FACTOR AFFECTING NON-PERFORMING ASSETS IN NEPALESE COMMERCIAL BANKS

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of requirement for the Master's Degree

By

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "**FACTOR AFFECTING NON-PERFORMING ASSETS IN NEPALESE COMMERCIAL BANKS**". The work of this dissertation has not been submitted previously for the purpose of conferral of any degree nor has it been proposed and presented as part of requirements for any other academic purposes. The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declared that all information sources and literature used are cited in the reference section of the dissertation.

Sabita Munikar

September 2024

REPORT OF RESEARCH COMMITTEE

Ms. Sabita Munikar has defended research proposal entitled "**FACTOR AFFECTING NON-PERFORMING ASSETS IN NEPALESE COMMERCIAL BANKS**", successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Lecture Mr. Rabindra Bhattarai and submit the thesis for evaluation and viva voce examination.

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(Supervisor)

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Dissertation Proposal Defended Date

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Dissertation Viva Voce Date

APPROVAL SHEET

We have examined the dissertation entitled "**FACTOR AFFECTING NON-PERFORMING ASSETS IN NEPALESE COMMERCIAL BANKS**" presented by Ms. Sabita Munikar for the degree of Masters of Business Studies. We hereby certify that the dissertation is acceptable for the award of degree.

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Any remaining errors are mine.

Sabita Munikar

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ABBREVIATIONS

ANOVA	:	Analysis of Variance
CAR	:	Capital Adequacy ratio
CIR	:	Cost Income Ratio
EBL	:	Everest Bank Limited
IFLR	:	Inflations rate
KBL	:	Kumari Bank Limited
LR	:	Liquidity Ratio
NBL	:	Nepal Bank Limited
NPA	:	Non-performing Loan
ROA	:	Return on Assets
S. D	:	Standard Deviation
SDC	:	Shanker Dev Campus
SPSS	:	Statistical Package for the Social Sciences
T.U.	:	Tribhuwan University

ABSTRACT

The objective of the research are to assess the current status of non-performing loans and factor affecting non-performing assets in Nepalese commercial banks, to analyze the relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks and examine the impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks. The literature review from the google scholar. The descriptive and casual comparative research design has been used for doing this research. Out of 20 commercial bank, 3 banks are taken under studies. The secondary data are used for this study. Financial and statistical analysis conducted for achievement of the objectives. It is found that deviation mean minimum and maximum and the result of the given tables shows the variables namely; non-performing assets ratio, return on assets, liquidity ratio, cost income ratio, capital adequacy ratio and inflations rate are fluctuating in nature. The relationship of return on assets and liquidity ratio to the non-performing assets ratio is not significant. The relationship of cost income ratio, capital adequacy ratio and inflation rate is significant to the non-performing assets ratio. The impact of return on assets and liquidity ratio to the non-performing assets ratio is not significant. The impact of cost income ratio, capital adequacy ratio and inflation rate is significant to the non-performing assets ratio.

Keywords: *non-performing assets, profitability and commercial bank in Nepal*

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

Non-Performing Assets (NPAs) are loans issued by commercial banks that borrowers have failed to repay by the maturity date. Also referred to as non-performing loans (NPLs), these debts are classified as NPAs when they become overdue. Parul (2012) highlights that a rise in NPLs requires banks to set aside higher provisions, which reduces profits and impacts shareholders. A large proportion of bank credit raises the risk of financial instability. Ahmad and Ariff (2007) define NPLs as loans that remain unpaid for three months or longer, with high levels of NPLs signaling greater potential losses from credit defaults, while lower levels indicate a higher likelihood of profitability.

Banks are increasingly vulnerable to credit risks due to borrower defaults. High NPLs negatively impact bank profitability, particularly when it comes to asset sales. Felix and Claudine (2008) state that non-performing loans have a negative relationship with return on equity (ROE) and return on assets (ROA). NPAs generally represent bad debts, including loans and advances that are not performing and may become irrecoverable. These bad debts severely impact financial institutions by reducing the value of investments and requiring risk provisions, directly affecting profitability. In extreme cases, they can threaten a bank's survival. Therefore, prompt recovery of both principal and interest is essential to prevent further disruptions.

The growing problem of NPLs has led to discussions on the "bail-in" approach, particularly in India after the introduction of the Financial Resolution and Deposit Insurance Bill. In Nepal, the Nepal Rastra Bank acts quickly to preserve public trust in commercial banks, especially in light of the significant NPLs in public sector banks. NPAs not only indicate the performance of banks but also influence the entire financial system (Dudhe, 2014).

Banks play a vital role in a country's economic growth. Nepal Bank Limited, the first commercial bank in Nepal, demonstrates the key role these banks play within financial institutions. They manage deposits from individuals, businesses, and government entities, and extend credit through lending and investment, facilitating the flow of goods and services and supporting government finances. Banks are instrumental in executing monetary policy and are

essential to the functioning of the economy. By providing credit, they contribute to economic development and foster public confidence. To maintain stability, banks must ensure they have sufficient loan loss provisions and capital reserves to manage NPAs effectively.

1.2 Problem Statement

The economic growth of any nation is deeply connected to the strength of its financial system, with the banking sector playing a pivotal role. Commercial banks, as essential financial intermediaries, play a major part in fostering economic development by pooling funds from surplus units and lending them to deficit units, generating profits in the process. However, these activities expose banks to risks such as loan defaults and difficulties in repaying depositors, which may arise from political instability, economic challenges, or internal banking issues. These risks can jeopardize the stability and profitability of the entire financial system. One key challenge in the credit cycle is the failure to recover loans and interest on time. While completely avoiding such losses is impossible, banks can take steps to minimize them. The issue of non-performing assets (NPAs) has been a significant topic of concern in the global banking sector. When a bank is unable to recover loans or consistently collect payments, its profitability and shareholder value decline due to the need for increased provisions. Failures within the banking industry can have ripple effects on both connected and unrelated sectors. NPAs are not only a concern for individual banks but also for the overall economy of a nation (Karri et al., 2015). They serve as an indicator of bank performance, with rising NPAs heightening the risk of loan defaults, reducing profitability, and depreciating asset values (Hersugondo et al., 2021). Public sector banks, in particular, need to prioritize better NPA management to boost profitability. Financial institutions must develop innovative strategies for improving loan recovery, as NPAs negatively affect their financial health and morale.

The increasing significance of NPAs underscores the need for stronger credit management practices to bolster the banking sector's financial stability. A loan becomes past due when payments are delayed for a brief period, but once this delay extends (typically 90 days), it is categorized as non-performing (Selvarajan & Vadivalagan, 2013). The persistent NPA crisis continues to disrupt the Indian banking industry. Despite multiple efforts to address NPAs, no solution has been fully effective. Public sector banks face the brunt of this issue, and to improve efficiency and profitability, there is a need to better schedule NPAs. Stringent measures are necessary to confront the NPA crisis (Patwary & Tasneem, 2019). While achieving zero NPAs

is unrealistic, timely loan recovery and better credit management are essential for maintaining smooth banking operations. The rise in NPAs is often attributed to a target-driven lending approach that undermines the quality of loans, deliberate defaults, poor loan account supervision, and borrowers' lack of technical and managerial competence (Rai, 2012). Banks must implement new recovery programs for overdue loans, monitor accounts more closely, and maintain consistent communication with borrowers. Many defaults result not from low income, but from a lack of ethical responsibility. Enhancing credit management through better credit planning, thorough appraisals, post-sanction monitoring, and need-based lending is crucial for reducing NPAs.

The purpose of this research is to investigate the factors contributing to NPAs and explore strategies for mitigating them. It acts as a critical reminder to customers and investors about the importance of effective management of their deposits. This study will offer valuable insights to individuals, bank managers, and financial sector practitioners. NPAs have become a significant threat to banks in today's competitive landscape, as they not only lock up the bank's funds but also lead to a loss of assets. There is a dire need for the banks to overcome this problem of NPA. Mainly following are the problem of the research.

- What are the existing conditions of non-performing loans and factor affecting non-performing loan of Nepalese commercial banks?
- What is the relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks?
- Whether there is the any impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks?

1.3 Objectives of the Study

The primary objective of this research is to examine the impact of non-performing assets (NPAs) on the profitability of commercial banks in Nepal. This main objective is further divided into three specific objectives, which are as follows:

- To assess the current status of non-performing loans and factor affecting non-performing assets in Nepalese commercial banks.
- To analyze the relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks.

- To examine the impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks.

1.4 Hypothesis

Hypothesis 1

There is the significant the relation relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks.

Hypothesis 2

There is the significant impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks.

1.5 Rationale of the Study

The study of factors affecting non-performing assets (NPAs) in Nepalese commercial banks is closely linked to the banks' credit management practices. Effective credit management plays a crucial role in minimizing NPAs, reducing customer default rates, and helping banks maintain a competitive edge in the loan market. Ineffective credit risk management is one of the primary causes of bank failures, and this research aims to assist bank management in improving profitability by addressing these risks. The extent to which credit is effectively managed also directly influences the growth and sustainability of deposit money banks and the broader economy.

For customers and investors, understanding how efficiently their deposits are managed is essential, making this research an insightful resource. It will provide valuable knowledge to individuals, management, and practitioners in both the banking and non-bank financial sectors. Additionally, the findings will contribute to academic research. The issue of NPAs in Nepalese commercial banks has gained prominence recently due to a liquidity crisis in the market, which has increased the risk of loan defaults. Given this context, the study of factors affecting NPAs is both relevant and timely.

1.6 Limitations of the Study

Following are the limitation of these studies.

- Research is based on secondary source of data and collected from annual report of the respective commercial banks.

- In the study used only three sample commercial banks and data were taken ten years of each.

CHAPTER-II

LITERATURE REVIEW

This chapter encompasses a theoretical review, empirical review, and an exploration of the research gap. The theoretical review covers the relevant theories related to the research topic, while the empirical review focuses on examining existing literature and previous studies. The research gap highlights the differences between past research and the current study, identifying areas for future investigation.

2.1 Theoretical Review

Non-Performing Loans (NPLs)

Non-performing loans are a key determinant of credit risk for deposit-taking institutions. The ratio of non-performing loans to total loans indicates the quality of a bank's loan portfolio, revealing the percentage of loans at risk of default. A higher ratio suggests inefficiency in loan assessment, indicating a greater likelihood that many loans may not be repaid. NPLs are typically categorized into substandard, doubtful, or lost, based on criteria established by a country's banking laws.

Liquidity Ratio

Msomi (2022) explains that the liquidity ratio measures a company's ability to use its assets to meet its liabilities. It assesses a company's capability to pay off short-term obligations when they are due. In banks, liquidity is evaluated by comparing total loans to total deposits. A high liquidity ratio means the bank is deploying more funds for loans, leading to a less liquid position as more funds are locked in loans.

Capital Adequacy Ratio

The capital adequacy ratio (CAR) reflects a bank's ability to maintain adequate capital to cover its risks and support future growth. It measures the institution's capacity to handle credit, market, and operational risks, and evaluates the management's ability to control these risks. CAR helps ensure that banks have sufficient capital to support their risk-weighted assets. It plays a vital role in ensuring the long-term sustainability and daily operations of banks.

Cost to Income Ratio (CIR)

As Msomi (2022) notes, the cost to income ratio (CIR) reflects a bank's operational efficiency by comparing operating costs to revenues. It is calculated by dividing the bank's operating expenses, excluding bad debts, by its operating income. A lower CIR indicates higher operational efficiency, as more of the bank's income is retained after covering operating costs.

Inflation Rate

Inflation refers to the sustained increase in the general price level of goods and services over time, leading to a decline in the purchasing power of money. Measured by the Consumer Price Index (CPI), inflation affects real economic growth and has significant consequences for overall economic performance. The relationship between inflation and growth, as well as its impact on economic activities, remains a topic of debate (Li & Godzik, 2006).

Return on Assets (ROA)

ROA measures a bank's ability to generate profits from its assets. It shows how efficiently the bank's resources are used to produce income over time. Similarly, return on equity (ROE) measures the profitability generated from shareholders' investments. ROA is a key indicator of profitability in the banking sector, often used to rank banks based on their efficiency in generating returns from their asset base (Saeed et al., 2016).

Loan Classification

Loan classification involves evaluating a bank's loan portfolio and categorizing loans based on their risk levels and other characteristics in accordance with central bank guidelines. This ongoing process allows banks to assess loan quality and take corrective actions to mitigate risks. In Nepal, under the authority of the NRB Act 2012 and Commercial Bank Act, Nepal Rastra Bank provides specific guidelines for loan classification and loss provisions.

- Pass loan
- Watch List
- Substandard loan
- Doubtful loan
- Bad Loan

Non-Performing Loan

Bad Debt and Non-Performing Loans (NPLs)

Bad debt is often associated with non-performing loans (NPLs), which are loans where the borrower has failed to make at least three consecutive scheduled payments. Both principal and interest payments may be delayed or not paid at all. Since a significant portion of deposits is used to fund loans, these loans represent the bank's assets. A key source of income for banks is the interest earned on these loans, but loans can become non-performing if repayments are irregular. Thus, NPLs are loans that are no longer generating income through principal and interest recovery. According to Choudhury (2002), NPLs can be categorized into three types based on how long they have been delinquent: substandard loans, doubtful loans, and bad debts.

Performing Loans

Performing loans are those where the borrower consistently makes timely payments of both principal and interest. These loans are considered productive assets for banks as they generate income. Loans must be repaid within a specified time frame, and when borrowers meet this schedule, the loan is classified as performing. In Nepal, performing loans are typically categorized as "pass and watch list" loans. These loans represent the bank's most profitable assets, with better-performing loans reflecting the overall success of a bank. However, the failure to repay loans on time has negatively impacted many banks (Choudhury, 2002).

Causes of Non-Performing Assets (NPAs)

The increase in NPAs within commercial banks can be attributed to several factors, including poor lending practices. Other contributing factors include gaps in legal provisions for loan recovery, inconsistent government policies, economic downturns, inadequate supervision from central banks, overly strict provisioning requirements, shortfalls in loan security, weak credit concentration, mismanagement within banks, and the failure to identify borrowers with bad intentions.

NPA Management

When banks accept deposits from the public and lend money for corporate and other uses, external effects may occur. If a loan is not repaid with interest, it becomes a non-performing asset, making it difficult for banks to return depositors' money. This loss of public trust can

damage the bank's reputation. Additionally, in order to pay depositors, banks may need to borrow money at higher interest rates, which reduces profitability and can ultimately lead to bank failure (Brose, 2016).

2.2 Empirical Review

2.2.1 Review of International Article

Chun and Ardaaragchaa (2024) examine the intertemporal relationship between non-performing loan (NPL) ratios and bank lending, analyzing factors that influence loan growth using data from Mongolian commercial banks. Given the limited research on Mongolian banks' lending behaviors due to their relatively short history, their study employs an ordinary least squares (OLS) regression model with panel data to assess how NPL ratios affect overall loan growth. They considered both bank-specific variables, such as loan-to-deposit ratio, provision-to-loan portfolio ratio, equity-to-asset ratio, and liquidity ratio, and economic factors, including real GDP growth rate, interest rate, and inflation rate. Their findings indicate that non-performing loans negatively impact total loan growth significantly. This suggests that non-performing loans compromise banking efficiency, which in turn affects financial stability and the broader economy. Additionally, high levels of non-performing loans decrease bank profits. The study also reveals that loss reserves and liquidity ratios positively influence total loan growth, whereas the loan-to-deposit ratio and equity capital ratio do not have significant effects. On a macroeconomic level, inflation positively impacts total loan growth, and interest rates also positively affect loan growth rather than hindering it.

Ghaffar et al. (2023) evaluated non-performing loans (NPLs) in Pakistan's commercial banks, focusing on how macroeconomic factors like GDP, corruption, unemployment, political instability, and inflation influence NPL levels. They used time series data from 1972 to 2022 and employed the ARDL approach for both long-run and short-run analysis. Their results highlight a long-term relationship between the variables, with co-integration showing a significant impact on NPLs. They found that efficient management significantly affects NPLs, and GDP has both positive and negative significant impacts on NPLs in the long and short run. Conversely, corruption's impact is inconsistent and insignificant, while inflation and interest rates have significant negative effects on NPLs in both time frames.

Marchela and Widodo (2023) explored how macroeconomic and internal company variables—such as BOPO, ROA, money supply, and unemployment rate affect non-performing loans (NPLs) in Indonesian Regional Commercial Banks (BPD). Using purposive sampling of 20 banks from 2008 to 2021 and panel data regression, they determined that BOPO, ROA, money supply, and unemployment rates significantly impact NPLs both simultaneously and individually. The Fixed Effect Model (FEM) was applied, with issues addressed using Feasible Generalized Least Squares (FGLS).

Darwisman and Mawardi (2023) studied factors influencing BPD profitability during normal times and the Covid-19 pandemic, using panel data regression and two-sample t-test analysis. Their findings show that, in normal times, profitability, as measured by ROA, is negatively affected by NPLs and total assets but positively by liquidity. The pandemic generally impacted BPD profitability, with NPL and NIM variables continuing to affect ROA significantly during the crisis. Liquidity's effect on profitability diminished during the pandemic, and capital, measured by CAR, had no significant effect on BPD profitability in both normal and pandemic times.

Khoirunisa and Karnasi (2023) investigated factors affecting credit risk in 36 conventional banks listed on the Indonesia Stock Exchange from 2017 to 2021. Using purposive sampling and panel data regression, they found that return on assets, capital adequacy ratio, and GDP had a significant negative impact on non-performing loans, whereas inflation had a significant positive effect. Lending interest rates and liquidity ratios did not significantly affect non-performing loans.

Agrawal et al. (2022) investigated the issue of loan repayment defaults among small and marginal farmers from the perspective of bankers. They conducted a pilot study with 60 responses from bankers using a structured questionnaire, focusing on bank branches in Rajasthan. The study revealed that farmers often fail to repay their loans, mistakenly believing that the government will eventually forgive the debts, despite having the means to repay. Issues identified included restrictions on the sale of agricultural land owned by small and marginal farmers, misuse of loan funds for unproductive purposes, excessive spending on social obligations, and a pattern of loan waivers benefiting defaulters while good payers receive no relief.

Msomi (2022) analyzed both macroeconomic and bank-specific factors affecting non-performing loans (NPLs) in commercial banks. The study covered 47 listed banks across six countries: Nigeria (19 banks), Benin (14 banks), Burkina Faso (3 banks), Gambia (3 banks), Guinea (3 banks), and Liberia (5 banks), from 2008 to 2019. Using fixed and random effect models, the Hausman test recommended the fixed effect model. The findings indicated that the liquidity ratio, capital adequacy ratio, and inflation rate significantly impact NPLs.

Harimurti et al. (2022) examined the effects of macroeconomic factors, specifically inflation, and bank-specific factors such as Return on Assets (ROA), Equity to Asset Ratio, and bank size on non-performing loans in state-owned banks. This causal associative study used panel data analysis with EViews version 10. The results showed that ROA negatively affects NPLs, while Equity to Asset Ratio and bank size positively influence NPLs. Inflation also has a positive impact on NPLs.

Lemma-Lalisho (2022) investigated the determinants of non-performing loans in Ethiopian commercial banks, focusing on both bank-specific and macroeconomic factors. The study analyzed data from the Commercial Bank of Ethiopia (DBE) from 1990 to 2019, noting a rise in NPLs during this period, which adversely affected bank performance and led to insolvency. Employing an explanatory design and mixed research approach, primary data were collected through interviews with senior credit officers and team managers at DBE, while secondary data came from the bank's annual financial reports and the National Bank's annual reports over thirty fiscal years. Using the autoregressive distributed lag (ARDL) model for co-integration analysis, the study found a significant negative relationship between earning capacity (ROA), interest rate, GDP, inflation rate, and NPLs. Conversely, bank size and liquidity were positively related to NPLs.

Gashi et al. (2022) explored how macroeconomic factors affect non-performing loans (NPLs) using econometric models such as GMM, Fixed Effect, and Random Effect models. The study aimed to pinpoint macroeconomic factors influencing NPL levels in the Western Balkans, assess their impact, and address the gap between economic growth and factors significantly affecting NPLs. They conducted desk research using World Bank data from 2000 to 2019, analyzed with STATA software. The findings indicate that macroeconomic factors do affect NPLs, but despite economic growth in various countries, bad debt levels have not been fully

resolved. Fixed effects estimates throughout the study period revealed that some variables did not show significance in a static context. Key findings include that annual GDP growth rates, final government consumption, real interest rates, gross domestic savings, and unemployment rates positively impact NPLs.

Stefano and Dewi (2022) examined whether profitability negatively affects non-performing loans, whether income diversification positively impacts NPLs, and whether bank capital and liquidity have negative effects on NPLs. Their study included 28 banking companies listed on the Indonesia Stock Exchange for the period. Using purposive sampling and data processed with E-Views 10 software, they found that profitability has a negative effect on NPLs, income diversification has a positive effect, while bank capital and liquidity do not significantly impact NPLs.

Keshani and Jayatilake (2021) investigated the factors related to institutions, customers, and remedial measures for addressing non-performing loans. The study involved ten employees and ten customers from ABC Finance Limited. Using a qualitative research methodology, including an interpretivist paradigm, case study strategy, and grounded theory approach, they conducted in-depth interviews. Their findings identified both customer-related factors and new institutional-related factors influencing non-performing loans, as well as some moderate remedial measures for financial companies and banks.

Zunic et al. (2021) studied the factors driving non-performing loans in the banking sector of Bosnia and Herzegovina and the impact of the COVID-19 pandemic. They used secondary data from the banking sector and performed a multi-regression analysis with variables including non-performing loans, GDP, loan loss provisions, and a COVID-19 dummy variable. The analysis revealed significant influences of these variables, demonstrating a positive link between NPLs and the state of the country's economy.

Prasanth et al. (2020) examined the factors influencing Non-Performing Assets (NPAs) at the Commercial Bank of India. The study was based on conclusions from existing literature, with secondary time series data collected from the audited annual reports and performance reports of Indian Bank and SBI. Ratios were computed, and a multiple linear regression model was applied using SPSS version 20 software. The regression analysis revealed that the loan-to-deposit ratio, financial performance as measured by return on equity, and capital adequacy

were statistically significant determinants of NPAs. In contrast, loan growth, cost efficiency, and bank size were not found to significantly impact NPAs. Additionally, factors such as inadequate credit risk evaluation, reliance on collateral-based lending, poor loan monitoring, and limited credit advisory practices were identified as specific bank-related issues affecting NPAs.

Rachman et al. (2018) investigated bank-specific factors affecting loan defaults in developing countries, focusing on how these factors impact the broader economy. The study analyzed panel data from 36 commercial banks listed on the Indonesian Stock Exchange. Using a fixed effects panel regression model, the research found that both profitability and credit growth negatively influenced the level of non-performing loans (NPLs) in Indonesian banks. Banks with higher profitability had lower NPLs due to better credit management practices, while banks with higher credit growth also exhibited lower NPLs, indicating more effective credit management and specialized lending activities.

Table 1

Summary of International Article Review

S.N.	Author/ Date	Title	Objectives	Methodology	Findings
1	Ghaffar et al. (2023)	Macroeconomic Factor Affecting Non-Performing Loans (NPLs): Evidence from Commercial Bank in Pakistan Based ARDL	To assess non-performing loans (NPLs) in Pakistan's commercial banks, the study examined macroeconomic factors such as the country's GDP, corruption,	They employed time series data from Pakistan, analyzing it using ARDL, correlation, and multiple regression techniques.	The findings indicate that GDP has either a positive or negative and significant effect on non-performing loans (NPLs) in Pakistan's commercial banking sector, depending on the time frame (long run or short run). Corruption, however, has either a positive

		Cointegration Approach.	unemployment, political instability, and inflation, all of which influence the level of NPLs in these banks.		or negative but insignificant effect on NPLs in both the long and short runs. Inflation and interest rates both have a negative and significant impact on NPLs across both time frames.
2	Marchela and Widodo (2023)	Determinants of non-performing loans in Regional Commercial banks (BPD) in Indonesia.	To assess the impact of macroeconomic and internal company variables, including BOPO, ROA, money supply, and the unemployment rate, on non-performing loans (NPLs) in Indonesian regional commercial banks.	The study employed purposive sampling to select participants and utilized panel data regression for data analysis.	The analysis results indicate that both together and individually, the variables BOPO, ROA, money supply, and unemployment rates significantly and positively impact the non-performing loans (NPL) of Regional Commercial banks.
3	Darwisman and Mawardi	Analysis of the Influence of Liquidity,	To examine the factors influencing	This study employed panel data	The NPL and NIM variables continue to have a significant

	(2023)	Non-Performing Loans, Capital, and Total Assets of Bank on Bank Profitability before and during the Covid-19 Pandemic.	BPD profitability during both normal periods and the Covid-19 pandemic crisis	regression analysis using the fixed-effects model, complemented by a two-sample t-test analysis for support.	impact on the BPD ROA ratio during the Covid-19 pandemic. However, liquidity does not significantly influence BPD profitability during the pandemic, and capital, as measured by the CAR proxy, does not significantly affect BPD profitability either during normal times or throughout the Covid-19 crisis.
4	Khoiruni sa and Karnasi (2023)	Factors Affecting Non-Performing Loans of Conventional Banking in Indonesia Stock Exchange.	To examine the factors affecting credit risk in banks, a sample of 36 conventional banks listed on the Indonesia Stock Exchange was used.	The study employed purposive sampling and analyzed the data using panel data regression methods.	The findings indicated that the return on assets, capital adequacy ratio, and gross domestic product significantly reduced the level of non-performing loans, while the inflation rate had a significant positive impact on non-performing loans.
5	Agrawal	Exploring	To examine the	A pilot study	They discovered that

	et al. (2022)	Factors Affecting Non-Performing Assets of Small and Marginal Farmers: Bankers Perspective.	issue of non-repayment of loan installments by farmers, particularly small and marginal farmers, from the perspective of bankers.	was carried out with a sample of 60 responses from bankers using a structured questionnaire.	farmers are deliberately not repaying loan installments, assuming that the government will forgive the loans, even though they have the resources to pay.
6	Msomi (2022)	Factors affecting non-performing loans in commercial banks of selected West African countries.	To analyze how macroeconomic and bank-specific factors impact non-performing loans in commercial banks.	The study utilized fixed and random effects models with data from 47 listed commercial banks across six countries.	The estimation revealed that the liquidity ratio, capital adequacy ratio, and inflation rate have a significant impact on non-performing loans.
7	Harimurti et al. (2022)	Factors affecting non-performing loans in state-owned banking.	To examine the impact of macroeconomic factors, such as inflation, and bank-specific factors, including return on	This research is a causal associative study aimed at determining how return on assets, equity-to-asset ratio,	The research employed panel data analysis using EViews version 10. The analysis revealed that return on assets has a significant negative impact on non-performing loans.

			assets, equity-to-asset ratio, and bank size, on non-performing loans in state-owned banks.	inflation, and bank size affect non-performing loans in state-owned banks.	
8	Lemma-Lalisho (2022)	Determinant of non-performing loan in commercial banks of Ethiopia.	To investigate the factors influencing non-performing loans in Ethiopian commercial banks.	The study employed an explanatory design and a mixed research approach. Primary data were collected through interviews with senior credit officers and team managers at DBE.	They discovered a significant negative relationship between earning ability (ROA), interest rates, GDP, and inflation rates with non-performing loans in Ethiopian commercial banks. Conversely, a positive relationship was observed between bank size, liquidity, and non-performing loans.
9	Gashi et al. (2022)	The Impact of Macroeconomic Factors on Non-performing Loans in the	To examine how macroeconomic factors relate to the level of non-performing	The research was conducted using desk research methodology.	The results indicate that macroeconomic factors influence non-performing loans. They also demonstrate that, despite economic

		Western Balkans.	loans (NPLs) using econometric models such as GMM, the Fixed Effect model, and the Random Effect model.		growth in many countries, bad debt levels have not been fully eradicated even when interacting with other variables.
10	Stefano and Dewi (2022)	Determinants of Non-Performing Loans: Banking Sector Listed in Indonesia Stock Exchange.	To gather empirical evidence on whether profitability negatively impacts non-performing loans, whether income diversification positively affects non-performing loans, and whether bank capital and liquidity have negative effects on non-performing loans.	The research sample comprised 28 banking companies listed on the Indonesia Stock Exchange Purposive sampling was employed, and the data were analyzed using E-Views 10 software.	The results show that profitability negatively impacts non-performing loans, while income diversification has a positive effect on them. Additionally, bank capital and liquidity do not have a significant negative effect on non-performing loans.

11	Keshani and Jayatilake (2021)	Factors Affecting Non-Performing Loan in Sri Lanka: A Qualitative Study.	To identify the institutional factors, customer-related factors, and remedial mechanisms for addressing non-performing loans.	The study employed a qualitative research methodology, utilizing paradigm, case study strategy, and grounded theory approach, with data collected through in-depth interviews.	The findings indicated that customer-related factors contribute to non-performing loans, and several new institutional-related factors were also identified.
12	Zunic et al. (2021)	Non-performing loan determinants and impact of covid-19: Case of Bosnia and Herzegovina.	To examine the factors influencing the fluctuations in non-performing loans within the banking sector of Bosnia and Herzegovina, and to assess the impact of the COVID-19	Secondary data from Bosnia and Herzegovina's banking sector was utilized for the analysis, which was conducted using multiple regression methods.	The analysis revealed a significant impact from all three variables, demonstrating a substantial positive correlation between non-performing loans and the overall economic condition of the country.

			pandemic.		
13	Prasanth et al. (2020)	Factors affecting non-performing loan in India.	To examine the factors influencing Non-Performing Assets (NPAs) of the Commercial Bank of India over the specified period.	A multiple linear regression model was employed for the analysis, utilizing SPSS version 20 software.	The regression analysis revealed that among the variables examined, the loan-to-deposit ratio, financial performance (measured by return on equity), and capital adequacy were significant determinants of non-performing loans (NPLs). In contrast, loan growth, cost effectiveness, and bank size were found to have no significant impact on NPLs.
14	Rachman et al. (2018)	Bank-specific factors affecting non-performing loans in developing countries: Case study of Indonesia.	To highlight the bank-specific factors influencing loan default issues in developing countries, where the banking sectors are	The panel regression model indicates that profitability and credit growth in Indonesian banks have a negative impact on the	They found that banks with higher profitability tend to have lower levels of non-performing loans (NPLs) because they are able to implement effective credit management practices.

	crucial to the overall economy.	level of non-performing loans (NPLs).

2.2.2 Article Review in Nepalese Context

Singh et al. (2021) examined the factors influencing non-performing loans (NPLs) in Nepalese conventional banks, using data from major commercial banks for the period 2015–2019. The study utilized secondary data from bank annual reports, as well as GDP and inflation data from the World Bank. Multiple regression analysis was employed, with NPL as the dependent variable and Return on Assets (ROA), Capital Adequacy Ratio (CAR), Bank Size, GDP growth, and Inflation as independent variables. The results indicated that ROA, Bank Size, GDP, and Inflation significantly affect NPLs, while CAR does not. Notably, GDP growth had a positive and significant impact on NPLs, contrasting with most studies that show a negative effect, suggesting that increased GDP growth leads to higher NPLs despite stable income growth.

Koju et al. (2018) assessed the macroeconomic and bank-specific determinants of NPLs in the Nepalese banking sector, considering 30 commercial banks over the period 2003–2015. Using both static and dynamic panel estimation approaches, the study identified that NPLs had a significant positive relationship with the export-to-import ratio, inefficiency, and asset size, while showing a negative relationship with GDP growth rate, capital adequacy, and inflation rate.

Bhattarai (2018) analyzed factors affecting NPLs in Nepalese commercial banks with a sample of ten banks over the period 2013–2017, using 50 observations. The study adopted descriptive and causal-comparative research designs, focusing on both bank-specific factors (e.g., bank size, return on assets, loan-to-deposit ratio, and capital adequacy ratio) and macroeconomic factors (e.g., real GDP growth rate, inflation). The research highlighted that high levels of NPLs could impede financial intermediation benefits and emphasized the need for effective management of NPLs by banks to maintain them at acceptable levels.

Table 2

Summary of Nepalese context article

S.N.	Author/ Date	Title	Objectives	Methodology	Findings
1	Singh et al. (2021)	The effect of non-performing loan on profitability: Empirical evidence from Nepalese commercial banks.	To determine the impact of non-performing loans (NPLs) on Nepalese conventional banks.	The study focuses on major commercial banks in Nepal, using data from 2015 to 2019. Secondary data was collected from each bank's annual reports, with GDP and inflation data sourced from the World Bank database. The analysis was conducted using multiple regression techniques.	The research findings indicate that Return on Assets (ROA), Bank Size, GDP, and Inflation significantly impact Non-Performing Loans (NPL), whereas the Capital Adequacy Ratio (CAR) does not have a significant effect on NPLs. Notably, this study finds a positive and significant impact of GDP on NPLs, contrasting with the generally observed negative relationship in other studies.
2	Koju et al. (2018)	Macroeconomic and bank-specific determinants of	To assess the macroeconomic	The study examines 30 commercial banks in Nepal	The findings indicate that non-performing loans (NPLs) have a significant positive

		non-performing loans: Evidence from Nepalese banking system.	and bank-specific factors influencing non-performing loans (NPLs) in the Nepalese banking sector, employing both static and dynamic panel estimation methods.	from 2003 to 2015, using 7 bank-specific and 5 macroeconomic variables to evaluate how banking management and economic indicators influence non-performing loans (NPLs).	correlation with the export-to-import ratio, inefficiency, and asset size, while showing a negative correlation with GDP growth rate, capital adequacy, and inflation rate.
3	Bhattarai (2018)	Ascertained the factors affecting to non-performing loans in Nepalese commercial banks using a sample of ten	To determine the factors influencing non-performing loans in	The study utilized descriptive and causal-comparative research designs. Non-performing loans were the	High levels of non-performing loans (NPLs) can undermine the benefits of financial intermediation and impede the country's economic progress. Therefore, it is crucial

commercial banks for the period of 2013-2017 with 50 observations, Adinde, J.C. (2014).	Nepalese commercial banks.	dependent variable, while the independent variables included bank-specific factors such as bank size, return on assets, total loan to deposit ratio, and capital adequacy ratio, as well as macroeconomic factors like real GDP growth rate and inflation.	for banks to manage their NPL ratios effectively. Identifying the causes of NPLs and understanding the significance of these factors is essential for addressing and mitigating their impact.

2.3 Research Gap

Despite extensive research on non-performing loans (NPLs) across various countries, significant research gaps persist, particularly in the context of specific banking systems and economic environments. For instance, Chun and Ardaaragchaa (2024) highlighted the adverse impact of NPLs on loan growth in Mongolian banks, but their study was limited by the relatively short operational history of these banks. This limitation indicates a need for longitudinal studies to assess long-term trends and effects in NPL behavior. Furthermore, their analysis did not address the influence of international financial standards or global economic crises, leaving a gap in understanding how these factors might affect NPL dynamics in such unique banking environments.

Similarly, research by Ghaffar et al. (2023) and Marchela and Widodo (2023) on NPLs in Pakistan and Indonesia respectively, focused on macroeconomic and internal bank factors. While Ghaffar et al. highlighted the impact of GDP and inflation on NPLs in Pakistan, and Marchela and Widodo examined various determinants in Indonesian banks, both studies relied on historical data without considering recent global economic changes like the COVID-19 pandemic. This oversight suggests a need for future research that incorporates contemporary variables, including pandemic-related impacts, to offer a more nuanced understanding of NPL determinants in these regions.

In the context of Nepalese commercial banks, the current research design, which uses descriptive and causal-comparative approaches, reveals additional gaps. The study's reliance on descriptive metrics, such as NPAs, loan loss provisions, and capital adequacy ratios, provides only a static view of financial health. There is a need for more advanced analytical techniques that account for temporal changes and non-linear effects. Moreover, the limited sample size of only three banks and the reliance on secondary data restrict the generalizability of findings. Expanding the sample to include a broader range of banking institutions and integrating primary data through interviews or surveys could offer a deeper and more comprehensive understanding of NPAs and their impact on profitability. Additionally, considering external factors like political instability or regulatory changes could further enhance the robustness and relevance of the research findings.

CHAPTER- III

RESEARCH METHODOLOGY

The research methodology uses a descriptive and causal-comparative design to assess how non-performing loans (NPLs) impact the profitability of commercial banks in Nepal. The study examines three randomly selected banks, covering data from FY 2013/14 to FY 2022/23. It employs secondary data from financial statements, regulatory reports, and economic databases. The analysis involves evaluating financial ratios and applying statistical techniques, including descriptive statistics, correlation analysis, and multiple regression, to explore the relationships between NPLs and various profitability metrics. This approach aims to offer insights into the effect of NPLs on bank performance and profitability over time.

3.1 Research Design

The research employs a descriptive and causal-comparative design. Descriptive research focuses on detailing or defining the subject, such as non-performing loans, loan loss provisions, capital adequacy, return on assets, inflation rate, gross domestic product, and return on equity. Causal-comparative research aims to explain the relationships and effects between dependent and independent variables.

3.2 Population and Sample

Sampling is conducted using a random sampling method, where the sample is chosen randomly. For this research, financial statements from three commercial banks covering a ten-year period, from FY 2013/14 to FY 2022/23, are utilized.

In fiscal year 2023, there are 20 commercial banks in Nepal, and the study focuses on 3 of these banks, selected based on the availability of data.

Table3

Sample Bank

S.N.	Commercial Banks	Sample	Owner status
1.	Everest bank limited	1	Joint venture with Punjab national bank of India
2.	Kumari bank limited	1	Private and public sectors
3.	Nepal bank limited	1	Government and public own
	Total	3	

Source: NRB Financial Bulletin

3.3 Nature and Sources of Data

This study uses secondary data to examine the relationships and cause-and-effect associations between non-performing assets and the profitability of commercial banks in Nepal. The research also evaluates the predictive strength of these factors. Firm-specific data will be gathered from the annual reports of the selected banks available on their websites. Additionally, data from NEPSE, SEBON, and NRB will be used to obtain the necessary information. Panel data will be employed to analyze the relationship between non-performing assets and their determinants.

3.4 Instrument of Data Collection

This study utilized secondary data, which were gathered from the websites of the relevant banks. Data were collected from the banks' published annual reports, as well as from NRB's Banking and Financial Statistics, economic reports, and other statistical publications. Additional information was obtained through informal discussions and procedures. All data were sourced from the banks' annual financial statements.

3.5 Methods of Analysis

For the achievement of the objectives of the research the statistical analysis of done. They are descriptive statistical analysis, correlation analysis and multiple regression analysis.

3.5.1 Financial analysis

The financial analysis involved various ratio calculations related to both dependent and independent variables. Here are the key ratios and their calculation formulas:

Non-Performing Loan Ratio

This ratio assesses the quality of a bank's loan portfolio and its financial health by comparing Non-Performing Assets (NPAs) to Total Loans and Advances. NPAs are loans or advances where either the principal or interest payment has been overdue for 90 days or more, reflecting the asset quality or credit risk management practices of a bank. Total Loans and Advances encompass the total amount of money lent by the bank to borrowers, including personal loans, mortgages, and business loans.

Non-performing Loan ratio $= \frac{Non\ perfming\ assets}{total\ loan\ and\ advance} \times 100$

Return on Assets (ROA)

Return on Assets (ROA) is an important financial metric that evaluates a company's profitability in relation to its total assets. It reflects how effectively a company utilizes its assets to generate earnings. This ratio is especially valuable for comparing the performance of companies within the same industry.

Return on assets $= \frac{Net\ profit\ after\ tax}{total\ assets} \times 100$

Liquidity Ratio

Liquidity ratios are financial metrics that evaluate a company's capacity to fulfill its short-term obligations using its most liquid assets. They offer insight into the company's financial stability and operational effectiveness, revealing whether it can cover its current liabilities without needing external financing.

Current ratio $= \frac{Current\ Assets}{Current\ liabilities}$

Cost-Income Ratio (CIR)

The Cost-Income Ratio (CIR) is a financial metric used to evaluate the operational efficiency of a company, especially in the banking and finance sectors. It is determined by dividing operating expenses by operating income and expressing the result as a percentage. A lower CIR signifies greater efficiency, indicating that the company is spending less to generate each unit of income, whereas a higher CIR reflects lower efficiency.

Cost Income Ratio $= \frac{Operating\ Expenses}{operating\ Income} \times 100$

Capital Adequacy Ratio (CAR)

The Capital Adequacy Ratio (CAR) typically assesses a bank's capacity to absorb potential losses by evaluating its risk-weighted assets. There are also more straightforward measures

that approximate a bank's capital adequacy by using total assets and equity. These simplified metrics include the Equity to Total Assets Ratio and the Leverage Ratio.

Capital adequacy ratio = $\frac{toal\ equity}{total\ assets} \times 100$

Inflation Rate

The inflation rate measures the percentage increase in the price level of goods and services within an economy over a designated period, usually a year. It indicates how much the purchasing power of money declines, meaning that more money is required to purchase the same quantity of goods and services.

Inflation rate = $\frac{CPI\ current\ Period - CPI\ previous\ period}{CPI\ previous\ period} \times 100$

Where,

CPI= consumer price index

3.5.2 Statistical analysis

3.5.2.1 Descriptive Statistics Analysis

Descriptive statistics encompass various metrics such as the mean, median, standard deviation, coefficient of variation, minimum, and maximum values. The mean represents the average or most common value in a dataset and serves as a measure of central tendency, alongside the median and mode. It is also known as the expected value. The standard deviation measures the extent of variation or dispersion within a dataset. It is calculated as the square root of the variance, which is determined by assessing each data point's deviation from the mean.

Mean ($\bar{X}$)

The mean is the average value in a set of numbers and represents a measure of central tendency in statistics, alongside the median and mode. It is also known as the expected value.

Standard Deviation (σ)

Standard deviation measures the extent of variation or dispersion in a set of values. It is calculated as the square root of the variance by assessing each data point's deviation from the mean (Kumari & Yadav, 2018). It is denoted by (σ).

Standard Deviation ($\boldsymbol{\sigma}$) = Standard Deviation ($\boldsymbol{\sigma}$) = $\sqrt{\frac{\sum(X - \overline{X})^2}{n}}$

Where,

X=variables

$\overline{X}$ = mean

N= No. of Period

Minimum and maximum

Minimum is the lowest values of the given data series and maximum is the highest value in the given data series. The minimum and maximum shows the weakness and strength point of the given data series.

Coefficient of Variations

The Coefficient of Variation (CV) is a statistical measure used to assess the relative variability of a dataset. It is expressed as a percentage and is calculated by dividing the standard deviation of a dataset by its mean and then multiplying by 100:

$$CV = \frac{Standard\ deviation}{Mean} \times 100$$

3.5.2.2. Correlation Analysis

This design has been basically adopted to identify the direction and magnitude of relationship between different pairs of variables. For this purpose, correlation analysis has been used. It is a statistical tool to identify direction and magnitude of relation between two set of variables. It shows how two variables move together and also shows the degree of association between them. The relationship has been explained by using Pearson correlation coefficient. The value of correlation coefficient ranges from -1 to +1. If correlation coefficient is exactly -1, two variables are said to have perfect negative correlation as such that they move together exactly into opposite direction. On the other hand, if correlation coefficient is +1, the variables are said to be perfectly positively related.

3.5.2.3 Multiple Regression Analysis

The regression models will be employing in this study intend to analyze the impact between the dependent and independent variables will be stated in the following form:

Model 1

$NPA=\beta_0+\beta_1\times ROA+\beta_2\times LR+\beta_3\times CIR+\beta_4\times CAR+\beta_5\times IFLR+e$

Where,

NPA= Non-performing Loan

ROA= Return on Assets

LR=Liquidity Ratio

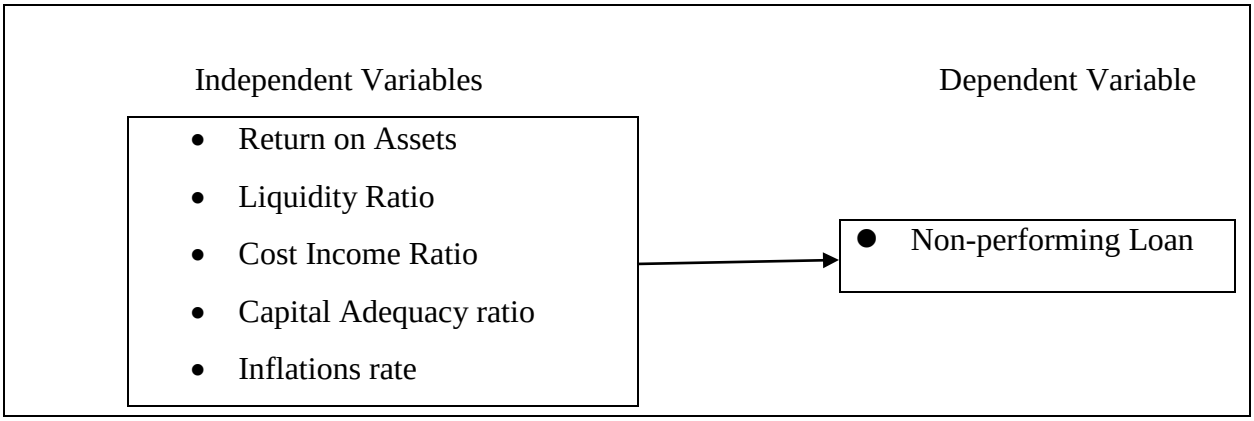
CIR=Cost Income Ratio

CAR= Capital Adequacy ratio

IFLR= Inflations rate

3.6 Research Framework and Definition of Variables

For the convenient presentation of the research, the variables are abbreviated as follows. This can be shown in the following table.



Source: *Khoirunisa & Karnasi (2023)*

Figure 1: Research Framework

Definition of Variables

Non-Performing Loans (NPLs)

Non-performing loans are a crucial indicator of credit risk for deposit-taking banks. This ratio, which compares non-performing loans to total loans, reveals the quality of a bank's loan portfolio and indicates the percentage of loans that are at risk of default. A higher ratio suggests inefficiencies in loan evaluation and a greater likelihood that many loans may not be recovered. Non-performing loans are typically classified into categories such as substandard, doubtful, or lost based on national banking regulations.

Liquidity Ratio

The liquidity of a bank is assessed by comparing its total loans to total deposits for a given period. This ratio reflects the bank's fund utilization policy, with a higher ratio indicating that more funds are allocated to loans, potentially resulting in a less liquid position for the bank.

Capital Adequacy Ratio (CAR)

The CAR assesses a bank's ability to maintain capital in proportion to the risks it faces. It evaluates how well a bank manages its capital to cover all types of risk, including credit and market risks. Institutions are rated based on their ability to manage risk effectively, including compliance with interest and dividend rules. Adequate capital supports risk assets and ensures the bank's operational stability and long-term viability.

Cost to Income Ratio (CIR)

The CIR measures a bank's efficiency by comparing its operating expenses, such as administrative costs and salaries, to its operating income. It excludes bad debts and provides insight into how effectively a bank manages its operational costs relative to its income.

Inflation Rate

Inflation represents the rate at which the general level of prices for goods and services rises, leading to a decrease in the purchasing power of money. This is measured either as a continuously compounded rate or as an annual percentage increase reported in the Consumer Price Index (CPI). High inflation rates can negatively impact real economic growth and overall economic performance.

Return on Assets (ROA)

ROA measures the profitability of a bank relative to its total assets, indicating how efficiently a bank generates profit from its assets. It helps assess the bank’s ability to use its assets effectively to produce income. In contrast, Return on Equity (ROE) measures the profitability relative to shareholder equity, reflecting returns on investments made by the bank’s owners. A higher ROA typically signifies better performance and effective asset utilization.

CHAPTER –IV

RESULT AND DISCUSSION

The data analysis results are presented in relation to the study's objectives. To ensure the best outcomes, the data has been analyzed following the research methodology outlined in Chapter Three. This chapter is organized according to the various tools and techniques used to identify the relationship and relevance between the data and the objectives. It includes an analysis using primary data and its findings.

4.1 Result

4.1.1 Financial analysis

Financial analysis entails assessing businesses, projects, budgets, and other financial entities to gauge their performance and suitability. This process generally involves examining financial statements, such as the balance sheet, income statement, and cash flow statement. In this context, the financial analysis includes various ratio analyses, which are:

4.1.1.1 Non-performing assets to total loan and advance

Non-Performing Assets (NPAs) and Total Loans and Advances are essential metrics in the banking sector for evaluating the quality of a bank's loan portfolio and its overall financial health. NPAs refer to loans or advances where the principal or interest payments have been overdue for 90 days or more. They serve as an indicator of a bank's asset quality and its credit risk management practices. Total Loans and Advances represent the total amount of funds a bank has lent to its borrowers, encompassing various types of loans, such as personal loans, mortgages, and business loans.

Table 4

Non-performing assets to total loan and advance

Year (NPL)	EBL	KBL	NBL
2014	0.97	4.03	3.4
2015	0.66	2.49	3.98
2016	0.38	1.15	3.11
2017	0.25	1.86	3.32
2018	0.16	1.05	3.37
2019	0.16	1.01	2.64
2020	0.22	1.39	2.47
2021	0.12	0.96	2.05
2022	0.12	1.11	1.83
2023	0.79	4.97	2.85
Mean	.38	2.00	2.9
S.D	.31	1.41	0.66
C. V (%)	81.57	70.5	22.75

Source: *Appendix-1*

Table 4 displays the Non-Performing Assets (NPA) to Total Loans and Advances Ratio for three selected banks: Everest Bank Limited (EBL), Kumari Bank Limited (KBL), and Nepal Bank Limited (NBL). The data includes 30 observations in total, with 10 from each bank. Nepal Bank Limited (NBL) has the highest average NPA ratio at 2.9, indicating a greater level of non-performing assets in relation to its total loans and advances. Kumari Bank Limited (KBL) shows the greatest standard deviation (S.D) at 1.41, pointing to significant variability in its NPA ratio. Meanwhile, Everest Bank Limited (EBL) records the highest Coefficient of Variation (C.V) at 81.75%, indicating a higher relative variability of its NPA ratio compared to its mean. Based on the S.D and C.V, both KBL and EBL exhibit more significant fluctuations in their NPA ratios, suggesting a more volatile and inconsistent performance in managing non-performing assets than NBL.

4.1.1.2 Return on Assets

Return on Assets (ROA) is an important financial indicator that assesses a company's profitability in relation to its total assets. It reflects how effectively a company utilizes its assets to generate profit. This ratio is especially valuable for comparing the performance of companies within the same industry.

Table 5

Return on Assets

Year (ROA)	EBL	KBL	NBL
2014	2.23	1.09	0.54
2015	1.74	1.05	2.78
2016	1.76	1.68	2.78
2017	1.81	1.07	1.34
2018	1.78	1.26	2.40
2019	1.79	1.16	1.51
2020	1.31	0.79	1.21
2021	0.83	1.03	3.72
2022	1.07	1.20	1.121
2023	1.34	0.135	1.15
Mean	1.57	1.05	1.86
S.D	.414	0.39	1.00
C. V	26.36	37.14	53.76

Source: *Appendix-1*

Table 5 shows the Return on Assets (ROA) ratio for the three selected banks: Everest Bank Limited (EBL), Kumari Bank Limited (KBL), and Nepal Bank Limited (NBL). The analysis includes 30 observations, with 10 for each bank. Nepal Bank Limited (NBL) has the highest average ROA ratio at 1.86, indicating that it generally achieves the highest return relative to its assets. NBL also has the highest standard deviation (S.D) of 1, highlighting the greatest variability in its ROA ratio over the observation period. Additionally, NBL's Coefficient of Variation (C.V) is the highest at 53.763%, showing the most significant relative variability in its ROA ratio compared to its mean. This indicates that NBL experiences the largest fluctuations in its return on assets, suggesting a more inconsistent performance in generating returns from its assets than Everest Bank and Kumari Bank.

4.1.1.3 Liquidity Ratio

Liquidity ratios are financial metrics that evaluate a company's capacity to meet its short-term obligations using its most liquid assets. These ratios offer insight into the company's financial health and operational efficiency, indicating whether it can settle its current liabilities without the need for external funding.

Table 6

Liquidity Ratio

Year (LR)	EBL	KBL	NBL
2014	39.23	106.92	110.87
2015	26.87	107.57	104.04
2016	21.6	109.38	106.48
2017	20.58	114.05	110.91
2018	121.74	112.72	99.66
2019	125.43	111.07	101.77
2020	123.91	114.13	102.27
2021	125.80	111.30	107.49
2022	109.18	109.83	107.86
2023	110.15	108.9	105.76
Mean	82.45	110.59	105.7
S.D	48.25	2.52	3.78
C. V	58.52	2.278	3.57

Source: *Appendix-1*

Table 6 displays the liquidity ratio for three banks: Everest Bank Limited (EBL), Kumari Bank Limited (KBL), and Nepal Bank Limited (NBL). The analysis includes 30 observations, with 10 for each bank. Kumari Bank Limited (KBL) has the highest average liquidity ratio at 110.59, indicating a stronger ability to meet short-term obligations compared to the others. Everest Bank Limited (EBL) has the highest standard deviation (S.D) of 48.25, indicating the greatest variability in its liquidity ratio throughout the observation period. Additionally, EBL shows the highest Coefficient of Variation (C.V) at 58.52%, highlighting the most significant relative variability in its liquidity ratio compared to its mean. This high C.V suggests that EBL faces more pronounced fluctuations in its liquidity ratio, reflecting a greater inconsistency in maintaining adequate liquidity over time compared to Kumari Bank and Nepal Bank.

4.1.1.4 Cost Income Ratio

The Cost Income Ratio (CIR) is a financial metric used primarily to measure the efficiency of a company's operations, particularly within the banking and finance sectors. It is calculated as the ratio of operating expenses to operating income, expressed as a percentage. A lower CIR indicates higher efficiency, meaning the company is spending less to generate a unit of income, while a higher CIR suggests less efficiency.

Table 7

Cost income ratio

Year (CIR)	EBL	KBL	NBL
2014	29.74	45.31	92.66
2015	33.97	53.05	78.26
2016	31.49	31.59	53.91
2017	32.97	24.85	45.20
2018	36.98	47.52	35.88
2019	36.55	48.39	41.70
2020	41.87	51.61	54.72
2021	49.47	47.42	46.91
2022	45.72	44.72	54.92
2023	39.73	30.48	59.20
Mean	37.85	42.49	56.34
S.D	6.36	9.8	17.2
C. V	16.8	23.06	30.52

Source: *Appendix-1*

Table 7 displays the Cost-to-Income Ratio for three banks: Everest Bank Limited (EBL), Kumari Bank Limited (KBL), and Nepal Bank Limited (NBL). The analysis is based on 30 observations, with each bank contributing 10 observations. Nepal Bank Limited (NBL) has the highest average Cost-to-Income Ratio at 56.34, indicating that NBL has the highest proportion of costs relative to its income among the banks. NBL also has the highest standard deviation (S.D) of 17.2, reflecting the greatest variability in its Cost-to-Income Ratio over the observation period. Additionally, NBL has the highest Coefficient of Variation (C.V) at 30.52%, which indicates that the variability in NBL's Cost-to-Income Ratio relative to its mean is more significant compared to Everest Bank and Kumari Bank. This higher C.V suggests that NBL experiences more substantial fluctuations in its cost management efficiency, reflecting a greater inconsistency in its cost relative to income over time.

4.1.1.5 Capital Adequacy ratio

The Capital Adequacy Ratio (CAR) typically evaluates a bank's capacity to absorb potential losses by using risk-weighted assets. However, simplified metrics can provide a rough estimate of a bank's capital adequacy by considering total assets and equity. Two such simplified measures are the Equity to Total Assets Ratio and the Leverage Ratio.

Table 8

Capital adequacy ratio

Year (CAR)	EBL	KBL	NBL
2014	7.745	9.55	4.34
2015	6.94	8.95	6.48
2016	6.452	9.50	10.21
2017	9.907	13.45	17.71
2018	11.14	12.74	17.21
2019	10.36	11.12	17.07
2020	9.749	11.82	15.7
2021	9.772	9.95	27.08
2022	10.01	9.85	13.60
2023	10.144	9.28	12.30
Mean	9.22	10.62	14.17
S.D	1.58	1.56	6.44
C. V	17.13	14.68	45.44

Source: *Appendix-1*

Table 8 shows the Capital Adequacy Ratio for three banks: Everest Bank Limited (EBL), Kumari Bank Limited (KBL), and Nepal Bank Limited (NBL). The analysis includes 30 observations, with each bank providing 10. Nepal Bank Limited (NBL) has the highest average Capital Adequacy Ratio at 14.17, indicating that NBL holds a higher level of capital relative to its risk-weighted assets compared to the other banks. NBL also has the highest standard deviation (S.D) of 6.44, reflecting the greatest variability in its Capital Adequacy Ratio over the observation period. Additionally, NBL's Coefficient of Variation (C.V) is the highest at 45.44%, demonstrating substantial variability relative to its mean. This high C.V suggests that NBL experiences significant fluctuations in its capital adequacy, indicating a less consistent approach to maintaining capital in relation to risk-weighted assets compared to Everest Bank and Kumari Bank

4.1.2 Descriptive statistical analysis

Descriptive statistical analysis is employed to summarize and describe the primary characteristics of a dataset quantitatively. Key components and methods involved in this analysis include the mean, standard deviation, minimum, and maximum values.

Table 9

Descriptive statistical analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Non-performing assets ratio	30	.12	4.97	1.76	1.38
Return on Assets	30	.14	3.73	1.49	.72
Liquidity Ratio	30	20.58	125.81	99.58	29.74
Cost Income Ratio	30	24.86	92.67	45.56	14.07
Capital Adequacy ratio	30	4.34	27.08	11.34	4.35
Inflations rate	30	3.63	8.79	6.15	1.87
Valid N (listwise)	30				

Source: *Appendix-1&2*

Table 9 presents a descriptive statistical analysis for three sample banks: Everest Bank, Kumari Bank, and Nepal Bank Limited. The analysis is based on a total of 30 observations, with 10 observations per bank, covering both dependent and independent variables. These variables include the non-performing assets ratio, return on assets, liquidity ratio, cost-to-income ratio, capital adequacy ratio, and inflation rate.

The minimum, maximum, and mean values for each variable are as follows:

Non-performing assets ratio: Minimum = 0.12, Maximum = 4.97, Mean = 1.76, Standard Deviation = 1.38

Return on assets ratio: Minimum = 0.14, Maximum = 3.73, Mean = 1.49, Standard Deviation = 0.72

Liquidity ratio: Minimum = 20.58, Maximum = 125.81, Mean = 99.58, Standard Deviation = 29.74

Cost-to-income ratio: Minimum = 24.86, Maximum = 92.67, Mean = 45.56, Standard Deviation = 14.07

Capital adequacy ratio: Minimum = 4.34, Maximum = 27.08, Mean = 11.34, Standard Deviation = 4.35

Inflation rate: Minimum = 3.63, Maximum = 8.79, Mean = 6.15, Standard Deviation = 1.87

The table shows the standard deviation, mean, minimum, and maximum values for each variable, revealing that the variables non-performing assets ratio, return on assets, liquidity ratio, cost-to-income ratio, capital adequacy ratio, and inflation rate exhibit significant fluctuation.

4.1.3 Correlation analysis

Correlation analysis is a statistical method used to assess both the strength and direction of the relationship between two variables. The Pearson correlation coefficient is the most widely used measure, as it quantifies the linear relationship between two continuous variables.

Table 10

Correlation analysis

		NPL	ROA	LR	CIR	CAR	INFR
NPL	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	30					
ROA	Pearson Correlation	-.021	1				
	Sig. (2-tailed)	.911					
	N	30	30				
LR	Pearson Correlation	.208	-.248	1			
	Sig. (2-tailed)	.269	.186				
	N	30	30	30			
CIR	Pearson Correlation	.384*	-.065	.328	1		
	Sig. (2-tailed)	.036	.732	.077			
	N	30	30	30	30		
CAR	Pearson Correlation	.151*	.393*	.263	-.153	1	
	Sig. (2-tailed)	.025	.032	.161	.418		
	N	30	30	30	30	30	
INFR	Pearson Correlation	.284*	-.012	-.255	.198	-.578**	1
	Sig. (2-tailed)	.029	.951	.173	.294	.001	
	N	30	30	30	30	30	30

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Source: *Appendix-1&2*

Table 10 presents the results of the correlation analysis for three banks: Everest Bank, Kumari Bank, and Nepal Bank Limited. The analysis includes a total of 30 observations, with 10 from each bank, focusing on both dependent and independent variables such as the non-performing

assets ratio, return on assets, liquidity ratio, cost-to-income ratio, capital adequacy ratio, and inflation rate.

The findings are as follows:

The correlation between non-performing loans and return on assets is negative and not significant, with a correlation coefficient of -0.021 and a significance value of 0.911, indicating that the hypothesis is not supported.

The correlation between non-performing loans and the liquidity ratio is positive but not significant, with a correlation coefficient of 0.208 and a significance value of 0.269, suggesting that the hypothesis is not supported.

The correlation between non-performing loans and the cost-to-income ratio is positive and significant, with a correlation coefficient of 0.384 and a significance value of 0.036, indicating that the hypothesis is supported.

The correlation between non-performing loans and the capital adequacy ratio is positive and significant, with a correlation coefficient of 0.151 and a significance value of 0.025, indicating that the hypothesis is supported.

The correlation between non-performing loans and the inflation rate is positive and significant, with a correlation coefficient of 0.284 and a significance value of 0.029, indicating that the hypothesis is supported.

4.1.4 Regression analysis

Regression analysis is a robust statistical technique used to explore the relationships between a dependent variable and one or more independent variables. It allows for the assessment of how the expected value of the dependent variable shifts when any single independent variable changes, while keeping the other independent variables constant. In this context, multiple regression analysis is performed.

Table 11

Model summary of regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632[a]	.400	.275	1.17

a. Predictors: (Constant), Inflations rate, Return on Assets, Cost Income Ratio, Liquidity Ratio , Capital Adequacy ratio

Source: *Appendix-1&2*

Table 11 provides the model summary for the regression analysis conducted on the three sampled banks: Everest Bank Limited (EBL), Kumari Bank Limited (KBL), and Nepal Bank Limited (NBL). The analysis is based on 30 observations, with each bank contributing 10. The regression model investigates the relationship between the dependent and independent variables. The R-squared value is 0.275, indicating that 27.5% of the variance in the dependent variable is explained by the independent variables included in the model. This suggests that the independent variables account for about a quarter of the variation in the dependent variable. The remaining 72.5% of the variance is due to other factors not covered by the model, such as external influences or unobserved variables. This R-squared value reflects a moderate level of explanatory power, showing that while the model offers useful insights, there are additional factors influencing the dependent variable that are not captured in the analysis.

Table 12

ANOVA of the regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.179	5	4.436	3.196	.024[b]
	Residual	33.311	24	1.388		
	Total	55.490	29			

a. Dependent Variable: Non-performing assets ratio

b. Predictors: (Constant), Inflations rate, Return on Assets, Cost Income Ratio, Liquidity Ratio , Capital Adequacy ratio

Source: *Appendix-1&2*

Table 12 displays the ANOVA results for the regression analysis of the three sampled banks: Everest Bank Limited (EBL), Kumari Bank Limited (KBL), and Nepal Bank Limited (NBL). The analysis includes 30 observations, with each bank contributing 10. The ANOVA table assesses the overall significance of the regression model by determining if the independent variables together have a statistically significant effect on the dependent variable.

The results show that the combined impact of the independent variables on the dependent variable is statistically significant, with a p-value of 0.024. This p-value is below the conventional significance threshold of 0.05, indicating that the independent variables collectively have a significant effect on the dependent variable. In other words, the model

effectively captures the influence of the predictors on the outcome, and the variations in the dependent variable are largely explained by the combined effects of the independent variables. This result highlights the importance and effectiveness of the chosen independent variables in explaining the variations observed in the dependent variable.

Table 13

Coefficient of the regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.090	1.661		-2.463	.021
	Return on Assets	-.440	.372	-.232	-1.184	.248
	Liquidity Ratio	.001	.009	.023	.118	.907
	Cost Income Ratio	.034	.018	.342	2.913	.008
	Capital Adequacy ratio	.198	.075	.623	2.650	.014
	Inflations rate	.427	.151	.580	2.824	.009

a. Dependent Variable: Non-performing assets ratio

Source: *Appendix-1&2*

Table 13 present the coefficient of the regression. The three bank Everest bank, kumara bank and Nepal bank limited are the sample bank. Total 30 and individual 10 observation are taken. Analysis for dependent and independent variables. The beta and significant value are importance in the table and examine here under. The regression model is $NPA=\beta_0+\beta_1\times ROA+\beta_2\times LR+\beta_3\times CIR+\beta_4\times CAR+\beta_5\times IFLR+e$.

The relationship between the non-performing assets ratio and return on assets is negative and not significant, with a beta value of -0.44 and a significance value of 0.248, indicating that the hypothesis is not supported.

The relationship between the non-performing assets ratio and liquidity ratio is positive but not significant, with a beta value of 0.001 and a significance value of 0.907, suggesting that the hypothesis is not supported.

The relationship between the non-performing assets ratio and cost-to-income ratio is positive and significant, with a beta value of 0.034 and a significance value of 0.008, supporting the hypothesis.

The relationship between the non-performing assets ratio and capital adequacy ratio is positive and significant, with a beta value of 0.198 and a significance value of 0.014, confirming the hypothesis.

The relationship between the non-performing assets ratio and inflation rate is positive and significant, with a beta value of 0.427 and a significance value of 0.009, validating the hypothesis.

4.2 Discussion

The first objective of research to assess the current status of non-performing loans and factor affecting non-performing assets in Nepalese commercial banks. It is found that the deviation mean minimum and maximum and the result of the given tables shows the variables namely; non-performing assets ratio, return on assets, liquidity ratio, cost income ratio, capital adequacy ratio and inflations rate are fluctuating in nature. The result is consistent with the result of Zunic et al., (2021) and also consistent with the Stefano & Dewi, (2022).

The second objective of research to analyze the relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks. It is found that the non-performing loan and return on assets is negative relationship and not significant; at the same time hypothesis is also not true. The result is consistent with the result of Ghaffar et al., (2023). The non-performing loan and liquidity ratio is positive relationship and not significant; at the same time hypothesis is also not true. The result is consistent with the result of Marchela & Widodo (2023). The non-performing loan and cost income ratio is positive relationship and significant; at the same time hypothesis is also true. The result is consistent with the result of Darwisman & Mawardi, (2023). The non-performing loan and capital adequacy ratio is positive relationship and significant; at the same time hypothesis is also true. The result is consistent with the result of Khoirunisa & Karnasi, (2023). The non-performing loan and inflation rate is positive relationship and significant; at the same time hypothesis is also true. The result is consistent with the result of Chun & Ardaaragchaa, (2024).

The third objective of research to examine the impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks. It is found that the non-performing assets ratio and return on assets is negative impact and not significant; at the same time

hypothesis is not true. The result is consistent with the result of Msomi, (2022). The non-performing assets ratio and liquidity ratio is positive impact and not significant; at the same time hypothesis is not true. The result is consistent with the result of Harimurti et al., (2022). The non-performing assets ratio and cost income ratio is positive impact and significant; at the same time hypothesis is true. The result is consistent with the result of Gashi et al., (2022). The non-performing assets ratio and capital adequacy ratio is positive impact and significant; at the same time hypothesis is true. The result is consistent with the result of Stefano & Dewi, (2022). The non-performing assets ratio and inflation rate is positive impact and significant; at the same time hypothesis is true. The result is consistent with the result of Keshani & Jayatilake, (2021).

CHAPTER –V

SUMMARY AND CONCLUSION

Chapter Five includes the summary and conclusion of the research. The summary provides a detailed overview of the research from start to finish. The conclusion presents findings based on the research objectives and their implications. The third section of this chapter discusses the potential future applications of the research.

5.1 Summary

Non-Performing Assets (NPAs) refer to loans issued by commercial banks that have not been repaid by the borrower by their due date. These are also known as non-performing loans. When a loan is not repaid on time and becomes overdue, it is classified as an NPA for the bank.

Banking is crucial for a country's economic development. Nepal Bank Limited, the nation's first commercial bank, and other commercial banks are central to the financial system. They manage deposits from individuals, government entities, and businesses, and provide funds through their lending and investment activities. This support facilitates the flow of goods and services and helps manage government financial operations. Banks also play a key role in implementing monetary policy.

Given their importance, this research focuses on the factors influencing non-performing assets in Nepalese commercial banks. The study examines how these factors impact non-performing loans and their implications for the banking sector.

The problem of the research what are the existing conditions of non-performing loans and factor affecting non-performing loan of Nepalese commercial banks? What is the relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks? Whether there is the any impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks? The objective of the research are to assess the current status of non-performing loans and factor affecting non-performing assets in Nepalese commercial banks, to analyze the relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks and examine the impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks. The

literature review from the google scholar. The descriptive and casual comparative research design has been used for doing this research. Out of 20 commercial bank, 3 banks are taken under studies. The secondary data are used for this study. Financial and statistical analysis conducted for achievement of the objectives. It is found that deviation mean minimum and maximum and the result of the given tables shows the variables namely; non-performing assets ratio, return on assets, liquidity ratio, cost income ratio, capital adequacy ratio and inflations rate are fluctuating in nature. The relationship of return on assets and liquidity ratio to the non-performing assets ratio is not significant. The relationship of cost income ratio, capital adequacy ratio and inflation rate is significant to the non-performing assets ratio. The impact of return on assets and liquidity ratio to the non-performing assets ratio is not significant. The impact of cost income ratio, capital adequacy ratio and inflation rate is significant to the non-performing assets ratio.

5.2 Conclusion

The first objective of research to assess the current status of non-performing loans and factor affecting non-performing assets in Nepalese commercial banks. It is found that the deviation mean minimum and maximum and the result of the given tables shows the variables namely; non-performing assets ratio, return on assets, liquidity ratio, cost income ratio, capital adequacy ratio and inflations rate are fluctuating in nature. In conclusion non-performing assets ratio, return on assets, liquidity ratio, cost income ratio, capital adequacy ratio and inflations rate are fluctuating in nature

The second objective of research to analyze the relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks. It is found that the relationship of return on assets and liquidity ratio to the non-performing assets ratio is not significant. The relationship of cost income ratio, capital adequacy ratio and inflation rate is significant to the non-performing assets ratio. In conclusion relationship of cost income ratio, capital adequacy ratio and inflation rate is significant to the non-performing assets ratio.

The third objective of research to examine the impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks. It is found that the impact of return on assets and liquidity ratio to the non-performing assets ratio is not significant. The impact of cost income ratio, capital adequacy ratio and inflation rate is significant to the non-performing

assets ratio. In conclusion the impact of cost income ratio, capital adequacy ratio and inflation rate is significant to the non-performing assets ratio.

5.3 Implications

Research on the factors affecting non-performing assets (NPAs) in Nepalese commercial banks has several significant implications:

i. Improved credit assessment and lending practices can be established based on the identified factors. Banks can develop more accurate models to predict potential defaults.
ii. By reducing NPAs, banks can minimize the costs associated with provisioning for bad loans, thereby improving their profitability.
iii. Resource Allocation: Banks can allocate resources more efficiently, focusing on profitable ventures rather than managing non-performing loans.
iv. Small and medium-sized enterprises (SMEs), which are crucial for economic development, can receive more support from banks with improved lending practices.
v. Reduced NPAs can enhance public trust in the banking system, leading to increased deposits and participation in the formal financial sector.
vi. The research can pave the way for further studies on NPAs, focusing on different sectors, types of loans, or comparative studies with other countries. This can contribute to a more comprehensive understanding of NPAs.

Understanding and addressing the factors affecting NPAs is crucial for the health and growth of Nepalese commercial banks and the broader economy. The research can have far-reaching implications, shaping policies, practices, and future studies in this area.

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Appendix

Appendix 1: data from annual report

Everest Bank Limited Amount in “million”

Year	Net profit	Total Assets	Current assets	Current liabilities	Operating expenses	Total operating Income	Equity	Non-performing asset	NOA Ratio	Inflation rate
2014	1,574	70445	25312	64521	1056	3550	5456	470	0.97	8.36
2015	1,730	99152	24510	91195	1243	3659	6889	367	0.66	7.87
2016	2,006	113885	23116	106798	1303	4137	7348	264	0.38	8.79
2017	2,118	116510	21382	103894	1564	4743	11,543	197	0.25	3.63
2018	2,581	144818	141784	116460	2163	5848	16,134	456	0.16	4.06
2019	3,054	170077	166612	132829	2507	6859	17,625	1123	0.16	5.57
2020	2516	191,162	180865	145954	2581	6163	18,637	1254	0.22	5.05
2021	1770	211650	206219	163915	2495	5043	20,683	786	0.12	4.09
2022	2429	225211	219818	201324	2931	6410	22561		0.12	6.26
2023	3362	250090	243567	221115	3176	7993	25371		0.79	

Kumari Bank Limited Amount in “million”

Year	Net profit	Total Assets	Current assets	Current liabilities	Operating expenses	Total operating Income	Equity	Non-performing asset	NPA ratio	Inflation rate
2014	341	31020	24154	22589	435	960	2965	918	4.03	8.36
2015	394	37374	29021	26977	538	1014	3347	673	2.49	7.87
2016	716	42416	42199	38579	581	1839	4032	345	1.15	8.79
2017	660	61416	60620	53152	659	2651	8,263	840	1.86	3.63
2018	1046	82723	81365	72183	1228	2584	10,539	660	1.05	4.06
2019	1230	105311	103954	93592	1654	3418	11,719	770	1.01	5.57
2020	1158	145,971	143481	125708	2290	4437	17,268	1600	1.39	5.05
2021	1970	189,782	186880	167,895	3164	6672	18,892	1380	0.96	4.09
2022	2579	213155	207757	189157	3552	7941	21002		1.11	6.26
2023	517	380524	366175	336222	3980	13057	35314		4.97	

Nepal Bank Limited Amount in "million"

Year	Net profit	Total Assets	Current assets	Current liabilities	Operating expenses	Total operating Income	Equity	Non-performing asset	NPL ratio	Inflation rate
2014	483	88211	77591	69978	3110	3356	3831	2121	3.4	8.36
2015	2882	103479	87790	84379	3025	3865	6713	1978	3.98	7.87
2016	3117	112057	103042	96765	2873	5329	11451	2469	3.11	8.79
2017	1,747	130226	111582	100604	3027	6696	23074	2469	3.32	3.63
2018	3,215	133467	113504	113889	2713	7561	22971	2015	3.37	4.06
2019	2,596	171515	144757	142234	3226	7736	29,281	2365	2.64	5.57
2020	2,332	191,162	164803	161131	3924	7171	30,030	2696	2.47	5.05
2021	4572	122,645	199876	185937	3841	8188	33215	1608	2.05	4.09
2022	2923	260677	236886	22121	4432	8069	35453		1.83	6.26
2023	3437	296735	271512	256718	6291	10625	36522		2.85	7.82

Appendix 2: calculated data

Correlations

		Non-performing assets ratio	Return on Assets	Liquidity Ratio	Cost Income Ratio	Capital Adequacy ratio	Inflations rate
Non-performing assets ratio	Pearson Correlation	1	-.021	.208	.384*	.151	.284
	Sig. (2-tailed)		.911	.269	.036	.425	.129
	N	30	30	30	30	30	30
Return on Assets	Pearson Correlation	-.021	1	-.248	-.065	.393*	-.012
	Sig. (2-tailed)	.911		.186	.732	.032	.951
	N	30	30	30	30	30	30
Liquidity Ratio	Pearson Correlation	.208	-.248	1	.328	.263	-.255
	Sig. (2-tailed)	.269	.186		.077	.161	.173

	N	30	30	30	30	30	30
Cost Income Ratio	Pearson Correlation	.384*	-.065	.328	1	-.153	.198
	Sig. (2-tailed)	.036	.732	.077		.418	.294
	N	30	30	30	30	30	30
Capital Adequacy ratio	Pearson Correlation	.151*	.393*	.263	-.153	1	-.578**
	Sig. (2-tailed)	.025	.032	.161	.418		.001
	N	30	30	30	30	30	30
Inflations rate	Pearson Correlation	.284*	-.012	-.255	.198	-.578**	1
	Sig. (2-tailed)	.029	.951	.173	.294	.001	
	N	30	30	30	30	30	30

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Everest Bank Limited	Year	ROA	LR	CIR	CAR
	2014	2.23	39.23	29.74	7.745
	2015	1.74	26.87	33.97	6.94
	2016	1.76	21.6	31.49	6.452
	2017	1.81	20.58	32.97	9.907
	2018	1.78	121.74	36.98	11.14
	2019	1.79	125.43	36.55	10.36
	2020	1.31	123.91	41.87	9.749
	2021	0.83	125.80	49.47	9.772
	2022	1.07	109.18	45.72	10.01
	2023	1.34	110.15	39.73	10.144
	2014	1.09	106.92	45.31	9.55
	2015	1.05	107.57	53.05	8.95
	2016	1.68	109.38	31.59	9.50
	2017	1.07	114.05	24.85	13.45
	2018	1.26	112.72	47.52	12.74
	2019	1.16	111.07	48.39	11.12
	2020	0.79	114.13	51.61	11.82
	2021	1.03	111.30	47.42	9.95
	2022	1.20	109.83	44.72	9.85
Kumari Bank Limited	2023	0.135	108.9	30.48	9.28
	2014	0.54	110.87	92.66	4.34
	2015	2.78	104.04	78.26	6.48
	2016	2.78	106.48	53.91	10.21
	2017	1.34	110.91	45.20	17.71
	2018	2.40	99.66	35.88	17.21
	2019	1.51	101.77	41.70	17.07
	2020	1.21	102.27	54.72	15.7
	2021	3.72	107.49	46.91	27.08
	2022	1.121	107.86	54.92	13.60
Nepal Bank Limited	2023	1.15	105.76	59.20	12.30

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632[a]	.400	.275	1.17811

a. Predictors: (Constant), Inflations rate, Return on Assets, Cost Income Ratio, Liquidity Ratio , Capital Adequacy ratio

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.179	5	4.436	3.196	.024[b]
	Residual	33.311	24	1.388		
	Total	55.490	29			

a. Dependent Variable: Non-performing assets ratio

b. Predictors: (Constant), Inflations rate, Return on Assets, Cost Income Ratio, Liquidity Ratio , Capital Adequacy ratio

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.090	1.661		-2.463	.021
	Return on Assets	-.440	.372	-.232	-1.184	.248
	Liquidity Ratio	.001	.009	.023	.118	.907
	Cost Income Ratio	.034	.018	.342	2.913	.008
	Capital Adequacy ratio	.198	.075	.623	2.650	.014
	Inflations rate	.427	.151	.580	2.824	.009

a. Dependent Variable: Non-performing assets ratio

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Non-performing assets ratio	30	.12	4.97	1.7623	1.38327
Return on Assets	30	.14	3.73	1.4947	.72795
Liquidity Ratio	30	20.58	125.81	99.5883	29.74728
Cost Income Ratio	30	24.86	92.67	45.5640	14.07555
Capital Adequacy ratio	30	4.34	27.08	11.3417	4.35190
Inflations rate	30	3.63	8.79	6.1500	1.87878
Valid N (listwise)	30				

Descriptive Statistics[a]

	N	Mean	Std. Deviation
Non-performing assets ratio	10	.3830	.31074
Return on Assets	10	1.5710	.41479
Liquidity Ratio	10	82.4570	48.25269
Cost Income Ratio	10	37.8540	6.36069
Capital Adequacy ratio	10	9.2240	1.58179
Inflations rate	10	6.1500	1.94712
Valid N (listwise)	10		

a. Companies = Everest Bank Limited

Descriptive Statistics[a]

	N	Mean	Std. Deviation
Non-performing assets ratio	10	2.0020	1.41627
Return on Assets	10	1.0520	.39333
Liquidity Ratio	10	110.5920	2.52057
Cost Income Ratio	10	42.4970	9.81015
Capital Adequacy ratio	10	10.6260	1.56971
Inflations rate	10	6.1500	1.94712
Valid N (listwise)	10		

a. Companies = Kumari Bank Limited

Descriptive Statistics[a]

	N	Mean	Std. Deviation
Non-performing assets ratio	10	2.9020	.66501
Return on Assets	10	1.8610	1.00371
Liquidity Ratio	10	105.7160	3.78490
Cost Income Ratio	10	56.3410	17.20882
Capital Adequacy ratio	10	14.1750	6.44887
Inflations rate	10	6.1500	1.94712
Valid N (listwise)	10		

a. Companies = Nepal Bank Limited

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ABSTRACT The objective **of** the **research are to** assess **the current status of** non-performing loans **and** factor affecting non-performing assets in Nepalese commercial banks, to analyze the relationship of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks and examine the impact of factors affecting non-performing loan and non-performing loan in Nepalese commercial banks. The literature review from the google scholar.