



Effect of Microfinance Institutions Lending Dimensions on Business Performance of Selected Small and Medium Enterprises in Rulindo District, Rwanda

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Abstract: This study examined the effect of microfinance lending dimensions on the business performance of selected Small and Medium Enterprises (SMEs) in Rulindo District, Rwanda. It evaluated the performance of SME businesses in respect to loan size, interest rates, loan repayment terms, and collateral requirements. The study used a quantitative method with descriptive and correlational research designs, guided by Credit Constraints Theory, Resource-Based View Theory, Financial Intermediation Theory, Pecking Order Theory, and Agency Theory. 371 respondents were chosen from the target group of SME owners and managers, and they submitted information using standardized questionnaires. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. Findings revealed that interest rates had a negative and substantial impact on SME performance ($B = -0.219$, $\beta = -0.230$, $t = -4.543$, $p < .001$), whereas loan size had a positive and significant impact ($B = 0.349$, $\beta = 0.355$, $t = 7.533$, $p < .001$). Collateral requirements exhibited a negative and significant association with SME performance ($r = -.846$, $p < .01$), whereas loan repayment period had a positive and substantial influence ($B = 0.284$, $\beta = 0.276$, $t = 5.680$, $p < .001$). Strong explanatory power was shown by the regression model, which explained 81.2% of the variation in SME performance ($R^2 = .812$). To improve SME growth, performance, and sustainability, the study advises MFIs to offer sufficient loan amounts, reasonable interest rates, flexible repayment terms, and alternate collateral arrangements.

Keywords: Microfinance Institutions; Lending Dimensions; Loan Size; Interest Rates; Loan Repayment Period; Collateral Requirements; SME Performance; Small and Medium Enterprises

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1. Introduction

Small and Medium Enterprises (SMEs) are widely acknowledged as significant contributors to global economic development through the creation of jobs, revenue, innovation, entrepreneurship, and poverty alleviation. In many economies, they make up the majority of enterprises and have a significant impact on employment and economic activity. SME growth, profitability, and sustainability are nevertheless severely hampered by a lack of suitable and reasonably priced financing, especially in developing nations (World Bank, 2022; International Finance Corporation [IFC], 2023). SMEs' financial capacity is still limited by strict lending conditions, high borrowing

costs, insufficient collateral, and limited credit availability, even though external financing helps them maintain working capital, grow operations, acquire productive assets, and pursue new opportunities (World Bank, 2022; OECD, 2023).

SMEs are essential to the growth of the private sector, the creation of jobs, and the generation of household income in Africa, yet many businesses still face severe financial difficulties. For small enterprises that might not fit the criteria of traditional commercial banks, Microfinance Institutions (MFIs) and Savings and Credit Cooperative Organizations (SACCOs) have emerged as crucial sources of funding. These organizations assist working capital, investments, and business growth by offering loans and

other financial services (IMF, 2024). However, because lending circumstances can either encourage or impede firm growth, access to financing alone does not always improve SME performance.

The quantity of credit available, borrowing costs, repayment plans, and collateral restrictions continue to have an impact on SME finance throughout East Africa. While interest rates affect borrowing costs, cash flow, and profitability, loan size dictates the financial resources available for expansion and investment. Similar to how repayment terms influence the timing and size of financial commitments, collateral restrictions may prevent businesses with limited assets from obtaining financing (World Bank, 2022; OECD, 2023).

With MSMEs making up more than 99.8% of businesses in Rwanda, SMEs are especially crucial to the growth and employment of the private sector (AFR, 2024). Due to collateral restrictions and other financing obstacles, some businesses still struggle to obtain appropriate and affordable credit despite advancements in financial inclusion (NISR, 2024, 2025). As a result, MFIs and SACCOs continue to be crucial sources of funding for SMEs involved in commerce, services, and other profitable endeavors.

At the district level, particularly in Rulindo District, MFIs and SACCOs provide financing for working capital, investment, and business expansion. However, there is little empirical data that shows how particular aspects of microfinance lending affect the district's SME performance. Prior research has mostly concentrated on microfinance services or general access to finance (Sommer, 2022; Ngarukiye & Twesige, 2024). Therefore, this study assessed the impacts of loan size, interest rates, payback durations, and collateral requirements on the performance of selected SMEs in Rulindo District, giving evidence relevant to MFIs, SACCOs, SME owners, managers, and policymakers.

1.2 Statement of Problem

SME development, investment, profitability, and sustainability are still severely hampered by a lack of access to sufficient and reasonably priced financing, especially in emerging nations (World Bank, 2022; OECD, 2023). Even while MFIs and SACCOs are significant sources of credit for SMEs, the terms of such financing may decide whether borrowed funds enhance or limit company success. Inadequate loan amounts can restrict profitable investment, short payback terms can put pressure on cash flow, high interest rates can raise financing costs, and strict collateral requirements can bar businesses with insufficient assets (NISR, 2025). There is little empirical data on how loan size, interest rates, payback terms, and collateral requirements impact the business performance of SMEs in Rulindo District, many of whom rely on MFIs and SACCOs for working capital and expansion. The ability of financial institutions and governments to create suitable SME financing strategies is hampered by this evidence vacuum. Therefore, this study examines the effect of microfinance

institutions' lending dimensions on the business performance of selected SMEs in Rulindo District, Rwanda.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to examine the effect of microfinance Institutions 'lending dimensions on business performance of selected SMEs in Rulindo District, Rwanda.

1.3.2 Specific Objectives

1. To determine the effect of loan size on business performance of selected SMEs in Rulindo District.
2. To assess the effect of interest rates on business performance of selected SMEs in Rulindo District.
3. To examine the effect of loan repayment period on business performance of selected SMEs in Rulindo District.
4. To investigate the effect of collateral requirements on business performance of selected SMEs in Rulindo District.

1.4 Hypotheses of the Study

H₀₁: Loan size has no significant effect on business performance of selected SMEs in Rulindo District.

H₀₂: Interest rates have no significant effect on business performance of selected SMEs in Rulindo District.

H₀₃: Repayment period has no significant effect on business performance of selected SMEs in Rulindo District.

H₀₄: Collateral requirements have no significant effect on business performance of selected SMEs in Rulindo District.

2. Literature Review

This chapter covers conceptual review, theoretical frameworks and empirical studies in relation to the research variables. It also presents the conceptual framework and emphasizes the research gap that the study addresses.

2.1. Conceptual Review

2.1.1. Financial Institutions

Microfinance institutions (MFIs) offer financial services, such as savings and loans, to low-income people and small enterprises who have limited access to traditional banking, according to the World Bank (2023). By giving loans to business owners, MFIs and SACCOs in Rwanda encourage financial inclusion. SMEs' access to financing, profitability, liquidity, sales growth, operational efficiency, and sustainability are all impacted by their lending dimensions, which include loan size, interest rates, payback terms, and collateral requirements (World Bank, 2023).

2.1.2 Loan Size

The quantity of credit given to SMEs for commercial purposes by microfinance institutions is referred to as loan size. It establishes the amount of money accessible for operations, investments, working capital, and growth. SMEs can buy inventory, acquire productive assets, increase productivity, and react to market possibilities with the help of appropriate loan amounts (International Finance Corporation [IFC], 2022). Profitability, liquidity, sales growth, operational efficiency, and sustainability are all anticipated to be impacted by loan size in this study.

2.1.3. Interest rates

Interest rates, which are typically stated as a percentage of the principal loan amount, are the charges associated with borrowing that microfinance organizations charge. While moderate interest rates offer financial flexibility for expansion, cash flow management, and sustainability, high rates raise repayment responsibilities, decreasing profitability and restricting SMEs' capacity to reinvest (Beck & Cull, 2021; Armendáriz & Morduch, 2020). Interest rates are anticipated to have an impact on sustainability, sales growth, profitability, and liquidity in this study.

2.1.4. Loan Repayment Period

The amount of time borrowers has to pay back the principal and interest on a loan is known as the loan payback term. While short repayment terms may cause liquidity issues, flexible repayment plans that are in line with SME cash flow cycles can increase liquidity, lower default risks, and strengthen financial stability (Organization for Economic Co-operation and Development [OECD], 2022). Repayment terms are anticipated to have an impact on sales growth, profitability, liquidity, and business sustainability in this study.

2.1.5. Collateral Requirements

Assets or guarantees that microfinance organizations request as security for loan repayment are known as collateral requirements. Strict restrictions may prohibit asset-constrained SMEs from obtaining credit, even while collateral can enhance loan availability and lower lender risk (African Development Bank [AfDB], 2023). Collateral requirements are regarded in this study as institutional elements that impact SMEs' performance and access to financing; fair conditions are anticipated to enhance profitability, liquidity, sales growth, and business sustainability.

2.1.6. Lending Dimensions

Lending dimensions are the terms and conditions such as loan size, interest rates, repayment schedules, and collateral requirements that financial institutions specify when making loans. While unfavorable conditions may limit credit, raise repayment costs, and postpone business expansion, favorable conditions such as suitable collateral, flexible repayment plans, and moderate interest rates improve SMEs' operations, performance, and access to

credit (Mwizerwa & Habimana, 2022). The independent variable influencing SME profitability, liquidity, sales growth, and sustainability in this study is lending dimensions.

2.1.7. Business performance of SME

The ability of a SME to turn a profit, sustain revenue and sales growth, and effectively manage assets in order to accomplish business goals is referred to as business performance. Profitability, sales growth, revenue growth, liquidity, and sustainability are frequently used to gauge it. The Organization for Economic Co-operation and Development (OECD, 2023) states that financial performance and managerial abilities have a significant impact on corporate performance in emerging nations. The dependent variable in this study is business performance, which is determined by sales growth, profitability, liquidity, and sustainability.

2.1.8. Small and Medium Enterprises

Small and Medium Enterprises (SMEs) in Rwanda are categorized based on capital investment; buildings and land are not included. Small businesses have capital between RWF 500,000 and RWF 15,000,000, medium-sized businesses have capital between RWF 15,000,000 and RWF 75,000,000, and micro businesses have capital under RWF 500,000 (Ministry of Trade and Industry [MINICOM], 2023). SMEs in this study include registered companies in the Rulindo District that operate in trade, agriculture, manufacturing, and services and obtain financial services from MFIs and Umurenge SACCOs.

2.2. Theoretical Review

2.2.1. Credit Constraints Theory

According to Credit Constraints Theory, small and medium-sized businesses (SMEs) frequently encounter difficulties obtaining financing because of collateral restrictions, information asymmetries, and lenders' perceptions of high risk. Many viable SMEs are consequently denied access to formal credit markets or given less favorable loan terms. These limitations are immediately reflected in the operational lending characteristics of MFIs in the context of this study, including loan size, interest rates, repayment schedules, and collateral requirements. According to recent research, loosening credit restrictions increases investment capacity and liquidity, which boosts SME profitability and sustainability (World Bank, 2024; BNR, 2023).

Thus, this theory validates the connection between the lending dimensions of MFIs and the business performance of SMEs in Rulindo District.

2.2.2. Agency Theory

In order to clarify the connection between principals who supply resources and agents who oversee them, Michael C. Jensen and William H. Mackling created Agency Theory in

1976. The theory highlights information asymmetry and conflicts of interest, which can lead to moral hazard following loan disbursement and adverse selection prior to lending. SME owners are agents in microfinance, whereas MFIs serve as principals. To lessen information asymmetry, lower default risks, and encourage responsible credit use, MFIs set lending conditions, such as loan size, interest rates, repayment terms, and collateral requirements (Agyekum et al., 2024). In this paper, Agency Theory illustrates how advantageous lending aspects can safeguard the interests of lenders and borrowers while enhancing SME profitability, liquidity, sales growth, and business sustainability.

2.2.3. Resource-Based View (RBV)

Barney (1991) established the Resource-Based View (RBV), which contends that the acquisition, development, and efficient use of valuable, uncommon, unique, and non-substitutable resources are critical to organizational effectiveness. Businesses can invest in innovation, enhance operations, acquire productive assets, and achieve sustainable growth with the help of financial resources. SME productivity, profitability, and sustainability can all be enhanced by sufficient financial resources (Nguyen & Pham, 2023). Microfinance loans are strategic financial resources in this study, and SMEs' access to and efficient use of capital are determined by loan size, interest rates, repayment schedules, and collateral requirements. Investment, liquidity, profitability, sales growth, and business sustainability can all be enhanced by favourable lending aspects. As a result, RBV offers a theoretical framework for investigating the ways in which these four lending characteristics affect SME performance in Rulindo District.

2.2.4. Pecking Order Theory

Pecking Order Theory states that due of knowledge asymmetry and financing costs, companies favor internal financing over debt and external equity (Khan et al., 2023). Retained revenues are a common source of funding for SMEs in developing nations, but when internal resources are inadequate, they turn to outside funding sources like microloans. The idea in this study is applicable to SMEs in the Rulindo District, where MFIs offer significant external funding. SMEs' access to and utilization of credit are influenced by loan size, interest rates, repayment schedules, and collateral restrictions. SMEs' financial decisions and ability to increase liquidity, profitability, sales growth, and business sustainability are impacted by these lending characteristics. Thus, the theory encourages investigating the ways in which MFI lending aspects affect the success of SME businesses (Khan et al., 2023).

2.2.5. Financial Intermediation Theory

Myers and Majluf created the Pecking Order Theory in 1984, which explains why businesses prioritise internal funding like retained earnings over external financing. Due to knowledge asymmetry, transaction expenses, and

ownership dilution, external equity is least desired by businesses when internal finances are insufficient (Gale, 2024; Khan et al., 2023). When internal resources are insufficient to support operations and expansion, the theory in microfinance explains why SMEs turn to MFI and Umurenge SACCO loans. Lending factors that affect business success and access to outside funding include loan size, interest rates, payback schedules, and collateral restrictions. While negative conditions may limit business growth, favorable conditions promote profitable investment, liquidity, sales growth, and sustainability (Terry, 2024).

2.3 Empirical Review

2.3.1. Loan Size and Business Performance

According to recent empirical research, loan size has a major impact on the performance of SME businesses. The International Finance Corporation (2022) discovered a significant regression effect ($\beta = 0.472$, $p < 0.001$) and a strong positive correlation ($r = 0.691$, $p < 0.01$) between loan size and performance. Muturi and Mwangi (2022) observed a significant positive link in Kenya ($r = 0.642$, $p < 0.01$; $\beta = 0.418$, $p < 0.001$), while Okoye and Eze (2023) found similar results in Nigeria ($r = 0.614$, $p < 0.01$; $\beta = 0.397$, $p < 0.001$). Nyiransabimana and Tarus (2023) found a significant favourable effect in Rwanda ($r = 0.673$, $p < 0.01$; $\beta = 0.451$, $p < 0.001$). These results imply that while excessive borrowing may raise repayment risk, suitably sized loans improve SME liquidity, profitability, investment, and expansion.

2.3.2. Interest Rates and Business Performance

According to recent research, interest rates significantly impair the performance of SMEs since high borrowing costs hinder investment, profitability, and company growth. Interest rates and SME performance were found to be significantly correlated negatively by the International Finance Corporation (2022) ($r = -0.658$, $p < 0.01$; $\beta = -0.431$, $p < 0.001$). Similar results were reported by Nakkito and Kato (2021) in Uganda ($r = -0.611$, $p < 0.01$; $\beta = -0.392$, $p < 0.001$) and Alemu and Fanta (2022) in Ethiopia ($r = -0.647$, $p < 0.01$; $\beta = -0.418$, $p < 0.001$). Mudumizi and Rusibana (2023) found a significant negative association ($r = -0.629$, $p < 0.01$; $\beta = -0.405$, $p < 0.001$) in Rwanda, indicating that high interest rates limit the growth and profitability of SMEs.

2.3.3. Repayment Periods and Business Performance

According to recent research, flexible loan payback terms enhance cash-flow management, liquidity, profitability, and business sustainability, all of which have a beneficial impact on SME performance. Repayment term and SME performance were found to be significantly positively correlated by the International Finance Corporation (2022)

($r = 0.653$, $p < 0.01$; $\beta = 0.421$, $p < 0.001$). Similar results were found in Ghana ($r = 0.639$, $p < 0.01$; $\beta = 0.408$, $p < 0.001$) and Tanzania ($r = 0.621$, $p < 0.01$; $\beta = 0.386$, $p < 0.001$) by Mensah and Frimpong (2023) and Kalangi and Msuya (2022). According to Mudumizi and Rusibana (2023), 72.4% of respondents in Rwanda stated that flexible repayment terms allowed them to fulfill loan obligations without interfering with business activities. These results imply that repayment plans in line with SME cash-flow cycles can improve the sustainability and performance of businesses.

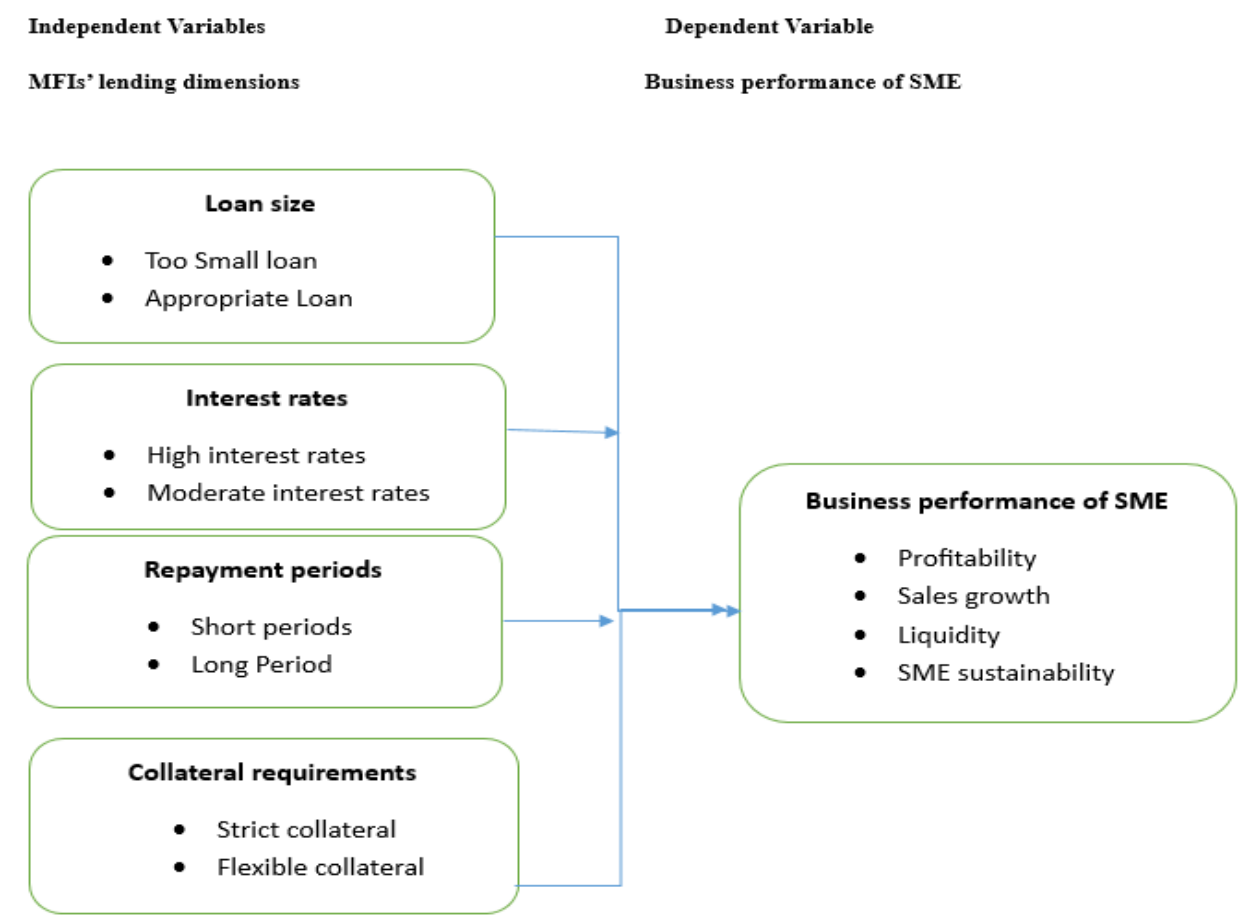
2.3.4. Collateral Requirements and Business Performance

According to recent research, strict collateral requirements have a detrimental impact on the performance of SMEs by limiting their access to loans, investment, and business growth. Collateral requirements and SME performance were found to be significantly correlated negatively by the

International Finance Corporation (2022) ($r = -0.617$, $p < 0.01$; $\beta = -0.389$, $p < 0.001$). Gyamfi (2021) also found a substantial negative connection ($r = -0.596$, $p < 0.01$; $\beta = -0.372$, $p < 0.001$) in Ghana. Collateral requirements had a considerable impact on SME performance in Rwanda, according to Uwase and Nkurunziza (2022) ($r = -0.628$, $p < 0.01$; $\beta = -0.401$, $p < 0.001$). A substantial negative connection was also reported by Nyiransabimana and Tarus (2023) ($r = -0.641$, $p < 0.01$; $\beta = -0.417$, $p < 0.001$). These results imply that alternate security measures and flexible collateral regulations can enhance SMEs' access to capital and economic expansion.

2.4. Conceptual Framework

The conceptual framework explains how MFI lending dimensions' loan size, interest rates, repayment periods, and collateral requirements affect SME business performance, measured by profitability, sales growth, liquidity, and sustainability



Source: Researcher ,2026

2.5. Research Gap

There is little data examining the combined impact of MFI lending dimensions and SME performance in Rwanda, despite prior research demonstrating strong correlations between the two. The majority of Rwandan research that are

now available concentrate on specific lending criteria in urban settings, paying little attention to rural areas like Rulindo. Furthermore, few studies evaluate sustainability, liquidity, sales growth, and profitability at the same time. Therefore, this study addresses the contextual, conceptual, and methodological gaps by analyzing the combined

influence of loan size, interest rates, payback durations, and collateral requirements on SME company performance in Rulindo District, Rwanda.

3. Methodology

This study examined the effect of microfinance lending dimensions on the business performance of selected Small and Medium Enterprises (SMEs) in Rulindo District, Rwanda. this study used a quantitative method utilizing descriptive and correlational research designs. Yamane's method was used to determine a sample of 371 SMEs with a 5% margin of error from the target population, which consisted of 5,178 SMEs receiving financial services from SACCOs and other microfinance institutions. To guarantee sufficient representation throughout the 17 sectors of Rulindo District and reduce sample bias, proportional and straightforward random sampling approaches were employed. A standardized questionnaire with a five-point Likert scale covering loan amount, interest rates, repayment

terms, collateral requirements, and business performance was used to gather primary data from SME owners and managers. To evaluate the instrument's validity, reliability, and clarity, a pilot research with 37 SMEs in Gakenke District was carried out. Expert evaluation verified content validity, resulting in a Content Validity Index (CVI) of 0.86, while Cronbach's Alpha coefficients more than 0.70 indicated adequate dependability. SPSS was used to code and analyze the data. While Pearson correlation and multiple linear regression evaluated correlations and effects among variables, descriptive statistics provided an overview of the data. Strict adherence was maintained to ethical standards, such as informed permission, anonymity, secrecy, voluntary participation, and academic integrity.

4. Results and Discussion

4.1 Descriptive Statistics

Table 1: Descriptive Statistics of Loan Size

Statements	N	Mean	SD
The loan amount offered meets my business capital needs	371	4.11	.887
The loan size provided is adequate for daily business operations	371	4.18	.889
The loan amount received allows investment in business assets	371	4.10	.881
The loan size is sufficient to support business expansion	371	4.11	.847
The loan size is appropriate for the scale of my business	371	4.15	.846
Composite Mean		4.13	

The results show that respondents consistently and strongly agreed that the loan sizes offered by microfinance firms are adequate. The replies showed little variation, with mean scores ranging from 4.10 to 4.18 and standard deviations ranging from 0.846 to 0.889. The loan sizes were sufficient for regular business operations, according to the highest mean score ($M = 4.18$, $SD = 0.889$). Additionally,

respondents concurred that loan sizes supported asset investment, matched business scale, and enabled business expansion. Overall, the findings point to the importance of appropriately sized microloans in promoting the operations, investment, and expansion of SMEs. However, correlation and regression research are necessary to determine their true impact on business success.

Table 2: Descriptive Statistics of Collateral Requirement

Statements	N	Mean	SD
Collateral requirements pose challenges to my business	371	4.10	.901
Strict collateral requirements limit access to loans	371	4.08	.905
Availability of collateral influences loan approval decisions	371	4.14	.852
Collateral requirements affect my ability to expand the business	371	4.04	.933
Loan collateral conditions are unfair and reasonable	371	4.06	.938
Composite Mean		4.084	

With a composite mean of 4.084, the results demonstrate that respondents view collateral restrictions as a major obstacle to obtaining microfinance services. Collateral availability has a significant impact on loan acceptance decisions, according to the highest-rated item ($M = 4.14$, $SD = 0.852$). Additionally, respondents concurred that collateral requirements limit loan access ($M = 4.08$) and cause

company difficulties ($M = 4.10$). Collateral requirements were generally seen as restricting SMEs' access to funding, while having a relatively small direct impact on growth ($M = 4.04$). The results show collateral's importance in lowering loan risk while perhaps limiting SME financing and growth options, supporting both Credit Constraint Theory and Agency Theory.

Table 3: Descriptive Statistics of Loan Repayment Period

	N	Mean	SD
The repayment period provided is sufficient for my business cycle	371	4.14	.873
The repayment schedule matches my business cash flow	371	4.12	.896
Flexible repayment terms reduce financial pressure on my business	371	4.11	.863
Short repayment periods create cash flow challenges	371	4.19	.800
Repayment period affects my business financial stability	371	4.13	.833
Composite mean		4.13	

With a composite mean of 4.14 and mean scores ranging from 4.11 to 4.19, the results show that loan payback periods are a significant microfinance lending component influencing SME success. Short repayment terms cause cash flow problems, according to respondents (M = 4.19, SD = 0.800). Additionally, they concurred that payback periods often correspond with business cash flows (M =

4.12), impact financial stability (M = 4.13), and are adequate for business cycles (M = 4.14). Additionally, flexible periods for repayment were valued (M = 4.11). In order to lessen financial strain, respondents often stressed payback plans that are in line with company cash flows. To determine the true impact on SME performance, correlation and regression analysis are necessary.

Table 4: Descriptive Statistics of Interest Rate

	N	Mean	SD
Interest rates charged by MFIs are relatively not affordable to my business	371	4.10	.899
Interest rates affect my ability to reinvest profits	371	4.16	.855
High interest charges reduce my business profitability	371	4.12	.941
Interest costs influence my borrowing decisions	371	4.13	.859
Favorable interest rates encourage business growth	371	4.12	.878
Composite mean		4.12	

With an overall mean of 4.12 and individual averages ranging from 4.10 to 4.16, the results show that interest rates are an important microfinance lending dimension influencing SME performance. Interest rates have a significant impact on borrowing decisions (M = 4.13, SD = 0.859) and profit reinvestment (M = 4.16, SD = 0.855), according to respondents. They also concurred that

favourable interest rates promote business expansion and high interest rates lower profitability (M = 4.12). Concerns regarding borrowing expenses are further highlighted by the belief that MFI interest rates are comparatively exorbitant (M = 4.10). Interest rates generally affect the profitability, investments, borrowing patterns, and growth prospects of SMEs.

Table 5: Descriptive Statistics of Business Performance

	N	Mean	SD
My business has experienced growth in its overall operations over the past few years.	371	4.16	.890
My business has improved its ability to attract and retain customers.	371	4.12	.871
My business has increased its sales volume over time.	371	4.17	.833
My business is able to compete effectively within its market.	371	4.15	.848
My business has achieved sustainable growth and long-term stability.	371	4.14	.863
Composite mean		4.15	

With a composite mean of 4.15, the results show that the chosen SMEs in the Rulindo District have excellent business performance. With ratings ranging from 4.12 to 4.17, all indicators were rated highly, indicating that enterprise performance was generally seen favorably. The greatest mean was reported for increased sales volume (M = 4.17), followed by market competitiveness (M = 4.15) and operational growth (M = 4.16). Long-term stability and

sustainable growth also scored highly (M = 4.14), but customer acquisition and retention had the lowest mean (M = 4.12). SMEs generally performed well in terms of operations, sales, competitiveness, sustainability, and customer relations.

4.2 Inferential Statistics

Table 6: Pearson Correlation Results

		LSV	IRV	LRPV	CRV	BPV
LSV	Pearson Correlation	1				
	Sig. (2-tailed)					
IRV	Pearson Correlation	.841**	1			
	Sig. (2-tailed)	.000				
LRPV	Pearson Correlation	.819**	.849**	1		
	Sig. (2-tailed)	.000	.000			
CRV	Pearson Correlation	.817**	.826**	.826**	1	
	Sig. (2-tailed)	.000	.000	.000		
BPV	Pearson Correlation	.856**	-.846**	.845**	-.808**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000

** . Correlation is significant at the 0.01 level (2-tailed).

All financing factors were substantially correlated with SME company performance at the 1% level ($p < 0.01$), according to Pearson correlation statistics based on 371 observations. Interest rates ($r = -0.846$, $p < 0.01$) and collateral requirements ($r = -0.808$, $p < 0.01$) were strongly and negatively correlated and statistically significant with

performance, although loan size ($r = 0.85$, $p < 0.016$) and payback period ($r = 0.84$, $p < 0.015$) shown strong positive and statistically significant associations. Independent variable correlations varied from 0.817 to 0.849, staying below 0.90 and suggesting no significant multicollinearity issues.

Table 7: Model Summary Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.901 ^a	.812	.810	.29100

a. Predictors: (Constant), CRV, LSV, LRPV, IRV

The model shows strong explanatory power, with $R^2 = 0.812$ and adjusted $R^2 = 0.810$. Thus, loan size, interest rates, repayment period, and collateral requirements jointly explain 81.2% of the variation in SME business

performance, while 18.8% is explained by other factors. Overall, the findings confirm that microfinance lending conditions significantly influence SME growth, sustainability, and financial performance.

Table 8: Result of the ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	134.233	4	33.558	396.279	.000 ^a
	Residual	30.994	366	.085		
	Total	165.227	370			

a. Predictors: (Constant), CRV, LSV, LRPV, IRV

b. Dependent Variable: BPV

The regression model is extremely significant, according to the ANOVA results ($F = 396.279$, $p < 0.001$). With regression variation surpassing residual variation, the model accounts for a significant amount of variation in SME business performance ($R^2 = 0.812$). Therefore, the success of SME businesses is greatly influenced by the loan size, interest rate, repayment time, and collateral conditions.

Table 9: Regression Coefficients Result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.215	.101		2.124	.034
LS	.349	.046	.355	7.533	.000
IR	-.219	.048	-.230	-4.543	.000
LRP	.284	.050	.276	5.680	.000
CR	-.101	.046	-.101	-2.173	.030

a. Dependent Variable: BP

The results of the regression analysis demonstrate that the performance of SME businesses in Rulindo District is strongly influenced by microfinance lending parameters. The constant ($B = 0.215$, $p = 0.034$) was significant and positive. Performance was significantly impacted negatively by interest rates ($B = -0.219$, $p < 0.001$) and positively by loan size ($B = 0.349$, $p < 0.001$). Collateral

requirements had a negative impact on performance ($B = -0.101$, $p = 0.030$), whereas loan repayment period had a positive impact ($B = 0.284$, $p < 0.001$). As a result, all four null hypotheses were disproved. While high interest rates and stringent collateral requirements limit firm expansion, larger loans and flexible payback terms often improve SME performance.

Table 10: Hypotheses Testing Results

Hypothesis	Statement	β (Beta)	t-value	Sig. (p-value)	Decision
H01	Loan size has no significant effect on business performance of SMEs in Rulindo District	0.355	7.533	0.000	Reject H01
H02	Interest rates have no significant effect on business performance of SMEs in Rulindo District	-0.230	-4.543	0.000	Reject H02
H03	Repayment period has no significant effect on business performance of SMEs in Rulindo District	0.276	5.680	0.000	Reject H03
H04	Collateral requirements have no significant effect on business performance of SMEs in Rulindo District	-0.101	-2.173	0.030	Reject H04

5. Conclusion and Recommendation

5.1 Conclusions

This study focused on loan size, interest rate, loan payback time, and collateral criteria in order to investigate the impact of microfinance institutions' lending characteristics on SME company performance in Rwanda's Rulindo District. These associations were evaluated using correlation analysis and multiple regression. Lending dimensions significantly influence SME success, as evidenced by the regression model's statistical significance ($F = 396.279$, $p < 0.001$) and ability to explain 81.2% ($R^2 = 0.812$) of the variation in SME business performance.

The results demonstrated that loan size significantly improved SME firm performance, suggesting that larger loans encourage investment and business growth. Interest rates have a major detrimental impact, indicating that increased borrowing costs limit expansion and profitability. The length of the loan payback period had a major positive impact, highlighting the significance of flexible repayment plans. On the other hand, by restricting SMEs' access to

credit, collateral requirements had a substantial negative impact on performance.

The study finds that while high interest rates and stringent collateral requirements limit business growth in Rwanda's Rulindo District, greater loan amounts and flexible payback terms improve SME business success.

5.2 Recommendations

The study's conclusions led to the establishment of the following recommendations:

1. While improving credit risk assessment, microfinance institutions should raise suitable loan amounts in accordance with SMEs' growth potential and sector-specific requirements.
2. Affordable interest rates, subsidized loan programs, and credit guarantee systems are ways that MFIs and legislators can lower borrowing costs.
3. To increase liquidity and lessen financial strain, microfinance organizations should offer flexible repayment terms that correspond with SMEs' cash-flow patterns.

4. Alternative collateral arrangements, such as cash-flow lending, credit scoring, group lending, and movable assets, should be used by MFIs.
5. SMEs should improve their record-keeping, financial management, and efficient use of borrowed money.
6. Integrated SME financing policies that address loan size, interest rates, repayment schedules, and collateral requirements should be created by policymakers.

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