45	4	91.8%
Size of a business excluding land and buildings (Size)					
Micro	244	61%	11	233	4.5%
Small	143	36%	94	49	65.7%
Medium	13	3%	12	1	92.3%
Level of education (EdL)					
None	4	1%	0	4	0%
Primary	96	24%	1	95	1%
Secondary	146	37%	8	138	5.5%
Tertiary	154	39%	108	46	70.1%
Collateral security for loan (Coll)					
Yes	172	43%	97	75	56.4%
No	228	57%	20	200	8.8%
Credit History – presence of debt (CreH)		0			
No (not a debtor)	209	52	58	151	27.8%
Yes (a debtor)	191	48	59	132	30.9%

Source: Authors' computation, 2025.

The data in Table 5 above presents the distribution of respondents across their characteristics which include the socio-economic and credit related characteristics, as well as their willingness to pay (WTP) responses.

- Willingness to Pay (WTP):** Out of the total 400 respondents, only 117 are willing to pay the initial bid, which is 29.25%. The remaining 70.75% (283) are not. This low WTP reveals that the cost of credit offered is perceived to be too high by most of the MSMEs.
- Loan Tenure:** Loan duration shows a strong positive relationship with WTP. WTP for short-term loan is 3.2%, but tremendously rise to 40% for medium-term loan, and further rise to 91.8% for long-term loan. Hence, MSMEs strongly prefer long-term repayment period.
- Business Size:** WTP positively correlates with firm size. Micro enterprise has 4.5% WTP rate, small enterprises have larger acceptance rate of 65.7%, and medium businesses have very high acceptance rate of 92.3%. this implies that, capacity boost confidence in taking up credit, due to the ability to withstand the cost.
- Education Level (EdL):** Not educated business owners show no willingness to pay, primary school certificate holder shows only 1% WTP, while SSCE holder shows only 5% WTP. It shows a gradual rise in WTP with education. However, tertiary spikes with 70.1 WTP. This concludes that higher education enhances WTP.

Correlation Analysis Result

Table 6 below presents the correlation matrix, which shows the simple correlation coefficients between every pair of the variables. This is conducted using spearman's rank correlation matrix because of the measurement scales of the variables are not

Table 6. Spearman's Rank Correlation Matrix

Variables	R1	IBID	Gender	Size	Rev	BEx	Age	Ten	EdL	Coll	CreH
R1	1.0000										
IBID	-0.1749 (0.0004)	1.0000									
Gender	0.1095 (0.0285)	0.0177 (0.7244)	1.0000								
Size	0.6876 (0.000)	-0.0750 (0.1342)	0.1182 (0.0181)	1.0000							
Rev	0.6498 (0.0000)	-0.0262 (0.6011)	0.1025 (0.0404)	0.6851 (0.0000)	1.0000						
BEx	0.7122 (0.0000)	0.0108 (0.8295)	0.0614 (0.2206)	0.5698 (0.0000)	0.5474 (0.0000)	1.0000					
Age	0.8024 (0.0000)	-0.0588 (0.2411)	0.1228 (0.0139)	0.6162 (0.0000)	0.5951 (0.0000)	0.8343 (0.0000)	1.0000				
Ten	0.5333 (0.0000)	0.0461 (0.3580)	0.0669 (0.1815)	0.4193 (0.0000)	0.4493 (0.0000)	0.4526 (0.0000)	0.4882 (0.0000)	1.0000			
EdL	0.7110 (0.0000)	-0.0872 (0.0816)	0.0917 (0.0668)	0.6740 (0.0000)	0.7447 (0.0000)	0.5822 (0.0000)	0.6381 (0.0000)	0.4698 (0.0000)	1.0000		
Coll	0.5183 (0.0000)	-0.0500 (0.3186)	0.0419 (0.4030)	0.5805 (0.0000)	0.7530 (0.0000)	0.4355 (0.0000)	0.4533 (0.0000)	0.3541 (0.0000)	0.6619 (0.0000)	1.0000	
CreH	0.0345 (0.0000)	-0.0779 (0.1200)	-0.0712 (0.1551)	-0.0037 (0.9406)	0.0320 (0.5237)	0.0372 (0.4586)	0.0238 (0.6357)	0.0483 (0.3351)	-0.0055 (0.9126)	-0.0013 (0.9791)	1.0000

Source: Authors' computation, 2025.

From Table 6 above, the figures in bracket are the p-values. The table shows that firm characteristics such as size and revenue, and owner characteristics such as age, education and experience show positive significant association with first response (R1), while interest rate (IBID) shows negative significant relationship with R1. Credit history (CreH) and gender not significant. Among the explanatory variables, strong correlation exists between firm size and revenue (Rev) as well as age and business experience (Bex). Education level (EdL) has positive relationship with firm size, revenue (Rev) and collateral (Coll) availability. Tenure (Ten) is moderately correlated with age, experience (Bex) and firm performance variables. In contrast, gender and credit history exhibit weak correlation with other variables.

Diagnostic Tests

Table 7 below presents the diagnostic test results.

Table 7. Diagnostic Test Results

Test	Coefficient	P-Value
Pseudo R ²	0.86	-
Log-likelihood ratio	-33.55	0.0000
Wald-ChiSquare	74.80	0.0000
Breusch-Pagan heteroskedasticity Test	79.83	0.0000
Link Test _hat	1.09	0.0000
Link Test _hatsq	-0.096	0.283
ROC	0.9942	-
Wald Joint Significance	12.76	0.0125

VIF

2.23

-

Sources: Author's computation, 2025.

In Table 7 above, the Pseudo R² suggests that the model explains a substantial portion of the variation of the WTP (86%). The log-likelihood confirms that the fitted model is significantly better than the null model. Wald chi-square shows strong capacity of the explanatory variables in jointly explaining WTP. The Breusch-Pagan test reports presence of heteroskedasticity. However, this necessitates the use of robust standard errors to adjust for this problem.

The linktest suggests that the model is correctly specified. The Receiver Operating Characteristics (ROC) indicates that the model excellently predicts WTP acceptance, by accurately distinguishing between different WTP outcomes. The Wald joint significant test reveals that the different questionnaire versions (A-E), each corresponding to alternative interest rate scenarios administered to respondents exert a statistically significant effect on WTP. The last on the table is the mean Variance Inflation Factor (VIF) of 2.23 which is well below conventional threshold of 10 indicates the absence of multicollinearity.

The non-normality test was not conducted, because it is not included as part of routine diagnostics for discrete choice model in established practice (Wooldridge, 2020).

Binary Probit Regression

Table 8. Binary Probit Regression Results of MSME finance WTP

R1	Coefficient	Robust std. err.	z	P > z	[95% conf. interval]		Marginal Effect
Key Variables							
IBID	-0.44	0.09	-4.74	0.00	-0.63	-0.26	-0.02
Size_S	1.63	0.46	3.51	0.00	0.72	2.53	0.08
Size_Me	2.36	0.69	3.43	0.00	1.01	3.71	0.11
Ten_L	3.02	0.67	4.51	0.00	1.71	4.34	0.14
Coll	-1.96	0.88	-2.24	0.03	-3.68	-0.24	-0.09
CreH	0.62	0.35	1.77	0.08	-0.07	1.30	0.03
Control Variables							
Rev_H	1.32	0.65	2.03	0.04	0.04	2.60	0.06
BEx_H	1.69	0.54	3.11	0.00	0.62	2.75	0.08
Age_O	2.25	0.45	4.96	0.00	1.36	3.14	0.10
Gender	0.28	0.33	0.86	0.39	-0.36	0.93	0.01
EdL_H	2.38	0.69	3.44	0.00	1.02	3.74	0.11
cons	5.52	2.11	2.62	0.01	1.39	9.65	-

Source: Authors' computation, 2025.

Result from table 8 above shows that the primary loan characteristics hypothesized to affect WTP shows significant effect on WTP of MSMEs. Loan cost (initial bid), and collateral requirements (Coll) significantly reduce the probability of accepting the loan, while longer tenure (Ten_L) shows significant positive association with it. This is in line with theoretical expectation that MSMEs need more time to repay loan, but discouraged by higher cost and security demand. Business size has positive and significant effect on WTP. Using micro as reference category, the small (Size_S) and medium (Size_Me) coefficients are positive and significant. Contrarily, Credit history (CreH) was not statistically significant.

After controlling for annual revenue (Rev), education EdL_H) as a factor of financial literacy, business experience (Bex_H), gender (Gender) and age (Age_O), the result shows that larger and more profitable MSMEs are more willing to bear financing costs. Also, educated and experiences MSMEs shows readiness to accept, stressing the importance of literacy in financing decisions.

The marginal effects show that loan tenure yields the largest positive influence on SMEs' willingness to pay for finance costs. That is, a one-category increase in loan tenure (for example, moving from short-term to medium-term financing) increases the probability of WTP by approximately 14 percentage points, while holding other factors constant. Similarly, education increases the probability of WTP by 11 percentage points, when MSMEs move from a lower category to higher category of education level. On the other hand, collateral requirements reduce the probability of WTP by about 9 percentage points. These findings suggest that repayment flexibility is more important to SMEs than moderate changes in borrowing costs.

Table 9. Estimates of the Willingness to pay for Single-Bounded Dichotomous Choice

R1	Coeff.	Std. err.	z	P> z	[95% interval]		conf.
WTP	23.08	1.10	21.02	0.00	20.93	25.23	

Source: Authors' computation, 2025.

Table 10. Estimates of the Willingness to pay for Double-Bounded Dichotomous Choice

	Coeff.	Std. err.	z	P> z	[95% interval]		conf.
Beta	28.18	0.34	84.07	0.00	27.52	28.83	
Sigma	5.30	0.35	15.04	0.00	4.61	5.99	

Source: Author's computation, 2025.

Table 9 presents the estimated WTP from the single-bounded dichotomous choice model, where the mean WTP is 23.08 and is statistically significant at 5% level. Similarly, Table 10 presents the estimated WTP result of the double dichotomous choice model, with a mean WTP of 28.18 and is statistically significant at 5%. The result suggests that the double dichotomous choice model result yields a higher and more efficient estimate of WTP compared to the single bounded approach. This implies that MSMEs in Kwara state exhibit a measurable WTP for access to finance, despite prevailing credit constraints.

Discussion of Findings

The second finding shows that the WTP of MSMEs in Kwara State is jointly and significantly affected by the mix economic, financial and demographic factors. The first finding is that higher bid amount discourages WTP. This aligns with the theoretical expectation of negative relationship and consistent with demand theory. This is also in agreement with previous literature such as

Ukwadinamor and Oduguwa (2020), Sanni et. al. (2020) and Chilembo (2021).

Second findings show that, economic factors which are business size, business revenue and business experience have positive significant effect on the WTP. In business size as a control variable shows a significantly encourages WTP. This testifies to the hypothesis and the theory of production (Varian, 1992). This agrees with prior studies such as Omeje et. al., (2024) and Saidu (2019). Controlling for average annual revenue of MSMEs provides a solid conclusion that it contributes to their risk bearing ability. This confirms prior studies finding such as Ayodeji and Balcioglu (2019) and Olabisi (2022). Control for business age/experience (Bex_H) reveals the positive effect of experience on WTP. Ahmed (2019) and Ajirowo (2024) made similar discovery, which confirms the impact of experience in shaping rationality as theorised by Cyert and James (1963).

Third finding is on the financial factors. Loan tenure (Ten_L) as a control variable shows a significant positive effect on WTP. Preference for long-term loan tenure by business owners is positively associated with higher probability of accepting the bid. Prior studies which include Chilembo (2021) Brutscher et. al. (2017) Chowdhury and Alam (2017), made similar conclusion which supports this finding. This owes to the limited capacity of small businesses, who may need more period to earn enough return for repayment. Collateral (Coll) has a negative and significant coefficient. Prior studies revealed similar result (Brutscher et al., 2017; Bellucci et. al., 2015; Jrad & Tedjedine, 2020; Rahman et. al., 2017; Rithaa, 2019; Chilembo, 2021). This reveals that respondents are not willing to provide the required collateral. This is a risk of increases loss aversion as revealed in prospect theory. Credit history (CreH) of MSMEs has no significant effect on WTP. This disagrees with prior studies such as Wasilewska and Davydenko (2017) that posits that such a relationship exists in Ukraine. One possible explanation is that many MSMEs in Kwara state operates outside formal financial system, unlike Ukraine where the firms in question have credit history, while some even have perfect credit history. Therefore, they possess inadequate record of credit histories. Consequently, access to future credit may highly depend on collateral availability, repayment capacity (signalled by business size and revenue), and ease of payment (longer tenure), rather than previous borrowing records.

The fourth finding reveal variation in demographic variables. Controlling for gender provides no significant effect on WTP. This implies that gender has little or no effect on MSMEs acceptance of loan. On the other hand, Level of education (EdL_H) has a significant positive effect on WTP. Hence, higher

education level is positively associated with WTP. This agrees with previous studies such as Addo and Asante (2022), Isimoya and Oluleye (2022), Kuruppu and Azeez (2016), Ibitomi et. al. (2024) and Nisser and Ibrahim (2018). This feeds the hypothesis that knowledge improves rationality as theorised by Cyert and James (1963). The positive association of education with WTP supports the Behavioural Theory of the Firm. Higher educational attainment improves financial literacy, capacity to process

information and risk assessment skills, thereby reducing the effects of bounded rationality. The more educated an MSME owner is, the better he or she will understand loan conditions, evaluate financing opportunities and make informed borrowing decisions, which results in a higher WTP for productive credit.

Lastly, the mean WTP using single-bound is lower to double-bound. The single bound is about 23.08% of the bid variable, and the double-bound about 28.18% of the bid variable. This is consistent with contingency valuation literature, which shows that follow-up bid questions increase statistical efficiency and reduce the variance of WTP estimates by extracting additional information from respondents (Henemann et al., 1991). Hence, the double-bound reveals a more accurate initial WTP of MSMEs after controlling for biases. The estimated average maximum WTP of 28.18% is remarkably close to the prevailing SME lending rates reported for 2024 (27.5%). This suggests that MSMEs are willing to tolerate the current market lending rates, so far it is accessible and expected to generate profit for the business. The relatively small difference of 0.68 percentage points between the estimated average maximum WTP and the observed lending rate of 2024 also supports the realism of the contingent valuation scenario. That is, respondents' stated preferences are consistent with actual financial conditions faced by MSMEs and well reflected by the hypothetical loan scenario. This alignment boosts confidence in the validity of the WTP value.

5.0 | CONCLUSION AND RECOMMENDATIONS

This study estimates MSME's willingness to pay for the cost of credit by MSMEs from conventional deposit money banks in Kwara State, using a double-bounded CVM. The study examined the demand side of the situation more using primary data using latent and control variables in line with the appropriate theory. The Data were collected from the survey of 400 MSMEs across agriculture, manufacturing, services, and trading sectors, and across selected commercial centres in Kwara State.

The empirical evidence from the analysis reveals that MSMEs' willingness to pay for finance is jointly predicted by financial, economic and demographic factors, such as loan cost (bid amount or interest rate), loan tenure, collateral requirements, education and firm size which are the key variables as predicted in neoclassical theory of firms. After controlling for revenue, experience, and education, these determinants remained significant. Further evidence is contained in studies such as Seyefar (2019), Babarinde et al. (2019), Brutscher et al. (2017),

Onepich (2024), Salimide (2021) and Ajirowo (2024). Findings disagree with studies such as Serrasqueiro et al. (2023) and Saidu (2019).

The mean WTP for finance cost sits at 23.08% using single-bounded and 28.18% using double-bounded. This indicates that the respondents are willing to pay an average annual interest rate of 28.18% for formal credit under the hypothetical scenario presented. Due to the ability of the double bounded to account

for biases, the double bounded estimate is assumed to be more accurate than the single-bound. Therefore, the 28.18% is the acceptable mean WTP given the key factors in play, and after controlling for education, age, experience, gender and revenue.

In light of this, the following are recommended.

- a) The deposit money banks should fashion credit facilities that will be channelled to MSMEs with cost at or below the estimated mean WTP threshold of 28.18%.
- b) Given the strong positive association between loan tenure and WTP, lenders should consider longer repayment period and more flexible repayment structures for MSMEs. Micro and small businesses (which make up the majority of the sample) should be targeted with long-term credit products that aligns with their business cash flow patterns.
- c) Banks should relax the burden of collateral on MSMEs to encourage formal credit market participation of MSMEs.
- d) Policymakers should encourage education and invest in training programs such as financial literacy, record keeping and business management to enhance the MSMEs capacity to make informed financial decisions.
- e) The Central Bank of Nigeria (CBN) and SMEDAN should periodically undertake WTP assessments among MSMEs across different states and sectors. Studies of such would not just provide updated evidence on MSMEs acceptable costs of borrowing given the changing macroeconomic and financial conditions, but also support the design of more responsive MSME financing policies.

6.0 | Limitations of the Study

Although the study uses DBDC-CVM to improve estimation efficiency, responses remain subject to hypothetical bias because WTP is elicited under a stated preference scenario. Also, the study relies on cross-sectional data from MSMEs in Kwara State located in the selected commercial centres, with emphasis entirely on conventional deposit money banks. Hence, this limits the ability to generalise the findings on all MSMEs in Kwara State or Nigeria at large. The cross-sectional nature of the data also made it impossible to capture changes in WTP over time. Some variables such as business size and annual revenue remain subjective and error prone because they are self-reported

information. Lastly, the largest bid amount could be below the threshold of some larger MSMEs, which is an information not fully captured.

Further studies may employ longitudinal data to capture variation over time and use revealed preference to capture a more accurate estimates and extend the findings of this study. Further studies may also sample a different population from different geographical location for inter-state or international comparison.

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APPENDIX I



MSMES LOAN WILLINGNESS TO PAY SURVEY QUESTIONNAIRE ESTIMATING SMALL AND MEDIUM SCALE ENTERPRISE WILLINGNESS TO PAY FOR COST OF CREDIT AT CONVENTIONAL DEPOSIT MONEY BANKS IN KWARA STATE.

Dear Respondents,

This questionnaire is part of an ongoing Master's research project in the Department of Economics by Ridwan Garba. Imagine a bank is prepared to tend to all your loan and financing needs, in order to help MSMEs and other businesses like yours to grow. To make this program accessible, MSME owners are required to state their willingness to pay and readiness to accept the conditions of this program.

This survey is created for the purpose of eliciting information on MSMEs willingness to pay for finance costs. The questionnaire is divided into the four sections as stated below:

- ☐ Section A is for your characteristics, which include annual revenue, credit history, required collateral and loan tenure.
- ☐ Section B is for your willingness to pay for finance cost.
- ☐ Section D is for your demographic information.

Please be assured that all information will be treated with **strict confidentiality**, and will be used for research purpose alone. No information that could harm you is required. Kindly answer the question objectively and sincerely by selecting the option you consider most appropriate. Your time and effort are deeply appreciated.

Researcher:

Ridwan Garba

Thank you!

Section A: MSMEs (Small and Medium Scale Enterprises) Characteristics

1.	What is your business's average annual revenue?
	☐ Less than ₦5 million ☐ ₦5 million–₦20 million ☐ ₦20 million–₦50 million ☐ More than ₦50 million
2.	What is your business's average monthly revenue? _____
3.	Are you currently repaying a loan or have a loan yet to be paid fully? ☐ Yes/ ☐ No
4.	The criteria for collateral by banks required that you provide an asset that has 150% of the value of your loan amount. Also, loans without collateral attract higher charges and interest rate. Will you be ready to provide the collateral? ☐ Yes/ ☐ No
5.	What loan tenure do you prefer? ☐ Within or less than a year ☐ up to 3 years ☐ More than 3 years
6.	What is the exact loan tenure of your choice? _____

Section B: Willingness to Pay (WTP)

Scenario (VERSION A):

*Imagine that you have the opportunity to expand your business through a loan facility of ₦5,000,000 offered to you by a commercial bank at an interest rate (cost) of 27% **annually**. All evidence shows that it will increase your*

*profit more than enough, and expand your business to your satisfaction.
Given the scenario above,*

7.	Are you willing to pay the above? ☐ Yes If Yes, go to question 6 ☐ No If No, go to question 7
8.	What if it is accessible at 29% <i>interest rate</i> , are you willing to pay it? ☐ Yes/ ☐ No
9.	What if it is accessible only at 25% <i>interest rate</i> , instead? ☐ Yes/ ☐ No
10.	What is the maximum <i>interest rate</i> you are willing to pay for the loan above if offered? _____

Scenario (VERSION B):

*Imagine that you have the opportunity to expand your business through a loan facility of ₦5,000,000 offered to you by a commercial bank at an interest rate (cost) of **29% annually**. All evidence shows that it will increase your profit more than enough, and expand your business to your satisfaction.*

Given the scenario above,

7.	Are you willing to pay the above? ☐ Yes If Yes, go to question 6 ☐ No If No, go to question 7
8.	What if it is accessible at 31% <i>interest rate</i> , are you willing to pay it? ☐ Yes/ ☐ No
9.	What if it is accessible only at 27% <i>interest rate</i> , instead? ☐ Yes/ ☐ No
10.	What is the maximum <i>interest rate</i> you are willing to pay for the loan above if offered? _____

Scenario (VERSION C):

*Imagine that you have the opportunity to expand your business through a loan facility of ₦5,000,000 offered to you by a commercial bank at an interest rate (cost) of **31% annually**. All evidence shows that it will increase your profit more than enough, and expand your business to your satisfaction.*

Given the scenario above,

7.	Are you willing to pay the above? ☐ Yes If Yes, go to question 6 ☐ No If No, go to question 7
8.	What if it is accessible at 33% <i>interest rate</i> , are you willing to pay it? ☐ Yes/ ☐ No
9.	What if it is accessible only at 29% <i>interest rate</i> , instead? ☐ Yes/ ☐ No
10.	What is the maximum <i>interest rate</i> you are willing to pay for the loan above if offered? _____

Scenario (VERSION D):

Imagine that you have the opportunity to expand your business through a loan facility of ₦5,000,000 offered to you by a commercial bank at an interest rate (cost) of **33% annually**. All evidence shows that it will increase your profit more than enough, and expand your business to your satisfaction.

Given the scenario above,

7.	Are you willing to pay the above? ☐ Yes If Yes, go to question 6 ☐ No If No, go to question 7
8.	What if it is accessible at 35% interest rate, are you willing to pay it? ☐ Yes/ ☐ No
9.	What if it is accessible only at 31% interest rate, instead? ☐ Yes/ ☐ No
10.	What is the maximum interest rate you are willing to pay for the loan above if offered? _____

Scenario (VERSION E):

Imagine that you have the opportunity to expand your business through a loan facility of ₦5,000,000 offered to you by a commercial bank at an interest rate (cost) of **35% annually**. All evidence shows that it will increase your profit more than enough, and expand your business to your satisfaction.

Given the scenario above,

7.	Are you willing to pay the above? ☐ Yes If Yes, go to question 6 ☐ No If No, go to question 7
8.	What if it is accessible at 37% interest rate, are you willing to pay it? ☐ Yes/ ☐ No
9.	What if it is accessible only at 33% interest rate, instead? ☐ Yes/ ☐ No
10.	What is the maximum interest rate you are willing to pay for the loan above if offered? _____

Section C: Demographic Information

11.	How long has your business been in operation? ☐ Less than 1 year (Start-up) ☐ 1–5 years (Early-stage) ☐ More than 5 years (Matured)
12.	How many years has your business been in operation? _____
13.	What is your age group? ☐ Under 30 years ☐ 30–40 years ☐ 41–50 years ☐ Above 50 years
14.	What is your exact age? _____
15.	What is your highest educational qualification? ☐ No formal education ☐ Primary ☐ Secondary ☐ Tertiary
16.	Gender? ☐ Male/ ☐ Female

17. Which category does your business belongs to?

CATEGORY	EMPLOYMENT	ASSETS (in million Naira) excluding land and building)	RESPONSE
1. (Micro)	Less than 10	Less than ₦10	☐
2. (Small)	10 – 49	₦10- less than ₦100	☐
3. (Medium)	50 – 199	₦100 – less than ₦1,000	☐

18. What is the exact worth of your business assets (excluding land and building)?

Thank you for completing this questionnaire!