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MODERATING EFFECT OF GOVERNMENT REGULATIONS ON THE RELATIONSHIP BETWEEN CREDIT RISK MANAGEMENT AND LOAN PERFORMANCE IN CREDIT-ONLY MICROFINANCE INSTITUTIONS

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ABSTRACT

Credit-only microfinance institutions support financial inclusion by providing credit to borrowers who are often underserved by formal banks, yet persistent loan defaults continue to threaten their sustainability. This study examined the moderating effect of government regulations on the relationship between credit risk management practices and loan performance among credit-only microfinance institutions in Kirinyaga, Nyeri, Murang'a and Kiambu counties, Kenya. The study focused on credit risk identification, credit risk assessment, credit policy and credit risk oversight. Anchored on information asymmetry theory, the study adopted a descriptive and explanatory mixed-methods design. Data were collected using questionnaires and interviews administered to credit management personnel in 37 credit-only microfinance institutions. Of the 111 questionnaires administered, 108 were completed and analyzed. Quantitative data were analyzed using descriptive statistics, correlation analysis, multiple regression, and moderated regression analysis, while qualitative data were analyzed thematically. The main-effects model explained 70.9% of the variation in loan performance, while the moderated model explained 77.3%, indicating an additional explanatory power of 6.4%. Government regulations significantly moderated the relationships between credit risk identification and loan performance, credit risk assessment and loan performance, and credit policy and loan performance. However, the moderating effect on the relationship between credit risk oversight and loan performance was insignificant. The study concludes that government regulations partially strengthen the effect of credit risk management practices on loan performance. The findings contribute to microfinance literature by demonstrating that regulation functions not only as a direct institutional factor but also as a conditional mechanism that enhances selected credit risk management practices.

Keywords: *Credit Risk Management, Loan Performance, Government Regulations, Moderating Effect, Microfinance.*

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INTRODUCTION

Microfinance institutions remain important in expanding financial inclusion, especially in developing economies where low-income households, informal entrepreneurs and small enterprises often have limited access to conventional banking services. Access to microfinance has also been linked to resilience and sustainable development because it can help vulnerable borrowers' smooth consumption, support small businesses and respond to economic shocks (Gatto & Sadik-Zada, 2022). However, the sustainability of microfinance depends on the ability of institutions to maintain sound loan portfolios while continuing to serve higher-risk borrower groups. Recent evidence from Ethiopia further shows that risk management practices are closely associated with the financial performance of microfinance institutions, confirming that sustainability is strongly linked to how institutions manage credit, liquidity and operational risks (Molla & Kaur, 2025).

Credit risk management is therefore central to loan performance in microfinance institutions. Weak borrower screening, poor credit appraisal, inadequate credit policy enforcement and limited post-disbursement monitoring increase the likelihood of default and portfolio deterioration. Naili and Lahrichi (2022) observe that non-performing loans remain a major threat to financial stability and are influenced by bank-specific, macroeconomic and industry-related factors. Although their review focuses on banks, the argument is relevant to microfinance institutions because loan quality remains the main source of institutional survival. For credit-only microfinance institutions, this issue is even more critical because they rely heavily on loan recovery and external funding, rather than customer deposits, to sustain operations.

At the global level, regulation also shapes how lending institutions manage credit risk. Regulatory frameworks influence lending standards, reporting requirements, governance practices, consumer protection, and credit information sharing. However, the effect of regulation on lending outcomes is not always uniform. Thamae and Odhiambo (2022) show that the impact of bank regulation on lending may be positive, negative, insignificant, or inconclusive depending on the design of regulatory measures and the institutional context. This supports the argument that government regulation should not only be treated as a direct predictor of loan performance, but also as a condition that may strengthen or weaken the effect of internal credit risk management practices.

Regionally, microfinance institutions in Sub-Saharan Africa face persistent credit risk challenges arising from borrower income instability, weak collateral systems, limited formal credit histories, and exposure to economic shocks. Tadele, Roberts and Whiting (2022) found that governance mechanisms influence risk among microfinance institutions in Sub-Saharan Africa, although the effect varies across institutional types and risk measures. This shows that microfinance risk outcomes are shaped not only by internal lending practices, but also by governance and institutional structures. Similarly, recent microfinance evidence from Ethiopia confirms that better risk management practices are important for institutional performance, especially where MFIs operate under financial pressure and uncertain borrower conditions (Molla & Kaur, 2025).

In Kenya, credit-only microfinance institutions serve small-scale traders, agricultural households, micro-entrepreneurs, and low-income borrowers who may not qualify for loans from commercial banks. Their role is especially important in counties such as Kirinyaga, Nyeri, Murang'a and Kiambu, where agriculture, trade and small enterprises create strong demand for accessible credit. However, COMFIs are vulnerable to loan default because weak repayment directly affects liquidity, lending capacity and institutional sustainability. This makes credit risk identification, credit risk assessment, credit policy and credit risk oversight essential to loan performance.

The Kenyan microfinance context also raises important regulatory questions. Government regulations can improve lending discipline by promoting compliance, reporting standards, transparency, credit information sharing, and accountability (Musau, 2023; Thamae & Odhiambo, 2022). At the same time, unclear guidance, uneven enforcement or limited supervisory support may weaken the effectiveness of internal credit risk management practices (Tadele et al., 2022). This is particularly relevant to COMFIs because their operating model, funding structure, borrower profile, and regulatory exposure differ from commercial banks and deposit-taking microfinance institutions. Therefore, evidence from banks and deposit-taking institutions may not fully explain how government regulation interacts with internal credit risk management practices in credit-only microfinance institutions.

Although recent studies have examined credit risk, governance, regulation and microfinance performance, limited evidence explains how government regulations moderate the relationship between credit risk management practices and loan performance among COMFIs. For example, Molla and Kaur (2025) examined risk management practices and financial performance among microfinance institutions, while Tadele et al. (2022) assessed governance mechanisms and risk outcomes among microfinance institutions in Sub-Saharan Africa. Similarly, Naili and Lahrichi (2022) reviewed the determinants of credit risk and non-performing loans, while Thamae and Odhiambo (2022) showed that the effect of regulation on lending depends on institutional context and regulatory design. However, these studies largely treat risk management, governance, regulation or credit risk as separate or direct institutional factors. Few studies examine whether regulation strengthens or weakens the effects of borrower screening, credit assessment, credit policy and credit oversight on loan outcomes. This creates an empirical gap in the credit-only microfinance context. This study addresses the gap by examining the moderating effect of government regulations on the relationship between credit risk management practices and loan performance among COMFIs in Central Kenya.

Statement of the Problem

Credit-only microfinance institutions are central to financial inclusion in Central Kenya because they provide credit to small-scale entrepreneurs, agricultural households, and low-income borrowers who often face limited access to formal banking services. However, persistent loan defaults, weak repayment performance and portfolio deterioration continue to threaten their sustainability. This is a serious concern because COMFIs do not mobilize customer deposits and therefore have limited buffers against loan losses. Recent literature shows that credit risk and non-performing loans remain major threats to financial stability, especially where borrower assessment, monitoring, and institutional controls are weak (Naili & Lahrichi, 2022). Evidence from microfinance institutions also confirms that risk management practices are closely linked to institutional performance and sustainability (Molla & Kaur, 2025).

Credit risk management practices such as credit risk identification, credit risk assessment, credit policy and credit risk oversight are expected to improve loan performance by strengthening borrower screening, loan appraisal, lending discipline and post-disbursement monitoring. However, these practices may not produce the same outcomes under different regulatory conditions. Recent evidence from Sub-Saharan Africa shows that governance structures influence microfinance risk outcomes, while studies on regulation show that the effect of regulatory controls on lending depends on institutional context and enforcement design (Tadele et al., 2022; Thamae & Odhiambo, 2022). This suggests that government regulation may shape how effectively internal credit risk management practices translate into improved loan performance.

Despite growing research on credit risk management and loan performance, limited

empirical attention has been given to credit-only microfinance institutions. Existing studies often focus on commercial banks, deposit-taking microfinance institutions or general financial performance, yet COMFIs have a distinct operating model, funding structure, borrower profile and regulatory exposure. Further, many studies treat government regulation as a direct predictor of performance rather than as a moderating condition that may strengthen or weaken the relationship between credit risk management practices and loan performance. This study addresses this gap by examining the moderating effect of government regulations on the relationship between credit risk management practices and loan performance among COMFIs in Central Kenya.

METHODOLOGY

Research Design

The study adopted a descriptive and explanatory mixed-methods design. The descriptive component summarized credit risk management practices, government regulations, and loan performance among credit-only microfinance institutions, while the explanatory component tested the direct and moderating relationships among the study variables. The mixed-methods design was appropriate because quantitative data supported hypothesis testing, while qualitative interviews provided contextual explanations of how government regulations influenced credit risk management practices and loan performance. This approach is consistent with current mixed-methods guidance, which supports the integration of quantitative and qualitative evidence when a study seeks both statistical explanation and contextual interpretation (Creswell & Creswell, 2023; Saunders et al., 2023).

Study Area and Target Population

The study was conducted among credit-only microfinance institutions in Kirinyaga, Murang'a, Kiambu, and Nyeri counties in Central Kenya. The counties were selected because they host active COMFIs and have strong agricultural, trade and small enterprise activities that rely on microfinance credit. The target population comprised 37 COMFIs operating in the four counties. From each institution, three respondents were purposively selected from the credit management function, namely a credit manager, a junior credit officer and a field credit officer. This produced a target sample of 111 respondents. The study confirms that these respondents represented strategic, operational and field-level roles in credit risk management, loan performance monitoring and regulatory compliance.

Table 1

Target Population and Sample Distribution by County

County	Number of COMFIs	Target Respondents
Kirinyaga	8	24
Murang'a	8	24
Kiambu	12	36
Nyeri	9	27
Total	**37**	111

Sampling Procedure

A census approach was adopted because the population of 37 COMFIs was small and accessible. Including all the institutions improved representativeness and reduced sampling bias. Purposive sampling was then used to select respondents from the credit management function because the study required information from officers directly involved in borrower screening, credit assessment, credit policy implementation, loan monitoring and regulatory compliance. This ensured that the data were obtained from respondents with relevant knowledge of the study variables.

Data Collection Instruments

Data were collected using structured questionnaires and interview schedules. The questionnaire captured information on credit risk management practices, government regulations and loan performance. Credit risk management was measured through four dimensions: credit risk identification, credit risk assessment, credit policy and credit risk oversight. Government regulations were measured using compliance requirements, reporting standards, regulatory enforcement, and supervisory guidance. Loan performance was measured using repayment rates, loan defaults, portfolio quality, recovery rates and non-performing loans. Interviews with credit managers provided additional explanations on how regulatory requirements influenced lending decisions, compliance practices, and portfolio performance.

Validity and Reliability

Content validity was established by aligning the research instruments with the study objectives, literature and key constructs. Expert review was used to assess item clarity, relevance and adequacy. Construct validity was supported through a pilot study conducted among COMFIs outside the study area, which helped test the suitability of the questionnaire before the main data collection. A pilot study, reliability testing and validity assessment were conducted before the main data collection.

Reliability was tested using Cronbach's alpha, with .70 adopted as the minimum acceptable threshold for internal consistency, consistent with common multivariate analysis practice (Hair et al., 2022). Reliability analysis showed acceptable internal consistency for all constructs: credit risk identification, $\alpha = .72$; credit risk assessment, $\alpha = .75$; credit policy, $\alpha = .78$; credit risk oversight, $\alpha = .81$; government regulations, $\alpha = .79$; and loan performance, $\alpha = .83$. These results confirmed that the research instrument had acceptable internal consistency.

Data Collection Procedure and Ethical Considerations

Approval for data collection was obtained from the National Commission for Science, Technology and Innovation and the relevant university ethics review body. Participating COMFIs were contacted before data collection and questionnaires were administered using the drop-and-pick method to give respondents adequate time to complete them. Interviews with credit managers were conducted at agreed times. Ethical standards were observed through informed consent, voluntary participation, confidentiality, anonymity and proper acknowledgement of secondary sources. Respondents were informed about the purpose of the study, their right to withdraw and the confidentiality measures applied.

Data Analysis

Quantitative data were coded and analyzed using SPSS. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the study variables. Pearson correlation analysis was used to examine associations among the variables. Multiple regression analysis tested the direct effects of credit risk identification, credit risk assessment, credit policy, credit risk oversight and government regulations on loan performance.

Moderated regression analysis was then used to test whether government regulations changed the strength or direction of the relationship between each credit risk management practice and loan performance. Interaction terms were created between government regulations and each credit risk management practice, following a regression-based moderation procedure (Hayes, 2022). Interaction terms were created between government regulations and each credit risk management practice.

Regression assumptions were assessed before model interpretation. Normality was tested using the Kolmogorov-Smirnov and Shapiro-Wilk tests; multicollinearity was assessed using VIF values; heteroscedasticity was assessed using White's test; and autocorrelation was assessed using the Durbin-Watson statistic. Diagnostic results showed that the

key regression assumptions were met, with VIF values ranging from 1.75 to 3.12, White's test showing p = .271, and the Durbin-Watson statistic recorded as 1.98.

The moderated regression model was specified as follows:

$$LP = \beta_0 + \beta_1 CRI + \beta_2 CRA + \beta_3 CP + \beta_4 CRO + \beta_5 GR + \beta_6(CRI \times GR) + \beta_7(CRA \times GR) + \beta_8(CP \times GR) + \beta_9(CRO \times GR) + \varepsilon$$

where LP = loan performance, CRI = credit risk identification, CRA = credit risk assessment, CP = credit policy, CRO = credit risk oversight, GR = government regulations, and ε = error term.

Qualitative interview responses was analyzed thematically and used to support the interpretation of the quantitative findings. This enabled the study to explain not only whether government regulations moderated the relationships, but also how regulatory requirements influenced borrower screening, credit appraisal, credit policy enforcement, and loan monitoring.

RESULTS AND DISCUSSION

Response Rate and Respondent Profile

A total of 111 questionnaires were administered to credit management personnel in the selected credit-only microfinance institutions, of which 108 were completed and used for analysis. This represented a response rate of 97%, which was considered adequate for statistical analysis. The respondents comprised credit managers, junior credit officers and field credit officers. Their direct involvement in borrower screening, credit assessment, credit policy implementation, loan monitoring and regulatory compliance made them suitable for providing reliable information on credit risk management practices, government regulations and loan performance.

Table 2

Questionnaire Response Rate

Response category	Frequency	Percentage
Questionnaires distributed	111	100
Questionnaires returned and analysed	108	97
Incomplete questionnaires	3	3
Total	111	100

Descriptive Results for Credit Risk Management Practices

The descriptive results showed that COMFIs applied credit risk management practices to a high extent. Credit risk oversight recorded strong ratings, particularly regular credit limit reviews and dedicated credit risk monitoring teams. Credit policy was also strongly applied, especially loan restructuring for at-risk borrowers and credit monitoring for early detection of potential defaults. Credit risk identification was mainly supported by borrower credit history, Credit Reference Bureau reports, and verification of loan application information. Credit risk assessment emphasized review of business risks, consideration of environmental risks and evaluation of borrower business plans before loan approval.

These findings indicate that COMFIs relied on borrower verification, structured appraisal, policy controls and post-disbursement monitoring to manage credit risk. This finding is consistent with Molla and Kaur (2025), who established that risk management practices are significantly associated with the performance of microfinance institutions. It also aligns with Tadele et al. (2022), who found that governance and risk structures influence risk outcomes among microfinance institutions in Sub-Saharan Africa. The results therefore suggest that COMFIs in Central Kenya reflect a wider regional pattern in which internal risk systems are central to microfinance sustainability.

Table 3

Summary of Credit Risk Management Practices

Dimension	Highest-rated practice	Mean	Lowest-rated practice	Mean
Credit risk identification	Borrower credit history in loan approval	4.25	Use of data analytics to identify risk patterns	3.99
Credit risk assessment	Review of business risks before loan approval	4.23	Use of comprehensive risk assessment tools	4.01
Credit policy	Loan restructuring for at-risk borrowers	4.38	Maintaining reserves for defaulted loans	4.05
Credit risk oversight	Regular credit limit reviews	4.39	Use of previous loan feedback for future oversight	4.11

Descriptive Results for Government Regulations and Loan Performance

The descriptive results showed that respondents perceived government regulations as important in strengthening credit risk management and loan performance. Compliance with government regulations recorded the highest mean score, followed by transparency in credit practices, government oversight and operational efficiency and non-compliance penalties. The lowest-rated item was the effect of regulatory requirements on credit risk assessment approaches, suggesting that some COMFIs had not fully translated regulatory expectations into internal credit appraisal systems.

Loan performance indicators were also positively rated. Portfolio growth recorded the highest mean score, followed by regular assessment and reporting of loan performance, mechanisms for managing loan defaults, and perceived low default rates compared with industry standards. These results suggest that COMFIs reported generally favorable loan performance, although the close mean scores indicate that performance depends on several linked factors, including borrower assessment, credit policy enforcement, portfolio oversight and regulatory compliance. This finding aligns with Naili and Lahrichi (2022), who observed that credit risk is shaped by institution-specific controls and wider operating conditions. It also supports Thamae and Odhiambo's (2022) position that regulatory effects on lending depend on institutional context and enforcement design.

Table 4

Summary of Government Regulations and Loan Performance Indicators

Construct	Highest-rated indicator	Mean	Lowest-rated indicator	Mean
Government regulations	Compliance improves loan performance	4.24	Regulatory requirements affect credit risk assessment approaches	**3.76**
Loan performance	Loan portfolio has shown positive growth	4.16	High recovery rate for overdue loans	**4.01**

Correlation Analysis

Pearson correlation analysis showed positive and statistically significant relationships between loan performance and all study variables. Loan performance had the strongest association with credit risk oversight, followed by credit risk assessment, credit risk identification, government regulations and credit policy. These results indicate that stronger credit risk management practices and regulatory compliance were associated with improved loan performance among COMFIs.

The strong association between credit risk oversight and loan performance suggests that post-disbursement monitoring remains important in identifying repayment stress and enabling timely corrective action. This finding corroborates Tadele et al. (2022), who established that governance mechanisms influence risk outcomes among

microfinance institutions in Sub-Saharan Africa. It also supports Naili and Lahrichi (2022), who emphasized that credit risk and non-performing loans are influenced by internal institutional controls. In the context of COMFIs, the results imply that borrower screening, appraisal discipline, policy controls and oversight systems work together to strengthen loan performance.

Table 5

Correlation Between Study Variables and Loan Performance

Variable	Correlation with loan performance
Credit risk oversight	.73**
Credit risk assessment	.71**
Credit risk identification	.68**
Government regulations	.65**
Credit policy	.62**

Note. **p** < .01. COMFIs = credit-only microfinance institutions. N = 108.

Diagnostic Tests

Diagnostic tests were conducted to confirm the suitability of the data for regression analysis. The residuals were normally distributed, as shown by the Kolmogorov-Smirnov test, statistic = .091, p = .200, and the Shapiro-Wilk test, statistic = .973, p = .082. Multicollinearity was not a concern because the VIF values ranged from 1.75 to 3.12, which were below the accepted threshold of 10. White's test was insignificant, p = .271, indicating homoscedasticity, while the Durbin-Watson statistic of 1.98 confirmed independence of errors. These results showed that the key regression assumptions were met and supported the use of multiple and moderated regression analysis.

Table 6

Summary of Diagnostic Tests

Assumption	Test/indicator	Result	Interpretation
Normality	Kolmogorov-Smirnov	.091, p = .200	Met
Normality	Shapiro-Wilk	.973, p = .082	Met
Multicollinearity	VIF range	1.75 to 3.12	No severe multicollinearity
Heteroscedasticity	White's test	p = .271	Homoscedasticity met
Autocorrelation	Durbin-Watson	1.98	No autocorrelation

Note. VIF = variance inflation factor.

Main Effects Regression Model

Multiple regression was conducted to determine the direct effects of credit risk management practices and government regulations on loan performance. The model was statistically significant, $F(5, 102) = 49.637$, $p < .001$. The predictors jointly explained 70.9% of the variation in loan performance, $R = .842$, $R^2 = .709$, adjusted $R^2 = .692$. This indicates that credit risk identification, credit risk assessment, credit policy, credit risk oversight, and government regulations jointly predicted loan performance among COMFIs.

As shown in Table 7, all predictors had positive and statistically significant effects on loan performance. Credit risk assessment had the strongest direct effect, followed by credit policy, credit risk identification, credit risk oversight, and government regulations. This means that loan performance improved where COMFIs strengthened borrower assessment, applied clear credit policies, screened borrowers carefully, monitored loan portfolios and complied with regulatory requirements.

The finding that credit risk assessment had the strongest effect is consistent with Naili and Lahrichi (2022), who observed that credit risk is strongly influenced by institution-specific risk controls and borrower-related factors. It also corroborates Molla and Kaur (2025), who found that risk management practices significantly improve microfinance institutional performance. This study extends that evidence by showing that, within credit-only microfinance institutions, borrower assessment is the strongest direct predictor of loan performance. This is theoretically consistent with information asymmetry theory, since careful appraisal reduces hidden borrower risk before credit is approved.

Credit policy also had a positive and significant effect on loan performance. This finding aligns with Tadele et al. (2022), who showed that governance mechanisms influence risk outcomes in Sub-Saharan African microfinance institutions. In this study, documented lending procedures, loan restructuring options, repayment terms and enforcement mechanisms appear to strengthen repayment discipline and reduce inconsistent lending decisions. The results suggest that COMFIs should not rely only on individual credit officer judgment, but should apply clear and consistent lending policies.

Table 7

Main Effects Regression Predicting Loan Performance

Predictor	B	SE	B	t	p
Constant	.742	.183		4.055	< .001
Credit risk identification	.156	.034	.221	4.588	< .001
Credit risk assessment	.218	.041	.301	5.317	< .001
Credit policy	.174	.038	.247	4.579	< .001
Credit risk oversight	.137	.035	.189	3.914	< .001
Government regulations	.126	.033	.173	3.818	< .001

Moderated Regression Analysis

Moderated regression analysis was conducted to determine whether government regulations changed the strength of the relationship between each credit risk management practice and loan performance. The moderated model was statistically significant, $F(9, 98) = 37.053$, $p < .001$. After the interaction terms were introduced, the model explained 77.3% of the variation in loan performance, $R = .879$, $R^2 = .773$, adjusted $R^2 = .751$. This represented an increase of 6.4% from the main-effects model, which explained 70.9% of the variation in loan performance. The increase in explained variance indicates that government regulations improved the predictive strength of the model and had a meaningful moderating role in selected relationships.

As shown in Table 8, government regulations significantly moderated the relationship between credit risk identification and loan performance, B = .073, $p = .014$; credit risk assessment and loan performance, B = .091, $p = .003$; and credit policy and loan performance, B = .057, $p = .037$. However,

the interaction between credit risk oversight and government regulations was positive but statistically insignificant, B = .041, p = .118. These findings show that government regulations had a partial moderating effect.

Table 8

Moderated Regression Predicting Loan Performance

Predictor	B	SE	β	t	p
Constant	.684	.169		4.047	< .001
Credit risk identification	.142	.033	.201	4.303	< .001
Credit risk assessment	.196	.039	.271	5.026	< .001
Credit policy	.158	.037	.224	4.270	< .001
Credit risk oversight	.127	.035	.178	3.629	.001
Government regulations	.119	.031	.166	3.839	< .001
Credit risk identification × Government regulations	.073	.029	.104	2.517	.014
Credit risk assessment × Government regulations	.091	.030	.132	3.033	.003
Credit policy × Government regulations	.057	.027	.081	2.111	.037
Credit risk oversight × Government regulations	.041	.026	.059	1.577	.118

Discussion of Moderation Findings

The strongest moderating effect was observed between credit risk assessment and government regulations. This suggests that regulatory requirements strengthened the effect of borrower appraisal on loan performance by encouraging documentation, compliance with lending standards, verification of borrower information and attention to repayment capacity. This finding is consistent with Thamae and Odhiambo (2022), who reported that the effect of regulation on lending depends on regulatory design, enforcement, and institutional context. It also supports Naili and Lahrichi's (2022) position that credit risk management requires both internal control systems and supportive regulatory environments. In the COMFI context, regulation appears to have improved the consistency and quality of borrower assessment.

The significant moderating effect for credit risk identification shows that regulation strengthened borrower screening and verification. This supports information asymmetry theory because borrower identification reduces information gaps before loan approval. Where regulatory requirements promote credit information sharing, borrower documentation, and compliance checks, COMFIs are more likely to identify risky borrowers early and reduce exposure to default. This finding aligns with recent credit risk literature which emphasizes that strong institutional risk procedures reduce non-performing loans and protect financial stability (Naili & Lahrichi, 2022).

The significant moderating effect for credit policy indicates that government regulations improved the effectiveness of lending rules and credit control procedures. This suggests that credit policies are more effective when supported by compliance expectations, supervisory guidance, and enforcement mechanisms. The finding corroborates Tadele et al. (2022), who found that governance structures affect risk outcomes in microfinance institutions. It also extends prior evidence by showing that regulatory conditions do not only influence loan performance directly, but also strengthen the effect of internal policy controls on loan performance.

Government regulations did not significantly moderate the relationship between credit risk oversight and loan performance. This finding contrasts with the significant moderation effects observed for credit risk identification, credit risk assessment, and credit policy. A possible explanation is that credit risk oversight is a post-disbursement function that depends more on internal institutional capacity than on external

regulation alone. Effective oversight requires trained staff, digital tracking systems, early warning tools, regular portfolio review and active borrower follow-up. This interpretation is consistent with Molla and Kaur (2025), who showed that risk management performance depends on the internal capacity of microfinance institutions to identify, monitor and respond to risk. Therefore, although regulation can strengthen screening, appraisal, and policy enforcement, it may not automatically improve daily loan monitoring unless COMFIs invest in stronger internal systems.

Qualitative data on Regulatory Moderation

Qualitative responses supported the moderated regression findings. Credit managers indicated that regulatory requirements encouraged proper documentation of borrower assessment, adherence to lending procedures, and maintenance of complete loan files. These practices improved credit risk identification and credit risk assessment before loan approval. Respondents also noted that regulatory expectations reduced inconsistencies in the application of credit policies by encouraging uniform lending procedures, reporting discipline and management attention to portfolio quality.

The qualitative findings further showed that regulation created pressure for accountability and standardization. This corroborates Thamae and Odhiambo (2022), who noted that the effect of regulation depends on how institutions respond to regulatory requirements. The interview evidence also extends the quantitative results by explaining how regulation strengthened credit risk identification, credit risk assessment, and credit policy implementation. However, respondents noted that unclear guidance, uneven enforcement and reporting demands could create implementation challenges, especially for smaller COMFIs with limited staff and technological capacity. This explains why regulation strengthened selected pre-disbursement and policy-related practices but did not significantly strengthen credit risk oversight. Oversight requires internal systems that operate continuously after loan disbursement, and these systems may not improve through regulation alone.

Overall, the findings demonstrate that credit risk management practices are important predictors of loan performance among COMFIs. The study further shows that government regulations partially strengthen the relationship between credit risk management and loan performance. This contribution is important because it moves beyond treating regulation as a direct predictor and demonstrates its conditional role in shaping the effectiveness of selected internal credit risk management practices.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The study examined the moderating effect of government regulations on the relationship between credit risk management practices and loan performance among credit-only microfinance institutions in Kirinyaga, Nyeri, Murang'a and Kiambu counties. The findings showed that credit risk identification, credit risk assessment, credit policy, credit risk oversight and government regulations had positive and statistically significant direct effects on loan performance. This implies that loan performance improved where C/OMFIs strengthened borrower screening, assessed borrower repayment capacity, applied clear lending procedures, monitored loan portfolios and complied with regulatory requirements.

Credit risk assessment had the strongest direct effect on loan performance. This indicates that careful appraisal of borrower repayment capacity, business viability, credit history, collateral adequacy and debt burden is central to reducing default risk. The finding is consistent with Naili and Lahrichi (2022), who observed that credit risk is strongly influenced by institution-specific controls and borrower-related risk factors. It also corroborates Molla and Kaur (2025), who found that risk management practices significantly improve microfinance institutional performance. In the context of COMFIs, the result confirms that

borrower assessment is a critical pre-disbursement control for improving repayment outcomes.

The findings further showed that credit policy positively influenced loan performance. This suggests that documented lending procedures, loan restructuring options, repayment terms, approval requirements and default management procedures strengthen lending discipline. This finding aligns with Tadele et al. (2022), who found that governance structures influence risk outcomes among microfinance institutions in Sub-Saharan Africa. It also implies that COMFIs should reduce discretionary lending decisions by applying clear and consistent credit policies across all lending stages.

The moderated regression results showed that government regulations significantly strengthened the relationships between credit risk identification and loan performance, credit risk assessment and loan performance and credit policy and loan performance. This means that government regulations improved the effectiveness of borrower screening, credit appraisal and lending policy enforcement. The finding is consistent with Thamae and Odhiambo (2022), who noted that the effect of regulation on lending depends on regulatory design, enforcement and institutional context. The study therefore extends previous evidence by showing that regulation does not only influence loan performance directly, but also improves the effectiveness of selected internal credit risk management practices.

However, government regulations did not significantly moderate the relationship between credit risk oversight and loan performance. This suggests that post-disbursement monitoring depends more on internal institutional capacity than on external regulation alone. Effective oversight requires trained credit officers, reliable portfolio tracking systems, early warning indicators, regular loan reviews and active borrower follow-up. This finding is consistent with Molla and Kaur (2025), who emphasized the importance of internal risk management capacity in improving microfinance performance. Therefore, although regulation supports lending discipline, COMFIs must still invest in internal monitoring systems to improve loan performance.

The study concludes that credit risk management practices are important predictors of loan performance among credit-only microfinance institutions. Strong credit risk identification reduces borrower information gaps before loan approval, while effective credit risk assessment improves the ability of COMFIs to determine borrower repayment capacity and default exposure. Clear credit policies strengthen lending discipline and credit risk oversight supports early detection and management of repayment problems.

The study also concludes that government regulations have a partial moderating effect on the relationship between credit risk management practices and loan performance. Regulations strengthened the effects of credit risk identification, credit risk assessment, and credit policy on loan performance, but did not significantly strengthen the effect of credit risk oversight. This shows that regulatory requirements are most effective where they support pre-disbursement controls, documentation, compliance and policy enforcement. However, post-disbursement monitoring requires stronger internal systems and institutional capacity.

The study contributes to credit risk management literature by demonstrating the conditional role of government regulations in the COMFI context. Unlike studies that treat regulation only as a direct determinant of performance, this study shows that regulation can shape the strength of the relationship between internal credit risk management practices and loan performance. The findings also support information asymmetry theory by showing that borrower screening, appraisal, and policy controls improve loan performance by reducing information gaps and strengthening lending discipline.

The study recommends that COMFIs strengthen credit risk identification by improving borrower background checks, verifying loan application information, using Credit Reference Bureau reports, and adopting data-supported risk identification tools. Since borrower information gaps increase default exposure, COMFIs should ensure that every loan approval process is supported by reliable borrower information and clear risk indicators.

COMFIs should also prioritize credit risk assessment because it had the strongest direct and moderated effect on loan performance. Institutions should use structured appraisal tools to assess repayment capacity, business viability, credit history, existing debt obligations, collateral adequacy and borrower cash flows. Credit assessment should not rely only on officer judgment, but should be guided by standardized appraisal criteria and documented evidence.

The study further recommends consistent enforcement of credit policies. COMFIs should clearly document lending procedures, approval requirements, repayment terms, loan restructuring options and default management procedures. These policies should be applied uniformly to reduce discretionary lending, improve repayment discipline and strengthen portfolio quality.

COMFIs should strengthen internal credit risk oversight by investing in post-disbursement monitoring, early warning systems, digital portfolio tracking, staff training, and regular portfolio review. Since government regulations did not significantly moderate the relationship between oversight and loan performance, institutions should not depend on regulation alone to improve monitoring. Instead, they should build internal capacity for daily follow-up, arrears detection, and timely corrective action.

Regulators should improve compliance support, supervisory consistency, credit information sharing, and enforcement of lending standards. Regulatory agencies should also provide practical guidance that helps COMFIs translate compliance requirements into stronger borrower screening, credit appraisal, policy enforcement, and loan performance monitoring. This would make regulation more supportive rather than merely procedural.

Implications for Policy and Practice

The findings have important implications for COMFI managers and policymakers. For managers, the study shows that loan performance depends on integrated credit risk management rather than isolated lending practices. Borrower screening, appraisal, policy enforcement, and oversight should be treated as connected components of the credit cycle. For policymakers, the findings show that regulation is most useful when it strengthens institutional lending discipline and improves compliance capacity. Therefore, regulatory frameworks should be designed to support both financial stability and practical implementation among smaller credit-only microfinance institutions.

Limitations and Suggestions for Further Research

The study focused on credit-only microfinance institutions in four counties in Central Kenya; therefore, the findings may not fully represent COMFIs in other regions or deposit-taking microfinance institutions. Future studies could extend the analysis to other counties or compare credit-only and deposit-taking microfinance institutions. In addition, the study used cross-sectional data, which limits the ability to examine changes in loan performance over time. Future research could adopt longitudinal or panel designs to assess how credit risk management practices and regulatory conditions affect loan performance across different economic periods.

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