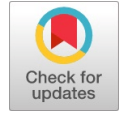


Effects of Microfinance Interest Rates on the Performance of Small-Scale Enterprises in Moshi Municipality, Tanzania

Edmund E. Lubinza, Nyanjige Mayala, Emmanuel Kileo



Abstract: Microfinance has emerged as a potent tool to reduce poverty and promote economic empowerment, especially in developing nations, by providing loans with lower interest rates. This study investigated the effects of microfinance interest rates on the performance of Small-Scale Enterprises (SSEs) in Moshi Municipality, Tanzania. The study was grounded by Wicksell's Natural Rate of Interest theory, which suggests an equilibrium interest rate balances savings and investment in an economy. A concurrent research design was used under a mixed research approach. The target population was 5,570 SSEs, and a sample size of 190 respondents was obtained using a sample size calculator. Data was collected through structured questionnaires and key informant interviews. The validity of the research instruments was conducted through face and content validity. For reliability, a Cronbach's alpha of 0.83 correlation coefficient was obtained. Descriptive and inferential statistics, including regression analysis and correlation, were used for the data analysis. Quantitative data were analyzed using SPSS, descriptive statistics, and inferential statistics, which included regression and correlation. Meanwhile, qualitative data was analyzed using contextual analysis. Ethical guidelines were adhered to throughout the study, including ensuring privacy, protection from harm, informed consent, and adhering to research guidelines. The study found that high interest rates negatively affected SSE's performance, with a significant effect on the microfinance institution's interest rates on SSE's performance at a p-value of less than 0.05. The study concluded that microfinance interest rates affect the performance of SSEs in Moshi Municipality. Furthermore, business owners increased prices and faced obstacles in job creation due to MFI interest rates, which increased costs, reduced profitability, and affected their ability to pay loans. In addition, the loan interest rate was statistically significant to SSE performances. The study recommended that policymakers and microfinance institutions review and potentially reduce interest rates to alleviate the financial burden of SSEs, promote business growth, and enhance profitability. Microfinance institutions should also prioritize transparent communication of interest rates and loan terms while offering flexible loan products.

Keywords: Microfinance Institutions, Interest Rates, Performance of Small-Scale Enterprises, and Small-Scale Enterprises.

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I. INTRODUCTION

Microfinance has emerged as a potent tool to reduce poverty and promote economic empowerment, especially in developing nations. Microfinance Institutions (MFIs) are credit providers that provide smaller loans than those granted by banks (A. Abrar et al., 2020, [1]). In Tanzania, microfinance is crucial in providing financial services to small-scale businesses that lack financial access from banking institutions (N. Thacker, 2022, [2]). The United Nations recognizes microfinance as a significant strategy to achieve its Sustainable Development Goals (SDGs) by 2030, focusing on poverty eradication, reduced inequality, and economic growth (United Nations, 2015, [3]). However, more research is needed on how interest rates affect the performance of Small-Scale Enterprises (SSEs).

Numerous factors regarding microfinance lending terms have been examined, including loan amount, interest rate, loan repayment period, loan processing fees, penalties, and collateral (J.N. Inekwe, 2019, [4]). This study specifically focused on the effects of interest rates among SSEs. By isolating the impact of interest rates, this research identified the effects of interest rates on SSE's performance to improve microfinance interventions and enhance the performance of MFIs in supporting entrepreneurial activities and economic development. In microfinance, interest rates play a fundamental role in determining the affordability and accessibility of capital for SSEs (T.S. Msomi, 2023, [5]). Interest rates serve as compensation for the use of money and reflect various economic factors, including time preference, liquidity preference, default, inflation risks, and administrative costs (T. Gorbacheva & T. Barkova, 2023, [6]). Hence, this study focused on determining the effects of Microfinance interest rates on the performance of SSEs in Moshi Municipality, Tanzania. In the global context, the issue of microfinance interest rates and their impact on small business owners and their performance is complex and multifaceted. Access to formal financial services remains challenging for micro, small, and medium-sized enterprises (M.A. Merroun & M. Hamiche, 2023, [7]). Microfinance interest rates are higher than traditional banking institutions due to the higher transaction costs and risks of serving small-scale borrowers. This high interest rate has been a significant burden for small business owners, potentially limiting their ability to grow and invest.



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In recent years, there has been a growing interest in alternative microfinance models, such as peer-to-peer lending, crowdfunding, and digital financial services, which may offer more flexible and affordable options for small business owners. In the African region, where poverty levels are high and access to finance is limited, MFIs have played a crucial role in providing financial services to the unbanked and underbanked populations (H. Sani, 2020, [8]). According to a report from the World Bank, only 34% of adults in Africa had a bank account in 2017, compared to the global average of 69% (World Bank, 2018, [9]). Microfinance plays a crucial role in enhancing financial inclusion in the region. To fully grasp its impact, it's imperative to examine how microfinance interest rates influence Small-Scale Enterprises (SSEs) in terms of their operations and performance." In Tanzania, the allocation of resources, investment, and growth in many SSEs often relies on borrowing money (H. M. Shkeily et al., 2022, [10]). The Tanzanian government has recognized the importance of enhancing SSE's access to credit and has implemented high-level principles on SSE financing. Many SSEs still depend on loans from financial institutions that impose unpredictable interest rates and offer limited loan amounts, resulting in pressure on these SSEs (K. Kiyabo & N. Isaga, 2019, [11]). Moreover, the interest rates charged on credit facilities for SSEs in Tanzania are comparatively higher compared to neighboring countries (H.M. Shkeily et al., 2022 [10]). This situation is made worse by the inappropriate lending policies of MFIs and a need for more understanding among SSEs regarding the lending terms offered by MFIs, ultimately affecting their performance. The challenges arising from high interest rates offered by MFIs represent an obstacle to the growth of SSEs, particularly in Moshi Municipality, Tanzania. Therefore, this study aimed to investigate the effects of microfinance interest rates on the performance of SSEs in Moshi Municipality. According to Y. Beer (2022, [12]), interest rates are the payments made for using money, comprising future compensations, default risks, and administrative expenses. Various economic factors contribute to interest rates, including time preference, liquidity preference, default, inflation risks, and administrative costs. The study also recognized that tax systems introduce distortions by not differentiating between the various components of interest rates, affecting administrative expenses and financial service charges. Therefore, this study aimed to investigate the effects of interest rates imposed by microfinance institutions on the performance of SSEs.

II. STATEMENT OF PROBLEM

Interest rates have spread in the microfinance sector, indicating inefficiencies and hindering financial development and economic growth. MFIs were designed to support the progress of SSEs by helping them grow, increase their productivity, and contribute to economic development (G.E. Makundi, 2019, [13]). Despite the significant role of SSEs in driving economic growth and poverty reduction, accessing affordable financing remains a significant challenge for these businesses, particularly in developing countries (F. Manzoor et al., 2021, [14]). Over 1.7 billion people worldwide still lack access to formal financial services (World Bank, 2018 [9]).

Interest rates charged by financial institutions, including microfinance institutions, are a critical factor affecting SSEs' ability to access capital and their overall performance (H.M. Shkeily et al., 2022 [10]). However, there is limited evidence on the effects of interest rates on the performance of SSEs (B.S. Gashaw and A.M. Kedir, 2019, [15]). Addressing the interest rate is aimed at understanding how interest rates influence the performance of SSEs. The owners of SSEs in Tanzania perceive the obtained loans as high risk due to the high interest rates. In addition, SSEs are still confronted with the problem of high interest rates that hinder their growth (Y. Yuena, 2021, [16]). This study looked at this matter as one of the national issues that must be amicably addressed. This study examines the effects of Microfinance Interest rates on the performance of SSEs in Moshi Municipality, Tanzania. High interest rate spreads signal Microfinance sector inefficiency, and when that occurs, it hampers not only financial development but also the economic growth of businesses (E.E. Mbowe *et al.*, 2020, [17]). While microfinance has been recognized as a powerful tool for economic empowerment and poverty alleviation, the consequences of interest rates on SSEs have yet to be explored. Investigating how interest rates charged by microfinance institutions may affect SSE's performance is crucial. Specifically, this study focused on Moshi Municipality, Tanzania, to bridge this research gap. Thus, it promotes sustainable economic development in Moshi Municipality by addressing SSEs' challenges in accessing affordable financing. Therefore, this study aimed to determine the effects of microfinance interest rates on the performance of small-scale Enterprises in Moshi Municipality, Tanzania.

III. RESEARCH OBJECTIVES

To determine the effects of microfinance interest rates on the performance of SSEs in Moshi Municipality, Tanzania.

IV. RESEARCH QUESTION/HYPOTHESIS

A. Research Question

How do microfinance interest rates affect the performance of SSEs in Moshi Municipality?

B. Research Hypothesis

H₀ –There is no significant effect of microfinance interest rates on the performance of SSEs

H₁ –There is a significant effect of microfinance interest rates on the performance of SSEs

V. THEORETICAL FRAMEWORK

This study was grounded by Knut Wicksell's Natural Rate of Interest theory, developed in 1898. The theory assumes that there is an equilibrium interest rate that balances savings and investment in an economy. When the actual interest rate deviates from the natural rate, it creates economic imbalances, such as inflation or deflation. Wicksell's theory has implications for the borrowing costs and access to financing for SSEs.



Changes in interest rates influenced by central bank policies can affect the cost of borrowing for SSEs and their ability to obtain loans for business activities. Knut Wicksell's Natural Rate of Interest theory has several strengths. It takes a macroeconomic perspective, considering the interplay between interest rates, savings, investment, inflation, and economic growth. In addition, Wicksell's theory provides an integrated understanding by linking interest rates to broader macroeconomic conditions. On the other hand, the theory has weaknesses since it assumes that the entire economy has a single natural interest rate. In reality, interest rates can vary across different sectors, regions, and types of borrowers. Knut Wicksell's Natural Rate of Interest theory is relevant to this study since it emphasizes the importance of aligning the actual interest rate with the natural rate to maintain economic stability. Wicksell's theory can provide insights into the potential effects of interest rate deviations from the natural rate on the performance of SSEs.

VI. EMPIRICAL LITERATURE REVIEW

Several scholars have researched the effects of interest rates on the performance of SMEs worldwide, in a region, and Tanzania. W.A. Isola and E.P. Mesagan (2018, [18]) conducted a study on the impact of monetary policy on Small and Medium Enterprises (SMEs) in Nigeria, Ghana, and the Gambia from 1981 to 2016. The study analyzed variables such as credit to the private sector, interest rates, inflation rates, and exchange rates as factors influencing SME performance. The study found that credit to the private sector and inflation rates hurt SMEs' output, while exchange and interest rates also had adverse effects. In Ghana, only interest rates directly affected SMEs, while in Gambia, exchange rates had a positive impact. Overall, the study concluded that monetary policy in these countries was not favorable for SMEs. The survey by W.A. Isola and E.P. Mesagan (2018, [18]) focused on economic policy for SMEs in West African countries. However, the study is limited to loan interest rates for SMEs. However, a study was required on interest rates focusing on SSEs in contexts like Eastern Africa, Tanzania, and Moshi Municipality, incorporating micro-level factors and considering current dynamics. Hence, this study aimed at determining the effects of loan interest rates providing microfinance lenders on SSEs in Moshi Municipality Tanzania to understand the interest rates of loans, thus contributing to the literature. T. Tambunan (2019, [19]) conducted a study on the development of micro, small, and medium enterprises (MSMEs) in Indonesia. The study found that MSMEs in the country are predominantly micro-sized enterprises, comprising almost all firms but contributing only 58% to 61% of the GDP. It was also discovered that around 42.84% of micro-sized enterprises are owned by women, although this ratio varies across provinces. Poverty was identified as a Key driver behind the growth of MSMEs. The study recommended government interventions such as training programs focusing on online marketing, entrepreneurship, and management and improving product quality and business efficiency. It also suggested providing alternative funding options with low interest rates and simplified requirements, along with direct assistance at production sites for new entrepreneurs. Additionally, the study emphasized the need to eliminate gender discrimination

in treating MSMEs. T. Tambunan (2019, [19]) focused on MSME development in Indonesia. However, nothing in the study mentioned interest rates and how they affect small-scale enterprises' performance, specifically in a context like Moshi Municipality, Tanzania. Therefore, the study focused on determining how loan interest rates provided by microfinance lenders affect the performance of SSEs in Moshi Municipality. J. Ngaga and G. Atheru (2020, [20]) conducted a study in Kenya to explore the impact of interest rate capping on credit growth for small and medium businesses in Nairobi County. The study involved 312 employees and utilized a combination of primary and secondary data, employing quantitative and qualitative methods. The findings revealed a strong correlation between the variables, with an adjusted R² value of 0.841, indicating that 84.1% of SMEs' performance variation could be explained by credit accessibility, availability, and risk. The remaining 15.9% was attributed to other factors not considered in the study. An analysis of variance (ANOVA) was conducted at a 95% significance level. The study concluded that interest rate capping positively correlated with the performance of small and medium-sized restaurants in Nairobi West. Thus, regulating interest rates had a beneficial impact on credit growth and the overall performance of the businesses. J. Ngaga and G. Atheru (2020, [20]) researched interest rate capping and credit growth in Nairobi, Kenya. However, the study left a research gap that this study aimed to fill by investigating the effects of loan interest rates provided by microfinance lenders on SSE performance in Moshi Municipality, Tanzania. This study aimed to bridge the research gap by focusing on Moshi Municipality Tanzania on how loan interests affect the performance of SSEs. E.T. Kassa (2021, [21]) conducted a study in Ethiopia to examine the factors influencing the growth of micro and small enterprises. The study found that the owner's age, access to finance, family business background, and interest rates positively impacted enterprise growth. Conversely, entrepreneurship training, owner's experience, inflation rate, and competition were negatively associated with development. The study recommended that policymakers prioritize improving access to finance, supporting family business backgrounds, and addressing challenges related to training, experience, inflation, and competition to foster the growth of micro and small enterprises in Ethiopia. A study by E.T. Kassa (2021) explained micro and small enterprise growth in Ethiopia, but this study needs to address this issue. This study focused on the effects of loans with interest rates provided by microfinance lenders on the performance of SSEs in Moshi Municipality, Tanzania. By addressing this, the study contributed to understanding how microfinance loans and interest rates affect SSE's performance. A. Darmawan (2018, [22]) conducted a study in Indonesia to examine the impact of loan interest rates, non-performing loans (NPL), third-party funds (TPF), and inflation rates on the lending distribution of micro, small, and medium enterprises (MSMEs) by commercial banks.

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The study utilized quantitative analysis and data from commercial banks listed on the Indonesian Stock Exchange from 2013 to 2015. The study found that while loan interest rate, NPL, TPF, and inflation rate collectively influence MSME credit lending distribution, only the third-party fund (TPF) had a significant positive effect. Loan interest rate, NPL, and inflation rate did not significantly impact MSME credit lending. The study on MSME credit lending distribution at commercial banks in Indonesia provides insights. However, there was a gap that this study aimed to address on the effects of loans with interest rates offered by microfinance lenders on the performance of SSEs in Moshi Municipality, Tanzania. While Darmawan's study focused on commercial banks and their influence on MSME credit lending, it specifically examined the effects of microfinance loans and their interest rates on SMEs' performance in Moshi Municipality, Tanzania.

VII. METHODOLOGY

The study employed a concurrent research design with a mixed research approach to collect and analyze data. This design was chosen because it allowed for data collection from a diverse population at a specific time (J.W. Creswell & J.D. Creswell, 2017, [23]). The target population was small-scale enterprise owners and microfinance institution managers in Moshi Municipality. The study area was chosen due to its significance as a Centre point for business and the substantial number of SSEs in the area (J.J. Iwata *et al.*, 2018, [24]). The study utilized a sample size calculator to determine a representative sample, resulting in 190 small-scale enterprise owners participating. Simple random sampling was used to sample SSEs, ensuring equal opportunity for all participants. MFI managers regarded as key informants were obtained purposely, and four (4) microfinance managers were nominated to respond to the Interview.

Data was collected using questionnaires and key informant interviews for quantitative and qualitative data. To ensure the

validity and reliability of the data collection instruments, the researcher conducted a pilot test for 19 Small-scale enterprise owners and 2 Microfinance managers. Research experts from MWECAU validated the research instruments; their comments for improvement were used to modify the research instruments. For the reliability of research instruments, a Cronbach's alpha of 0.83 correlation coefficient was obtained and accepted for the instrument to be used. Quantitative data were analyzed using descriptive and inferential statistics through SPSS. Descriptive statistics were presented as tables, frequencies, percentages, and mean scores. Inferential statistics, regression models, and correlations were employed to test the hypotheses since they are highly flexible, allowing researchers to quantify the relationships between variables, make statistical inferences, and assess the significance of the observed effects, making them a perfect fit for the rigorous testing of the study's hypotheses. Qualitative data were analyzed through contextual analysis. Ethical guidelines were adhered to throughout the study, including ensuring privacy, protection from harm, informed consent, and adhering to research guidelines.

VIII. RESULTS, INTERPRETATIONS, AND DISCUSSIONS

A. Demographics Information

The respondents for this study were from SSEs in Moshi Municipality. The expected number of respondents was One hundred and Ninety (190). Among the respondents, a hundred Seventy-One (171) participated in the study, which is approximately 90% of the sample size, fair enough to answer the research objective for the study (B.C. Holtom *et al.*, 2022, [25]). The respondents' Demographic information focused on gender, level of education, business structure, business experience, and business type. The demographic responses are summarized in Table 1.

Table 1: Demographic Information

		f	%	Total
Gender	Male	90	52.6	
	Female	81	47.4	171
Level of highest education	Primary	15	8.8	
	Secondary	28	16.4	
	Certificate	14	8.2	
	Diploma	15	8.8	
	Degree	97	56.7	
	Masters	2	1.2	171
Business structure	Sole Proprietorship	32	18.7	
	Partnership	128	74.9	
	Limited Liability Company	9	5.3	
	Cooperative	2	1.2	171
Business experience	Less than two years	11	6.4	
	2 – 4 years	66	38.6	
	5 – 7 years	87	50.9	
	More than eight years	6	3.5	171
Business Type	Manufacturing	9	5.3	
	Service-oriented	11	6.4	
	Retail business	149	87.1	
	Tourism	2	1.2	171

Source: Field Data, (2024).



Table 1 shows the demographic information whereby the total number of respondents was 171 business owners. On gender, 52.6% were male while 47.4% were female, implying that nearly equal representation of male and female respondents ensures a balanced analysis. Regarding the Business structure, 74.9% of respondents owned a partnership business, 18.7% were sole proprietors, 5.3% were limited companies, and 1.2% were cooperative, implying that different business structures may have varying access to and reliance on microfinance credit facilities. Based on the education level, 56.7% of the business owners had a Bachelor's Degree. In comparison, 8.8% of the respondents had both a diploma and a primary level of education, implying that they possess the necessary knowledge and skills to understand financial concepts, including interest rates. These results highlight the significance of finance education among SSEs. This further supports D.A.T. Kumari's (2020, [26][33][34][35]) findings, which revealed that financial literacy encompasses the knowledge and skills needed to make informed financial decisions, including understanding interest rates. 50.9% of the business owners had 5 – 7 years of experience. In comparison, 3.5% of them had more than eight years of experience in business, which implies that the respondents consisted of entrepreneurs with moderate expertise in SSEs. The findings align with N. Astuti's research (2021, [27]) that demonstrated a robust

positive association between entrepreneurial experience and the performance of small-scale enterprises (SSEs)". SSEs with experienced entrepreneurs tend to perform better. Regarding the business type, 87.1% of the business owners owned a retail business. The business type distribution implies that the retail sector is dominant within the sample, which may have specific connections to the effects of microfinance interest rates on SSE performance in the business industry.

This demographic information is included in this study because it provides an overview of the sample population of business owners, ensuring diverse representation for a representative and generalizable sample. This study achieved nearly equal gender representation, essential for balanced analysis. Information on different business structures acknowledges varying access to microfinance credit facilities. The business owners' education and experience level support the understanding of financial concepts and implications of microfinance interest rates on SSEs' performance for this study.

B. Effects of Microfinance Interest Rates on the Performance of SSEs

This study assessed the effects of microfinance interest rates on the performance of SSEs in Moshi Municipality.

Table 2: Effects of Microfinance Interest Rates on the Performance of SSEs (n=171)

Interest rates on the performance of SSEs	SD		D		U		A		SA		Mean
	f	%	f	%	f	%	f	%	f	%	
MFI interest rates have made it difficult for me to grow my business.	1	0.6	15	8.8	3	1.8	54	31.6	98	57.3	4.36
MFI interest rates have increased my business costs.	1	0.6	4	2.3	2	1.2	119	69.6	45	26.3	4.19
MFI interest rates have reduced my business profits.	3	1.8	2	1.2	1	0.6	81	47.4	84	49.1	4.41
MFI interest rates have made it difficult for me to repay my loans.	1	0.6	13	7.6	3	1.8	98	57.3	56	32.7	4.14
MFI interest rates have caused me financial stress	1	0.6	2	1.2	8	4.7	104	60.8	56	32.7	4.24
MFI interest rates have prevented me from investing in new products or services.	1	0.6	4	2.3	19	11.1	96	56.1	51	29.8	4.12
MFIs interest rates have made it difficult for me to compete with larger businesses.	1	0.6	5	2.9	15	8.8	105	61.4	45	26.3	4.10
MFIs interest rates have forced me to raise prices for my customers	3	1.8	16	9.4	7	4.1	69	40.4	76	44.4	4.16
MFIs interest rates have reduced my ability to create jobs.	2	1.2	14	8.2	7	4.1	80	46.8	68	39.8	4.16
MFI interest rates have made me less likely to recommend microfinance to other small-scale enterprise owners.	1	0.6	6	3.5	7	4.1	108	63.2	49	28.7	4.16

Source: Field Data, (2024).

Key: SD = Strongly Disagree, D=Disagree, U= Undecided, A= Agree, SA= Strongly Agree

Table 2 indicates that 57.3% of the respondents strongly agreed with the statement that MFI interest rates have made it difficult for them to grow their business further, with a mean of 4.36, which also supports the same idea. These data suggest that most business owners feel that microfinance interest rates have hindered their business growth. The findings were also supported by the critical informant when one of them said: "Some of these MFIs operate outside the proper lending procedures. As a result, MFIs, which were supposed to support entrepreneurs, have now become a burden due to high interest rates (Interview conducted on December 8, 2023)."

Table 2 further indicates that 69.6% of the respondents agreed that MFI interest rates have increased business costs. A mean score of 4.19 also supports that respondents agree with the same statement. This data implies that most respondents perceive that MFI interest rates have had a

tangible effect on their business costs. The high percentage of agreement suggests that many business owners or individuals involved in the study believe that MFIs' interest rates have increased their operational expenses. The findings were also supported by the critical informant when one of them said: "Some of the businesses are growing because they once obtained a loan to start their own business, so it is not true that the loans increase their operational costs (Interview conducted on, December 6, 2023)."

However, the Key informant also supported the findings when another respondent said: "Most MFIs focus on gaining profits without considering the negative consequences that borrowers will face. since they are not adequately educated regarding the terms of the loans they have taken" (Interview conducted on December 8, 2023).

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Further, table 2 revealed that 49.1% strongly agreed and 47.4% agreed with the statement that MFIs' interest rates have reduced business profits. The same statement had a mean of 4.41, indicating that respondents for this question strongly agreed with the statement. These data imply that the business owners perceive that MFI interest rates have hurt their profits. The high percentage of agreement, particularly the strong deal, suggests that several business owners or individuals in the study believe that MFIs' interest rates have decreased profitability. These data align with what was obtained by M.P. Boza et al., 2020, [28]), who revealed that Microfinance institutions in Mexico provide smaller loans, shorter terms, and higher interest rates for microenterprises, leading to lower profits than commercial banking.

57.3% of the respondents agreed with the statement that MFIs' interest rates have made it difficult for them to repay their loans. Also, the statement had a mean of 4.14, further supporting that business owners agree that MFI interest rates have made it difficult for me to repay my loans. These data imply that many of the study's respondents feel that MFI interest rates have made it difficult for them to repay their loans. Many business owners have expressed concern about the impact of high interest rates on their ability to service their loans. It shows that high interest rates can burden borrowers and make it challenging to fulfill their financial responsibilities. The findings align with T.M. Whited et al., 2021, [29]) research, which demonstrated that higher interest rates can burden borrowers and make it challenging to meet their financial obligations." Further, the critical informant also supported the findings when one of them said: "Interest rates are not supposed to exceed 42% per annum. Now, the MFIs compete for customers, often dividing the interest rates into monthly installments, assuming it appears easier for borrowers. However, it is not cheap to borrowers" (Interview conducted on December 8, 2023).

60.8% of the respondents agreed that MFI interest rates have caused financial stress. Moreover, the mean score of 4.24 supports this interpretation, revealing agreement with the same statement. These data show that most respondents believe MFI interest rates have worsened their financial situation and caused them more stress. The burden of high interest rates can contribute to economic hardship and mental health challenges." It is essential to be aware of these potential problems caused by high interest rates and consider ways to protect people's financial stability and overall well-being. These data correspond with E. Brech's 2020 [30]) findings, which investigated small businesses and revealed that high interest rates negatively affect small businesses.

56.1% of the respondents agreed that MFI interest rates had prevented them from investing in new products or services,

further through the mean of 4.12, which also shows the respondents' agreement with the statement. It implies that many business owners believe that microfinance interest rates have hindered their ability to invest in new products or services. MFIs interest rates have made it difficult for small businesses to compete with larger firms, and this was supported by the agreement of 61.4% of the respondents. Also, the mean of 4.10 reveals that respondents agreed with the statement. These data suggest that many respondents feel that microfinance interest rates have posed challenges in competing with larger businesses. These findings were opposite of what was revealed by the critical informant when one of them said: "Businesses are growing when they obtain loans, since SSEs obtain capital to operate their businesses (Interview conducted on December 7, 2023)."

MFIs' interest rates have forced them to raise prices to their customers, evidenced by the agreement of 40.4% and strong agreement of 44.4%. Further, a mean score of 4.16 revealed respondents agreed with the same statement. The burden of microfinance interest rates has led many business owners to pass on the costs to their customers through higher prices.

The statement stated that MFIs interest rates have reduced their ability to create jobs; 46.8% agreed, and 39.8 strongly agreed with the statement. However, when considering a mean score of 4.16, the data reveals that respondents agreed with the same statement that interest rates have reduced their ability to create new jobs. These data suggest that most business owners believe that microfinance interest rates have limited their ability to create jobs. In addition, these data align with what was obtained by M. Myropolska & S. Dombrowska 2021, [31]), who revealed that Microfinance organizations provide loans without collateral for impoverished individuals but at higher interest rates, limiting their ability to create jobs.

Lastly, 63.2 % of the respondents agreed that MFIs' interest rates have made them less likely to recommend microfinance to other small-scale enterprise owners. A mean score of 4.16 confirms the respondents' general agreement with this statement. These data imply that most respondents feel less inclined to recommend microfinance to other small-scale enterprise owners due to the perceived effects of interest rates.

C. Hypothesis Testing

Further tests were done to investigate the effects of microfinance interest rates on the performance of Small-Scale Enterprises in Moshi Municipality, Tanzania. The Regression model and Pearson Correlation model were used to test hypotheses. The hypothesis was tested at a significant level of 0.05 accepted in social sciences.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.568 ^a	.323	.302	.312	1.309
Source: Filed Data, (2024).					
a. Predictors: (Constant) Business growth, Business cost, profits, and Financial Stress.					
b. Dependent Variable: SSEs performance					



Results in Table 3 indicate a moderate positive relationship between the predictors (Business growth, Business cost, Business profits, and Financial stress) and the likelihood of SSE performances. R-square is 0.323, which means that the model formed can explain a 32.3% variance of the dependent

variable (small-scale enterprises' performances). The unexplained variance of 67.7 is considered not a biased model; hence, it is good. Further, the Durbin-Watson of 1.309 indicates that there is a weak positive correlation between the residuals, indicating the possibility of some autocorrelation.

Table 4: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.435	4	14.859	43.124	.000 ^b
	Residual	57.197	166	.345		
	Total	116.632	170			

Source: Filed Data, (2024).
a. Dependent Variable: SSEs performance
b. Predictors: (Constant), Business Growth, Business cost, profits, and financial stress.

Results in Table 4 indicate that the predictors (Business growth, Business cost, business experience, and financial stress) have a statistically significant impact on the likelihood of SSE performing well. As the significance value (p-value) is 0.000, which is less than 0.05, we reject the null

hypothesis(H₀) and accept the alternative hypothesis (H₁), indicating that the predictors (Business growth, Business cost, business profits, and financial stress) jointly affect the performances of Small-Scale Enterprises.

Table 5: Coefficients Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.016	.399		-.041	.967		
	Business growth.	.400	.052	.450	7.744	.000	.875	1.143
	Business cost.	.046	.099	.035	.464	.643	.534	1.873
	Business profits.	-.043	.086	-.038	-.498	.619	.510	1.961
	Financial stress	.568	.077	.444	7.390	.000	.820	1.220

Source: Filed Data, (2024).
a. Dependent Variable: SSEs performances.

Results in Table 5 show that the Business cost variable had a coefficient (0.046), indicating that that there is a minimal likelihood of SSE performance. Moreover, through a significant (p = 0.643), the business cost has no statistical effect on SSEs' performances. Business profits had a coefficient (-.043) and a significant (p = 0.619), meaning that the impact of business profits does not significantly affect SSE performances. Regarding the growth of business and financial stress, as the p-value of the predictors (business growth and financial stress) is less than 0.05, we reject the null hypothesis (H₀) and accept the alternative hypothesis (H₁) that financial stress and business growth individually do affect the performance of small scale enterprises. Both business growth and financial stress play a substantial role in the performance of small-scale enterprises. Furthermore, the Variance Inflation Factors (VIF) value is higher than five (or

T less than 0.2), indicating a correlation between the predictors and SSEs performance.

one-unit increase in Business growth is associated with a 0.400-unit increase in the dependent variable, holding other variables constant. Similarly, the coefficient of 0.046 for Business cost suggests a 0.046-unit increase in the dependent variable for a one-unit rise in Business cost. In contrast, the coefficient of -0.043 for Business profits implies a 0.043-unit decrease in the dependent variable for a one-unit increase in Business profits. Lastly, the coefficient of 0.568 for financial stress shows that a one-unit increase in financial stress is predicted to increase the dependent variable by 0.568 units, assuming the other variables remain unchanged. The equation formed considering the unstandardized coefficient is:
Small Scale Performances = -0.16 + 0.40 (Business growth) + 0.46 (business cost) - 0.43 (Business profits) + 0.57 (Financial stress).

Table 7: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.133	171	.000	.963	171	.000

Source: Filed Data, (2024).
a. Lilliefors Significance Correction

Results in Table 7 reveal that the Kolmogorov-Smirnov test yielded a statistic of .133 with 171 degrees of freedom and a significance value of .000, indicating a significant deviation from a normal distribution. Thus, the residuals are not normally distributed. Further, the Shapiro-Wilk test resulted in a test statistic of .963 with 171 degrees of freedom and a significance value of .000, also indicating a significant

departure from a normal distribution. These results show a deviation from a normal distribution in the regression model's unstandardized residual distribution.



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Small p-values (less than 0.05) are obtained from the Shapiro-Wilk and Kolmogorov-Smirnov tests, suggesting that the null hypothesis of normality is rejected. The residuals

do not follow a normal distribution, which violates one of the model's fundamental assumptions.

Table 8: Correlation Results

		X1	X2	X3	X4	X5
SSE performance	R	1	.281**	-.160*	.277**	.257**
	P		.000	.038	.000	.001
Business growth	R	.281**	1	-.494**	.574**	.055
	P	.000		.000	.000	.477
Business profits	R	-.160*	-.494**	1	-.497**	-.030
	P	.038	.000		.000	.700
Business cost.	R	.277**	.574**	-.497**	1	.165*
	P	.000	.000	.000		.031
Financial stress	R	.257**	.055	-.030	.165*	1
	P	.001	.477	.700	.031	

Source: Filed Data, (2024).
Key: X1= SSE performance, X2= Business growth, X3= Business profits, X4= Business cost, and X5= Financial stress
 **. Correlation is significant at the 0.01 level (2-tailed).
 *. Correlation is significant at the 0.05 level (2-tailed).

Results in Table 8 reveal that SSE performance has a significant positive correlation with Business Growth ($R = 0.281$, $p < 0.01$), indicating that business growth tends to increase as SSE performance improves. Further, business Growth is positively correlated with SSE performance ($R = -0.494$, $p < 0.01$), indicating that SSE performance tends to increase as business growth increases. There is no significant correlation between Business Cost and SSEs Performance, Business Growth, Business profits, or financial stress with a p-value greater than 0.05 ($p > 0.05$). Additionally, Financial stress has a strong positive correlation with business growth ($R = 0.574$, $p < 0.01$), indicating that higher financial stress is linked to business expansion. However, there is no significant correlation between financial stress and SSE performance, business profits, or business costs with a p-value greater than 0.05 ($p > 0.05$). They indicate that business growth tends to decrease as financial stress increases, causing difficulties in SSE's performance. These results align with what B.E.A. Jayasekara et al., 2020, [32]) obtained, who revealed that financial stress is necessary for developing problem-solving and financial management skills for individuals to expand their businesses.

IX. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

The study concluded that microfinance interest rates affect the performance of small-scale enterprises. Small-scale business owners reported difficulties in growing their businesses, increased costs, reduced profitability, and challenges in loan repayment. Business owners increased prices and faced obstacles in job creation. The effects of loan interest rates decreased the likelihood of recommending microfinance to others. In addition, there was a significant positive correlation between business experience, the difficulty in growing the business, and the increased business costs caused by microfinance interest rates. Furthermore, the predictors of business growth, business cost, profits, and financial stress were statistically significant in explaining the likelihood of SSE performance.

B. Recommendations

This study recommends that policymakers and microfinance institutions review and potentially reduce

interest rates to alleviate the financial burden of SSEs, promote business growth, and enhance profitability. Further, Policymakers should prioritize financial inclusion initiatives that aim to increase access to affordable credit and financial literacy programs for SSEs. In addition, this study recommends that microfinance institutions prioritize transparent communication of interest rates and loan terms while offering flexible loan products that serve the specific needs of small-scale enterprises. This study recommends further studies on the "long-term impact of high interest rates on business sustainability and growth" since the study would provide information on the sustainability of small businesses under different interest rate environments and understanding the long-term effects of interest rates on Small-Scale Enterprises in Tanzania.

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