

# Usage of Financial Services and Financial Performance of Agribusiness MSMEs in Greater Kigezi Sub-Region, Uganda

Kabagambe Jesse David<sup>1</sup> & Moses Agaba<sup>2</sup>

<sup>1</sup>Department of business studies, Kabale University, Faculty of Economics and Management Sciences Kabale University, Uganda

<sup>2</sup>Department of Management Sciences, Faculty of Economics and Management Sciences Kabale University, Uganda

Correspondent Author; [agabamosez@yahoo.com](mailto:agabamosez@yahoo.com)

DOI: <https://doi.org/10.54099/ijmba.v5i1.1783>

## ARTICLE INFO

Research Paper

### Article history:

Received: 25 marchl 2026

Revised: 10 April 2026

Accepted: 8 June 2026

Keywords: Financial inclusion, financial usage, MSMEs, agribusiness, enterprise performance, Uganda.

## ABSTRACT

This study examines the influence of financial usage on the financial performance of agribusiness micro, small and medium enterprises (MSMEs) in Uganda's Greater Kigezi sub-region. A total of 208 valid observations (N = 208) were analyzed using descriptive statistics, correlation analysis, and ordinary least squares (OLS) regression. Measurement quality was assessed prior to estimation. Content validity was confirmed (CVI = 0.90), while construct adequacy of the financial usage indicators was evaluated using the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's Test of Sphericity. The KMO value of 0.500 indicated marginal sampling adequacy, while Bartlett's Test was statistically significant ( $\chi^2 = 71.523$ ,  $df = 1$ ,  $p < .001$ ), confirming the presence of meaningful correlations among the usage indicators. Given the behavioral and heterogeneous nature of usage, indicators were retained as observed measures rather than aggregated into a composite factor. Reliability diagnostics were satisfactory. Empirical results reveal a positive and statistically significant relationship between financial usage and MSME financial performance. The study concludes that deepening the actual use of financial services is critical for improving agribusiness MSME profitability and stability in rural Uganda and recommends that inclusion policies shift from access expansion toward usage-oriented interventions.

*This work is licensed under a Creative Commons Attribution-Non-Commercial 4.0 International License.*

## 1.0 Introduction

Globally, financial inclusion has evolved from a narrow focus on access to financial services toward a broader framework that emphasizes access, usage, quality, and sustainability as interconnected dimensions of inclusive finance (Demirgüç-Kunt et al., 2022; IMF, 2024). While early inclusion initiatives prioritized the expansion of bank branches, automated teller machines, and digital platforms, recent evidence indicates that access alone does not necessarily translate into improved economic outcomes unless financial services are actively and consistently used. This shift has placed financial

usage at the centre of contemporary financial inclusion discourse, particularly in relation to MSME development.

At the global level, MSMEs are widely recognized as engines of employment creation and economic growth, yet they continue to face persistent financial performance constraints linked to liquidity shortages, transaction inefficiencies, and limited financial integration (Ayyagari et al., 2020). Studies increasingly show that enterprises that actively use financial services—such as conducting frequent transactions, digital payments, and routine financial management—exhibit stronger performance outcomes than those with passive or irregular usage (World Bank, 2022; IMF, 2024). Consequently, financial usage is now viewed as a critical mechanism through which inclusive financial systems support enterprise productivity and resilience.

In Sub-Saharan Africa, the relevance of financial usage is particularly pronounced due to high levels of informality, cash-based transactions, and infrastructure constraints. Regional evidence indicates that while access to digital and agent-based financial services has expanded rapidly, usage remains uneven among MSMEs, limiting the performance impact of financial inclusion reforms (Sulemana, 2025). Enterprises often maintain nominal access to financial services but continue to rely on cash or informal mechanisms due to affordability challenges, trust issues, and limited product suitability.

In Uganda, financial inclusion reforms have accelerated over the past decade, driven by digital finance, mobile money platforms, and agent banking networks. The National Financial Inclusion Strategy (NFIS) 2023–2028 explicitly emphasizes the need to convert access into sustained usage, recognizing that meaningful economic impact depends on how financial services are used by households and enterprises (MoFPED, 2023). Despite these reforms, agribusiness MSMEs—particularly those operating in rural regions—continue to experience uneven patterns of financial usage, raising questions about the effectiveness of inclusion initiatives in improving enterprise performance.

The Greater Kigezi sub-region provides an important empirical context for examining the usage–performance relationship. The region is predominantly rural and agrarian, with MSMEs engaged in produce aggregation, agro-processing, trading, and small-scale logistics. These enterprises operate within seasonal trading cycles and cash-intensive markets, where frequent and effective financial usage is essential for working-capital management, supplier settlement, and risk mitigation. However, many MSMEs in the region maintain limited and irregular engagement with formal financial services, potentially constraining their financial performance.

While existing studies in Uganda and the region have examined access to finance and credit constraints, limited objective-specific evidence exists on whether financial usage significantly influences MSME financial performance in rural agribusiness settings. This study addresses this gap by empirically examining the effect of financial usage on agribusiness MSME financial performance in Greater Kigezi

## **2.0 Problem Statement**

Despite sustained expansion of financial access points globally and nationally, many MSMEs continue to exhibit weak financial performance outcomes. International evidence increasingly suggests that the performance impact of financial inclusion depends less on access per se and more on the extent to which enterprises actively use available financial services (Demirgüç-Kunt et al., 2022; World Bank, 2022). In developing economies, MSMEs often maintain nominal access to financial services but fail to integrate them into daily operations, limiting productivity and profitability gains.

In Sub-Saharan Africa, financial usage remains constrained by transaction costs, service reliability challenges, and limited alignment between financial products and enterprise needs. Regional studies

indicate that MSMEs that do not frequently use financial services remain vulnerable to liquidity shocks and operational inefficiencies, even when access is available (Sulemana, 2025). This suggests that financial usage may be a binding constraint on enterprise performance.

In Uganda, national policy efforts such as the NFIS 2023–2028 emphasize deepening usage among MSMEs to improve economic outcomes (MoFPED, 2023). However, empirical evidence shows that rural agribusiness MSMEs continue to rely heavily on cash transactions, informal savings, and irregular financial engagement, resulting in unstable cash flows and limited growth potential. In the Greater Kigezi sub-region, these challenges are amplified by dispersed settlement patterns, seasonal agricultural cycles, and infrastructure limitations.

Although previous studies in Uganda have documented access-related barriers to MSME finance (Ambrose, 2021; Nyiratebuka, 2022), they provide limited objective-specific evidence on financial usage as a predictor of enterprise performance. Consequently, there remains insufficient empirical clarity on whether and how financial usage influences MSME financial performance in rural agribusiness contexts. This study addresses this gap by evaluating the effect of financial usage on agribusiness MSME financial performance in Greater Kigezi.

### **3.0 Theoretical Framework**

This study is grounded in three complementary theoretical perspectives that explicitly explain the usage of financial services and its implications for MSME financial performance: Theory of Planned Behavior (TPB), Transaction Cost Theory, and Financial Intermediation Theory (usage-oriented interpretation). Together, these theories provide a robust conceptual foundation for understanding why and how MSMEs use financial services and how such usage translates into improved enterprise outcomes.

#### **3.1 Theory of Planned Behavior (TPB)**

The Theory of Planned Behavior provides a behavioral explanation for financial usage by emphasizing the role of individual intentions, attitudes, and perceived control in shaping economic behavior. According to TPB, the decision to use a financial service is influenced by an enterprise owner's attitude toward the service, perceived usefulness, ease of use, and perceived ability to control the usage process.

Applied to MSMEs, TPB explains why enterprises with similar levels of access may exhibit different usage patterns. MSME owners who perceive financial services as reliable, affordable, and beneficial are more likely to use them frequently, while those who perceive high costs, complexity, or risk may limit usage despite availability. In rural agribusiness contexts, behavioral factors such as trust in financial providers, familiarity with digital platforms, and confidence in transaction processes play a critical role in determining usage intensity. By incorporating TPB, the study acknowledges that financial usage is not purely structural but also behaviorally driven, reinforcing the need to examine usage as a distinct and performance-relevant dimension of financial inclusion

#### **3.2 Transaction Cost Theory**

Transaction Cost Theory posits that economic actors seek to minimize the costs associated with conducting transactions, including search costs, travel costs, time costs, and enforcement costs. In rural and semi-rural contexts, these costs are often magnified due to dispersed settlement patterns, limited infrastructure, and reliance on cash-based exchanges. For agribusiness MSMEs, high transaction costs

can constrain the frequency and efficiency with which financial services are used, even when access is available.

From a financial usage perspective, the theory explains why MSMEs are more likely to actively use financial services when such services reduce transaction frictions. Frequent use of digital payments, mobile money transfers, agent banking, and deposit facilities lowers the cost of settling transactions, managing cash flows, and conducting routine business operations. Reduced transaction costs enable MSMEs to improve working-capital turnover, shorten payment cycles, and reduce losses associated with cash handling. Consequently, enterprises that use financial services more intensively are expected to exhibit stronger financial performance outcomes. This theoretical logic is particularly relevant in agribusiness settings such as Greater Kigezi, where enterprises operate within seasonal trading cycles and face high logistical and transaction-related costs.

### **3.3 Financial Intermediation Theory (Usage-Oriented Perspective)**

Financial Intermediation Theory explains how financial institutions facilitate economic activity by mobilizing savings, enabling transactions, and allocating resources efficiently between surplus and deficit units. While traditional interpretations of the theory emphasize access to financial services, a usage-oriented perspective highlights the role of **active engagement** with financial intermediaries as the mechanism through which intermediation benefits materialize.

In the context of MSMEs, merely having access to a bank account, mobile money platform, or agent outlet does not automatically improve performance. Instead, performance gains arise when enterprises **actively use** financial services for transactions, payments, savings, and financial management. Regular usage strengthens the intermediation function by integrating MSMEs into formal financial flows, improving liquidity management, and facilitating smoother resource allocation within the enterprise. Through repeated usage, MSMEs are better able to manage short-term financing needs, stabilize cash flows, and support ongoing business operations. This theory therefore supports the expectation that higher levels of financial usage are associated with improved MSME financial performance.

### **3.4 Theoretical Synthesis and Implications for the Study**

Together, Transaction Cost Theory, Financial Intermediation Theory, and the Theory of Planned Behavior provide a coherent framework for explaining financial usage among MSMEs. Transaction Cost Theory highlights the cost-reduction benefits of frequent usage, Financial Intermediation Theory explains how usage enables efficient resource allocation and liquidity management, and TPB accounts for behavioral factors influencing usage intensity. Integrating these perspectives, the study posits that MSMEs that actively and consistently use financial services are better positioned to manage cash flows, reduce operational inefficiencies, and improve financial performance. This theoretical synthesis underpins the study's hypothesis that financial usage has a positive and significant effect on MSME financial performance in the Greater Kigezi sub-region.

## **4.0 Methodology**

### **4.1 Research Design**

This study employed a cross-sectional explanatory survey design to investigate the relationship between financial usage and the financial performance of agribusiness MSMEs. The design was appropriate for examining objective-specific behavioral effects of financial inclusion dimensions at a single point in time (Benon *et al.* 2024). Unlike access-based analysis, which focuses on availability, the usage dimension emphasizes actual engagement and frequency of interaction with financial services, making

a cross-sectional explanatory approach suitable for capturing variations in enterprise behavior and performance outcomes. The design also enabled efficient data collection across a geographically dispersed rural sub-region within practical time and resource constraints.

#### 4.2 Research Approach

A quantitative explanatory approach was adopted to empirically test whether financial usage significantly predicts MSME financial performance. This approach facilitated objective-based hypothesis testing and estimation of the magnitude and direction of the usage–performance relationship using observable indicators. The focus on quantitative analysis was particularly relevant given the need to distinguish usage intensity across enterprises and assess its statistical contribution to financial performance outcomes.

#### 4.3 Study Area

The study was conducted in the Greater Kigezi sub-region of southwestern Uganda, comprising six districts. The sub-region is predominantly rural and agrarian, with MSMEs actively involved in agricultural production, aggregation, agro-processing, trading, and small-scale logistics. These enterprises operate within seasonal market cycles and cash-intensive environments, making financial usage behavior especially relevant for managing liquidity and transaction flows. The study area therefore provided an appropriate context for examining how differences in financial usage translate into enterprise performance outcomes.

#### 4.4 Target Population

The target population comprised owners and managers of agribusiness MSMEs operating within the Greater Kigezi sub-region. These individuals were selected as the units of analysis because they are directly responsible for financial decision-making and day-to-day engagement with financial services. Their responses therefore provided reliable information on financial usage behavior and enterprise performance.

#### 4.5 Sample Size and Response Rate

A total of 230 questionnaires were administered to agribusiness MSMEs across the six districts. Of these, 208 valid questionnaires were returned and used for analysis, yielding a response rate of 96.2 percent. This sample size was adequate for correlation and regression analysis and exceeded minimum requirements for cross-sectional econometric estimation. The high response rate further enhanced the reliability and representativeness of the findings (Turyasingura *et.al*,2023).

**Table 1. Response Rate**

Description	Number
Questionnaires Distributed	230
Valid Questionnaires Returned	208
Invalid/Unusable Responses	22
Response Rate (%)	96.2

#### **4.6 Sampling Procedure**

A multi-stage sampling strategy was employed. First, the Greater Kigezi sub-region was purposively selected due to its concentration of agribusiness MSMEs and relevance to the study objectives. Second, districts within the sub-region were treated as strata to ensure geographic representation. Finally, agribusiness MSMEs were identified within trading centres, markets, and production clusters, and respondents were selected using a combination of purposive identification and systematic selection. This approach ensured that enterprises with active financial operations were included while minimizing selection bias.

#### **4.7 Data Collection Instrument**

Primary data were collected using a structured questionnaire administered to MSME owners and managers. The instrument contained closed-ended items measured on Likert-type scales, capturing the frequency and intensity of financial service usage as well as indicators of financial performance. The questionnaire was designed to reflect actual usage behavior rather than mere availability of services, consistent with the study's focus on financial usage as a behavioral construct.

#### **4.8 Measurement of Variables**

##### **Financial Usage (Independent Variable)**

Financial usage was operationalized as the extent and frequency with which MSMEs engage with formal financial services in their routine business operations. Indicators captured regularity of transactions, use of payment and transfer services, and engagement with financial platforms for managing business finances. Rather than measuring access points, the usage indicators focused on behavioral adoption and intensity of service utilization.

##### **Financial Performance (Dependent Variable)**

Financial performance was measured using a composite index reflecting profitability, liquidity stability, and overall financial sustainability. These dimensions' capture enterprise-level financial outcomes that are directly influenced by cash flow management and transaction efficiency, which are closely linked to financial usage behavior.

#### **4.9 Validity and Reliability of the Instrument**

To ensure robustness of measurement, multiple validity and reliability tests were conducted. Content validity was assessed using the Content Validity Index (CVI), which yielded a value of 0.90, exceeding the recommended minimum threshold and indicating adequate coverage of the financial usage construct (Mwujukye & Moses, 2019).

**Table 2. Validity and Reliability Statistics for Financial Usage**

Test	Statistic	Value	Interpretation
Content Validity Index (CVI)	CVI	0.90	Excellent content validity
Kaiser-Meyer-Olkin (KMO)	KMO	0.500	Marginal but acceptable sampling adequacy
Bartlett's Test of Sphericity	$\chi^2$	71.523	Significant correlation among indicators
Bartlett's Test of Sphericity	df	1	-
Bartlett's Test of Sphericity	p-value	< 0.001	Suitable for multivariate analysis
Reliability Test	Cronbach's Alpha	0.764	Acceptable internal consistency

Construct validity of the financial usage indicators was assessed using the Kaiser–Meyer–Olkin (KMO) Measure of Sampling Adequacy and Bartlett’s Test of Sphericity. The KMO value of 0.500 indicated marginal but acceptable sampling adequacy for behavioral constructs characterized by heterogeneous usage patterns. Bartlett’s Test was statistically significant ( $\chi^2 = 71.523$ ,  $p < .001$ ), confirming that the usage indicators were sufficiently correlated to justify their inclusion in multivariate analysis. Given the behavioral nature of usage, indicators were retained as observed measures rather than aggregated into a single latent factor.

Reliability of the **Financial Usage** construct was assessed using **Cronbach’s alpha coefficient**. The results indicate a Cronbach’s alpha value of  $\alpha = 0.764$ , which exceeds the commonly accepted minimum threshold of **0.70** for internal consistency in social science research. This value suggests that the financial usage items exhibit a satisfactory level of internal consistency and reliably measure the underlying usage behavior among agribusiness MSMEs. Given the behavioral and heterogeneous nature of financial usage where enterprises may differ in frequency and type of service engagement the obtained reliability coefficient is considered adequate for econometric analysis and hypothesis testing

#### 4.10 Model Specification and Estimation

To estimate the effect of financial usage on MSME financial performance, the study employed a single-predictor ordinary least squares (OLS) regression model, specified as:  $FP = \beta_0 + \beta_1 FU_i + \varepsilon_i$ ; where;  $FP_i$  = financial performance of MSME;  $FU$  = Usage of financial services index ;  $\beta_0$  = intercept;  $\beta_1$  = effect of Usage on performance;  $\varepsilon_i$  = random error term. This objective-specific specification isolates the independent contribution of financial usage, ensuring clear interpretation of results.

#### 4.11 Hypothesis Testing

The study tested the null hypothesis that financial usage has no significant effect on MSME financial performance against the alternative hypothesis that financial usage significantly affects MSME

financial performance. Statistical significance was evaluated at the 5 percent level, and the null hypothesis was rejected where the associated p-value was less than 0.05.

## **5.0 Results**

### **5.1 Data Diagnostics and Measurement Quality**

Prior to inferential analysis, data diagnostics and measurement quality tests were conducted to assess the suitability of the dataset for econometric estimation. The dataset contained 208 valid observations, with only three missing responses per item, representing less than 2 percent of the sample. Given the minimal level of missing data and the consistency across items, the dataset was considered complete and suitable for analysis without the need for imputation.

Reliability of the Financial Usage construct was assessed using Cronbach's alpha, which yielded a coefficient of  $\alpha = 0.764$ . This value exceeds the commonly accepted threshold of 0.70, indicating acceptable internal consistency among the usage indicators. Given the behavioral and multidimensional nature of financial usage, this reliability level is considered adequate for empirical analysis and hypothesis testing in social science research.

Construct validity was assessed using the Kaiser–Meyer–Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity. The KMO statistic recorded a value of 0.500, indicating marginal but acceptable sampling adequacy for behavioral constructs characterized by heterogeneous usage patterns. Bartlett's Test of Sphericity was statistically significant ( $\chi^2 = 71.523$ ,  $df = 1$ ,  $p < .001$ ), confirming that the financial usage indicators were sufficiently correlated to justify multivariate analysis. Together, these results support the appropriateness of the financial usage indicators for regression analysis.

### **5.2 Descriptive Statistics for Financial Usage**

Descriptive statistics for the financial usage show that agribusiness MSMEs in the Greater Kigezi sub-region demonstrate moderate levels of financial usage, with mean scores ranging from 3.09 to 3.75 on a five-point Likert scale.

Indicators related to proximity and demand for financial services recorded relatively higher mean values, including increased need for financial services within proximity (Mean = 3.75, SD = 1.02) and maximum lending limits affecting debt usage (Mean = 3.70, SD = 0.86). These results suggest that MSMEs actively recognize the importance of financial services in supporting their operations, particularly when services are accessible and aligned with enterprise financing needs.

Usage-related perceptions such as improvement in savings propensity (Mean = 3.50, SD = 1.01) and increased usage among formally banked MSMEs (Mean = 3.48, SD = 0.99) further indicate that financial usage contributes to improved financial discipline and engagement with formal financial systems. Conversely, relatively lower mean values were observed for credit flexibility and loan duration effects (Means = 3.09 and 3.08, respectively), suggesting that institutional lending conditions may still constrain the depth of financial usage among MSMEs.

Standard deviation values, which range from 0.80 to 1.19, indicate substantial variability in usage behavior across enterprises. This dispersion reflects differences in enterprise size, transaction volumes,

seasonal trading cycles, and the extent of formal financial integration. Overall, the descriptive results confirm that financial usage among MSMEs is neither uniformly low nor uniformly high, but rather characterized by moderate averages and considerable heterogeneity

### 5.3 Correlation Results for Usage and Financial Performance

To examine the association between **financial usage** and **financial performance of agribusiness MSMEs**, both **Pearson's product-moment correlation** and **Spearman's rank-order correlation** coefficients were computed. The use of both parametric and non-parametric measures enhances robustness, particularly given the Likert-scale nature of the financial usage indicators.

**Table 3. Pearson Correlation between Financial Usage and Financial Performance**

Variables	Financial Usage	Financial Performance
Financial Usage	1.000	0.542***
Financial Performance	0.542***	1.000

**Note:** \*\*\* $p < 0.001$ ,  $N = 208$

The Pearson correlation analysis indicates a **positive and statistically significant relationship** between financial usage and MSME financial performance ( $r = 0.542$ ,  $p < .001$ ,  $N = 208$ ). The correlation coefficient of 0.542 suggests a **moderately strong positive association**, implying that MSMEs that engage more frequently and intensively with financial services tend to achieve higher financial performance outcomes. The statistical significance at the **1 percent level (two-tailed)** indicates that the observed relationship is highly unlikely to be due to random variation.

**Table 4. Spearman Correlation between Financial Usage and Financial Performance**

Variables	Financial Usage	Financial Performance
Financial Usage	1.000	0.561***
Financial Performance	0.561***	1.000

**Note:** \*\*\* $p < 0.001$ ,  $N = 208$

To validate the robustness of this finding, Spearman's rho was also computed. The results similarly show a **positive and statistically significant association** between financial usage and financial performance ( $\rho = 0.561$ ,  $p < .001$ ,  $N = 208$ ). The slightly higher Spearman coefficient compared to the Pearson coefficient suggests that the relationship is stable across both linear and rank-based measures, confirming that the association is not driven by distributional assumptions.

The consistency of the Pearson and Spearman coefficients provides strong empirical evidence that **financial usage and financial performance are positively related**, while remaining conceptually distinct constructs. This reduces concerns regarding spurious correlation and supports the inclusion of financial usage as an explanatory variable in regression analysis

## 5.2 Regression Results for Usage and Financial Performance

To assess the **magnitude and direction of the effect** of financial usage on MSME financial performance, an **ordinary least squares (OLS) regression model** was estimated with financial performance as the dependent variable and financial usage as the independent variable.

The regression results indicate that **financial usage has a positive and statistically significant effect on MSME financial performance**. The unstandardized coefficient for financial usage is **B = 0.260** (SE = 0.028), while the standardized coefficient is  **$\beta = 0.542$** , with a **t-value of 9.261** ( $p < .001$ ). This implies that a one-unit increase in financial usage is associated with a **0.26-unit increase in MSME financial performance**, holding other factors constant.

The standardized beta coefficient ( $\beta = 0.542$ ) indicates a **substantively strong effect size**, suggesting that financial usage is a major determinant of financial performance among agribusiness MSMEs. The high t-statistic and extremely low p-value further confirm the robustness of this relationship.

The model summary shows an **R<sup>2</sup> value of 0.294** and an **adjusted R<sup>2</sup> of 0.291**, indicating that approximately **29 percent of the variation in MSME financial performance** is explained by financial usage alone. This level of explanatory power is substantial for a single-predictor model in MSME and development finance research, where performance outcomes are influenced by multiple structural and contextual factors.

**Table 5. Regression Coefficients**

Predictor	B	Std. Error	Beta ( $\beta$ )	t-value	p-value
Constant	$\beta_0$	-	-	-	-
Financial Usage	0.260	0.028	0.542	9.261	< 0.001

Dependent Variable: Financial Performance

The overall model is statistically significant, as reflected by the **F-statistic (F = 85.757, p < .001)**. This confirms that the regression model provides a significantly better fit than a model with no predictors. The **Durbin–Watson statistic of 1.515** falls within the acceptable range, indicating no serious autocorrelation in the residuals and supporting the reliability of the OLS estimates

## 5.3 Hypothesis Test Decision

The study tested the null hypothesis that **financial usage has no significant effect on MSME financial performance** against the alternative hypothesis that **financial usage significantly affects MSME financial performance**. Based on the regression results ( $\beta = 0.542$ ,  $t = 9.261$ ,  $p < .001$ ), the null hypothesis is **rejected at the 1 percent level of significance**.

**Table 6. Hypothesis Testing Results**

Hypothesis	$\beta$	t-value	p-value	Decision
H <sub>0</sub> : Financial usage has no significant effect on MSME financial performance	0.542	9.261	< 0.001	Rejected

---

Hypothesis	$\beta$	t-value	p-value	Decision
H <sub>1</sub> : Financial usage significantly affects MSME financial performance	0.542	9.261	< 0.001	Supported

---

This result provides strong statistical evidence that **financial usage is a significant and positive predictor of MSME financial performance** in the Greater Kigezi sub-region.

#### 5.4 Interpretation of Results

Taken together, the correlation and regression results provide convergent empirical evidence that financial usage plays a critical role in shaping MSME financial performance. The moderately strong correlation coefficients ( $r = 0.542$ ;  $\rho = 0.561$ ) indicate a stable association, while the regression results confirm that this relationship persists when modeled explicitly as a causal effect.

The magnitude of the standardized regression coefficient and the explanatory power of the model underscore the importance of active engagement with financial services, rather than mere access, in improving enterprise performance. These findings suggest that MSMEs that frequently use financial services are better positioned to manage cash flows, execute transactions efficiently, and stabilize their financial operations.

Overall, the results validate financial usage as a core transmission mechanism through which financial inclusion initiatives translate into improved MSME performance outcomes

### 6.0 Discussion

#### 6.1 Interpretation of the Empirical Relationship between Financial Usage and MSME Financial Performance

The empirical results provide strong and consistent evidence that financial usage has a positive and statistically significant influence on MSME financial performance in the Greater Kigezi sub-region. The correlation analysis reveals a moderately strong positive association between usage of financial services and MSME financial performance (Pearson  $r = 0.542$ ,  $p < .001$ ; Spearman's  $\rho = 0.561$ ,  $p < .001$ ), indicating that enterprises that engage more frequently and intensively with formal financial services tend to achieve superior financial outcomes. The convergence of both Pearson and Spearman coefficients confirms that this relationship is robust across parametric and non-parametric measures, reinforcing confidence in the stability of the findings.

The regression results further substantiate this relationship by demonstrating a direct and economically meaningful effect of financial usage on financial performance. The standardized coefficient ( $\beta = 0.542$ ) indicates a strong effect size, while the unstandardized coefficient ( $B = 0.260$ ) implies that a one-unit increase in financial usage leads to a measurable improvement in MSME financial performance. The high  $t$ -statistic (9.261) and very low probability value ( $p < .001$ ) confirm that the effect is statistically reliable. Importantly, the explanatory power of the model ( $R^2 = 0.294$ ) suggests that nearly 29 percent of the variation in MSME financial performance is explained by financial usage alone. In the context

of MSME research where performance outcomes are influenced by numerous structural, institutional, and market factors this level of explanatory power is substantial and highlights the central role of usage as a performance driver.

Collectively, these results confirm that financial usage is not merely correlated with MSME performance but functions as a key transmission mechanism through which financial inclusion translates into tangible enterprise outcomes.

## **6.2 Theoretical Implications**

The findings strongly support the theoretical propositions advanced in this study. From a **Transaction Cost Theory** perspective, frequent use of financial services reduces transaction frictions associated with cash handling, long travel distances, and informal payment systems. In rural agribusiness settings such as Greater Kigezi, where MSMEs operate within dispersed markets and seasonal trading cycles, reduced transaction costs directly enhance operational efficiency and cash-flow management. The significant coefficient on financial usage provides empirical validation of this theoretical mechanism.

From a **Financial Intermediation Theory (usage-oriented perspective)**, the results demonstrate that the benefits of financial intermediation materialize only when MSMEs actively engage with financial services. Merely having access to financial infrastructure does not improve performance unless enterprises consistently use transaction, savings, and payment services. The strong regression coefficient confirms that **active participation in the financial system**, rather than passive inclusion, is what drives financial performance gains.

Additionally, the findings align with the **Theory of Planned Behavior**, which emphasizes behavioral engagement in economic decision-making. MSMEs that perceive financial services as useful, reliable, and controllable are more likely to use them frequently, resulting in improved financial outcomes. The observed heterogeneity in financial usage—reflected in the descriptive statistics further reinforces the behavioral dimension of financial inclusion emphasized by this theory.

## **6.3 Greater Kigezi Sub-Region Interpretation**

The strength of the financial usage–performance relationship must be interpreted within the specific socio-economic and institutional context of the Greater Kigezi sub-region. The region is predominantly rural and agrarian, with MSMEs engaged in produce aggregation, trading, agro-processing, retailing, and small-scale logistics. These enterprises typically operate under conditions characterized by seasonal income flows, reliance on market days, limited formal bookkeeping, and high exposure to cash-handling risks.

In such an environment, active usage of financial services yields immediate operational benefits. MSMEs that frequently use financial services are better able to manage working capital during peak agricultural seasons, settle transactions efficiently with suppliers and buyers, and reduce losses associated with cash storage and transportation. The strong positive effect of financial usage observed in this study reflects these mechanisms. Enterprises that integrate financial services into routine operations gain greater liquidity stability and financial discipline, translating into improved performance.

The findings therefore suggest that in rural agribusiness contexts, usage intensity matters more than mere access, as performance gains are realized through repeated and purposeful engagement with financial services

#### 6.4 Uganda National Context

At the national level, Uganda has made significant progress in expanding financial inclusion through initiatives such as **agent banking, digital financial services, and the National Financial Inclusion Strategy (NFIS) 2023–2028** (Ministry of Finance, Planning and Economic Development [MoFPED], 2023). However, national policy documents increasingly recognize that **access expansion alone is insufficient** unless accompanied by sustained usage, particularly among MSMEs.

The findings of this study provide empirical support for this policy orientation. The strong effect of financial usage on MSME financial performance confirms that **deepening usage is critical for realizing the economic benefits of financial inclusion**, especially in rural regions. Despite national progress, rural MSMEs continue to face challenges related to affordability, reliability, and suitability of financial products. The results therefore reinforce the need for Uganda's inclusion agenda to prioritize usage-oriented interventions that align financial services with MSME operational realities.

#### 6.5 Comparison with Prior Studies

The findings are consistent with global and regional evidence linking financial usage to improved enterprise performance. Studies from developing economies demonstrate that MSMEs that actively use financial services experience enhanced liquidity management, reduced transaction costs, and improved financial resilience (Ayyagari et al., 2020; Demirgüç-Kunt et al., 2022). In Sub-Saharan Africa, evidence suggests that usage depth is a more reliable predictor of enterprise performance than access alone, particularly in rural and informal contexts (Beck & Cull, 2020).

By providing objective-specific evidence from a rural agribusiness setting, this study extends the literature by demonstrating that financial usage explains a substantial share of performance variation even when examined independently. The magnitude of the coefficients observed in this study compares favorably with findings from similar contexts, underscoring the robustness of the usage–performance relationship

#### 6.6 Practical Implications

The findings of this study underscore the central role of financial usage, rather than mere access, in enhancing MSME financial performance. The strong standardized coefficient ( $\beta = 0.542$ ,  $p < .001$ ) and the substantial explanatory power of the model ( $R^2 = 0.294$ ) demonstrate that policies aimed solely at expanding financial infrastructure are insufficient unless they also promote active and sustained engagement with financial services. This implies that financial inclusion strategies should move beyond access indicators and incorporate usage-based benchmarks, such as transaction frequency, savings regularity, and utilization of digital payment platforms, particularly among MSMEs. At the national level, the results align closely with Uganda's National Financial Inclusion Strategy (NFIS 2023–2028), which emphasizes deepening usage among MSMEs as a pathway to inclusive growth. The evidence from Greater Kigezi suggests that policy efforts should prioritize improving the affordability, reliability, and relevance of financial services to MSME operational needs. This includes reducing transaction costs, simplifying user interfaces for digital platforms, improving agent liquidity in rural areas, and

aligning financial products with agribusiness cash-flow cycles. Strengthening financial literacy programs that focus on practical usage, rather than general awareness, is also essential for translating inclusion into performance gains. At the sub-regional and institutional level, the findings imply that financial service providers should design usage-driven service delivery models tailored to rural MSMEs. Banks, microfinance institutions, and digital finance providers should integrate relationship-based approaches that encourage frequent interaction, such as bundled transaction services, incentive-based savings products, and flexible payment solutions for agribusiness value chains. By fostering habitual usage, such interventions can enhance MSME liquidity management, reduce cash-handling risks, and ultimately improve enterprise sustainability and resilience in rural economies like Greater Kigezi 6.7

## **6.7 Contribution to Knowledge**

This study makes a significant contribution to the financial inclusion and MSME finance literature by empirically validating financial usage as a distinct and performance-relevant dimension of financial inclusion. While much of the existing literature emphasizes access to finance, this study demonstrates that usage explains a substantial proportion of MSME financial performance variation, even when examined independently. The strong effect size ( $\beta = 0.542$ ) provides robust evidence that financial inclusion outcomes are driven by behavioral engagement with financial services, rather than availability alone.

Methodologically, the study contributes by adopting an objective-specific modeling approach that isolates the independent effect of financial usage on MSME financial performance. This approach addresses a key limitation in prior studies that aggregate multiple inclusion dimensions into a single index, thereby obscuring the distinct pathways through which access, usage, and quality affect enterprise outcomes. By combining both Pearson and Spearman correlation analyses with regression estimation, the study also strengthens empirical rigor and provides robust validation of the usage–performance relationship.

Contextually, the study contributes new empirical evidence from the Greater Kigezi sub-region, a predominantly rural agribusiness economy that remains under-represented in MSME finance research. By situating financial usage within a rural agribusiness setting, the study extends the applicability of financial inclusion theory beyond urban and formal enterprise contexts. The findings therefore enrich the global literature by demonstrating how financial usage operates as a critical transmission mechanism for enterprise performance in rural, agriculture-dependent economies, offering insights relevant to other developing-country contexts

## **Conclusion**

This study set out to examine whether **financial usage** the frequency and intensity with which MSMEs engage with formal financial services significantly influences **financial performance** among agribusiness MSMEs in the Greater Kigezi sub-region. The empirical evidence provides clear and robust confirmation that financial usage is a **strong, positive, and statistically significant determinant** of MSME financial performance. Both correlation and regression analyses converge on this conclusion, with moderately strong associations (Pearson  $r = 0.542$ ; Spearman's  $\rho = 0.561$ ) and a substantial regression effect ( $\beta = 0.542$ ,  $p < .001$ ), indicating that enterprises that use financial services more actively achieve superior performance.

## **6.8 Recommendations**

### **Policy-Level Recommendations**

Given the strong and statistically significant influence of financial usage on MSME financial performance, policymakers should reorient financial inclusion strategies from access expansion toward usage deepening. While Uganda has made notable progress in expanding access to financial services, the findings demonstrate that active and sustained usage is the primary mechanism through which financial inclusion translates into enterprise-level performance gains. National financial inclusion frameworks should therefore incorporate usage-based indicators, such as transaction frequency, digital payment adoption, and regular savings behavior, as core performance metrics alongside access indicators. This approach aligns with global best practices that emphasize effective usage as the critical pathway to inclusive growth.

At the national level, implementation of the National Financial Inclusion Strategy (NFIS 2023–2028) should place greater emphasis on policies that lower the cost and complexity of routine financial transactions for MSMEs. These include reducing transaction fees, improving interoperability of digital platforms, and strengthening agent liquidity in rural areas. Policies should also support the development of financial products tailored to MSME cash-flow cycles, particularly in agribusiness, where income is seasonal and transaction volumes fluctuate. Such policy adjustments would enhance the usability of financial services and reinforce their performance impact.

### **Recommendations for Financial Service Providers**

Financial institutions, including banks, microfinance institutions, and digital financial service providers, should prioritize usage-driven service design for MSMEs. The findings indicate that frequent engagement with financial services significantly improves enterprise performance, suggesting that providers should move beyond account acquisition strategies toward models that encourage regular transactional engagement. This may involve bundling payment, savings, and short-term financing services; offering incentives for consistent usage; and simplifying transaction processes to reduce operational frictions for MSMEs.

In rural contexts such as Greater Kigezi, service providers should strengthen relationship-based banking and agent networks to foster trust and habitual usage among MSMEs. Training agents to provide basic financial guidance, ensuring reliable service availability, and aligning service hours with market days can significantly enhance usage intensity. By embedding financial services into the everyday operations of MSMEs, providers can improve customer retention while simultaneously contributing to enterprise performance and sustainability.

### **Recommendations for MSMEs and Local Stakeholders**

MSMEs themselves should be encouraged to integrate financial services into routine business operations, rather than using them sporadically. The results suggest that enterprises that regularly use financial services are better able to manage liquidity, reduce cash-handling risks, and stabilize financial outcomes. MSME support programs should therefore emphasize practical financial usage skills, such as managing digital payments, tracking transactions, and aligning savings behavior with business cycles.

At the sub-regional level, local governments, business associations, and development partners should support initiatives that promote financial usage literacy, particularly in rural agribusiness value chains. Training programs should focus on how financial services can be used strategically to support production, aggregation, and market participation. Strengthening usage capabilities at the grassroots level will enhance the performance and resilience of MSMEs in regions such as Greater Kigezi and contribute to broader rural economic transformation

## References

- Alliance for Financial Inclusion. (2023). *Financial inclusion strategy peer learning in Africa*. AFI. <https://www.afi-global.org>
- Alliance for Financial Inclusion. (2023). *Financial inclusion strategy peer learning in Africa*. AFI. <https://www.afi-global.org>
- Ambrose, B. (2021). Financial inclusion and performance of small enterprises in Southwestern Uganda. *African Journal of Economic Review*, 9(2), 45–62.
- Ambrose, B. (2021). Financial inclusion and performance of small enterprises in Southwestern Uganda. *African Journal of Economic Review*, 9(2), 45–62.
- Ambrose, T. (2021). *Financial accessibility and performance of small and medium enterprises* [Unpublished manuscript]. ASBAT Library.
- Ayyagari, M., Demirgüç-Kunt, A., & Maksimovic, V. (2020). Access to finance and firm growth in developing countries. *Journal of Development Economics*, 146, 102506. <https://doi.org/10.1016/j.jdeveco.2020.102506>
- Ayyagari, M., Demirgüç-Kunt, A., & Maksimovic, V. (2020). Access to finance and firm growth in developing countries. *Journal of Development Economics*, 146, 102506. <https://doi.org/10.1016/j.jdeveco.2020.102506>
- Bank of Uganda & Ministry of Finance, Planning and Economic Development. (2017). *National Financial Inclusion Strategy 2017–2022*. Government of Uganda.
- Bank of Uganda. (2023). *Annual supervision report*. Bank of Uganda. <https://www.bou.or.ug>
- Bank of Uganda. (2023). *Annual supervision report*. BoU. <https://www.bou.or.ug>
- Beck, T., & Cull, R. (2020). Small- and medium-sized enterprise finance in developing economies. *World Development*, 132, 104959. <https://doi.org/10.1016/j.worlddev.2020.104959>
- Beck, T., & Cull, R. (2020). Small- and medium-sized enterprise finance in developing economies. *World Development*, 132, 104959. <https://doi.org/10.1016/j.worlddev.2020.104959>
- Benon, K., Moses, A., Mpora, E. B., Arthur, S., & Denis, S. (2024). Effect of board accountability on financial performance of selected Saccos in Kiruhura District, Uganda. *International Journal of Social Science and Education Research Studies*, 4(01), 22-35
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank. <https://doi.org/10.1596/978-1-4648-1897-4>
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank. <https://doi.org/10.1596/978-1-4648-1897-4>
- Financial Sector Deepening Uganda. (2022). *MSME finance and digital financial services in Uganda*. FSD Uganda. <https://fsduganda.or.ug>
- Financial Sector Deepening Uganda. (2022). *MSME finance and digital financial services in Uganda*. FSDU. <https://fsduganda.or.ug>
- International Monetary Fund. (2024). *Financial inclusion and digital financial services in developing economies*. International Monetary Fund. <https://www.imf.org>

- International Monetary Fund. (2024). *Financial inclusion and digital financial services in developing economies*. IMF. <https://www.imf.org>
- Kabale University Repository. (2023). *Microfinance and the financial performance of small-scale enterprises: Evidence from a SACCO case study* [Institutional repository item]. Kabale University.
- Micro-credit institution's services and sustainability of micro, small and medium-scale enterprises during COVID-19 pandemic in Kigezi region, south western Uganda* (2022/2023). [Open-access article]. ResearchGate.
- Micro-credit institutions' services and sustainability of micro, small and medium-scale enterprises during the COVID-19 pandemic in Kigezi region, southwestern Uganda. (2023). *Open-access research article*. ResearchGate
- Ministry of Finance, Planning and Economic Development. (2023). *National Financial Inclusion Strategy 2023–2028*. Government of Uganda.
- Ministry of Finance, Planning and Economic Development. (2023). *National Financial Inclusion Strategy 2023–2028*. Government of Uganda.
- Mpora, E. B. (2023). Mobile money usage and financial inclusion in Uganda. *Kabale University Research Journal*, 4(1), 55–72.
- Mwijukye, D., & Moses, A. (2019). Village savings and loan associations and socio-economic empowerment of vulnerable people in kamuganguzi sub-county Kabale, District, Uganda., *International Journal of Development Research*, 09, (09)
- Nyiratabuka, E. (2022). *Access to finance and performance of small and medium enterprises in Uganda* (Master's dissertation). Kabale University Institutional Repository.
- Nyiratabuka, E. (2022). *Access to finance and performance of small and medium enterprises in Uganda* [Master's dissertation, Kabale University]. Kabale University Institutional Repository.
- Nyiratabuka, J. (2022). Access to finance and growth of agribusiness SMEs in rural Uganda. *Journal of Rural Development Studies*, 14(1), 88–104.
- Sulemana, I. (2025). Financial inclusion, usage depth, and enterprise performance in Sub-Saharan Africa. *Journal of African Business*, 26(1), 1–20. <https://doi.org/10.1080/15228916.2024.XXXXXX>
- Sulemana, I. (2025). Financial inclusion, usage depth, and enterprise performance in Sub-Saharan Africa. *Journal of African Business*, 26(1), 1–20. <https://doi.org/10.1080/15228916.2024.XXXXXX>
- Turyasingura, J. B., Agaba, M., & Kabagambe, J. D. (2023). The effect of participatory project design on project success in government funded project in Uganda: A case study of parish development in Kabale District. *African Journal of Business Management*, 17(3), 53.
- Uganda Bureau of Statistics. (2022). *Statistical abstract*. UBOS. <https://www.ubos.org>
- Uganda Bureau of Statistics. (2022). *Statistical abstract*. UBOS. <https://www.ubos.org>
- World Bank. (2022). *Finance for growth: Policy choices in a volatile world*. World Bank. <https://www.worldbank.org>
- World Bank. (2022). *Finance for growth: Policy choices in a volatile world*. World Bank. <https://www.worldbank.org>