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Abstract

The objective of the study was to investigate how financial risk management literacy affects financial sustainability of MSMEs in Kakamega County. The study was anchored on prospect theory. Descriptive survey research design was adopted in the study in which the population comprised of 645 managers and proprietors of MSMEs in the county drawn from trading, manufacturing, distribution and service sectors in the county. The study sample comprised of 247 proprietors selected using stratified sampling technique. Primary data collected using structured questionnaires was utilised in the study. Collected data was analysed using SPSS version 26. Both descriptive statistics and inferential analysis were used in data analysis. Descriptive statistics included mean score and standard deviation. Inferential analysis included Pearson's correlation coefficient and multiple regression analysis. The coefficient of determination (R²), F-statistic, beta coefficient and p-values were used in interpreting results. Results showed that MSMEs demonstrated only modest levels of financial risk management literacy and MSMEs achieved financial sustainability only to a limited extent, as many struggled with profitability, cash flow adequacy, and revenue growth. Correlation analysis results showed that financial risk management literacy showed a strong and positive correlation with financial sustainability. Regression analysis confirmed that financial risk management literacy had a positive and statistically significant effect on financial sustainability. It was thus concluded that financial risk management literacy had a positive and statistically significant effect on financial sustainability of MSMEs in Kakamega County.

Key Words: Financial Risk Management Literacy; Financial Sustainability; Micro, Small and Medium Enterprises

1.0 Introduction

Micro, small, and medium-sized Enterprises (MSMEs) play acritical role towards economic growth and development by creating job opportunities and improving the quality of life. They also contribute the national gross domestic product (Fauzi & Sheng, 2022). However, they suffer sustainability quest. Most of the MMEs do not live to celebrate their third birthday. According to Kenya National Bureau of Statistics (2024) over 46% of MSMEs fail within their first year of



operation while another 75% of MSMEs collapse before their third year. Literature also supports that only about a third of MSMEs manage to survive past their first decade. Besides, 21% of microenterprises in developing countries are fully constrained, 19% are partially constrained, and 60 percent are unconstrained (World Bank, 2024). This has negatively impacted the sustainability of MSMEs among the key factors affecting sustainability of the MSMEs is financial literacy. Consequently, financial risk management literacy is essential for enabling MSMEs to successfully manage resources, make well-informed financial decisions, and promote sustainable development.

Micro, small, and medium-sized Enterprises owners who possess financial literacy are more able to access financial services and resources. Financial literacy helps business owners to comprehend the various financial products that are available, including grants, loans, and equity financing, and to decide which choices are most appropriate for their needs (Aduda & Ochieng, 2019). Increased financial literacy increases MSMEs' ability to successfully navigate the complicated financial landscape, create compelling business cases, and communicate their financial needs to financial institutions. This increases MSMEs' prospects of receiving capital for long-term, sustainable growth. Besides financial management literacy gives MSMEs the ability to create and implement effective financial plans and strategies. Entrepreneurs with financial literacy can develop realistic budgets, track cash flows, and successfully manage financial resources. This allows MSMEs to deploy resources more efficiently, discover opportunities for cost savings or investment, and make timely financial decisions that contribute to their long-term viability (Makanyeza & Chikoko, 2020).

Financial risk management literacy refers to an individual or organization understanding of how to identify, assess, and mitigate financial risks that may affect their financial stability and objectives. This type of literacy is vital for both businesses and personal finance, particularly in an increasingly complex and volatile financial environment (Ivanova, et al., 2019). Financial risk management literacy includes knowledge and understanding of financial concepts, as well as the skills, motivation, and confidence to apply such knowledge and understanding to make effective decisions across a variety of financial contexts and improve firms' financial well-being (Hogarth, 2002). Mutegi et al. (2015) state that financial literacy supports decision-making processes such as timely bill payment and efficient debt management, which enhances the creditworthiness of potential borrowers to support livelihoods, economic growth, sound financial systems, and poverty reduction. It also offers better control over one's financial future, more effective use of financial products and services, and reduced vulnerability to aggressive retailers or fraudulent schemes. According to a study by the OECD (2021), financial literacy about credit and debt is linked to better credit management, reduced likelihood of delinquency, and improved financial performance.

Micro, small, and medium-sized Enterprises play an important part in Kenya's economy. They account for more than 90% of the overall labour force, helping to decrease poverty and strengthen the economy. SMEs are also a source of innovation, competitiveness, and a vital outlet for Kenyans' entrepreneurial spirit (Micro and Small Enterprises Authority, 2024).

Over 7.4 million MSMEs employ over 14.9 million Kenyans across a variety of industries, demonstrating the importance of small enterprises to the national economy (KNBS, 2024). The vital significance of MSMEs in supporting GDP growth and employment in Kenya is highlighted by Vision 2030, the country's long-term development strategy. It is also incorporated in the "Big Four" agenda under manufacturing (Mutisya, 2023). MSMEs are typically owned and operated by



individuals or small groups of people who use their limited resources to start the business often informally. Another essential feature of MSMEs in Kenya is their level of innovation. Due to limited resources, MSMEs must be inventive in order to overcome obstacles and compete in the marketplace. This forced inventiveness places MSMEs in Kenya at the forefront of innovation, continually producing new and distinctive products and services to fulfil consumers' wants (MSEA, 2024).

MSMEs in Kenya are found in a variety of industries, including manufacturing, retail, and professional services. MSMEs manufacture apparel, food and beverages, textiles, and home items. MSMEs in retail run small stores and stalls that offer food, clothing, and household items (Cruz et al., 2022). MSMEs provide a variety of services, including hairdressing, dressmaking, smartphone repair, car repair, and others (Mutisya, 2023). MSMEs have also demonstrated their importance in terms of value addition, offering a significant source of income for families and playing an essential role in delivering basic goods and services to customers (Kawira, 2021). MSMEs boost global competitiveness by introducing innovative technologies and goods to the market. They help to increase customer choice by offering a variety of products and services to fulfil the demands of various consumers. All of these elements work together to make MSMEs an important part of the Kenyan economy (Njoki, 2024).

The study was anchored on prospect theory developed by Kahneman and Tversky in 1979, which posits that when faced with risk and uncertainty, people make decisions guided by possibility of suffering a loss or gain (Ilbahar, 2022). The theory illustrates how the possibility of losses frequently has a greater impact on decisions than comparable gains. Loss aversion, a preference for certainty, the discounting of unlikely outcomes, and the evaluation of decisions in relative rather than absolute terms are all examples of behaviours that result from people's tendency to place a higher value on perceived losses than comparable gains (Prietzel, 2020). Consequently, investors frequently choose the option that offers the most certainty when given a choice between two or more options, even if doing so means foregoing the option that could yield higher returns (Prietzel, 2020). Based on this argument, the fear of adverse effects of financial risk, forces investors to seek a deeper understanding of its causes and how to mitigate its effects. As a result, they gain more knowledge on how to manage the business in a more sustainable manner. Consequently, the study postulates that financial risk management literacy increases sustainability of Micro, Small, and Medium Enterprises in Kakamega County Kenya.

Prospect Theory has been criticised for its absence of a psychological mechanism that explains why people make the choices they do is one of its main drawbacks. In addition, it ignores affective and emotional aspects that are vital to decision-making in the real world (Ilbahar, 2022). Critics have also noted that its framing component is shallow, especially when it comes to explaining why people create particular frames and how they resolve divergent viewpoints on different topics (Ebert & Karehnke, 2021). Nevertheless, the study finds the theory relevant in explaining why investors make their decisions. Understanding of this theory can help MSME owners weigh risks and rewards when making business decisions and therefore make more logical decisions. As such the theory was used to explain the effect of financial risk management literacy on MSMEs financial sustainability.

Previous scholars have attempted to unravel the relationship between the study variables. However, the existing studies have left numerous gaps. Priyantoro et al. (2023) conducted research to investigate the impact of financial risk management literacy on business performance via the



mediation of financial access and risk attitude. The purpose of this study was to evaluate and assess the impact of financial literacy levels on business performance. This study used a purposive sample technique among tofu processing business players in Kediri City, Indonesia. The method employed in this study involves Structural Equation Model (SEM) Partial Least Square (PLS) analysis utilizing the SmartPLS data processing tool version 3. The findings indicated that all hypotheses were accepted. Financial literacy and financial risk attitudes all had a favourable and significant impact on company success.

Wahab and Bunyamin (2023) investigated the effects of financial knowledge on financial risk tolerance. The purpose of this study is to determine the impact of financial literacy on FRT among Malaysian investors, with financial behaviour serving as a mediating factor. Primary data was analysed on 148 investors among working adults. To evaluate the acquired data, this study used the Partial Least Squares Structural Equation Model (PLS-SEM) with the SmartPLS 3 software. The findings demonstrated that financial literacy has a beneficial influence on financial behaviour, which in turn has a positive impact on FRT. Furthermore, the findings showed that financial behaviour modulates the association between financial literacy and FRT.

Song et al. (2023) conducted research to evaluate the relationships between financial literacy, financial risk tolerance, and financial behaviour. The purpose of this study was to look at the effects of financial literacy on individual investors' financial behaviour, as well as the mediating role of financial risk tolerance and the moderating effect of emotional intelligence. The study obtained time-stamped data from financially independent individual investors at Pakistan's best educational institutions. To test the measurement and structural models, data are processed with SmartPLS (v 3.3.3). According to the data, financial literacy has a considerable impact on individual investors' financial behaviour. Furthermore, financial risk tolerance partially mediates the association between financial literacy and financial behaviour.

Masdupi et al. (2024) investigated financial risk literacy and sustainability in SMEs. This study focused on the Indonesian market, collecting data from SMEs' owners or chief financial officers using questionnaires. The strength of the correlations was investigated using partial least squares structural equation modelling. Financial literacy, financial risk mindset, and organizational risk tolerance were identified as major predictors of SME viability. In contrast, SME sustainability was not influenced by access to credit. The study also discovered that a financial risk mindset has a significant impact on the relationship between financial literacy and SME sustainability. Furthermore, the association between financial literacy and SME viability was found to be moderated by organizational risk-taking tolerance.

Mudzingiri (2024) conducted research to investigate the impact of financial literacy confidence on financial risk preference confidence in South Africa. The study evaluated the effect of financial literacy confidence (FLC) on financial risk preference confidence (FRPC), which was generated using objective and subjective measures of financial literacy and risk preferences. The findings showed that FLC has a considerable impact on FRPC, which differed between overconfident and under confident individuals. Specifically, the data demonstrated that a rise in FLC raises FRPC for overconfident individuals but decreases FRPC for less confident individuals. Further investigation demonstrates that financial literacy errors on subjective and objective measures of financial literacy are associated with risk preference errors on subjective and objective risk preference measures. Surprisingly, the findings demonstrate that for people with strong financial literacy, an increase in financial literacy residuals leads to a decrease in risk preference residuals. This shows



that persons with higher levels of financial literacy better understand their subjective and objective risk preferences and can manage financial risk better.

Wafula, et al. (2024) conducted research to identify the financial risk attitude, environmental dynamism, and financial sustainability of small and medium-sized firms in Nairobi, Kenya. The investigation was guided by the dual process theory. The study used an explanatory research design. The primary unit of analysis was the business owners of SMEs. Structured questionnaires were used to collect quantitative data, which was then analysed with descriptive and inferential statistics. The study employed a hierarchical regression model to examine the hypotheses. The findings revealed that financial risk attitude has a favourable and significant impact on financial sustainability. The findings emphasize the critical role of financial risk mindset as a major driver defining the financial sustainability of SMEs.

In her study on effect of financial literacy on the growth of micro and small enterprises in Kenya, Njoki (2024) explored the intricate relationship between financial literacy and the growth trajectory of MSEs. Specifically, the study sought to understand how proficiency in budgetary control, bookkeeping, debt management and comprehensive knowledge of banking services influence the growth path of MSEs. It was revealed that insufficient knowledge about banking services, bookkeeping, and budgeting further hinders their growth of MSEs. In another study, Ogonji (2024). Conducted a study aimed at determining the relationship between financial literacy and the financial performance of small and medium-sized enterprises in Kajiado county. Results showed a strong correlation between financial literacy and financial performance. The results further revealed that bookkeeping skills, debt management practices and formal business operations positively and significantly enhance profitability of the business.

The study established that although previous scholars have conducted studies on the study variables. Literature gaps still exist. Some of the studies reviewed were conducted in other study contexts such as Indonesia, Malaysia and South Africa (Priyantoro et al., 2023; Wahab & Bunyamin, 2023; Mudzingiri, 2024) and therefore the study findings cannot be generalised in the current context which was Kakamega county in Kenya. Studies conducted in Kenya were conducted in other areas such as Nairobi City County (Wafula, et al., 2024) and Kajiado County Ogonji (2024). Besides the study established that previous studies on financial risk management literacy linked the variable to other factors such as performance (Priyantoro et al., 2023). Moreover, the study noted that methodological gaps existed. For instance, Wahab and Bunyamin (2023) used partial least squares structural equation model while the current study adopted general least squares regression model.

1.1 Statement of the Problem

Micro, Small, and Medium Enterprises are crucial in the economic development in Kenya and in particular in Kakamega County. They contribute significantly to job creation, poverty alleviation, and overall economic growth. However, despite their potential, a large number of MSMEs face persistent challenges that hinder their long-term sustainability, with many failing within the first few years of operation. Specifically, according to MSEA (2024)75% of Kenyan MSMEs fail within the first three years. This corresponds to an annual attrition rate of 23.3% of the initial investment. A 2024 report from the Kenya National Bureau of Statistics (KNBS) states that only a small percentage of MSMEs continue to operate past the five-year mark, with nearly 400,000 failing to survive past their second year. Concerns regarding the long-term sustainability of this



crucial industry are also raised by a 2024 Central Bank of Kenya report that shows 46% of MSMEs in the nation closed within their first year of operation (CBK, 2024).

One of the most significant barriers to the financial sustainability of MSMEs is their limited financial risk management literacy (MSEA 2024). Besides, financial institutions view MSMEs as high-risk borrowers due to their small scale, lack of collateral and inadequate financial documentation. Further, Many MSME owners lack the necessary financial management skills, such as budgeting, bookkeeping, and financial reporting (Njoki, 2024). Consequently, financial risk management literacy to enable proprietors understand and use financial information effectively. Lack of these skills often leads to poor financial decision-making, which can result in cash flow problems, inability to secure financing, high levels of debt, and ultimately, business failure.

Academic researchers have highlighted the importance of acquiring business skills in terms of SME sector business performance, but they have not clearly stated that a lack of financial literacy can impede business growth and lead to the collapse of a number of MSMEs (Mogaji et al, 2023). Arinda (2019) examined the business results of SMEs in Ntungamo municipality and discovered that business skills and saving practices remained to be explored. Furthermore, Osinde et al. (2013) noted that the owner-managers are primarily concerned with training. While several studies have highlighted the importance of financial literacy for business success, there remains limited research on the specific impact of financial risk management literacy on the financial sustainability of MSMEs in Kakamega Central Business District.

1.2 Objective of the Study

This study will examine the effect of financial risk management literacy on sustainability of Micro, Small, and Medium Enterprises in Kakamega County Kenya.

1.3 Hypothesis of the Study

H0: Financial risk management literacy has no significant effect on sustainability of Micro, Small, and Medium Enterprises in Kakamega County Kenya.

2.0 Research Methodology

The study adopted descriptive survey research design. This design was adopted because it allows the researcher to describe the phenomena as it exists as well as determining the relationship existing between the study variables (Walliman, 2021). Furthermore, the design allows for the use of surveys and inferential statistics to determine the correlations between variables (Hair et al., 2017). The design is also ideal for the study because it allows for surveying in natural settings and the use of probability samples. The study population comprised of 645 proprietors of MSMEs in Kakamega central business district within Kakamega county. The population was drawn from trading, manufacturing, distribution and service sectors in the county. The study sample comprised of 247 proprietors selected using stratified sampling technique. The technique was selected because it allows researchers to give equal chances to all members of the population to be included in the sample.

Primary data collected using structured questionnaires was utilised in the study. Collected data was analysed using SPSS version 26. Both descriptive statistics and inferential analysis were used in data analysis. Descriptive statistics included mean score and standard deviation. Inferential analysis included Pearson's correlation coefficient and multiple regression analysis. Correlation



analysis was used to determine the nature and strength of the relationship between the study variables. Regression analysis on the other hand was used to determine the effect of financial risk management literacy on financial sustainability of MSMEs in Kakamega county. The coefficient of determination (R²) was used to determine the proportion of financial sustainability explained by variations in financial risk management literacy. F-statistic was used to determine the fitness of the model in determining the relationship between the variables. Beta coefficients were used to determine the extent of variations in financial sustainability as a result of changes in financial risk management literacy while P-values were used determining the significance of the results at 0.05 significance level.

Reliability of the research instrument was measured through in ternal consistency via Cronbach's alpha. A coefficient of 0.7 and above was considered adequate. Results revealed that the Cronbach's alpha for

Relevant diagnostic tests such as normality test (Shapiro-Wilk test) and test for heteroscedasticity (Breuch-Pagan/Cook-Weisberg test) were conducted.

3.0 Results and Discussions

This section presents the study findings.

3.1 Descriptive Analysis

Financial risk management literacy was assessed using six items designed to capture the extent to which MSMEs identify, analyse, mitigate, and monitor risks in their financial operations. Respondents rated their level of agreement with each statement on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Table 1 presents the descriptive statistics, including means and standard deviations for each item and the overall aggregate score.

Table 1: Descriptive Statistics for Financial Risk Management Literacy

| Item | Mean | Std. Dev. |
|---|-------|--------------|
| Our firm conducts financial risk management to identify the investment risk it faces | 2.851 | 0.734 |
| Risk identification is used to identify risks in the firm's financial transactions | 2.769 | 0.692 |
| Risk identification is used to identify market factors that may affect the firm's finances | 2.883 | 0.715 |
| Identified risks are analysed to determine their root causes and the effect they may have on the firm | 2.936 | 0.768 |
| The risks with high impact on firm finances are mitigated first | 2.804 | 0.701 |
| Risk monitoring is done to determine the effectiveness of managing firm financial risks | 2.911 | 0.756 |



| A | 2.859 | 0.730 |
|-----------------|-------|-------|
| Aggregate Score | 4.039 | 0.740 |

The analysis revealed that most firms rarely engage in structured financial risk management. The mean score for whether firms conduct risk management to identify investment risks was 2.851 (SD = 0.734), suggesting limited application of formal frameworks. Similarly, identifying risks in financial transactions scored even lower at 2.769 (SD = 0.692), pointing to weak monitoring of day-to-day financial operations. Identification of market-related risks recorded a slightly higher mean of 2.883 (SD = 0.715), indicating that MSMEs are somewhat more aware of external threats such as competition and market fluctuations, though still at a low level.

The highest mean was observed for analysing risks to determine root causes at 2.936 (SD = 0.768), showing that some businesses attempt risk analysis, albeit inconsistently. Mitigation of high-impact risks had a mean of 2.804 (SD = 0.701), revealing that risk prioritisation is not systematically practiced. Finally, monitoring the effectiveness of risk management recorded a mean of 2.911 (SD = 0.756), which reflects occasional but not sustained efforts to review outcomes of risk mitigation.

Overall, the aggregate mean score for financial risk management literacy was 2.859 (SD = 0.728), which falls within the moderate category (2.5-3.4). This indicates that MSMEs in Kakamega County exhibit only a modest level of financial risk management literacy. In practice, this suggests that while some aspects of risk identification, analysis, and monitoring are applied, such practices are inconsistent and lack the structure needed to effectively safeguard enterprises against financial uncertainties. This phenomenon may be caused by inadequate knowledge on the need for proper record keeping in the business and the prohibitive cost of maintaining proper records.

These findings resonate with empirical studies such as Priyantoro *et al.* (2023), who reported that financial literacy and risk attitudes enhance business performance, Wahab and Bunyamin (2023), who demonstrated that financial literacy contributes to improved financial behaviour and risk tolerance. However, the relatively weak literacy levels observed in this study mirror Mudzingiri (2024), who found that insufficient financial knowledge undermines entrepreneurs' ability to make informed risk decisions. Taken together, the results suggest that MSMEs in Kakamega County have not yet translated financial literacy into comprehensive and systematic risk management frameworks, a shortfall that threatens their long-term financial sustainability.

3.2 Reliability Results

Reliability test was conducted to determine if there was internal consistency in the data. Results were presented in table 2.

Table 2: Reliability Statistics

| Construct | Number of Items | Cronbach's Alpha (α) |
|------------------------------------|------------------------|----------------------|
| Financial Risk Management Literacy | 6 | 0.812 |
| Financial Sustainability | 3 | 0.807 |



All the study constructs generated Cronbach's alpha coefficients above the recommended threshold of 0.7, indicating that there was internal consistency.

3.3 Diagnostic Tests Results

Before carrying out correlation and regression analyses, the study conducted diagnostic tests to ensure that the dataset met the statistical assumptions necessary for valid inference. These tests included normality and heteroscedasticity tests. The results are presented in subsequent sections.

3.3.1 Normality Test Results

Normality test was conducted to determine if the data was obtained from a normally distributed population. The Shapiro–Wilk test was employed to assess normality. A p-value greater than 0.05 indicates that the data does not significantly deviate from normal distribution. Results were presented in table 3.

Table 3: Shapiro-Wilk Test for Normality

| Variable | Statistic | df | Sig. (p-value) |
|------------------------------------|-----------|-----|----------------|
| Financial Risk Management Literacy | 0.981 | 204 | 0.087 |
| Financial Sustainability | 0.984 | 204 | 0.064 |

The results showed that the variables had p-values greater than 0.05, indicating that the data was normally distributed and suitable for regression analysis.

3.3.2 Heteroscedasticity Test Results

This test was conducted to determine if the error term error variances are constant. Results were presented in table 4.

Table 4: Breusch-Pagan / Cook-Weisberg Test for Heteroscedasticity

| Test Statistic (χ²) | df | Sig. (p-value) |
|---------------------|----|----------------|
| 6.213 | 1 | 0.184 |

The test results showed a p-value of 0.184 (> 0.05), confirming that there was no heteroscedasticity.

3.4 Correlation Analysis

Correlation analysis was conducted to establish the strength and direction of the association between financial risk management literacy and financial sustainability. Pearson's correlation coefficient (r) was used, ranging from -1 to +1. Positive values indicate direct relationships, while negative values indicate inverse relationships. Statistical significance was tested at both the 0.05 and 0.01 levels.

Table 5: Correlation Matrix



| | | FS | FRML |
|---|---------------------|--------|------|
| Financial Sustainability (FS) | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| | N | 204 | |
| Financial Risk Management Literacy (FRML) | Pearson Correlation | .730** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 204 | 204 |

Correlation is significant at the 0.05 level (2-tailed).

Financial risk management literacy showed a strong and positive correlation with financial sustainability (r = 0.730, p < 0.05). This suggests that MSMEs with better risk management practices, such as identifying, analysing, mitigating, and monitoring risks, are more likely to remain financially sustainable. The implication is that systematic risk literacy enables firms to anticipate uncertainties, minimise losses, and protect long-term performance. This finding supports Priyantoro *et al.* (2023) and Wahab and Bunyamin (2023), who both demonstrated that financial literacy in risk management strengthens organisational performance and resilience.

3.5 Regression Analysis

Regression analysis was conducted to determine the extent to which financial risk management literacy predicts financial sustainability among MSMEs in Kakamega County. The results are presented in table 3.

Table 6. Regression Analysis Results

| Model | R | R | 2 | Adjusted I | \mathbb{R}^2 | Std. Error of the Estimate | | | | |
|------------------------|--------------------|--------|-------------|------------|----------------|----------------------------|--------|-------|--------------------|--|
| 1 | 0.730 ^a | 0.5 | 32 | 0.530 | | 0.45335 | | | | |
| Model | S | Sum of | Square | es df | Mea | Mean Square F | | 7 | Sig. | |
| Regression | | 47 | .245 | 1 | 2 | 17.245 | 229. | 875 | 0.000 ^b | |
| Residual | | 41 | .516 | 202 | | 0.206 | | | | |
| Total | | 88 | .761 | 203 | | | | | | |
| Variable | | | B (Unsta | ndardized) | Std. Error | Beta (Standar | dized) | t | Sig. | |
| (Constant) | | | 0.375 | | 0.124 | | | 3.024 | 0.003 | |
| Financial Managemen | t Literacy | Risk | 0.818 | | 0.128 | 0.730 | | 6.391 | 0.000 | |



The results show that the correlation coefficient (R = 0.730) indicates a strong positive relationship between the independent variables and financial sustainability. The coefficient of determination ($R^2 = 0.532$) reveals that 53.2% of the variance in financial sustainability is explained by financial risk management literacy. The adjusted R^2 of 0.530 further confirms that the model has a high explanatory power and is well-fitted to the data.

The ANOVA results indicate that the regression model was statistically significant (F = 229.875, p < 0.05). This demonstrates that the independent variable has a significant effect on financial sustainability. Consequently, the regression model is appropriate and reliable for determining the relationships in this study.

The regression model was fitted as follows;

Financial Sustainability = 0.375 + 0.730 Financial Risk Management Literacy

Financial risk management literacy had a positive and statistically significant effect on financial sustainability (β = 0.730, t = 6.391, p=0.00 < 0.05). This means that a one-unit increase in financial risk management literacy leads to a corresponding 0.730 unit increase in the financial sustainability of MSMEs in Kakamega County, holding other factors constant. The implication is that firms with stronger risk management practices such including systematic risk identification, analysis, mitigation, and monitoring are better equipped to withstand financial shocks and sustain long-term stability. These results are consistent with Priyantoro *et al.* (2023), who observed that financial risk management literacy significantly enhances business outcomes, and reinforce the argument that sound risk practices are a cornerstone of MSME sustainability. Besides Mudzingiri (2024) concluded that poor financial literacy has a direct relationship with high-risk preference behaviour. On their part, Song *et al.* (2023) noted that there is a direct relationship between financial literacy, emotional intelligence and financial risk tolerance.

4.0 Conclusion

The study also concluded that financial risk management literacy had a positive and statistically significant effect on financial sustainability. However, the study noted that MSMEs in Kakamega County demonstrate weak and largely reactive approaches to financial risk management. This suggests that while some enterprises occasionally identify and analyse risks, these practices are inconsistent and rarely embedded in formal systems. Risk monitoring and mitigation were also applied on an ad hoc basis, leaving firms vulnerable to financial shocks and uncertainties. The implication is that limited risk literacy undermines the resilience of MSMEs, restricting their ability to anticipate challenges such as market fluctuations, inflation, or operational disruptions. Enhancing financial risk management literacy is therefore critical for equipping MSMEs with the tools to safeguard their stability and ensure long-term sustainability.

5.0 Recommendations

The study revealed that MSMEs in Kakamega County practice risk management in a fragmented and reactive manner, with few enterprises applying systematic frameworks for risk identification, analysis, mitigation, and monitoring. To address these gaps, policymakers at both the county and national level should prioritise structured training programmes tailored to MSMEs, equipping managers with the tools needed to anticipate, assess, and manage financial risks effectively. Trade offices and business associations can complement these efforts by developing simplified sector-specific toolkits and guidelines that help small businesses integrate risk management into their daily operations. From a practical perspective, MSME owners and managers need to



institutionalise risk management as part of business planning rather than as an afterthought when crises emerge. Specifically, MSMEs need to maintain proper and updated risk register with regular reviews which may include monthly cash flow at risk review as well as supplier credit term tracking.

Although this study demonstrated that financial risk management literacy explains a significant proportion (53.2%) of the variance in financial sustainability among MSMEs in Kakamega County, it also indicates that 46.8% of the variation is influenced by other factors not captured in the model. Future research should therefore explore additional determinants such as innovation practices, digital financial adoption, access to credit markets, managerial competencies, and external factors like government policies and market dynamics. The study also proposes that future studies adopting other models such as panel data be conducted to determine if similar results would be obtained.

6.0 Limitations of the Study

The study was conducted to determine the effect of financial risk management literacy on sustainability of micro, small, and medium enterprises in Kakamega County Kenya. The study findings therefore ca only apply to MSMEs in Kakamega County and those that have similar characteristics. Consequently, the study findings may not be generalised in other forms of organization such as commercial banks since they have different operational environment. Similarly, the study findings cannot be inferred in studies in other counties or countries if they have different characteristics such as size and business dynamics.

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