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North West Region of Cameroon



The Effect of Corporate Governance Practices on the Loan Performance of Member-Owned Microfinance Institutions in the North West Region of Cameroon

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Abstract

Purpose: This study addresses the persistent challenge of poor loan performance among member-owned microfinance institutions (MFIs) in Northwest Cameroon, characterized by high delinquency rates, elevated non-performing assets, and inadequate loan recovery, which threaten institutional sustainability and financial stability.

Methodology: The primary objective is to evaluate how corporate governance practices influence loan performance in these institutions. Employing a quantitative, longitudinal panel data approach from 2019 to 2023, the research utilizes robust econometric techniques such as Prais-Winsten regression with Panel Corrected Standard Errors (PCSE) to address issues of autocorrelation, heteroskedasticity and cross-sectional dependence, ensuring reliable estimates.

Findings: The analysis reveals that effective governance mechanisms, such as; active boards, internal controls, transparency, stakeholder engagement, and internal controls positively affect loan performance measures, including; outstanding loans, delinquency and delinquency rates, while weak corporate governance practices exacerbate default risks.

Unique Contribution to Theory, Practice and Policy: Major findings demonstrate that strong governance frameworks and decentralized branch networks significantly enhance loan repayment and reduce delinquency rates. It is therefore recommended that the strengthening of governance structures through independent boards, investing in staff training, enhancing transparency via regular audits, expanding branch networks and implementing formal risk management systems can improve on the situation. The study highlights that fostering responsible governance, aligned with concepts like transparency, accountability, stakeholder engagement and internal controls is vital for mitigating default risks, promoting sustainability, and advancing inclusive financial development in fragile environments like Cameroon.

Key Words: *Corporate Governance, Loan Performance, Member-Owned Microfinance Institutions*

1. Introduction

The evolution of loan performance from a global perspective, particularly focusing on the United States and Europe, illustrates a trajectory of significant progress driven by technological advancements, regulatory reforms, and stakeholder collaboration. In North America, loan repayment rates have historically been high, often exceeding 90%, due to mature regulatory frameworks, sophisticated credit management practices, and a well-developed financial infrastructure (Morduch, 2000). Prior to 2000, the sector was characterized by stable delinquency rates below 2%, with non-performing assets (NPAs) rarely surpassing 1%, supported by robust credit scoring systems and transparent lending protocols (Ledgerwood, 1999). During the 2008 financial crisis, although some institutions experienced temporary increases in delinquency rates to around 3-4%, the sector demonstrated resilience, maintaining overall high loan recovery rates due to the strong governance and diversification of funding sources (Federal Reserve, 2020). Post-2010, the sector witnessed a technological revolution with the integration of mobile banking, online platforms, and fintech innovations, which further improved loan tracking and risk assessment, resulting in delinquency rates remaining below 2% and write-offs often under 1%.

Similarly, in Europe, the sector was characterized by a stable and mature environment prior to 2000, with delinquency rates generally below 3% and NPAs under 2%, supported by strong regulatory oversight and institutional capacity (European Microfinance Network [EMN], 2019). The 2008 financial crisis underscored the importance of responsible lending, prompting institutions to adopt stricter risk management practices and diversify their funding, which helped sustain low delinquency and write-off rates, often around 1-2%. The subsequent years saw a rapid adoption of digital platforms and data analytics that improved loan monitoring and enhanced borrower protection, thereby maintaining high repayment rates exceeding 95% and low NPA levels. The sector's focus on responsible finance, ESG principles, and technological integration has contributed to a steady improvement in loan performance, reflecting a resilient and adaptive financial ecosystem that balances social impact with sustainability.

With regards the the African context, the microfinance sector initially faced substantial challenges characterized by high delinquency rates often exceeding 15-20%, with NPAs high and write-offs substantial due to socio-economic shocks, weak regulatory frameworks, and limited institutional capacity (Rhyne & Otero, 2006). During the period before 2000, the sector was primarily NGO-led and highly vulnerable, with loan portfolios fragile and operational challenges exacerbated by political instability, droughts, and limited credit infrastructure (Rhyne & Otero, 2006). Nevertheless, these efforts laid the groundwork for subsequent improvements. Between 2001 and 2010, the sector experienced notable progress with delinquency rates decreasing from over 20% to around 8-12%, owing to increased stakeholder engagement, the development of credit bureaus, and the adoption of mobile banking platforms such as M-Pesa in Kenya, which increased outreach

and improved repayment mechanisms (Gine & Mansuri, 2017). These efforts, combined with policy reforms and capacity-building initiatives, led to a decline in NPAs to below 5%, and write-offs reduced to approximately 4-5%, marking a significant enhancement in loan quality and institutional stability. Post-2010, technological innovations like biometric verification and real-time data analytics further decreased delinquency rates below 8%, with write-offs stabilizing around 4-5%. Stakeholders, including governments, NGOs, and private entities, continually emphasized improving governance, expanding digital financial services, and implementing responsible lending policies to sustain this progress, despite persistent socio-economic vulnerabilities that continue to challenge the sector's stability and growth.

For Cameroon; a country in Africa, the microfinance sector has historically faced significant hurdles due to socio-economic fragility, weak governance, and limited credit infrastructure, leading to persistently high delinquency rates often exceeding 20% and elevated NPAs reflective of underlying socio-political issues and low financial literacy among borrowers (Ndebbio, 2016). The sector was initially constrained by limited stakeholder engagement, weak regulatory oversight, and minimal technological adoption, which hampered loan recovery efforts and contributed to high default rates. However, recent reforms focusing on strengthening regulation, improving corporate governance, and leveraging digital innovations such as mobile banking and digital credit platforms have begun to positively influence loan performance. These reforms have contributed to a gradual reduction in NPAs and an increase in repayment rates, although the sector still faces considerable challenges due to socio-economic vulnerabilities and infrastructural deficiencies (Ndebbio, 2016; Sam *et al.* 2025). The development of credit bureaus and borrower education initiatives, alongside stakeholder engagement, are seen as critical to building resilience within the microfinance sector, aiming to reduce delinquency rates and enhance loan sustainability. The ongoing efforts to improve governance and harness technological tools indicate a trajectory towards better loan performance, yet the sector's growth remains delicate, requiring continued institutional reforms and stakeholder cooperation to address persistent socio-economic challenges.

The cumulative evidence across these regions underscores the remarkable resilience, adaptability, and progressive improvement in loan performance over time, driven by innovations in technology, regulatory reforms, and stakeholder participation. The global experience demonstrates that technological adoption and responsible lending practices are crucial in reducing delinquencies and NPAs, thus promoting financial stability. Nevertheless, persistent socio-economic vulnerabilities, especially in Africa and Cameroon, continue to pose risks, emphasizing the need for enhanced governance and risk management strategies. The clear evolution from high default rates and fragile portfolios to stable, low delinquency environments highlights the importance of continuous stakeholder engagement and institutional strengthening. Given this context, it becomes imperative to explore the role of corporate governance in further improving loan performance, as effective governance can foster transparency, accountability, and prudent risk assessment. Addressing poor

loan performance through a focus on corporate governance offers a promising avenue to mitigate defaults, strengthen institutional capacity, and promote sustainable microfinance development, especially in fragile environments where socio-economic vulnerabilities are profound. This underscores the importance of a dedicated study linking corporate governance practices directly to loan performance, aiming to identify mechanisms that can enhance loan recovery and overall sector stability.

Loan performance is a critical measure of the financial health, sustainability, and developmental impact of microfinance institutions (MFIs), as it reflects their capacity to recover disbursed funds within agreed timeframes, maintain asset quality, protect members' savings, and sustain access to credit. Globally, member-owned MFIs have demonstrated commendable loan performance, with delinquency rates often below 2% and non-performing assets (NPAs) generally under 1%, a feat largely attributed to mature institutional frameworks, effective governance, disciplined credit management, and robust risk mitigation practices (Ledgerwood, 1999; Rhyne & Otero, 2006). These institutions have achieved high portfolio stability through stringent credit screening, diligent monitoring, and sound operational controls, which collectively foster confidence among stakeholders and ensure ongoing financial viability.

In stark contrast, the loan performance of member-owned MFIs in Cameroon, especially those affiliated with the Cameroon Cooperative Credit Union League in the Northwest Region, remains weak and highly fragile. Empirical evidence indicates that delinquency rates in this region often exceed 20%, with NPAs oscillating between 15% and 25%, and loan recovery rates falling substantially below international benchmarks (Ndebbio, 2016, Sam *et al.*, 2025)). This persistent deterioration results in deteriorating loan portfolio quality characterized by widespread repayment delays and defaults, which undermine institutional liquidity, weaken confidence among members, and threaten the sector's long-term stability. The situation is particularly concerning given the vital role credit unions play in financing micro and small enterprises, agriculture, and household needs, as rising delinquency and default rates limit access to funds, inflate operational costs, and divert management efforts from growth and development activities. In severe cases, prolonged poor loan performance has led to institutional distress, regulatory sanctions, and even collapse of some credit unions, with significant losses impacting members and local communities, (Nsoh *et al.* 2025).

Despite multiple interventions by government agencies, regulators, development partners and CAMCCUL itself, including; staff capacity building, borrower financial literacy, regulatory reforms and improved credit appraisal guidelines, loan performance indicators in the Northwest continue to be volatile and below expectations (Giné & Mansuri, 2017). The ongoing decline suggests that internal institutional dynamics, particularly weaknesses in credit management practices such as inadequate borrower screening, ineffective approval processes, delayed recovery, and weak enforcement of credit policies, are key drivers of poor performance. These practices are

heavily influenced by the quality of corporate governance structures that oversee risk management, accountability, and strategic decision-making within MFIs (Mallin, 2019). Improving governance mechanisms could, therefore, be instrumental in fostering better credit management practices, which may, in turn, enhance loan performance. Addressing this gap by examining how corporate governance influences loan outcomes through credit management practices could provide valuable insights for designing targeted reforms that strengthen financial stability and sustainability of MFIs in Cameroon.

This study therefore seeks evaluate the effect of corporate governance practices in addressing the loan performance challenges of some selected Credit Unions in the Northwest Region Cameroon. This study is therefore built on the following conceptual, theoretical and empirical foundations.

2. Review of Related Literature

2.1.1 Theoretical Review

Corporate governance encompasses internal mechanisms such as; board structure, internal controls, transparency, regulatory compliance, stakeholder engagement, and training, which collectively influence the effectiveness of MFIs (Tricker et al., 2015; Aguilera & Jackson, 2003; Mallin, 2013; Clarke, 2007; Freeman et al., 2004). These variables impact operational expenses like allowances, risk reserves, audit costs, and social responsibility initiatives, ultimately shaping loan performance outcomes (Mallin, 2013; Clarke, 2007). Effective governance enhances oversight, accountability, and stakeholder trust, which are critical for improving loan recovery, reducing delinquencies, and maintaining portfolio quality (Tricker *et al.*, 2015; Aguilera & Jackson, 2003). Recent studies emphasize that strengthening internal governance structures and practices can serve as a strategic approach to address persistent loan performance issues in microfinance institutions (Mallin, 2013; Clarke, 2007). Loan performance reflects a borrower's ability to repay on time, serving as an indicator of credit risk and portfolio health (Khandker *et al.*, 2013; Mishra & Pradhan, 2012). Key metrics such as non-performing loans, delinquencies, and recovery rates reveal the financial stability and risk management effectiveness of MFIs (Mishkin & Eakins, 2012). Elevated levels of non-performing assets and overdue payments signal poor loan quality and higher risk (Berger & DeYoung, 1997). Delinquencies beyond 30 days act as early warnings of potential defaults (Yaron & Strickland, 2017). Proper management of loan performance is vital for ensuring the sustainability of microfinance institutions.

With respect to the above, and from a theoretical perspective, the agency theory highlights that conflicts of interest and information asymmetry between management and stakeholders can impact loan performance, with effective governance and incentive structures mitigating risks (Jensen & Meckling, 1976). The stakeholder theory emphasizes that incorporating diverse stakeholder interests such as; borrowers and communities, into governance practices promotes responsible credit management and enhances loan outcomes (Freeman, 1984). Both theories underscore that

strong corporate governance frameworks, including transparency and participatory decision-making, are vital for improving loan performance by aligning incentives and stakeholder interests (Mersland & Strøm, 2009). Effective governance reduces default risks, fosters trust and supports sustainable credit practices, especially in member-owned MFIs. These theories collectively reinforce the importance of governance mechanisms that balance organizational, social, and economic objectives to optimize loan performance.

2.1.2 Empirical Review

Empirically, studies by Karanja & Njoroge (2018), Otieno & Okoth (2019), Munyaka & Mugo (2021), and Njuguna & Wainaina (2022) consistently demonstrate that effective corporate governance practices, which are integral components of corporate governance, significantly influence loan performance in microfinance institutions. These works highlight that rigorous borrower assessment, collateral management, continuous monitoring and diligent collection strategies lead to higher repayment rates and lower default levels. Karanja & Njoroge (2018) and Nkwati *et al.* (2025) found that MFIs with stringent credit policies and technological leverage experienced fewer defaults, while Otieno & Okoth (2019) emphasized the importance of integrated digital monitoring tools in improving recovery rates. Munyaka & Mugo (2021) confirmed that robust appraisal and monitoring systems positively impact loan performance, and Njuguna & Wainaina (2022) and Nkwati *et al.* (2017) stressed that comprehensive evaluation and regular follow-up are critical for enhancing repayment success. Collectively, these findings highlight that sound corporate governance practices, as part of strong corporate governance frameworks are vital for reducing credit risk and ensuring the sustainability of microfinance loans.

The existing literature largely treats corporate governance and credit management practices as independent determinants of loan performance, with limited focus on the mediating role of credit management in this relationship (Mwangi & Wainaina, 2022; Kuria & Karanja, 2021). Furthermore, most studies are geographically concentrated in East Africa or employ broad cross-country analyses, leaving a significant gap in context-specific research for Cameroon, particularly among member-owned MFIs in the Northwest Region. There is also a notable lack of empirical evidence examining the operational mechanisms through which governance structures influence loan outcomes via credit management practices. Addressing this gap by exploring the mediating effect of credit management practices can provide more nuanced insights into improving loan performance in similar institutional settings.

3. Methodology of the Study

3.1 Data and Sources

This study concentrates on the relationship between corporate governance practices and loan performance within member-owned microfinance institutions (MFIs) in the Bamenda chapter of

CAMCCUL, NW Cameroon, from 2019 to 2023. Key governance indicators include board composition, management structures, transparency, accountability, and internal control systems, which influence loan performance such as outstanding loans, delinquent loans, and delinquent rates. Loan performance metrics reflect the effectiveness of credit risk mitigation and portfolio health. The regional focus on Bamenda is crucial due to its diverse socio-economic and geographical features impacting access to financial services, amid a predominantly rural and agricultural population (Cameroon National Institute of Statistics, 2020; UNDP, 2021).

Based on the above justifications, this study employs a quantitative, longitudinal panel data design from 2019 to 2023, analyzing 31 MFIs in NW Cameroon to examine the effects of corporate governance practices on loan performance. Panel data enables capturing both cross-sectional and temporal variations, controlling for unobserved heterogeneity (Baltagi, 2021; Hsiao, 2003). Data from CAMCCUL covers multiple variables, with composite indices for governance created via Principal Component Analysis (PCA) to reduce dimensionality and multicollinearity. Loan performance is measured through delinquency and non-performing loans, while control variables include institution size, age, capital adequacy, membership and branches. The indices facilitate robust regression analysis, providing insights into how governance and credit practices influence loan outcomes over time (Jolliffe, 2002; Agrawal & Knoeber, 1996).

3.2 Pre-Estimation and Post Estimation Tests

Pre-tests such as stationarity (using LLC), cross-sectional dependence (Pesaran test), heteroskedasticity (modified Wald), and autocorrelation (Wooldridge test) were conducted to validate model assumptions, while diagnostic checks including multicollinearity (pairwise correlation) and residual analysis ensured data reliability. Post-estimation, significance was verified through t-tests, F-tests, and p-values, with additional validation via variance inflation factors and sensitivity analyses in the causal mediation framework (Greene, 2012; VanderWeele, 2015). These rigorous pre- and post-tests collectively enhance the validity and accuracy of the findings.

3.3 Model Specification and Estimation Techniques

This research aims to develop a model examining the impact of corporate governance on the loan performance of Microfinance Institutions (MFIs). Previous studies suggest that effective governance mechanisms, such as; the composition and roles of boards and committees, risk management reserves, audit expenses, dividends, social responsibility costs, and credit committee expenses, serve as indicators of governance quality and oversight (Smith & Jones, 2018; Lee, 2020). These governance practices are believed to influence how well MFIs manage credit risk and ensure timely loan repayments. Loan performance is commonly assessed using measures like the total outstanding loans, delinquency levels, and delinquency rates, which reflect the effectiveness of credit risk management (Kumar & Patel, 2019). By analysing the relationship

between governance variables and these performance metrics, the study seeks to understand how governance influences loan outcomes in MFIs. This is functionally expressed as follows;

$$LP_{it} = f(CGI_{it}, X_{it}) \dots \dots \dots (3.1)$$

This is specified in the econometric model as follows;

$$LP_{it} = \alpha + \lambda_i CGI_{it} + \rho_i X_{it} + \zeta_{it} \dots \dots \dots (3.2)$$

This model is then broken down into the following:

$$OUTL_{it} = \alpha + \lambda_i CGI_{it} + \rho_i X_{it} + \zeta_{it} \dots \dots \dots (3.2a)$$

$$DELL_{it} = \alpha + \lambda_i CGI_{it} + \rho_i X_{it} + \zeta_{it} \dots \dots \dots (3.2b)$$

$$DELR_{it} = \alpha + \lambda_i CGI_{it} + \rho_i X_{it} + \zeta_{it} \dots \dots \dots (3.2c)$$

Where: LP is Loan Performance, λ_i and ρ_i are respectively the contributions of corporate governance and the control variables, α is the constant term, while ζ is the error term, i for the individual member-owned MFIs, and t for the 5 years, and $OUTL$, $DELL$, and $DELR$ respectively stand for outstanding loans, delinquent loans and delinquent rate, as measures of loan performance.

The study employs the Prais-Winsten regression with panel-corrected standard errors (PCSE) to address the limitations of traditional methods like FGLS, effectively handling correlated errors, heteroskedasticity, autocorrelation, and cross-sectional dependence in short-panel data with repeated observations across units. The PCSE approach, particularly suited for small time spans relative to cross-sectional units, accounts for unit-specific autocorrelation and heteroscedasticity, providing more reliable inference. To address cross-sectional dependence and improve robustness, the study also considers non-parametric adjustments like Driscoll and Kraay's method, which resists misspecification and handles dependence across units. For analyzing causal pathways, the study uses causal mediation analysis (CMA) based on Baron and Kenny's framework, which uncovers mediating variables influencing the effect of corporate governance on loan performance, offering a deeper causal understanding and robustness checks through sensitivity analysis. (Bailey & Katz, 2011).

4. Presentation and Discussion of Findings

4.1 Presentation of Findings

4.1.1 Pre-Estimation Tests

Table 1 Cross-Sectional Dependence Test

Variable	CD-test	p-value	average joint T	mean ρ	mean abs(ρ)
LOUTL	48.218	0.000	5	1	1
LDEL	48.218	0.000	5	1	1
DELR	26.235	0.000	5	0.54	0.54
LCOST	48.218	0.000	5	1	1
LLIE	48.218	0.000	5	1	1
LLIF	48.218	0.000	5	1	1
LMORT	47.975	0.000	5	0.99	0.99
LLEND	44.346	0.000	5	0.92	0.92
LLOANR	48.218	0.000	5	1	1
LLEGEX	42.1	0.000	5	0.87	0.87
LCCEX	42.1	0.000	5	0.87	0.87
LBMA	48.218	0.000	5	1	1
LBSA	43.894	0.000	5	0.91	0.91
LAEX	42.1	0.000	4.94	0.87	0.87
DIV	43.234	0.000	5	0.9	0.97
SR	4.646	0.000	4.14	0.1	0.1
CC	48.218	0.000	5	1	1
NOB	0.0000	1.000	5	0	0
MP	48.218	0.000	5	1	1

Source: Authors (2026)

Table 1 shows strong cross-sectional dependence across most microfinance institution variables, with high CD-test statistics indicating synchronized movements likely driven by shared macroeconomic or sector-wide factors. Variables like outstanding loans, delinquent loans, governance expenses, and lending costs exhibit near-perfect correlation, while social responsibility shows minimal dependence, and the number of branches is unaffected by sector trends. The high dependence underscores the need for advanced econometric methods to obtain unbiased results, as traditional panel estimators may be biased if dependence is ignored.

Table 2: Stationarity Test Harris-Tzavalis unit-root Test

Variable	Statistics	Z	p-value
loutl	0.3236	-2.0155	0.0219
ldel	-0.0319	-6.0766	0.0000
delr	0.3358	-1.8761	0.0303
lcost	0.1483	-4.0180	0.0000
llie	-0.3499	-9.7096	0.0000
llif	-0.1548	-7.4811	0.0000
lmort	-0.0005	-5.7176	0.0000
llendc	-0.3599	-9.8247	0.0000
lloanr	0.0698	-3.1792	0.0007
llegex	-1.4238	-21.9793	0.0000
lccex	-1.1821	-19.2172	0.0000
Llwo	0.0000	-2.9019	0.0019
lbma	-0.3302	-9.4849	0.0000
lbsa	-0.4843	-8.5144	0.0000
laex	-0.5000	-8.6654	0.0000

div	-0.5086	-8.7479	0.0000
sr	-1.7728	-20.9202	0.0000
cc	0.0000	-5.7124	0.0000
nob	0.0000	-5.7124	0.0000
mp	0.0000	-5.7124	0.0000

Source: Authors (2026)

Table 2 presents the Harris–Tzavalis panel unit root test results, which show that all variables are stationary, as indicated by highly significant negative Z-statistics ($p < 0.05$), leading to rejection of the null hypothesis of non-stationarity. Variables such as delinquent loans, loan inspection expenses, lending costs, and social responsibility exhibit strong stationarity, while others like outstanding loans and delinquency rate also remain stationary. This confirms that the variables fluctuate around constant means and variances over time, making them suitable for regression analysis and ensuring reliable, unbiased results. The stationarity of the dataset supports the validity of the empirical model, especially given the short five-year panel structure, and indicates that observed variations reflect meaningful economic behavior rather than stochastic trends.

Table 3: Correlation Findings

	loutl	ldel	delr	lbca	lbsa	Laex	cc	nob	mp
Loutl	1.00								
Ldel	0.92***	1.00							
Delr	-0.18**	0.17**	1.00						
Lbca	-0.01	-0.09	-0.07	1.00					
Lbsa	-0.04	-0.04	0.10***	0.42***	1.00				
Laex	-0.03	0.01	0.23	0.57***	0.68***	1.00			
Cc	-0.05	-0.03	0.07	-0.10	0.00	-0.01	1.00		

		-	-						
Nob	-0.16**	0.24***	0.25***	0.24***	0.09	0.12	0.00	1.00	
		-	-						
Mp	-0.15**	0.22***	0.27***	0.19**	0.07	0.10	0.02	0.75***	1.00

Source: Authors, (2026)

Table 4 shows strong positive correlations between outstanding loans and delinquent loans ($r = 0.92$, $p < 0.01$), indicating larger loan volumes are associated with higher delinquency, while delinquency rate has a weak negative correlation with outstanding loans ($r = -0.18$, $p < 0.05$). Branch size and manpower are negatively correlated with all loan indicators, suggesting broader networks and staffing reduce delinquency and improve performance (nob with $r = -0.24$, $p < 0.01$). Governance variables like audit expenses correlate strongly with board allowances, indicating internal linkages, but variables such as board sitting allowances show limited direct influence on loan performance (Ghozali, 2005). Overall, larger branch networks and staffing capacity are associated with better loan outcomes and lower delinquency levels.

4.1.2 Regression Findings**Table 4: Regression Findings Using Indices**

VARIABLES	(1) loutl	(2) ldel	(3) delr	(4) loutl	(5) ldel	(6) delr
BFG	-0.786 (0.604)	-1.120** (0.531)	0.00572 (0.0625)			
ERMG	0.826** (0.387)	0.00607 (0.232)	-0.387*** (0.0940)			
SOG	-0.441 (1.037)	-0.451 (1.277)	0.0265 (0.0668)			
CGM				-0.152** (0.0724)	-0.140* (0.0762)	-0.0285*** (0.00944)
CC	-0.00336*** (0.00117)	-0.00145 (0.00147)	0.000754 (0.000528)	-0.00391*** (0.000724)	-0.00180 (0.00128)	0.000560 (0.000583)
NOB	-0.0330 (0.0208)	-0.0366 (0.0313)	0.000240 (0.00199)	-0.0441*** (0.00495)	-0.141*** (0.0365)	3.45e-05 (0.00115)
MP	0.000963 (0.00311)	-0.00231 (0.00460)	-0.00196*** (0.000503)	-0.000576 (0.000784)	0.0115** (0.00584)	-0.00172*** (0.000250)
Constant	19.84***	19.33***	0.608***	19.92***	19.40***	0.576***

	(0.218)	(0.272)	(0.0333)	(0.0255)	(0.115)	(0.0182)
Observations	155	155	155	155	155	155
Wald chi2(6)	148.25	209.50	72.42			
Wald chi2(4)				250.97	317.72	56.67
R-squared	0.977	0.976	0.756	0.9972	0.983	0.7502
Number of id	31	31	31	31	31	31

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Author, (2026)

Table 3's PCA-based governance indices reveal mixed effects on loan performance, with ethical and risk management governance (ERMG) positively influencing outstanding loans and significantly reducing delinquency severity, while Board Financial Governance and Shareholder-Oriented Governance show limited or negative impacts. The composite credit management index (CGM) consistently decreases outstanding loans, delinquent loans, and delinquency rate, indicating that integrated governance promotes prudent risk management. Branch network size and manpower also significantly influence lending and delinquency, with decentralization reducing risk and staffing improving loan supervision. The models demonstrate high explanatory power, especially with CGM, and all predictors are jointly significant, emphasizing the critical role of comprehensive governance in microfinance performance.

4.1.3: Post Estimation Tests**Table 5: Autocorrelation Findings**

Dependent Variable	Wooldridge test
Outstanding Loans	52.491***
Delinquent Loans	74.368***
Delinquent Rate	7.413**

Source: Authors (2026)

Table 5 presents the Wooldridge test results for first-order autocorrelation, revealing significant serial correlation across all measures of loan performance in relation to corporate governance practices. Outstanding loans and delinquent loans exhibit strong autocorrelation, with test statistics of 52.491 ($p < 0.01$) and 74.368 ($p < 0.01$), respectively, indicating that past levels of lending and

delinquency, influenced by corporate governance mechanisms such as oversight and risk management, significantly affect current performance outcomes. The delinquency rate also demonstrates statistically significant autocorrelation, though to a lesser extent (test statistic = 7.413, $p < 0.05$), suggesting it is somewhat dependent on previous trends but may also be more sensitive to recent changes in governance practices or external factors. These results underscore the importance of accounting for autocorrelation when analyzing the impact of corporate governance practices on loan performance, as ignoring this time dependency could lead to biased estimates and unreliable conclusions about the effectiveness of governance mechanisms in influencing loan outcomes.

Table 6: Heteroskedasticity Findings

Dependent Variable	Wald Test	Modified Wald test for groupwise heteroskedasticity
Outstanding Loans	158.2525***	336.01***
Delinquent Loans	125.6014***	335.99***
Delinquent Rate	81.7184***	8.5e+06***

Source: Authors (2026)

In table 6, the heteroskedasticity test results indicate significant variability in the residuals across the different measures of loan performance, such as outstanding loans, delinquent loans, and delinquent rate, as evidenced by the highly significant Wald and Modified Wald tests ($p < 0.001$). These findings suggest that the variance of errors is not constant, which may affect the reliability of regression estimates related to corporate governance practices and loan performance. Specifically, the presence of heteroskedasticity implies that the relationship between corporate governance practices such as; board oversight, transparency and accountability on loan performance metrics could be subject to variability that standard errors may not fully capture. Therefore, it is essential to account for heteroskedasticity in the analysis to ensure valid inference about how corporate governance influences loan outcomes, as ignoring this issue might lead to biased or inefficient estimates, potentially overstating or understating the true impact of governance practices on loan performance.

4.2 Discussion of Findings

This study confirms that corporate governance significantly influences loan performance among member-owned microfinance institutions in Northwest Region of Cameroon, aligning with

theoretical frameworks such as agency theory which emphasizes oversight to mitigate opportunistic behaviour (Jensen & Meckling, 1976). Strong governance mechanisms including active boards, effective credit committees, risk management, and transparency improve repayment rates and reduce non-performing assets, especially in fragile economic conditions (Mersland & Strøm, 2010; Mallin, 2019). Effective oversight enhances internal controls and enables proactive risk responses, aligning with findings by Florio & Leoni (2017) and Nkwati *et al* (2025). Transparency and accountability foster stakeholder trust and promote disciplined lending, while weak governance fosters mismanagement and delinquency (Cull *et al.*, 2009; Nkwati *et al.* 2017). The results also reflect stakeholder theory, where responsible governance involving social responsibility and client protection improves borrower trust and institutional legitimacy (Freeman, 1984). Additionally, better governance enhances the intermediation role of MFIs, reducing information asymmetry and transaction costs (Diamond, 1984). Overall, governance quality is crucial for safeguarding resources, ensuring prudent lending, and optimizing loan outcomes amid socio-political and economic challenges.

5. Conclusion and Policy Recommendations

5.1 Conclusion

This study confirms that strong corporate governance significantly improves loan performance in member-owned microfinance institutions in Northwest Cameroon by enhancing oversight, transparency, and internal controls (Jensen & Meckling, 1976; Florio & Leoni, 2017). Effective governance mechanisms such as active boards and risk management reduce non-performing assets and foster stakeholder trust (Mersland & Strøm, 2010; Cull *et al.*, 2009). The findings align with stakeholder theory by emphasizing social responsibility and client protection to strengthen borrower trust (Freeman, 1984). Good governance also enhances the intermediation role of MFIs by reducing information asymmetry (Diamond, 1984). Overall, governance quality is vital for safeguarding resources and improving loan outcomes amid socio-economic challenges.

Based on the findings, microfinance institutions should prioritize strengthening their governance structures by establishing active and independent boards that regularly oversee lending activities and enforce accountability. They should invest in comprehensive staff training programs to improve credit assessment, risk management, and internal controls, ensuring staff are well-equipped to detect and address early signs of delinquency. Enhancing transparency through clear financial reporting, regular audits, and stakeholder communication can build trust and promote disciplined lending. Expanding branch networks and staffing capacity can improve outreach and loan supervision, reducing delinquency rates. Implementing formal risk management frameworks and monitoring mechanisms will allow institutions to proactively respond to external shocks and socio-political risks. Finally, integrating social responsibility and client protection principles into policies can foster borrower trust and long-term institutional sustainability.

From the above facts, we can therefore conclude that strengthening corporate governance within microfinance institutions is essential for improving loan performance and ensuring financial sustainability, especially in fragile economic contexts like Northwest Cameroon. Practical steps include establishing independent and active boards, investing in staff training and risk management systems, and promoting transparency through regular auditing and clear reporting. Enhancing stakeholder engagement and integrating social responsibility principles can also build borrower trust and institutional legitimacy. Additionally, decentralizing branch networks and staffing can improve oversight and reduce delinquency. By focusing on these actionable governance improvements, microfinance institutions can better manage risks, optimize loan outcomes, and contribute to broader economic development in their communities.

5.2 Policy Implications

The findings of this study highlight the critical importance of strengthening corporate governance practices within member-owned microfinance institutions (MFIs) to enhance loan performance and ensure institutional sustainability in fragile environments like Northwest Cameroon. Effective governance mechanisms such as; active and independent boards, robust internal controls, transparency, stakeholder engagement and comprehensive risk management have been shown to significantly reduce delinquency rates and non-performing assets. Policymakers and regulatory authorities should prioritize establishing and enforcing standards that promote good governance, including mandatory governance assessments and regular audits, to foster accountability and transparency within MFIs. Implementing these policies can help mitigate opportunistic behaviors, improve resource management, and create a more resilient microfinance sector capable of supporting inclusive financial development.

Given the positive influence of decentralizing branch networks and expanding staffing capacity on loan outcomes, policy efforts should also focus on promoting institutional expansion and capacity building. Governments and development partners could incentivize MFIs to extend their outreach through subsidies, technical assistance, and capacity-building programs that emphasize effective branch management and staff training. Such measures will enhance supervision, improve borrower assessment processes, and enable more proactive risk mitigation, especially in rural and underserved areas. Additionally, integrating social responsibility principles into governance frameworks will foster borrower trust and stakeholder legitimacy, ultimately leading to better loan recovery rates and long-term institutional stability.

Finally, the study highlights the necessity of adopting comprehensive risk management frameworks and promoting transparency through regular reporting and stakeholder communication. Policymakers should encourage MFIs to develop formalized risk assessment and monitoring systems aligned with international best practices. Establishing legal and regulatory provisions for mandatory disclosures, periodic financial reporting, and stakeholder engagement

can reinforce responsible lending practices and improve borrower confidence. These policy actions will not only reduce delinquency and default risks but also contribute to the broader goal of sustainable financial inclusion, economic resilience, and poverty alleviation within Cameroon's microfinance sector. By focusing on governance reforms, institutional capacity, and transparency, stakeholders can significantly strengthen the sector's contribution to economic development.

5.3 Limitations and Suggestions for Further Study

Despite the valuable insights generated by this study, certain limitations should be acknowledged. First, the study focused on selected member-owned microfinance institutions in Northwest Cameroon, which may limit the generalisability of the findings to MFIs in other regions or institutional contexts. Secondly, the study relied largely on self-reported data from MFI management and staff, which may be subject to response bias or inaccuracies despite efforts to ensure reliability and validity. Additionally, external factors such as socio-political instability and macroeconomic shocks, which may influence loan performance, were not fully controlled. These limitations suggest that while the findings are robust within the study's context, caution should be exercised when extending the conclusions beyond the sampled institutions.

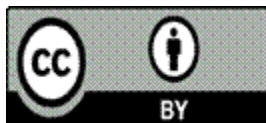
Based on the findings and limitations of this study, several areas for further research are suggested. Future studies could adopt a longitudinal research design to examine how changes in corporate governance and credit management practices influence loan performance over time. Expanding the scope of research to include MFIs in other regions of Cameroon or across different institutional categories would enhance the generalisability of findings. Further research may also explore the role of external factors such as regulatory enforcement, technological adoption, and socio-political conditions in shaping loan performance. In addition, qualitative studies could provide deeper insights into governance dynamics, decision-making processes, and borrower behaviour within MFIs. Such studies would complement quantitative findings and contribute to a more comprehensive understanding of loan performance determinants in microfinance institutions.

References

- Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31(3), 377–397.
- Aguilera, R. V., & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *The Academy of Management Review*, 28(3), 447–465.
- Bailey, M. N., & Katz, A. J. (2011). Panel corrected standard errors: An overview and applications. *The Stata Journal*, 11(4), 444–464.
- Baltagi, B. H. (2021). *Econometric analysis of panel data* (6th ed.). John Wiley & Sons.
- Berger, A. N., & DeYoung, R. (1997). Problem loans and cost efficiency in commercial banks. *Journal of Banking & Finance*, 21(6), 849–870.
- Cameroon National Institute of Statistics. (2020). *Cameroon demographic and health survey*.
- Clarke, T. (2007). *International corporate governance: A comparative approach*. Routledge.
- Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The Review of Economic Studies*, 51(3), 393–414.
- EUMed, M. (2019). Microfinance in Europe: An overview. *European Microfinance Network*.
- Federal Reserve. (2020). *Financial stability report*.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Ghozali, I. (2005). *Aplikasi analisis multivariate dengan program SPSS* (4th ed.). Badan Penerbit Universitas Diponegoro.
- Giné, X., & Mansuri, G. (2017). Local governance and microfinance: Experimental evidence from Pakistan. *The World Bank Economic Review*, 31(3), 583–603.
- Greene, W. H. (2012). *Econometric analysis* (7th ed.). Pearson Education.
- Hsiao, C. (2003). *Analysis of panel data* (2nd ed.). Cambridge University Press.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jolliffe, I. T. (2002). *Principal component analysis* (2nd ed.). Springer.
- Khandker, S. R., Bakht, Z., & Koolwal, G. B. (2013). *Handbook on impact evaluation: Quantitative methods and practices*. The World Bank.

- Kumar, S., & Patel, M. (2019). Corporate governance and credit risk management in microfinance institutions. *International Journal of Financial Management*, 9(2), 45–59.
- Kuria, M., & Karanja, F. (2021). Effect of corporate governance on loan performance in microfinance institutions in Kenya. *African Journal of Business Management*, 15(2), 54–68.
- Ledgerwood, J. (1999). *Microfinance handbook: An institutional and financial perspective*. The World Bank.
- Lee, S. (2020). Corporate governance and financial performance of microfinance institutions. *Journal of Financial Regulation and Compliance*, 28(4), 432–448.
- Mersland, R., & Strøm, R. O. (2009). Performance and governance in microfinance institutions. *Journal of Banking & Finance*, 33(4), 662–674.
- Mersland, R., & Strøm, R. O. (2010). Microfinance mission drift? *World Development*, 38(5), 662–674.
- Mishkin, F. S., & Eakins, S. G. (2012). *Financial markets and institutions* (7th ed.). Pearson Education.
- Morduch, J. (2000). The microfinance promise. *Journal of Economic Literature*, 38(4), 1569–1614.
- Munyaka, N., & Mugo, M. (2021). Corporate governance and loan repayment in microfinance institutions in Kenya. *International Journal of Finance & Banking Studies*, 10(2), 112–127.
- Ndebbio, N. (2016). Challenges of microfinance institutions in Cameroon. *African Development Review*, 28(3), 341–356.
- Njuguna, S., & Wainaina, S. (2022). Effect of corporate governance on loan performance in Kenyan microfinance institutions. *Journal of Business and Economics*, 14(1), 89–104.
- Nkwati, N. D., Sam, N. C., Sam, N. K., Watard, H., & Forgha, N. G. (2025). The Effect of Corporate Governance Practices on the Financial Stability of Selected Credit Unions in the North West Region of Cameroon. *African Development Finance Journal*, 8(6), 94-119.
- Nsoh, N. C., Kenmegni, G. R., Nkwati, N. D., & Forgha, N. G. (2024). The effect of capital adequacy on the financial performance of micro finance institutions in Bamenda, Cameroon. *Journal of Entrepreneurship, Management, Economics, and Business Administration*, 2(1), 27-34.
- Otieno, D., & Okoth, R. (2019). Impact of corporate governance on loan recovery in microfinance institutions in Kenya. *International Journal of Financial Research*, 10(3), 45–59.

- Rhyne, E., & Otero, M. (2006). Microfinance transactions: Issues and challenges. *The Journal of Microfinance*, 8(1), 7–24.
- Sam, N. C., Nkam, F. M., Nkwati, N. D., Sam, N. K., & Watard, H. (2025). The Effect of Risk Mitigation Practices on the Asset Quality of Some Selected Member-Owned Microfinance Institutions in the North West Region of Cameroon. *International Journal of Finance*, 10(5), 52-70.
- Sam, N. C., Nkwati, N. D., & Watard, H. (2025). Unravelling the Synergistic Effect of Institutional Resilience on Asset Quality; A Contemporary Outlook of Cameroon's Credit Unions. *International Journal of Finance*, 10(7), 30-49.
- Smith, J., & Jones, P. (2018). Governance practices and financial performance of microfinance institutions. *International Journal of Management and Economics*, 45(2), 78–92.
- VanderWeele, T. J. (2015). *Explanation in causal inference: Methods for mediation and interaction*. Oxford University Press.
- Yaron, J., & Strickland, K. (2017). The importance of early warning indicators in microfinance. *Microfinance Journ*



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al, 4(2), 33–45