

A Comparative Analysis of Credit Performance Between Nabil Bank Limited and Nepal Bank Limited

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Abstract

This study conducts a comprehensive comparison of the credit performance of NABIL Bank Limited and Nepal Bank Limited, with a focus on analyzing the impact of specific credit variables on their profitability. The research uses financial instruments to enhance the effectiveness and educational value of the investigation. Through descriptive and analytical research, the study examines how credit-specific factors influence the profitability of both banks. The study utilizes various quantitative factors, including Return on Assets (ROA), Return on Equity (ROE), Loan and Advance to Total Deposit, Loan Loss Provision to Loan and Advance, Non-Performing Loan to Loan and Advance (NPLLA), and Loan Loss Provision to Non-Performing Loan (LLPNPL). It employs correlation and linear multiple regression analysis on secondary data spanning a ten-year period from 2010/11 to 2019/20. The significance of these relationships is tested at a 95% level of significance. The findings reveal that the variables used in the study are more effective in explaining the ROA for NABIL Bank Limited compared to Nepal Bank Limited, as indicated by the higher R2 value for NABIL Bank Limited. Notably, NPLA and LLPNPL have the most positive impact on NABIL Bank Limited's ROA, even though they are statistically insignificant at the 5% level. Conversely, LLPLA and LLPNPL have the most negative impact on the profitability of Nepal Bank Limited, but they also show insignificance at the 5% level of significance.

Keywords: Credit, Credit performance, Loan and advance, Non-Performing loan, Return on assets

1. Introduction

Banks play a crucial role in borrowing and lending, attracting money through deposits and providing loans to individuals, businesses, and governments. The study focuses on two Nepalese banks, Nabil Bank Limited and Nepal Bank Limited, analyzing their credit performance and the effects of specific credit variables on profitability. Credit risk management is vital for banks to optimize risk, return, and credit exposure and safeguard against adverse impacts. The study aims to explore the relationship between private sector credit and economic development in Nepal, emphasizing the importance of effective credit

risk management for financial stability and economic growth. In this study, the focus is on the significance of credit performance in the banking sector. Improper loan provision can lead to higher costs for successful borrowers, fund erosion, and reduced flexibility for banks. Loan defaults due to inadequate credit evaluation restrict a bank's lending capacity and hinder access to credit for new applicants. Proper credit management is crucial to navigate the complex decision-making process of credit evaluation. Credit risk, stemming from potential borrower defaults, is an inherent part of a bank's lending activities. Sound credit performance is essential for a bank's stability and profitability, while poor credit quality can greatly impact its financial performance. The study aims to analyze the impact of credit performance on the financial performance of two Nepalese banks, Nabil Bank Limited and Nepal Bank Limited, through a comparative approach. It explores the current situation of total deposit, loan and advance, non-performing loan, loan loss provision, and profitability for both banks, while also investigating how specific credit variables influence their profitability.

2. Literature Review

In study planning, the literature review section is vital, concentrating on the conceptual review and relevant literature concerning the credit performance of commercial banks.

Conceptual Review: The conceptual review highlights the sensitivity of the banking business, where over 85% of their liabilities come from deposits mobilized from depositors. Banks use these deposits to provide credit to customers, which is a significant income source for them. However, mishandling the loan production process can lead to considerable default risk, potentially causing financial difficulties or insolvency. To thrive in a competitive market, banks must efficiently generate credit for customers while following appropriate credit performance procedures.

The importance of managing credit risk in modern banking is highlighted, as seen from lessons learned during the Global Financial Crisis (Allen & Powell, 2011). Proper credit assessment is crucial to identify risk levels in borrowers and portfolios (Hassain & Chowdhury, 2011). Effective credit risk management is necessary to ensure financial stability and prevent bank failures caused by non-performing loans (Bhattarai, 2016; Malla, 2017). Banks must use appropriate tools and procedures to design credit risk measurement frameworks (Kattel, 2016).

Proper management of loans is crucial for the success of financial institutions, and evaluation procedures in the lending process significantly impact the quality of loan portfolios. Negative selection, moral hazard, and external shocks can affect borrowers' ability to repay loans, leading to poor loan quality (Basu & Rolfes, 1995). Close attention by the loan commission and board of directors is needed to ensure proper loan management, as bias, nepotism, and personal emotions can influence the loan assessment process.

Theoretical Review: Financial development is believed to promote economic growth and reduce income inequality. Recent studies have explored the relationship between credit contracts and financial development, focusing on credit theories, credit risk theory, and credit liquidity theory. These ideas are complementary rather than alternative, and they emphasize how juridical institutions can enhance financial intermediation and provide greater access to credit for various consumers, including new and small ventures (Crosbie et al., 2003).

Review of Related Studies: The research includes studies from international and national journals related to credit policy and credit management in commercial banks. Mwaura and Ambrose (2017) explored the effects of credit policy on the financial performance of Kenyan banks, finding that credit policy positively affects bank performance. Afriyie et al. (2018) conducted a study on credit management systems of commercial banks, particularly in less developed economies like Ghana. Their findings highlighted the importance of sound credit control policies and credit risk assessment in minimizing credit risks and improving the overall credit risk management system of banks.

Three studies explored credit management's impact on financial institutions. Kagoyire and Shukla (2018) focused on Equity Bank Rwanda Ltd, finding that client evaluation, credit risk management, and collection approach influenced the bank's performance. Katibi et al. (2018) studied Sierra Leone's commercial banks and found efficient credit management significantly impacted profitability, highlighting the need for a robust loan strategy. Mutua (2018) investigated SACCOs in Kakamega County, revealing credit policy's considerable influence on financial success, emphasizing the importance of customer assessment and review for enhanced performance.

Alexis et.al. (2019) investigated the effect of loan management on the performance of microfinance institutions in Rwanda. The study found a positive relationship between loan management and institution performance, with effective loan management leading to reduced nonperforming loans, increased profits, owners' equity, and reputation. Mafumbo (2020) analyzed the impact of credit management on the financial performance of commercial banks in Uganda, revealing a significant relationship between credit management and bank performance. The study highlighted the significance of capital adequacy and credit risk control on bank performance. Nsengiyumva and Harelimana (2020) studied the contribution of loan management on the financial performance of Umurenge Savings and Credit Cooperatives in Rwanda, showing that loan management practices have a high influence on the SACCO's financial performance. Zaidanin and Zaidanin (2021) evaluated the impact of credit risk management on the financial performance of UAE commercial banks, finding that non-performing loans and cost of capital negatively affect bank profitability, while capital adequacy, liquidity ratios, and loans-to-deposits ratio have a somewhat positive impact on return on assets.

The studies conducted by Timsina, Kattel, Shrestha, and Malla offer valuable insights into various aspects of bank operations in Nepal. Timsina (2015) identified that GDP and liquidity ratio are significant determinants influencing bank lending behavior. Kattel (2016) explored the credit risk measurement practices and found that Nepalese banks use a range of techniques for credit appraisal. Shrestha (2016) conducted a comparative study of loan management in two banks and found they maintained good lending performance. Malla (2017) investigated credit portfolio management and observed that selected banks adhered to standard parameters, reflecting good credit risk management practices. These findings collectively underscore the importance of factors like GDP, liquidity ratio, and credit risk management in shaping the lending decisions of banks in Nepal.

Theoretical Framework: The study's framework examines credit performance, with Return on Assets and Return on Equity as dependent variables and various independent variables related to credit risk and liquidity theory, presented visually in a figure.

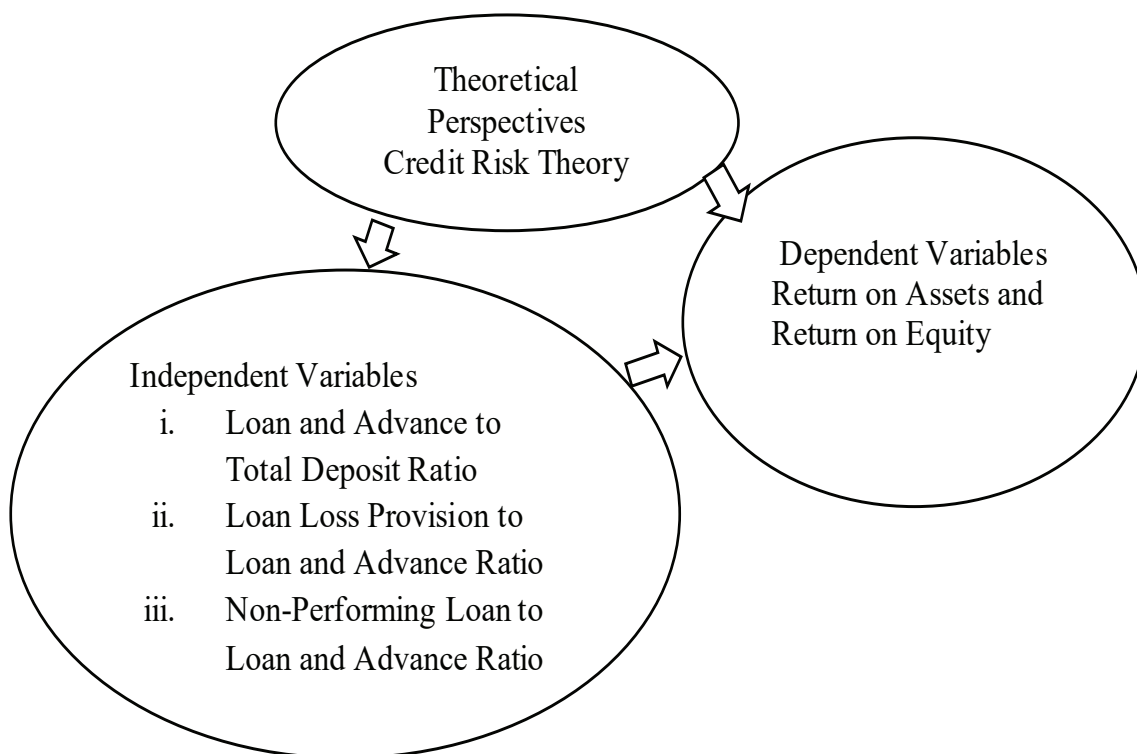


Figure 1: Framework for the Study

This study aims to fill the gap in research by investigating the credit performance and its impact on profitability in Nabil Bank Limited and Nepal Bank Limited in Nepal. The researchers used secondary data from the two banks over ten years to assess the efficiency of their credit performance and its connection to their long-term profitability.

3. Methodology

The study employed a research design using analytical and descriptive methods like regression analysis and correlation techniques to explore relationships between variables. Nabil Bank Limited and Nepal Bank Limited were selected as the sample through judgmental sampling from Nepal's commercial banks. Secondary data from various sources were collected and processed for analysis. Financial ratios played a crucial role in assessing loan management, and statistical tools such as mean, standard deviation, coefficient of variation, correlation coefficient, and multiple regression analysis were used for accurate data analysis.

4. Results and Analysis

Analysis is divided into two parts: Financial Analysis and Statistical Analysis

Financial Analysis: To identify the current situation of total deposit, loan and advance, non-performing loan, loan loss provision and profitability of Nabil bank limited and Nepal bank limited.

Return on Assets: The study analyzed the relationship between net profit after tax (NPLT) and total assets through NPAT/total assets ratio using data from Nabil Bank Limited and Nepal Bank Limited's annual reports. The analysis was performed with SPSS 25.0 software to achieve the research objective.

In (%)					
Fiscal Year	NABIL	NBL	Fiscal Year	NABIL	NBL
2010/11	2.3	0.25	2017/18	2.47	2.41
2011/12	2.69	0.3	2018/19	2.11	1.51
2012/13	3.03	1.07	2019/20	1.46	1.22
2013/14	2.66	0.92	Mean (\bar{X})	2.33	1.38
2014/15	1.81	0.55	S.D(σ)	0.44	0.92
2015/16	2.21	2.79	C.V	18.72%	66.77%
2016/17	2.59	2.78			

Source: Annual Reports of Respective Banks and Calculated Researcher

Table 1 presents the financial surplus to assets ratio (return on assets) of Nabil Bank Limited and Nepal Bank Limited. The average return on assets is 2.33% for Nabil and 1.38% for Nepal Bank. A return on assets over 5% is considered good, and over 1% is considered satisfactory in the service sector. Nabil Bank has shown higher consistency with a lower standard deviation of 0.44 compared to Nepal Bank's 0.92. The coefficient of variation indicates Nabil Bank's greater uniformity (18.72%) compared to Nepal Bank (66.77%). Over the ten-year analysis, Nabil Bank consistently outperformed Nepal Bank in terms of return on assets. Figure 1 visually represents the trend of return on assets for both sample banks during the study period.

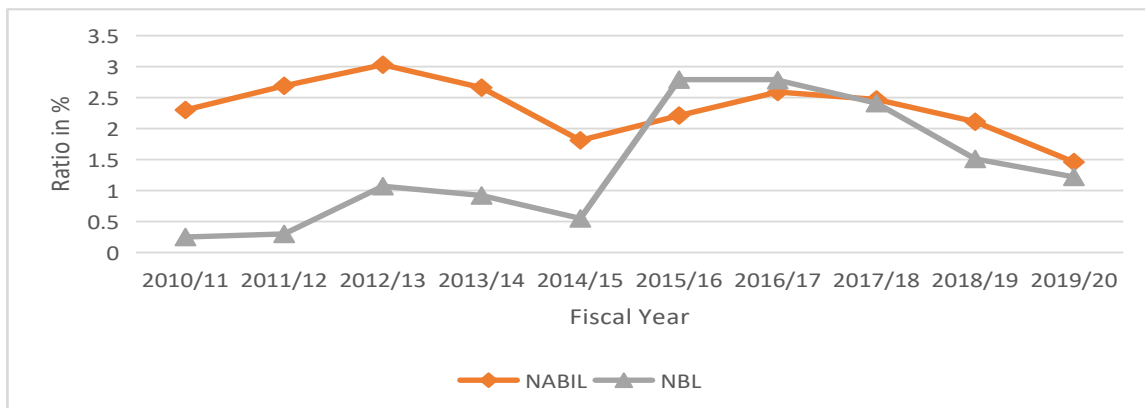


Figure 2: Return on Assets

Figure 2 shows the trend of return on assets for Nabil Bank Limited and Nepal Bank Limited from fiscal year 2010/11 to 2019/20. Both banks experienced fluctuating ROA during the study period, with an increasing trend in the first three years and a decreasing trend in the subsequent years. In the final year (2019/20), both banks' ROA decreased due to the impact of COVID-19, as they collected sufficient deposits but couldn't invest them effectively, leading to reduced profitability.

Return on Equity Ratio (ROE): The total shareholders' equity consists of various components, and the ratio is determined by dividing net profit after tax (NPAT) by the average total shareholders' equity per share.

Fiscal Year	NABIL	NBL	Fiscal Year	NABIL	NBL
2010/11	29.3	-2.86	2016/17	21.83	13.51
2011/12	31.19	-6.05	2017/18	19.34	14
2012/13	32.78	-361.24	2018/19	18.28	8.87
2013/14	27.97	21.39	2019/20	13.39	7.77
2014/15	20.53	12.63	Mean (X)	23.41	-24.9
2015/16	19.5	42.94	S.D(σ)	6.11	112.83
			C.V	26.09%	-453.08%

Source: Annual Reports of respective Banks and Calculated by researchers

Table 2 displays the return on equity (ROE) results for the sample banks. Nabil Bank Limited (NABIL) has a positive average ROE of 23.41%, indicating effective management in earning profit. However, Nepal Bank Limited (NBL) has a negative average ROE of -24.90%, suggesting poor performance. NBL's ROE is also more volatile with a higher coefficient of variation (-453.08%) compared to NABIL (26.09%) over the ten-year study period. Figure 2 graphically represents the trend of ROE for both banks during the study period.

Figure 3 illustrates the fluctuating trend of return on equity (ROE) for both Nabil Bank Limited (NABIL) and Nepal Bank Limited (NBL) during the ten-year study period. NBL experienced a significant negative ROE in fiscal year 2012/13, while NABIL had the highest ROE in the same year. The trend for NABIL shows an initial increase for the first three fiscal years, followed by a decreasing trend until fiscal year 2015/16, then increasing again until the final year. For NBL, the ROE trend is characterized by fluctuations with occasional increases and decreases throughout the study period.

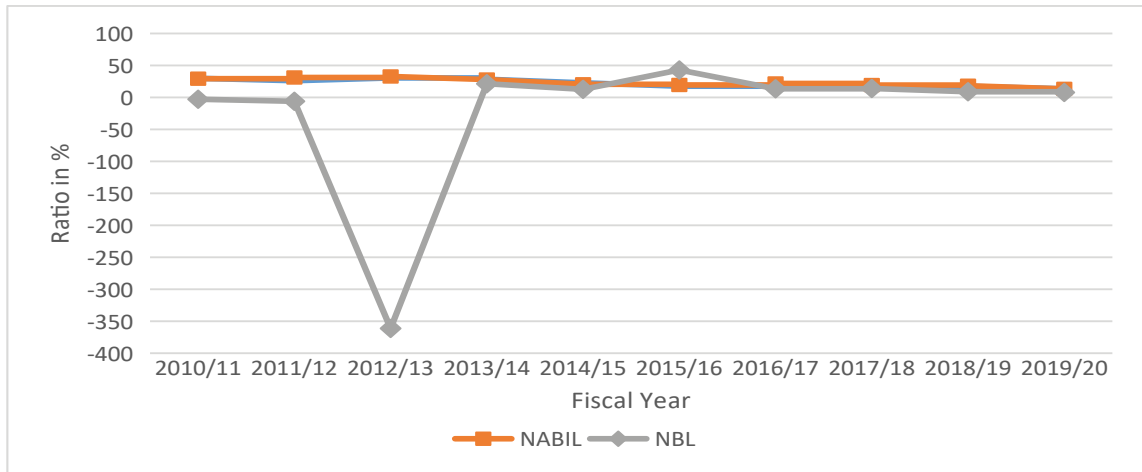


Figure 3: Return on Equity

Total Loans and Advance to Total Deposit Ratio: The loan and advance to total deposits ratio measures how effectively banks utilize their deposits for profit-generating operations. A higher ratio indicates better utilization of overall deposits. The summary presents the loan and advance to total deposits ratio for sample banks.

Fiscal Year	NABIL	NBL	Fiscal Year	NABIL	NBL
2010/11	76.53	81.26	2017/18	84.88	115.95
2011/12	75.61	74.23	2018/19	81.96	113.96
2012/13	72.9	73.62	2019/20	80.65	108.73
2013/14	72.55	78.88	Mean (\bar{X})	75.27	91.14
2014/15	62.84	83.98	S.D(σ)	6.12	15.47
2015/16	69.02	85.12	C.V	8.13%	16.98%
2016/17	75.73	95.67			

Source: Annual Reports of respective Banks and Calculated by researchers

Table 3 presents the loan and advance to total deposit ratio of Nabil Bank Limited (NABIL) and Nepal Bank Limited (NBL) from fiscal year 2010/11 to 2019/20. NBL consistently utilized its total deposits better over consecutive years, with a higher mean ratio of 91.14% compared to NABIL's 75.27%. The higher ratio indicates higher risk and turnover, and NBL's more aggressive approach is evident. However, it is essential for banks to aim for a ratio of more than 50% to achieve profitability. Figure 3 graphically illustrates the trend of the loan and advance to total deposit ratio for both banks during the ten-year study period.

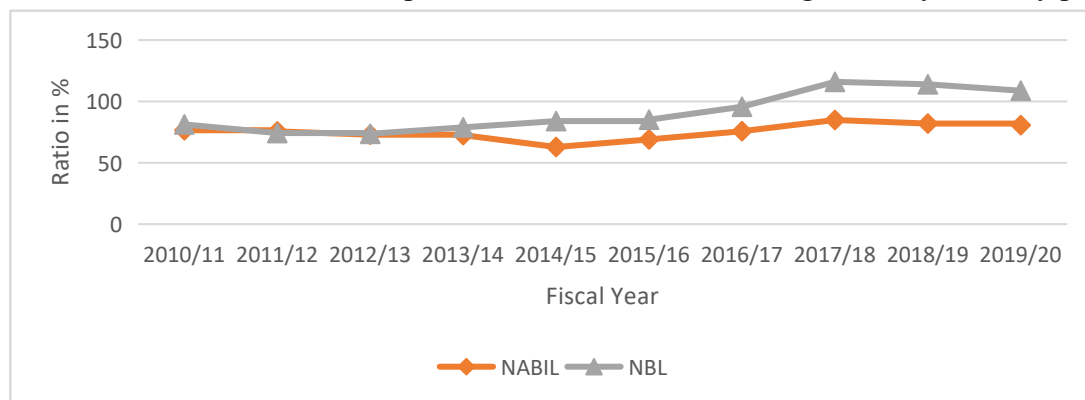


Figure 4: Loan and Advance to Total Deposit Ratio

Figure 4 depicts the fluctuating trend of the loan and advance to total deposit ratio for both Nabil Bank Limited (NABIL) and Nepal Bank Limited (NBL) during the ten-year study period. NABIL's ratio decreases during the first five years, increases from fiscal year 2015/16 to 2017/18, and decreases again in the last two years. For NBL, the ratio decreases during the first three years, increases from fiscal year 2013/14 to 2017/18, and then decreases again until the final year of the study period.

Loan Loss Provision to Total Loan and Advances Ratio: The provision for loan loss is growing due to the increased likelihood of non-performing loans, affecting earnings and dividends, but favorably influencing the financial position by reducing credit risk and hazards associated with deposit accounts. A low asset quality-to-total loan volume ratio indicates high-quality assets relative to total loans, while a high risk-to-return ratio suggests riskier assets as a percentage of overall loan and advance volume.

Table 4 and Figure 4 display the loan loss provision to total loan and advance ratio of selected commercial banks over the ten-year study period. Nabil Bank Limited (NABIL) has an average ratio of 2.02%, which is lower than Nepal Bank Limited's (NBL) 4.34%, indicating higher non-performing loans for NBL. The coefficient of variation analysis shows that NBL is more inconsistent in maintaining loan loss provisions, with a higher CV of 44.68% compared to NABIL's 37.45%. The graphical representation in Figure 4.4 shows the trend of the loan loss provision to loan and advance ratio for both banks during the study period.

Table 4 Loan Loss Provision to Loan and Advance Ratio (In %)

Fiscal Year	NABIL	NBL	Fiscal Year	NABIL	NBL
2010/11	2.29	7.43	2017/18	0.97	2.1
2011/12	3.03	6.83	2018/19	0.98	1.93
2012/13	2.75	5.92	2019/20	0.99	1.97
2013/14	2.76	5.62	Mean (X)	2.02	4.34
2014/15	2.53	4.53	S.D(σ)	0.76	1.94
2015/16	2.13	3.58	C.V	37.45%	44.68%
2016/17	1.8	3.51			

Source: Annual Reports of respective Banks and Calculated by researchers

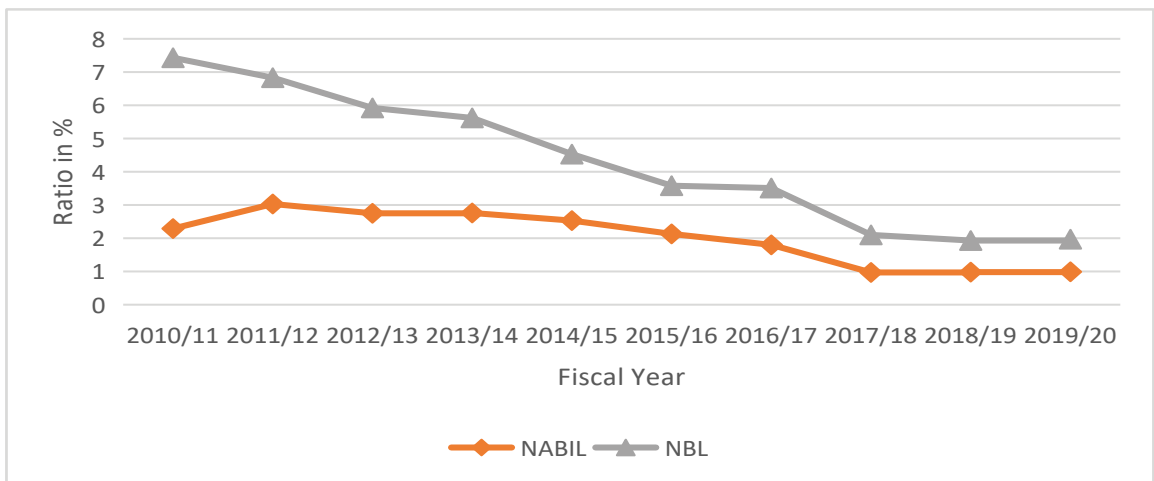


Figure 5: Loan Loss Provision to Loan and Advance Ratio

Figure 5 illustrates the trend of the loan loss provision to loan and advance ratio during the ten-year study period. For Nabil Bank Limited (NABIL), the ratio increased in the second year (2011/12), then decreased in 2012/13, increased slightly in 2013/14, and decreased until 2017/18, followed by a slight increase in the remaining years. For Nepal Bank Limited (NBL), the ratio generally decreased throughout the study period, except in the final year (2019/20).

Non-Performing Loans to Total Loan and Advances Ratio: The Nepal Rastra Bank has mandated commercial banks to create loan loss reserves to safeguard against risky loans, but non-performing loan information is not disclosed in balance sheets or profit and loss accounts. The ratio of non-recovery loans to total loans serves as a major indicator for Nabil Bank Limited (NABIL) and Nepal Bank Limited (NBL) to determine the proportion of non-performing loans.

Fiscal Year	NABIL	NBL	Fiscal Year	NABIL	NBL
2010/11	1.77	5.75	2017/18	0.55	0.85
2011/12	2.33	5.58	2018/19	0.74	0.71
2012/13	2.13	5.24	2019/20	0.98	0.5
2013/14	2.3	5.12	Mean (\bar{X})	1.46	3.42
2014/15	1.86	3.98	S.D(σ)	0.65	1.98
2015/16	1.17	3.11	C.V	44.53%	57.95%
2016/17	0.81	3.32			

Source: Annual Reports of respective Banks and Calculated by researchers

Table 5 and Figure 6 display the non-performing loan to total loan ratio for Nabil Bank Limited (NABIL) and Nepal Bank Limited (NBL) over the ten-year study period. NABIL has a lower mean ratio (1.46%) and higher consistency (CV of 44.53%) compared to NBL's higher mean ratio (3.42%) and higher CV (57.95%). Effective follow-up for recovery is recommended to mitigate the impact of non-performing loans on the banking sector and maintain provision amounts and profit levels for all sample banks. The graphical representation in Figure 5 shows the trend of the non-performing loan to total loan ratio for both banks during the study period.

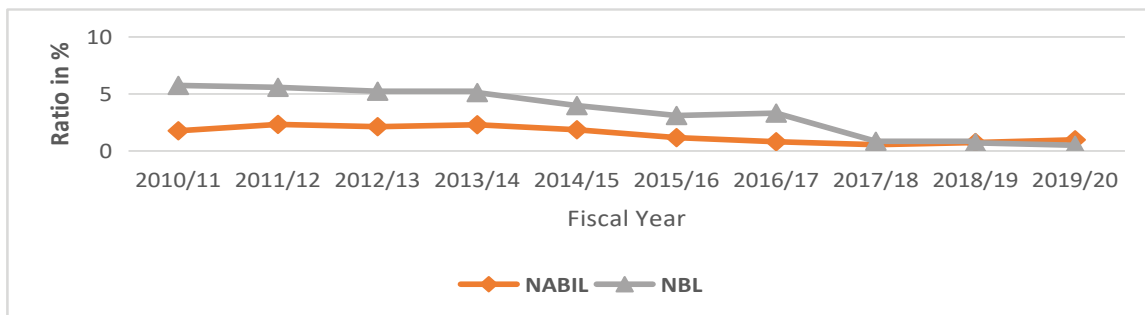


Figure 6: Non-Performing Loans to Total Loan and Advances Ratio

Figure 6 illustrates the trend of the non-performing loan to loan and advance ratio for both Nabil Bank Limited (NABIL) and Nepal Bank Limited (NBL) over the ten-year study period. NABIL's ratio shows fluctuations, increasing in fiscal year 2011/12 and 2013/14, decreasing in 2012/13 and from 2014/15 to 2017/18, and increasing again in the final two years. NBL's ratio, however, exhibits a consistent decreasing trend throughout the study period.

Statistical Analysis:

Correlation between ROA and Explanatory Variables of NABIL and NBL

Table 7 presents the correlation between return on assets (ROA) as a dependent variable and explanatory variables, including loan and advance to total deposit ratio, loan loss provision to loan and advance ratio, non-performing loan to loan and advance ratio, and loan loss provision to non-performing loan ratio.

Table 7 Correlation Analysis for NABIL (N=10)

		ROA	LATD	LLPLA	NPLA	LLPNPL
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
LATD	Pearson Correlation	0.002	1			
	Sig. (2-tailed)	0.996				
LLPLA	Pearson Correlation	0.53	-.707*	1		
	Sig. (2-tailed)	0.115	0.022			
NPLA	Pearson Correlation	0.406	-0.571	.929**	1	
	Sig. (2-tailed)	0.244	0.085	0		
LLPNPL	Pearson Correlation	0.274	-0.011	-0.161	-0.503	1
	Sig. (2-tailed)	0.443	0.977	0.657	0.138	
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 7 reveals the relationship between return on assets (ROA) and various explanatory variables for Nabil Bank Limited (NABIL) over the ten-year study period. There is a positive correlation between ROA and loan and advance to total deposit ratio, loan loss provision to loan and advance ratio, non-performing loan to loan and advance ratio, and loan loss provision to non-performing loan ratio. However, the degree of correlation is generally low, and the significance values indicate that these relationships are not statistically significant for NABIL.

Table 8 Correlation Analysis for NBL (N=10)

		ROA	LATD	LLPLA	NPLA	LLPNPL
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
LATD	Pearson Correlation	0.491	1			
	Sig. (2-tailed)	0.15				
LLPLA	Pearson Correlation	-.665*	-.896**	1		
	Sig. (2-tailed)	0.036	0			
NPLA	Pearson Correlation	-0.54	-.953**	.970**	1	
	Sig. (2-tailed)	0.106	0	0		
LLPNPL	Pearson Correlation	0.091	.798**	-.704*	-.831**	1
	Sig. (2-tailed)	0.802	0.006	0.023	0.003	
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 8 presents the relationship between return on assets (ROA) and explanatory variables for Nepal Bank Limited (NBL) over the ten-year study period. There is a positive correlation between ROA and loan and advance to total deposit ratio, indicating changes in the same direction. However, the degree of correlation is moderate (0.491), and the significance values suggest that these relationships are not statistically significant for NBL. Conversely, there are negative correlations between ROA and loan loss provision to loan and advance

ratio, as well as non-performing loan to loan and advance ratio. These negative correlations indicate changes in opposite directions and are statistically significant for NABIL. The correlation between ROA and loan loss provision to non-performing loan ratio is weak (0.091), and the relationship is not statistically significant for NABIL.

Regression Analysis with Dependent Variable ROA: Table 9 presents the regression analysis of the relationship between the dependent variable ROA and independent variables LATD, LLPLA, NPLA, and LLPNPL.

Regression Analysis when Dependent Variable is ROA

Banks	Model	Beta	t-value	p-value
NABIL	(Constant)	-4.844	-2.493	0.055
	LATD	0.053	2.042	0.097
	LLPLA	-0.174	-0.123	0.907
	NPLA	1.098	0.627	0.558
	LLPNPL	1.347	1.121	0.313
	F	4.954		0.055b
	R2	0.799		
NBL	(Constant)	4.943	0.697	0.517
	LATD	0.003	0.059	0.955
	LLPLA	-0.414	-0.477	0.654
	NPLA	-0.173	-0.128	0.903
	LLPNPL	-0.853	-1.195	0.286
	F	3.35		0.109b
	R2	0.728		

Source: Annual Reports of respective Banks and Calculated by researchers

The equations for the regression analysis for Nabil Bank Limited (NABIL) and Nepal Bank Limited (NBL) are as follows:

For NABIL: $ROA = -4.844 - 0.053 * LATD - 0.174 * LLPLA + 1.098 * NPLA + 1.347 * LLPNPL$

For NBL: $ROA = 4.943 + 0.003 * LATD - 0.414 * LLPLA - 0.173 * NPLA - 0.853 * LLPNPL$

In these equations, "ROA" represents the return on assets, "LATD" stands for loan and advance to total deposit ratio, "LLPLA" represents loan loss provision to loan and advance ratio, "NPLA" indicates non-performing loan to loan and advance ratio, and "LLPNPL" stands for loan loss provision to non-performing loan ratio. The beta values represent the coefficients of the independent variables, the t-values indicate the significance of each coefficient, and the p-values show the level of significance for each coefficient in the model. The F-statistics and R2 values provide information about the overall goodness of fit for the regression models for NABIL and NBL, indicating how well the independent variables explain the variation in the dependent variable (ROA).

The regression analysis in Table 4.9 shows the relationship between the dependent variable (ROA) and independent variables (LATD, LLPLA, NPLA, and LLPNPL) for NABIL

and NBL banks. The R-squared values indicate that 79.9% of the variation in ROA for NABIL and 72.8% for NBL can be explained by these independent variables. The analysis suggests that LATD, NPLA, and LLPNPL have a positive impact on ROA for NABIL, but the effects are statistically insignificant. LLPLA has a negative impact on ROA for NABIL, while for NBL, LATD has a positive impact, and LLPLA, NPLA, and LLPNPL have negative impacts on ROA, but all are statistically insignificant. The comparison between NABIL and NBL indicates that the independent variables used in the study better explain the ROA for NABIL than NBL, with higher R-squared values for NABIL.

Regression Analysis with Dependent Variable ROE: Table 10 presents the regression analysis showing the relationship between the dependent variable (ROE) and independent variables (LATD, LLPLA, NPLA, and LLPNPL).

Regression Analysis when Dependent Variable is ROE

Banks	Model	Beta	t-value	p-value
NABIL	(Constant)	-50.742	-2.674	0.044
	LATD	0.68	2.706	0.042
	LLPLA	10.562	0.766	0.478
	NPLA	0.036	0.002	0.998
	LLPNPL	1.042	0.089	0.933
	F	11.484		0.010b
	R2	0.902		
NBL	(Constant)	-180.512	-0.121	0.909
	LATD	3.249	0.277	0.793
	LLPLA	56.362	0.308	0.771
	NPLA	-76.527	-0.269	0.799
	LLPNPL	-71.692	-0.476	0.654
	F	0.3		0.866b
	R2	0.194		

Source: Annual Reports of respective Banks and Calculated by researchers

The regression equations for the banks NABIL and NBL are as follows:

For NABIL: $ROE = -50.742 + 0.68 * LATD + 10.562 * LLPLA + 0.036 * NPLA + 1.042 * LLPNPL$

For NBL: $ROE = -180.512 + 3.249 * LATD + 56.362 * LLPLA - 76.527 * NPLA - 71.692 * LLPNPL$

The "Beta" values represent the regression coefficients, the "t-value" is the t-statistic, and the "p-value" shows the significance level. The "F" value is the F-statistic, and "R2" is the coefficient of determination. In the case of NABIL, the model explains 90.2% of the variation in ROE, while for NBL, the model explains only 19.4% of the variation in ROE.

The regression analysis in Table 10 reveals the relationship between the independent variables (LATD, LLPLA, NPLA, and LLPNPL) and the dependent variable (ROE). For NABIL bank, the model explains 90.2% of the variation in ROE, with positive effects from LATD, LLPLA, and NPLA, while for NBL bank, the model explains only 19.4% of the variation in ROE, with positive effects from LATD and LLPLA but negative effects from NPLA and LLPNPL, though these effects are statistically insignificant.

Summary: The study aims to investigate the credit performance of Nabil Bank Limited (NABIL) and Nepal Bank Limited (NBL) over a ten-year period from 2010/11. The analysis focuses on credit, ratio analysis, and their relation to return on assets (ROA) and return on equity (ROE). NABIL has a higher average ROA of 2.33% compared to NBL's 1.38%, indicating satisfactory performance. NBL shows higher risk with a higher coefficient of variation (CV) of 66.77% for ROA compared to NABIL's 18.72%. On the other hand, NBL has a higher average ROE of 91.14% compared to NABIL's 75.27%, indicating better management effectiveness in earning profit. Loan and advance to total deposit ratio is higher for NBL, suggesting higher risk and turnover. NBL has a higher mean non-performing loan to total loan ratio of 3.42% compared to NABIL's 1.46%. However, NABIL is more consistent with a lower CV of 44.53% for non-performing loans compared to NBL's 57.95%. The study reveals that the variables used have a stronger explanatory power for ROA in NABIL than in NBL.

5. Conclusion

The study analyzes the credit performance of NABIL and NBL from a financial and statistical perspective. NABIL has a better ROA and ROE compared to NBL. Both banks have positive ROA and loan and advance to total deposit ratios. The correlation between return on assets and loan loss provision to loan and advance ratio is negative for NBL but not for NABIL. The study finds that the independent variables explain 79.9% of the variance in ROA for NABIL and 72.8% for NBL. The impact of non-performing loan to loan and advance ratio and loan loss provision to non-performing loan ratio on ROA for NABIL is positive but statistically insignificant, while the loan and advance to total deposit ratio has a significant positive impact. For NBL, the loan and advance to total deposit ratio has a positive impact, but other variables are statistically insignificant in influencing ROA.

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