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Assessing the Impact of Credit Risk on the Financial Performance of Commercial Banks in Nepal

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Abstract

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This study explores the impact of credit risk on the financial performance of Nepalese commercial banks, focusing on critical performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and liquidity ratios. The primary objective of this study is to evaluate the relationship between credit risk factors such as Non-Performing Loan Ratio (NPLR), Loan Loss Provision Ratio (LLPR), Capital Adequacy Ratio (CAR), and Credit Risk Ratio (CRR), and key financial metrics, and their influence on profitability and stability. Adopting a positivist research philosophy, the study employs a quantitative methodology using secondary data from the annual reports of commercial banks. The population consists of all commercial banks operating in Nepal, while a sample of seven banks was selected through the lottery method, a random sampling technique. Correlation and regression analyses were conducted to examine the relationships between the variables. The results disclose significant negative correlations between NPLR and both LAR and CAR, indicating adverse impacts of rising non-performing loans on asset leveraging and capital adequacy. Conversely, NPLR positively correlates with ROE, highlighting complex dynamics where banks with higher credit risks may achieve increased equity returns under certain conditions. Regression analysis indicates that LLPR and CRR negatively influence both ROA and ROE, whereas CAR positively impacts profitability. The findings highlight the critical importance of effective Credit Risk Management (CRM) in

enhancing financial performance. Banks must balance lending activities with risk management to maintain profitability and stability. The study concludes that robust CRM strategies are essential for mitigating credit risks and sustaining growth in Nepal's banking sector. These findings hold implications for policymakers, regulators, and practitioners aiming to strengthen the resilience of financial institutions in developing economies.

Keywords: *Commercial banks, credit risk, financial performance, Nepal, profitability.*

Introduction

The banking sector plays a pivotal role in fostering the economic development of a country by serving as a cornerstone for financial intermediation and resource allocation. Financial institutions, particularly banks, act as conduits for channeling funds from savers to borrowers, thereby supporting the economy's real growth (Chhetri, 2021). However, banking inherently involves risk-taking, a fundamental aspect of financial intermediation. The inability to adequately assess and manage these risks can lead to significant losses, potentially jeopardizing the stability of individual institutions and the broader financial system (Nepal Rastra Bank, 2018). As banks adapt to evolving economic environments, they encounter various risks that can impede their operations and performance, making risk management an indispensable aspect of their functioning (Santomero, 1997). Among the myriad risks faced by banks, credit risk is particularly significant due to its direct impact on profitability and operational sustainability. Credit risk arises when borrowers fail to meet their debt obligations, either through default or delayed payments. This risk is a major challenge for banks as it directly affects their revenue streams, primarily derived from interest earned on loans and advances (Boland, 2012). Effective credit risk management (CRM) is crucial for ensuring a bank's profitability, financial health, and long-term growth (Li & Zou, 2014). Banks that fail to manage credit risks adequately expose themselves to heightened bankruptcy risks, which can undermine depositor confidence and destabilize the financial ecosystem. The significance of CRM extends beyond individual institutions to encompass the broader banking sector. The Basel Accords 1999, a global regulatory framework, identifies credit risk as one of the three fundamental risks, alongside market and operational risks, that financial institutions must address (Jobst, 2007). Credit risk is not only external, stemming from borrower defaults, but also internal, often caused by managerial inefficiencies, poor credit standards, and inadequate oversight (Mwaurah, 2013). The consequences of mismanaging credit risks are severe, including an increase in non-performing loans (NPLs), which reduce profitability and threaten

the viability of banking operations (Bhattarai, 2016).

In Nepal, the banking sector is a vital component of the economy, with commercial banks playing a central role in credit creation and financial intermediation. However, the sector faces challenges in managing credit risks effectively, given the dynamic economic environment and the diverse nature of its loan portfolios (Thapa & Sejuwal, 2023). Credit risk management is a multifaceted process involving the identification, measurement, monitoring, and mitigation of risks associated with lending activities. Effective CRM strategies ensure that banks maintain adequate capital buffers, manage loan portfolios prudently, and mitigate the impact of credit defaults (Botchwey, 2023). In this context, performance evaluation serves as a critical tool for stakeholders, including regulators, investors, and depositors, to assess the health and efficiency of banks (Tadele, 2021). The CAMEL framework provides a comprehensive approach to evaluating bank performance, considering factors such as the return on assets (ROA), return on equity (ROE), NPL ratios, and liquidity ratios.

The study explores the role of non-performing loans and loan loss provisions in shaping the profitability and sustainability of Nepalese commercial banks. NPLs represent a significant challenge for banks, as they not only reduce income but also increase the cost of maintaining provisions. High NPL ratios indicate poor asset quality, which can erode stakeholder confidence and destabilize the financial system (Baral, 2005). Conversely, effective management of loan portfolios and provisions can enhance profitability and ensure the long-term sustainability of banking operations (Ogboi et al., 2013). Furthermore, the study investigates the interplay between credit risk and other financial risks, such as liquidity and market risks. Banks must adopt a holistic approach to risk management, accounting for the interactions between various risk types and their cumulative impact on performance (Odawo et al., 2019). By focusing on key performance indicators, such as the capital adequacy ratio (CAR), credit-to-deposit ratio, and risk sensitivity, the study aims to provide actionable recommendations for improving credit risk management practices in Nepalese commercial banks.

The primary objective of this research is to examine the impact of CRM on the financial performance of Nepalese commercial banks. Specifically, the study evaluates the structure and patterns of key performance indicators, such as ROA, ROE, and liquidity ratios, and analyzes their relationship with credit risk factors. The rationale for this study lies in the critical importance of CRM for the stability and growth of the banking sector. In Nepal, the banking industry is characterized by a diverse range of players, each facing unique challenges in managing credit risks. The findings of this study are expected to provide valuable insights

for banks, regulators, and policymakers, enabling them to adopt best practices in CRM and enhance the resilience of the financial system. Moreover, the study contributes to the existing body of literature by providing empirical evidence on the relationship between CRM practices and bank performance in the Nepalese context. Despite its contributions, the study acknowledges certain limitations. It focuses on a subset of Nepalese commercial banks, limiting the generalizability of its findings to the entire sector. Additionally, the analysis is based on a specific timeframe, which may not capture the long-term dynamics of credit risk management. Future research could address these limitations by incorporating a broader sample of banks and extending the analysis over a longer period.

Credit risk management is integral to the financial health and performance of commercial banks, particularly in developing economies like Nepal. Effective credit risk management minimizes potential financial losses by identifying, measuring, monitoring, and mitigating risks inherent in loan portfolios. Poudel (2012) emphasized the importance of robust credit risk models to optimize risk-adjusted returns, while Moti et al. (2012) noted that the process extends until full loan recovery. The Merton Theory of Credit Risk Assessment, developed by Merton (1974), provides a foundational framework for understanding credit risk. It encompasses structural and reduced-form models. Structural models assess a firm's capital structure to predict default based on economic fundamentals, while reduced-form models treat default as an external, unpredictable factor. Hybrid models, integrating these approaches, address limitations in traditional methods, enabling a more comprehensive risk assessment. The CAMELS framework offers a multi-dimensional approach to evaluating bank performance by analyzing Capital Adequacy, Asset Quality, Management Efficiency, Earnings Ability, Liquidity, and Sensitivity (Alzayed et al., 2023). Capital Adequacy gauges a bank's solvency and risk-bearing capacity, aligning with Basel Accords' international standards. Basel I and II emphasize adequate capital levels to mitigate credit risks, with Nepal Rastra Bank mandating minimum core capital at 6% and total capital fund at 11%. Asset quality, a critical determinant of profitability, evaluates credit risk in loan and investment portfolios (Kadioglu et al., 2017). Poor-quality assets, including non-performing assets (NPAs), undermine financial performance. Management quality, as per Grier (2007), is pivotal in ensuring effective risk identification and control mechanisms. Earnings sustainability and liquidity management are additional pillars influencing banks' resilience and ability to meet obligations.

Credit risk management has been extensively studied to understand its influence on the performance and profitability of commercial banks (Pradhan & Shrestha, 2017) emphasized

the the impact of capital adequacy and bank operating efficiency on financial performance of Nepalese commercial banks. The study revealed that primary factors influencing the financial success of Nepal's commercial banks are the ratio of total deposits to total assets and the efficiency of bank operations. The financial performance of commercial banks is greatly enhanced by bank operational efficiency, loan ratio, total deposit to total assets, and loan loss provision to total equity. The financial performance of Nepalese commercial banks is negatively impacted by loan loss provision to total loan, core capital ratio, risk weighted ratio, and total capital ratio. Bhattarai (2016) analyzed the impact of credit risk on bank performance, concluding that non-performing loan ratios (NPL) had a negative impact, while cost-per-loan assets positively influenced profitability, demonstrating the efficiency of loan distribution. Similarly, Bhattarai (2019) extended this analysis and identified significant relationships between credit risk indicators like capital adequacy ratio (CAR), NPL, and profitability indicators like return on assets (ROA), reinforcing the importance of effective risk management in Nepalese banks.

Shah and Pradhan (2019) explored the relationship between credit risk management practices and loan repayment, finding a positive correlation with mitigation measures. Their research provided insights for managers to design sustainable credit risk management models. Chhetri (2021) highlighted the need for scientific credit risk management to enhance loan management and minimize the adverse effects of NPLs on financial performance. Bagale (2023) further emphasized the critical role of credit risk management in influencing profitability, identifying factors such as liquidity ratios and capital adequacy ratios as key determinants. The study also noted the challenges of maintaining an optimal balance between risk and profitability, stressing the need for robust risk assessment frameworks. International studies corroborate these findings. Gizaw et al. (2015) concluded that credit risk indicators like NPLR and CAR significantly affect profitability in Ethiopian banks. Isanzu (2017) identified similar trends in Chinese banks, where credit risk indicators impacted financial performance. In South Africa, Munangi et al. (2020) found a negative relationship between credit risk and financial performance, highlighting the importance of managing NPLs to enhance profitability. Siddique et al. (2022) extended this analysis to South Asia, demonstrating that credit risk factors such as NPLs and CAR have significant effects on financial performance metrics like ROA and ROE. These studies underline the universal relevance of credit risk management while emphasizing regional and institutional differences in its impact.

Although credit risk management and its influence on financial performance have been widely studied, significant gaps remain, particularly in the Nepalese context. Most

studies focus on general credit risk indicators like NPLs and CAR but fail to capture the comprehensive dynamics of risk management practices in Nepalese commercial banks. Limited research has been conducted to analyze the specific determinants of profitability in these banks, often relying on small sample sizes and narrow time frames. Additionally, while international studies provide valuable insights, their findings are not always directly applicable to Nepal due to differences in economic environments, regulatory frameworks, and institutional capabilities. This gap highlights the need for focused research that evaluates credit risk management practices tailored to the unique challenges faced by Nepalese banks. Comprehensive studies with larger samples, extended timelines, and advanced methodologies are essential to provide actionable insights. Addressing these gaps will not only enhance understanding but also support the development of effective strategies to improve financial performance and resilience in Nepalese commercial banks.

Method of Data Collect and Analysis

This study employed a positivist philosophy with causal-comparative research designs to examine the relationship between credit risk indicators and the performance of Nepalese commercial banks. The causal-comparative approach assessed whether credit risk indicators could predict performance metrics such as Return on Assets (ROA) and Return on Equity (ROE). This study adopted a random sampling strategy to select banks from the population of 20 'A' class commercial banks regulated by Nepal Rastra Bank (NRB). Using the lottery method, seven banks were chosen to represent the sample for the period from 2012/13 to 2021/22. The selected banks include Nabil Bank Limited, Standard Chartered Bank Limited, Himalayan Bank Limited, Global IME Bank Limited, Agriculture Development Bank Limited, Siddhartha Bank Limited, and Machhapuchchhre Bank Limited. The nature of data was quantitative and secondary sources were used, including NRB directives, annual reports of the selected banks, and NRB's Statistics and Bank Supervision reports. Quantitative methods were employed to quantify the relationships and impact between variables, utilizing financial tools such as Non-Performing Loan Ratio (NPLR), Loan Loss Provision Ratio (LLPR), Loan and Advance Ratio (LAR), Capital Adequacy Ratio (CAR), Liquidity Ratio (LR), ROA, and ROE. Statistical tools such as correlation and regression analysis were applied, with the regression model defined as:

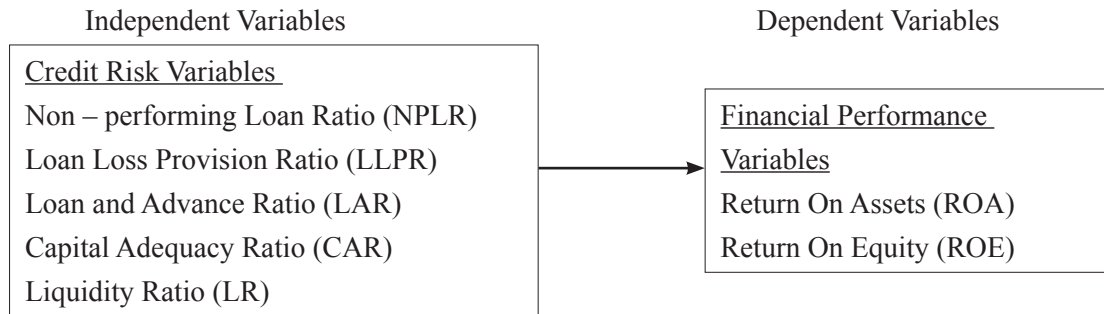
$$ROA = \alpha + \beta_1 \text{NPLR} + \beta_2 \text{LLPR} + \beta_3 \text{LAR} + \beta_4 \text{CAR} + \beta_5 \text{LR} + e$$

$$ROE = \alpha + \beta_1 \text{NPLR} + \beta_2 \text{LLPR} + \beta_3 \text{LAR} + \beta_4 \text{CAR} + \beta_5 \text{LR} + e.$$

This methodology provided a strong framework to analyze the influence of credit risk indicators on the performance of Nepalese commercial banks. The conceptual framework used in this study is as:

Figure 1

Conceptual Framework



Results

This section presents the results from inferential including correlation and regression analysis systematically and presents the findings.

Table 1 presents the correlations between various financial metrics of seven commercial banks in Nepal, aiming to elucidate the impact of credit risk on their financial performance. The metrics analyzed include Non-Performing Loan Ratio (NPLR), Loan to Asset Ratio (LAR), Loan Loss Provision Ratio (LLPR), Capital Adequacy Ratio (CAR), Cost to Benefit Ratio (CBR), Cash Reserve Ratio (CRR), Return on Assets (ROA), and Return on Equity (ROE).

Table 1

Pearson’s correlation coefficients matrix for the dependent and independent variable of Nepalese commercial banks for the selected period of 2011/12 to 2020/21.

	NPLR	LAR	LLPR	CAR	CBR	CRR	ROA	ROE
NPLR	1							
LAR	-.714*	1						
Sig.	0.020							
LLPR	0.508	-0.229	1					
Sig.	0.134	0.524						
CAR	-.834**	.867**	-0.216	1				
Sig.	0.003	0.001	0.549					
CBR	-0.580	0.452	-0.247	0.416	1			
Sig.	0.079	0.190	0.492	0.232				

CRR	.813**	.782**	0.396	-.648*	-0.360	1		
Sig.	0.004	0.008	0.258	0.043	0.307			
ROA	0.085	-0.390	-0.570	-0.305	-0.438	0.082	1	
Sig.	0.814	0.265	0.085	0.391	0.205	0.821		
ROE	.775**	-.676*	0.077	-.764*	-.812**	0.502	0.571	1
Sig.	0.008	0.032	0.832	0.010	0.004	0.139	0.085	

Note: Data sources from annual reports of respective banks

A key observation is the significant negative correlation between NPLR and both LAR and CAR. This indicates that as the ratio of non-performing loans increases, there is a corresponding decrease in the loan to asset ratio and capital adequacy ratio. This relationship suggests that higher levels of non-performing loans, which signify higher credit risk, adversely impact the bank’s ability to leverage its assets and maintain sufficient capital. Conversely, NPLR shows a significant positive correlation with CRR and ROE, implying that higher non-performing loans are associated with increased cash reserves and return on equity. This could indicate that banks with higher credit risk might be holding more liquid assets as a precaution, and despite the risk, are able to generate higher returns on equity. There is significant negative correlation with NPLR (-.835, -.813, -.775, -.714) on CAR, CARR, ROE and LAR respectively.

The Loan to Asset Ratio (LAR) exhibits a strong positive correlation with the Capital Adequacy Ratio (CAR), highlighting that banks with higher loan to asset ratios tend to maintain better capital adequacy. However, LAR is negatively correlated with both CRR and ROE, indicating that as banks allocate more of their assets to loans, their cash reserves and return on equity tend to decrease. This underscores the balancing act banks must perform between lending and maintaining liquidity. CAR also shows a negative correlation with CRR, suggesting that higher capital adequacy is associated with lower cash reserves. This relationship may reflect a strategic choice by banks to allocate less capital to liquid assets in favor of other forms of capital that improve their adequacy ratios. Additionally, the Cost to Benefit Ratio (CBR) has a significant negative correlation with ROE, indicating that higher operational costs relative to benefits result in lower returns on equity.

Retain on ROA

A regression analysis was conducted to analyze the return on assets (ROA). Estimated regression result on impact of NPLR, LLPR, LAR, CAR and CRR on Return on Assets (ROA) is calculated by using the following equation and the result is presented in table 2.

$$ROA = \alpha + \beta1 NPLR + \beta2LLPR + \beta3LAR + \beta4 CAR+ \beta5 CRR+ e$$

Table 2

Impact of NPLR, LLPR, LAR, CAR and CRR on ROA

Variable	Unstandardized Coefficients		Std. Coef. Beta	t	VIF Value
	B	Beta			
Constant	10.890	2.997		3.634	
LAR	-.109	.043	-1.862	-2.519	9.037
CAR	.344	.180	1.693	1.912	9.283
NPLR	.851	.418	1.703	2.036	1.875
CRR	-.161	.080	-1.268	-2.009	9.422
LLPR	-1.329	.390	-.995	-3.411	8.775

a. Predictors: (Constant), LLPR, CAR, CRR, LAR, NPLR

b. Dependent Variable: ROA

R Square = 0.818

Adjusted R Square = 0.592

F = 3.067

The regression analysis examining the impact of various financial ratios on the Return on Assets (ROA) of Nepalese commercial banks provides valuable insights into the relationships and influences of these ratios. The model, with an R Square of 0.818 and an Adjusted R Square of 0.592, explains 81.8% of the variability in ROA, indicating a relatively strong predictive power, though there is room for improvement in the model fit. The analysis highlights the effects of the Loan & Advances Ratio (LAR), Capital Adequacy Ratio (CAR), Non-Performing Loan Ratio (NPLR), Credit Risk Ratio (CRR), and Loan Loss Provision Ratio (LLPR) on the ROA. The LAR has an unstandardized coefficient of -0.109, suggesting an increase in the loan and advances ratio reduces the ROA. The negative t-value -2.519 indicates a significant negative impact, with a VIF 9.037 indicating suggests minimal multicollinearity for this variable. The CAR shows a positive unstandardized coefficient (0.344), implying that a higher capital adequacy improves ROA, whereas a unit increase in CAR leads to a 0.344 increase in ROA. The t-value of 1.912 indicates marginal significance, but the VIF value less than 10 indicates suggests minimal multicollinearity for this variable, i.e. no potentially affecting the stability of this coefficient.

The NPLR, with a coefficient of 0.851, positively impacts ROA, indicating that better management of non-performing loans enhances profitability. The t-value of 2.036 confirms its significance, and the relatively low VIF of 1.875 suggests minimal multicollinearity for this variable. The CRR has a negative coefficient of -0.161, indicating that higher credit risk decreases ROA, with a t-value of -2.009 showing significance. However, the high VIF of 9.422

suggests minimal multicollinearity for this variable. The LLPR negatively impacts ROA with a coefficient of -1.329, suggesting that higher loan loss provisions reduce profitability. The t-value -3.411 highlights its significance, and the VIF 8.775 indicates some multicollinearity. The t-values for these coefficients underscore their statistical significance, with LAR -2.519, CAR 1.912, NPLR 2.036, CRR -2.009, and LLPR -3.411 all showing relevance in the model. However, the high VIF values for LAR 9.037, CAR 9.283, and CRR 9.422 suggest some multicollinearity among these predictors, indicating that these ratios are interrelated, however, the value less than 10 is acceptable in interpreting their impacts.

The overall regression model is statistically significant, as indicated by the F-statistic 3.067. This confirms that the selected predictors collectively influence the ROA. The findings imply that effective management of these financial ratios is crucial for enhancing bank performance. For instance, maintaining an optimal level of loans and advances, ensuring adequate capital, effectively managing non-performing loans, controlling credit risk, and setting appropriate loan loss provisions are essential strategies for improving profitability.

Estimation of ROE on NPLR, LLPR, LAR, CAR and CRR

Estimated regression result on impact of NPLR, LLPR, LAR, CAR and CRR on Return on Equity (ROE)

$$ROE = \alpha + \beta_1 NPLR + \beta_2 LLPR + \beta_3 LAR + \beta_4 CAR + \beta_5 CRR + e$$

Table 3

Impact of NPLR, LLPR, LAR, CAR and CRR on ROE

Variable	Unstandardized Coefficients		Std. Coef. Beta	t-value	VIF Value
	B	Beta			
Constant	83.409	5.630		14.816	
LAR	-0.850	0.081	-1.555	-10.448	9.037
CAR	2.964	0.338	1.566	8.780	9.283
NPLR	11.574	0.785	2.482	14.736	9.422
CRR	-1.754	0.151	-1.473	-11.593	8.775
LLPR	-7.713	0.732	-0.619	-10.539	1.875

a. Predictors: (Constant), LLPR, CAR, CRR, LAR, NPLR

b. Dependent Variable: ROE

R Square = 0.993

Adjusted R Square = 0.983

F = 107.898

The analysis of the impact of various financial ratios on the Return on Equity (ROE) of Nepalese commercial banks reveals significant insights into the relationships and influences these ratios exert. The model, with an R Square of 0.993 and an Adjusted R Square of 0.983, demonstrates an excellent fit, explaining 99.3% of the variability in ROE, thus indicating a strong predictive power of the selected financial ratios. The regression analysis highlights that the Loan & Advances Ratio (LAR), Capital Adequacy Ratio (CAR), Non-Performing Loan Ratio (NPLR), Credit Risk Ratio (CRR), and Loan Loss Provision Ratio (LLPR) collectively have a profound impact on the performance of commercial banks in terms of ROE. Specifically, the LAR has a negative unstandardized coefficient -0.850, indicating that an increase in the loan and advances ratio reduces the ROE. This suggests that while loans and advances are essential for bank profitability, excessive levels may lead to diminishing returns. Conversely, the CAR shows a positive unstandardized coefficient 2.964, suggesting that higher capital adequacy improves bank performance by enhancing stability and reducing risk. Similarly, the NPLR, with a coefficient of 11.574, positively impacts ROE, indicating that effective management of non-performing loans can substantially boost bank profitability.

The CRR has a negative coefficient -1.754, reflecting that higher credit risk reduces profitability, underscoring the importance of maintaining a prudent risk management framework. The LLPR also negatively impacts ROE with a coefficient of -7.713, suggesting that higher provisions for loan losses, while necessary for risk mitigation, can decrease overall profitability. The t-values for these coefficients further substantiate their significance, with LAR -10.448, CAR 8.780, NPLR 14.736, CRR -11.593, and LLPR (-10.539) all showing strong statistical relevance. However, the high Variance Inflation Factor (VIF) values for LAR 9.037, CAR 9.283, and NPLR 9.422 indicate some multicollinearity among these predictors. This multicollinearity can distort the estimated coefficients and suggests that these ratios are interrelated, however, a VIF value of less than 10 is acceptable in interpreting their impacts.

The overall regression model is statistically significant, as indicated by the F-statistic 107.898. This confirms that the selected predictors collectively influence the ROE. The findings imply that effectively managing these financial ratios is crucial for enhancing bank performance. For instance, maintaining an optimal level of loans and advances, ensuring adequate capital, effectively managing non-performing loans, controlling credit risk, and setting appropriate loan loss provisions are critical strategies for improving profitability.

Discussion

The findings from the correlation and regression analyses provide crucial insights into the relationships between financial ratios and the financial performance of Nepalese commercial banks, as measured by Return on Assets (ROA) and Return on Equity (ROE). These results are contextualized within the broader literature, shedding light on both alignments and deviations. The correlation analysis reveals a negative relationship between the Non-Performing Loan Ratio (NPLR) and metrics such as the Loan to Asset Ratio (LAR) and Capital Adequacy Ratio (CAR). This suggests that higher credit risk adversely affects asset utilization and capital adequacy, consistent with Bagale (2023), who emphasized the detrimental effects of credit risk on asset management. Similarly, Baral (2005) and Bhattarai (2016) highlighted that increasing non-performing loans often diminish the efficiency of resource allocation and capital adequacy. However, a significant positive correlation between NPLR and ROE found in this study contrasts with findings by (Ghosh, 2015; Gizaw et al., 2015), which reported a predominantly negative impact of non-performing loans on profitability. This discrepancy may reflect unique credit risk management practices within Nepalese banks, as also suggested by (Thapa & Sejuwal, 2023).

Regression analysis further corroborates these findings. LAR was observed to negatively impact ROA, indicating diminishing returns from excessive lending. This aligns with prior studies such as Al-Tamimi and Obeidat (2013), Shah and Pradhan (2019), which emphasized the need for prudent asset allocation to ensure profitability. The positive influence of CAR on ROA observed in this study supports (Berger & Bouwman, 2013), as well as Bhattarai (2019), both of which underscore the stabilizing role of higher capital adequacy in volatile financial environments. Contrastingly, the positive relationship between NPLR and ROA diverges from studies by (Rashid et al., 2020; Moti et al., 2012), which highlighted increased provisioning and operational costs associated with rising non-performing loans. This difference might be attributable to adaptive strategies employed by Nepalese banks, as discussed by Chhetri (2022).

The predictors collectively explain 99.3% of the variability in ROE, highlighting their profound influence. Similar to ROA, CAR positively impacts ROE, reiterating its critical role in ensuring financial stability and profitability, as noted by (Pradhan & Shrestha, 2017). Conversely, the negative effect of LAR on ROE highlights the risks of aggressive lending practices, aligning with findings from (Poudel, 2012; Kadioglu et al., 2017).

While the findings are consistent with some existing studies, deviations, particularly the

positive impact of NPLR on ROA and ROE, underscore the unique banking environment in Nepal. This may reflect the effectiveness of credit risk management practices and regulatory frameworks tailored to the Nepalese context (Nepal Rastra Bank, 2018). The adaptive strategies of Nepalese banks in leveraging non-performing loans to mitigate adverse impacts on financial performance further differentiate these findings, as highlighted by Santomero (1997) and Boland (2012). These results contribute theoretically to how financial ratios impact the performance of commercial banks, providing valuable insights for stakeholders in Nepal's banking sector. Future research could explore the interplay of these factors in different macroeconomic contexts to validate and extend these findings.

Conclusion

This research study is conducted especially to investigate the impact on the performance of commercial banks in Nepal. The study is conducted using the sample of seven commercial banks operating in the Nepalese economy i.e. NABIL, SCBL, HBL, ADBL, GBIME, SBL and MBL. During the study period of the concerned sample banks, certain conclusions have been derived after analyzing the financial as well as statistical tools on behalf of different aspect of this study.

According to this study, ROA has a positive correlation with ROE, NPLR, and LAR and a negative correlation with LLPR, CAR, and CRR. Positive relationships exist between ROE and the NPLR, LLPR, and CRR, and negative relations with LAR and CAR. The investigation also discovered a link between profitability and credit risk management. According to the regression analysis, CAR and ROA have a major detrimental effect on commercial banks. The research indicates a negative significant relationship between the LLPR and ROE. The computed regression table demonstrates that the NPLR and ROE beta coefficients are positive and significant.

Following data analysis, the researcher concluded that NPLR, LLPR, and LAR had positive correlations with ROA but negative correlations with CAR and CRR, and that NPLR and LLPR had positive correlations with ROE but negative correlations with LAR, CAR, and CRR. According to the regression results, there is a considerable beneficial impact of NPLR and LAR on ROA, LLPR, CAR, and CRR and a negative impact on commercial banks ROA of Nepalese commercial banks. NPLR and LAR have significant and positive impacts on bank's ROE, LLPR, CAR, and CRR have negative and significant impacts on bank's ROE.

The study examined the relationship between the financial performance and credit

risk factors that affect the profitability of Nepalese commercial banks. This study provides research in future days ahead which can be taken in terms of data, model, and approach. The study's findings hold significant policy implications, particularly for the financial sector in Nepal. Policymakers can use these insights to develop targeted strategies and regulations aimed at enhancing risk management practices in commercial banks. For institutions within the financial sector, such as commercial banks, insurance firms, development banks, and microfinance institutions, the study's implications are crucial. Institutions can use these findings to strengthen their risk management frameworks, particularly by addressing credit risk, foreign currency risk, human resource risk, and other identified factors. From an academic perspective, this study provides a foundation for future research endeavors. Academics can build upon these findings by conducting more in-depth analyses using larger sample sizes and longer time periods. Exploring the preferences of different investors and stakeholders can also enrich the academic discourse on risk management and financial performance.

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