

## **Lending Practices and Their Impact on the Profitability of Nepalese Commercial Banks**

Nabin Parajuli

Assistant Lecturer

Kanakai Multiple Campus, Surunga, Jhapa, Nepal

[email: nabinparajuli1996@gmail.com](mailto:nabinparajuli1996@gmail.com)

<https://doi.org/10.3126/kj.v4i1.86137>

### **Abstract**

As the backbone of every national economy, the banking sector's development is one of the most important indicators of its financial growth, and analyzing its structural components is an essential first step in identifying the problems and challenges the nation faces. The objective of this study is to examine the lending practices and their impact on the profitability of Nepalese commercial banks. The study employed a descriptive research design to analyze and interpret the results. Necessary data are taken from five banks out of twenty commercial banks that are currently operating in Nepal. It uses five years' time frame from 2019-20 to 2023-24. Study reveals that non-performing loan has a negative impact on bank profitability. The findings also suggest that the banks of Nepal should strengthen their credit assessment and loan recovery mechanisms to minimize non-performing loans, as reducing NPLs is crucial for improving overall profitability.

**Keywords:** lending practices, commercial bank, profitability, return on assets, non-performing loan

### **Introduction**

In Nepal, there are mainly four types of banks, which are divided into commercial, development, finance companies and the microfinance institutions. These entire banks' main motive is to earn higher profit from its' lending service but there is varies in the profit ratio due to various factors. Lending is another word for credit, which is the practice of giving out loans, which is the most important function of a modern banking institution. One of the numerous ways a company can affect the demand for its goods is by lending or granting credit (Amahalu, Nweze & Obi, 2017). However, liquidity crisis and bank insolvency could result from poor lending management. Excessive credit

expansion can affect the stability of the financial system by raising prudential risks, even while it can encourage investment and economic activity (IMF, 2005; Mendoza & Terrones, 2008).

The effect of economic booms on bank lending behavior is less noticeable when banks compete in a less hostile market. Conservative banks will choose a safety target and restrict lending activity if they think that following the same credit expansion strategy will compel them to struggle for loan downgrade during economic booms. Shrestha and Khadka (2024) stated that without being profitable, banks cannot operate, which not only enables them to pay for costs and losses but also rewards investors and depositors. Thus, the management of the company has to regulate the efficient and effective utilization of its resources so as to make the most profit and satisfy the company's goals.

As the backbone of every national economy, the banking sector's development is one of the most important indicators of its financial growth, and analyzing its structural components is an essential first step in identifying the problems and challenges the nation faces. Non-performing loans have a direct effect on banks' revenue. The risk faced by the bank increases with the quantity of non-performing loans, which is one of the service products offered by the banking sector. This implies that the performance of the banking sector is not excellent (Shrestha & Khadka, 2024).

Bastola (2024) noted that the bank type and size, bank deposit ratio, capital ratio, interest rate, exchange rate, gross domestic product, investment portfolio, liquidity, national economic conditions, national monetary and fiscal policies, Nepal Rastra Bank guidelines, commercial bank internal lending policy, and other non-economic factors of Nepal are the main determinants of lending behavior. Based on these factors, bank profitability will be determined.

Customers can learn about the bank's stability and operational capabilities, which makes this study significant from their point of view as well. More proof of the lending practices and their effect on the profitability of Nepalese commercial banks will also be given to bank supervisors, Nepal Rastra Bank, and the relevant organizations, which will then look into whether more regulation or deregulatory measures are required. The following research question and objective are outlined in order to gain knowledge of the lending practices and how they affect the profitability of Nepalese commercial banks.

**Research Questions**

- Is there any connection exists between Nepalese commercial bank's return on assets with non-performing loans, bank size, and loan to deposit ratio, and capital adequacy ratio?
- Do non-performing loan, bank size, loan-to-deposit ratio, and capital adequacy ratio affect return on assets in Nepalese commercial banks?

**Research Objectives**

- To analyze the impact of non-performing loans, bank size, loan-to-deposit ratio, and capital adequacy ratio on the return on assets of Nepalese commercial banks.
- To assess the effect and relationship between non-performing loans, bank size, loan-to-deposit ratio, capital adequacy ratio, and the profitability (ROA) of Nepalese commercial banks

**Literature Review**

Review of literatures provides deep knowledge of past studies in related fields. So, the researcher aims to find out the research gap of previous studies through review of literatures and tried to fulfill the gap. Shrestha and Khadka (2024) examined the impact of non-performing loan on the profitability of Nepalese commercial banks. This study employed the annual balanced panel data of ten commercial banks during the period of 2016/17 to 2022/23. This paper used NPLs measured by the ratio of non-performing loans to total loans as an explanatory variable and profitability measured by ROA as a dependent variable. The study revealed that NPLs have a significant negative impact on profitability. The empirical results indicated that NPLs play a substantial role in determining profitability.

Sigdel and Deswal (2024) studied the relationship of credit risk management on performance of Nepalese commercial banks. The study has adopted descriptive as well as analytical research design. Data was collected of ten commercial banks out of twenty commercial banks. The study results shown that specific financial indicators, such as credit to deposit ratio, non-performing loan, and interest spread rate etc. played crucial roles in influencing return on assets.

Mishra and Kandel (2023) studied the determinants of operational performance in Nepalese commercial banks. The study focused on the roles of capital adequacy, cost-to-income ratio, and various performance indicators. Bank size, non-performing loans ratio, liquidity position, cost-to-income ratio, capital adequacy, and assets quality all

exhibit a positive impact on overall bank performances. Study revealed that commercial banks operated within a threshold level of capital ratio, avoiding excessively high levels that may negatively impact to profitability.

Bhandari (2023) conducted a study on Effect of Credit Performance and Interest Spread on Profitability of Commercial Banks in Nepal. Using panel least squares regression model of 16 commercial banks for the year 2013–2021, with 128 observations. The study used interest rate spread, non-performing loan ratio, credit to deposit ratio, customer deposit growth rate, capital adequacy ratio, and bank size as independent variables and return on asset as a dependent variable. The finding showed that the interest rate spread had positive and significant impact on ROA. Similarly, the ratio of NPLs has negative and significant impact on ROA. However, CD ratio had a positive but insignificant relationship with ROA. The finding further showed that customer deposit growth rate, CAR and bank size had a significant impact on ROA.

Dahal (2023) examined the impact of non-performing assets (NPA) on the profitability of Nepalese commercial banks. To assess the explanatory power of non-performing assets on banks' profitability, the commercial banks' return on equity (ROE) is used as the dependent variable, and non-performing assets (NPA), the loan loss provision (LLP) to loan and advances, loan and advance to total deposit ratio (LTDR), return on investment (ROI), and capital adequacy ratio (CAR) are used as the independent variables. The findings show a significant but inverse link between non-performing assets and bank profitability in order to lessen the negative effects of an increase in non-performing loans and increases in the profitability.

### **Hypothesis of the study**

Based on above review of literature, the following hypothesis is set up:

H<sub>1</sub>: Non-performing loans (NPL) have a significant negative impact on the return on assets (ROA) of Nepalese commercial banks.

H<sub>2</sub>: The loan-to-deposit ratio (LDR) has a significant positive impact on the return on assets (ROA) of Nepalese commercial banks.

## **Research methodology**

### **Research Design**

A fact-finding strategy known as descriptive research design has been used to get information on the lending practices and how they affect the profitability of Nepalese commercial banks. Furthermore, Explanatory research design has been used to measure relationship between the variables incorporate in the conceptual framework.

### Nature and Sources of Data

The annual balance panel data for five years, from 2019-20 to 2023–2024, served as the study's foundation. The study is based on secondary sources of data. All the information is obtained from annual reports of selected banks.

### Population and Sample

Out of the 20 commercial banks that operated in Nepal (NRB report, November, 2024), five commercial banks are selected randomly for the study purpose.

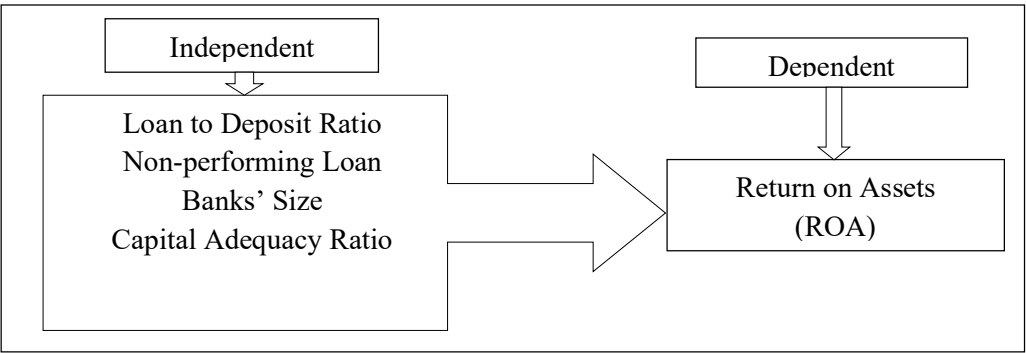
**Table 1**

*List of Sample Banks and study periods*

S.N.	Name of Banks	Study Period	No. of Observations
1	Citizens Bank International Ltd.	2019/20 to 2023/24	5
2	Everest Bank Ltd.	2019/20 to 2023/24	5
3	Global IME Bank Ltd.	2019/20 to 2023/24	5
4	Prime Commercial Bank Ltd.	2019/20 to 2023/24	5
5	Sanima Bank Ltd.	2019/20 to 2023/24	5
	Total		25

**Figure 1**

*Conceptual Framework*



Source: Adapted from Bastola, 2024.

**Research Model**

$$ROA_{it} = \beta_0 + \beta_1 LDR_{it} + \beta_2 NPL_{it} + \beta_3 LnTA_{it} + \beta_4 CAR_{it}$$

Where,

ROA = Return on Assets

LDR = Loan to Deposit Ratio

NPL = Non Performing Loan

LnTA = Natural log on Total Assets

CAR = Capital Adequacy Ratio

$\beta_0$  and  $\beta_1$  are Constant and Coefficients to be estimated respectively.

**Definition of Variables****Return on Assets (ROA)**

It measures how much the bank is earning after tax for each investment in the assets of the firm and shows the efficiency of the management in generating earnings from a single asset in rupees. A higher return on assets is preferable as it gauges how well a company's management generates returns from its investments in assets, and higher assets can also result in higher profits. Return on assets is expressed as below:

$$ROA = \text{Net Profit After Tax} / \text{Total Assets}$$

**Non Performing Loan (NPLs)**

Bank loans that are prone to late repayment or are not expected to be repaid by the borrower are classified as NPLs. The financial crisis and the ensuing recessions made it impossible for debtors to repay their loans (Shrestha & Khadka, 2024). Since, it specifies the ratio between the amount of loan losses and the total volume of loans. Non-performing loan is obtained by;

$$NPLs = \text{Non-performing Loan} / \text{Total Loan}$$

**Capital Adequacy Ratio (CAR)**

According to Hayes (2024), a minimum capital adequacy ratio is essential for making sure banks have the buffer to withstand a fair amount of losses before going bankrupt and losing depositor money. One measure of a bank's ability to fulfill its responsibilities is the capital adequacy ratio, or CAR. Regulators use the capital-to-risk weighted assets ratio (CRAR), which compares capital to risk-weighted assets, to assess a bank's likelihood of failing. It can be expressed as below;

$$CAR = (\text{Tier 1} + \text{Tier 2}) \text{ Capital} / \text{Risk Weighted Assets}$$

### **Banks' Size (LnTA)**

Basically, big banks may be more efficient because they are more diversified. It can be measured as the natural logarithm of the value of total assets. It is also measured the financial health of the banks. Aladwan (2015) stated that when the size of the banks is increases, it is less likely that they will earn more. Although, larger banks have the advantage of more access to additional financing sources, but dealing with liquidity problems and diversifying risk is another issue.

### **Loan to Deposit Ratio (LDR)**

It can be also known as credit to deposit ratio (CD ratio). It reflects the percentage value of banks' lending value out of its total deposit collection. The central bank issues a guideline regarding CD ratio, banks and financial institutions should not lend above 90% of total deposits due to avoid liquidity problems (Rose, P. S., & Hudgins, S. C., 2013). It can be obtained from:

$$\text{LDR} = \text{Total loan and advances} / \text{Total deposits}$$

## **Results and Discussion**

The descriptive statistical analysis has been used for interpreting the results. It can be consisted of the number of observations, mean, standard deviation, and minimum and maximum values associated with the variables under consideration.

**Table 2**

### *Descriptive Statistics*

Variables	Minimum	Maximum	Mean	Std. Deviation
ROA	0.46	1.82	1.2128	0.30419
LDR	77.39	96.05	85.7696	4.69004
NPL	0.12	4.85	1.7720	1.46505
LnTA	11.61	13.31	12.3332	0.38619
CAR	11.50	15.14	13.1012	0.88242

*Source:* SPSS 25 outcome

Table 2 reveals the descriptive statistics of dependent and independent variables for the sample commercial banks. During the study period, it is found that ROA of sample banks starting at 0.46 percent minimum value and up lift at 1.82percent maximum value with the average of 1.2128 having 0.30419 percent standard deviation. LDR of sample commercial bankshas higher standard deviation 4.69004 percent with average of 85.7696 percent at lower level 77.39 percent and most 96.05 percent.

Similarly, the NPL of sample banks has been found variation from minimum of 0.12 percent to maximum of 4.85 percent with an average and standard deviation 1.7720 and 1.46505 percent respectively. The banks' size (LnTA) of sample banks has minimum value 11.61 and has maximum value 13.31 with average value 12.3332 and standard deviation value 0.38619 respectively. Similarly, the CAR of sample banks ranges from 11.50 percent to 15.14 percent with mean 13.1012 percent and standard deviation of 0.88242 percent.

**Correlations Coefficients**

Correlation measures the strength and the direction of a linear relationship between dependent and independent variables. More specifically, it shows the correlation coefficients of dependent and independent variables for Nepalese commercial banks (Sigdel,2009) Pearson's correlation coefficients are computed, and the results are presented in Table 3.

**Table 3**

Pearson's Correlations Coefficients		ROA	LDR	NPL	LnTA	CAR
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
LDR	Pearson Correlation	.255	1			
	Sig. (2-tailed)	.218				
NPL	Pearson Correlation	-.470*	-.146	1		
	Sig. (2-tailed)	.018	.486			
LnTA	Pearson Correlation	-.071	-.472*	.391	1	
	Sig. (2-tailed)	.737	.017	.053		
CAR	Pearson Correlation	.304	.235	-.338	-.415*	1
	Sig. (2-tailed)	.139	.257	.099	.039	

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

Source: SPSS 25 outcome

Table 3 reflects that there are positive correlation coefficients between loan to deposit ratio and return on assets with a value of 0.255. It means higher the ratio, the chances of earnings of the bank is also higher. This result is inconsistent with the result of Sigdel and Deswal (2024).The correlation coefficient of non-performing loan and return on assets is significantly negative i.e., -0.470\*.It indicates that non-performing loan ratio has negative impacts on banks' return on assets. It further clarifies that higher the non-performing loan, lower would be the profitability of the banks. This founding is similar with the finding of Shrestha and Khadka (2024) and Sigdel and Deswal (2024).



The correlation coefficients of bank size (LnTA) with return on assets are negatively correlated with a value of -0.071. It directs that higher the size of banks lead to lower the profitability. Capital adequacy ratio is positively correlated at value of 0.304 with return on assets. It indicates that higher the ratio the lower the risk factors lead to higher the chances of gaining profit to the banks. The correlation result is consistent with the findings of Sigdel and Deswal(2024). In conclusion, the correlation coefficients reveal both positive and negative relationship between dependent and independent variables.

### Regression Analysis

A regression analysis is a statistical tool that illustrates the relationship between two or more variables. Regression analysis is typically used to assess the impact of an explanatory variable on the dependent variable (Shrestha, 2024). Table 4 shows the overall matrix of regression coefficients.

**Table 4**

#### *Regression Coefficients*

Model	Coefficients <sup>a</sup>			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	-4.654	3.186		-1.461	.160
LDR	.019	.013	.299	1.456	.161
NPL	-.102	.042	-.492	-2.445	.024
LnTA	.277	.180	.352	1.536	.140
CAR	.074	.070	.214	1.052	.305

a. Dependent Variable: ROA

Source: SPSS 25 outcome

The regression equation is;

$$ROA_{it} = -4.654 + 0.019 LDR_{it} - 0.102 NPL_{it} + 0.277 LnTA_{it} + 0.074 CAR_{it}$$

Table 4 shows that the beta coefficient of loan to deposit ratio is positive 0.019 and its t-value is 1.456 and p-value is 0.161 ( $0.05 > 0.161$ ). It indicates that there is positive but insignificant relationship found between LDR and ROA. Non-performing loan has -0.102 negative value of beta coefficient with -2.445 t-value and has 0.024 p-value i.e., ( $0.02 < 0.05$ ). The results show that there is significantly negative impact of NPLs on banks profitability. The finding of the study is similar with the results of Shrestha and

Khadka (2024), Bhattarai (2016), Bhandari (2023). Perhaps, the result is opposite with the findings of Pokharel (2020) which claimed non-performing loan has a significant positive effect on return on assets.

The beta coefficient of bank size measures in LnTA is 0.277 with t-value is 1.536 and has p-value is 0.140 ( $0.05 < 0.140$ ). There is insignificant positive relationship found between banks' size with banks' profitability measures in return on assets. Whereas, the beta coefficients of capital adequacy ratio is 0.074, t-value is 1.052 and p-value is 0.305 ( $0.05 < 0.305$ ) etc. It indicates that there is positive but insignificant relationship found between CAR and return on assets. The finding of this study is consistent with the result of Kandel and Mishra (2023) and Bhandari (2023).

### **Conclusions and Implications**

The lending behavior of Nepalese commercial banks and their effect on profitability have been studied from 2019-20 to 2023-2024. It employed panel data from five commercial banks with 25 observations. Return on assets and other profitability metrics were used to evaluate the commercial banks' performance. Specific variables related to banks' lending practices, including the loan-to-deposit ratio, non-performing loans, bank size, and capital adequacy ratio, were regressed. The results of this study show that non-performing loans have a negative effect on banks' profitability. Furthermore, according to return on assets, banks' profitability is positively impacted by the loan to deposit ratio and the capital adequacy ratio. On the other hand, there is a negative correlation between bank size and return on assets.

This study examined lending practices and how they affected Nepalese commercial banks' profitability. However, a number of additional factors could potentially affect profitability. Therefore, additional research should be carried out using additional elements as explanatory variables. Furthermore, the study only used a small number of factors for analysis. Therefore, the time series data of all commercial banks that operate in Nepal can be incorporated into future research. The results of the study can serve as a guide for further investigation and comparison. The purpose of this study is to determine how lending behavior affects Nepal's commercial banks' profitability. There is still room for research in the days ahead in terms of data, models, and methods. There is still enough data from the study to support future research.

## References

- Aladwan, M. S. (2015). The Impact of Banks Size on Profitability “An Empirical Study on Listed Jordanian Commercial Banks”. *European Scientific Journal, ESJ, 11*(34). Retrieved from <https://eujournal.org/index.php/esj/article/view/6729>
- Amahalu, N.N., Nweze, C.L, Obi, J.C. (2017). Effect of backflush accounting on financial performance of quoted food and beverage firms in Nigeria. *EPH - International Journal of Medical and Health Science, 2*(3), 58-80.
- Bastola, S. (2024). Determinants of Corporate Social Responsibility in Nepalese Commercial Banks. *Nepalese Journal of Management, 11*(2), 96–114. <https://doi.org/10.3126/njm.v11i2.68855>
- Bhandari, N.R. (2023). Effect of credit performance and interest spread on profitability of commercial banks in Nepal. *Nepalese Journal of Management Research, 3*, 50-58. Retrieved from <http://balkumaricollege.edu.np/journal>
- Bhattarai, B.P. (2019). Effect of credit risk management on financial performance of commercial banks in Nepal. *European Journal of Accounting, Auditing and Finance Research, 7*(5), 87-103.
- Bhattarai, S. (2015). Determinants of non-performing loan in Nepalese commercial banks. *Economic Journal of Development Issues, 22*-38 <http://dx.doi.org/10.3126/ejdi.v19i1-2.17700>
- Bhattarai, Y. R. (2016). Effect of non-performing loan on the profitability of commercial banks in Nepal. *Prestige International Journal of Management and Research, 10*(2), 1-9.
- Bhattarai, Y. R. (2017). Determinants of Lending Interest Rates of Nepalese Commercial Banks. *Economic Journal of Development Issues, 39*–59.
- Dahal, P. (2023). Impact of Non-Performing Assets on Profitability: A Panel Regression Analysis of Commercial Banks in Nepal. *Global J Comm Manage Perspect., 12*(4), 100047.
- Hayes, A. (2024). *Capital Adequacy Ratio: Ensuring Strong Asset Coverage in Banks*. FasterCapital. Retrieved from <https://fastercapital.com/content/Capital-Adequacy-Ratio--Ensuring-Strong-Asset-Coverage-in-Banks.html>

- International Monetary Fund (IMF). (2005). *Credit Booms: How Real Are They and What We Can Do?* IMF Working Paper No. 05/151. <https://www.elibrary.imf.org/view/journals/001/2005/151/article-A001-en.xml>
- Mendoza, E. G., & Terrones, M. E. (2008). *An Anatomy of Credit Booms: Evidence from Macro Aggregates and Micro Data*. NBER Working Paper No. 14049. <https://www.nber.org/papers/w14049>
- Mishra, A., & Kandel, D. (2023). Examination of specific factors of the form affecting profitability of commercial banks: A case from Nepal. *VEETHIKA - An International Interdisciplinary Research Journal*, 9(4), 13-24. <https://doi.org/10.48001/veethika.2023.09.04.002>
- Pokharel, S. P. (2020). Impact of non-performing assets on profitability in Nepalese Commercial Banks. *Patan Pragya*, 7(1), 222-229. <https://doi.org/10.3126/pragya.v7i1.35244>
- Rose, P. S., & Hudgins, S. C. (2013). *Bank management & financial services* (9th ed.). McGraw-Hill Education.
- Shrestha, P. M., & Khadka, K. K. (2024). Impact of non-performing loan on profitability of Nepalese commercial banks. *Researcher CAB. A Journal for Research and Development*, 3(1), 62–75. <https://doi.org/10.3126/rcab.v3i1.68422>
- Sigdel, K., & Deswal, K. (2024, July 2). Credit Risk Management and Profitability of Nepalese Commercial Banks. *NPRC Journal of Multidisciplinary Research*, 1(2), 68–82. <https://doi.org/10.3126/nprcjmr.v1i2.69294>