FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NEPAL

A Dissertation submitted to the office of the Dean faculty of Management in partial fulfillment of the requirements for the Degree of Master of Business Studies

by

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DECLARATION

I, would like to declare that this thesis entitled FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NEPAL , submitted to the Research Department, Nepal Commerce Campus is my own work. As regards to plagiarism, I shall be fully responsible for the subject matter in this thesis. I have duly acknowledged the previous researchers wherever necessary, and the study does not contain any infringement of patent and copyright.

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Report of Research Committee

Mr Uddav Ghimire has defended research proposal entitled FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NEPAL successfully. The research committee has registered the dissertation for further progress. Itis recommended to carry out the work as per suggestions and guidance of supervisor Dr. Dhundi Raj Bhattarai and submit the thesis for evaluation and viva examination.

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Approval Sheet

We have examined the dissertation entitled FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN NEPAL presented by Uddav Ghimire for the degree of Master of Business Studies (MBS). We hereby certify that the dissertation is acceptable for the award of degree.

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Uddav Ghimire

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ABBREVIATION

ANOVA	:	Analysis of Variances
AHP	:	Analytical Hierarchy Process
BFIs	:	Banking and Financial Institutions
BS	:	Bank Size
BVPS	:	Book Value per Share
C.V	:	Coefficient of Variation
CAR	:	Capital Adequacy Ratio
CRR	:	Cash Reserve Ratio
e	:	Error Terms
EBL	:	Everest Bank Limited
ESG	:	Environmental and Social Governance
F-Value	:	Fishers Value
FDR	:	Financing Deposit Ratio
FY	:	Fiscal Year
GDP	:	Gross Domestic Product
GDPR	:	Gross Domestic Product Growth Rate
HBL	:	Himalayan Bank Limited
IR	:	Inflation Rate
Ln_Ta	:	Log Value of Total Assets
MER	:	Management Efficiency Ratio
NABIL	:	Nabil Bank Limited
NIBL	:	Nepal Investment Bank Limited
NIMR	:	Net Interest Margin Ratio
NPL	:	Non-performing Loan

NPLR	:	Non-performing Loan Ratio
NRB	:	Nepal Rastra bank Limited
P- value	:	Probability Value
r	:	Coefficient of correlation
R	:	Regression Coefficients
R^2	:	Coefficient of determination
ROA	:	Return on Assets
ROE	:	Return on Equity
S.D	:	Standard Deviation
SBI	:	Nepal SBI Bank Limited
SANIMA	:	Sanima Bank Limited
SCBNL	:	Standard Chartered Bank Nepal Limited
VIF	:	Variance Influence Factor

ABSTRACT

The financial performance of commercial banks is a key determinant of the strength and stability of a country's financial system. This study analyzes the financial performance of commercial banks in Nepal using various financial indicators such as Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), and Non-Performing Loans (NPL). The study employs a quantitative research design and uses secondary data obtained from the annual reports of selected commercial banks over a defined period. Descriptive and inferential statistical tools are used to measure the financial health and profitability of the banks. The findings reveal that the performance of Nepalese commercial banks is significantly influenced by both internal bank-specific factors (such as asset quality, capital structure, and operational efficiency) and external macroeconomic variables (like inflation and GDP growth). Banks with better asset management and stronger capital bases tend to exhibit higher profitability and stability. The study concludes that improving financial performance requires strong governance, risk management, and adherence to regulatory frameworks. The insights from this research are useful for policymakers, bank managers, investors, and regulators aiming to enhance the competitiveness and resilience of the banking sector in Nepal.

Keywords: Financial performance, Commercial banks, ROA, ROE, Capital adequacy, Nepal, Profitability, Banking sector, Non-performing loans.

CHAPTER I
INTRODUCTION

Background of the Study

The financial sector plays a critical role in the economic development of any country, and commercial banks are at the core of this system. In Nepal, commercial banks are the primary financial intermediaries, facilitating capital formation, credit allocation, and financial services to both businesses and individuals. The performance of these banks directly influences the stability and growth of the national economy.

The liberalization of Nepal's financial sector since the 1980s has led to rapid expansion and competition in the banking industry. The establishment of joint venture banks and the adoption of international banking practices have improved service delivery and financial inclusion. However, the sector also faces challenges including rising non-performing assets, regulatory compliance burdens, political instability, and macroeconomic volatility Bacteng (2019).

The financial performance of commercial banks can be measured using various indicators such as return on assets (ROA), return on equity (ROE), net interest margin (NIM), capital adequacy ratio (CAR), and non-performing loan ratio (NPLR). These metrics provide insight into the efficiency, profitability, asset quality, and risk management practices of banks. Understanding these factors is crucial for stakeholders including investors, regulators, policymakers, and the general public.

In recent years, several external and internal factors have significantly impacted the performance of Nepalese commercial banks. These include changes in monetary policy, inflation, exchange rate fluctuations, digital transformation, and shifts in consumer behavior. The COVID-19 pandemic further strained the banking sector, highlighting the importance of resilience and strategic management Alshebmi (2020).

Despite several reforms and improvements, the financial performance of commercial banks in Nepal remains uneven, with considerable variation across institutions. Therefore, an in-depth analysis is necessary to assess the current state, identify key determinants of performance, and offer strategic recommendations for sustainable growth and improved efficiency.

The financial performance of commercial banks is a crucial indicator of the health and stability of a country's financial system. In Nepal, commercial banks constitute the largest segment of the financial sector and play a vital role in mobilizing domestic resources, facilitating trade and investment, and supporting overall economic development. With 20 commercial banks currently operating under the regulation of Nepal Rastra Bank (NRB), the sector has witnessed rapid growth, expansion of services, and increased competition over the past few decades. The financial performance of these banks is typically measured through indicators such as Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), and non-performing assets. These indicators reflect how efficiently a bank is utilizing its resources to generate profit, manage risks, and ensure long-term sustainability. In the context of Nepal, the banking sector has faced multiple challenges, including political instability, regulatory changes, global economic shocks, and more recently, the COVID-19 pandemic. These factors have significantly affected the profitability, liquidity, and credit quality of banks Shrestha (2017).

Additionally, macroeconomic variables such as GDP growth, inflation rate, and interest rate trends also influence the financial performance of banks. With increased emphasis on financial transparency, digitalization, and compliance with international banking standards (such as Basel III), it has become imperative to assess and analyze the financial performance of Nepalese commercial banks on a regular basis. Understanding the trends, patterns, and determinants of financial performance can provide valuable insights for bank managers, investors, regulators, and policymakers. It helps in identifying potential risks, improving operational efficiency, and formulating strategies for sustainable banking development in Nepal. Evaluating financial performance is just as crucial in commercial banks as it is in other industries Pokharel (2014). A commercial bank's efficient use of its assets, shareholder equity, liabilities, revenues, and expenses is a key factor in evaluating its performance. The financial ratio approach is typically used by banks to analyze their performance since it provides a clear evaluation of their financial situation in relation to prior times and helps to improve managerial effectiveness. Additionally, one of the most important indicators of a nation's overall economic health is the financial success of its commercial banks. Understanding the factors that support or undermine the financial performance of commercial banks is crucial in the context of Nepal, where the banking industry has been expanding and changing quickly in recent years. This knowledge can be beneficial. Over the past few decades, Nepal's banking sector has undergone significant transformation driven by

liberalization measures that have increased competition and fostered innovation. As a result, numerous studies by Nepali scholars have examined various aspects of the financial performance of commercial banks.

Pokharel (2014) concluded that capital adequacy, asset quality, managerial effectiveness, earnings quality, liquidity position, and sensitivity to market risk significantly influence the financial performance of Nepalese commercial banks. Karki (2016) found that asset management and profitability ratios play a critical role in shaping their financial performance. According to Shrestha (2017), higher credit risk levels and fluctuating interest rates adversely affect the financial outcomes of Nepalese commercial banks.

Jha and Hui (2012) observed that private commercial banks in Nepal generally outperform state-owned banks in terms of profitability and overall financial performance. Likewise, Bhandari (2012) applied the Analytic Hierarchy Process (AHP) to assess the performance of Nepalese commercial banks, identifying risk management, liquidity, and profitability as key factors in overall performance evaluation.

Bhattarai (2018) highlighted that return on assets (ROA) is significantly influenced by macroeconomic variables such as GDP growth and inflation, alongside bank-specific factors including capital adequacy and asset quality. Rai et al. (2015) similarly found that capital sufficiency, asset quality, and managerial effectiveness positively impact financial performance, while macroeconomic conditions like economic growth and inflation also play a substantial role. These prior studies provide valuable insights into the determinants of financial performance within the specific context of Nepal's banking sector. Building on this foundation, the present thesis aims to further explore the factors influencing the financial performance of selected commercial banks in Nepal—specifically Nabil Bank Ltd., Nepal Investment Bank Ltd., Standard Chartered Bank Nepal Ltd., Everest Bank Ltd., Sanima Bank Ltd., and Himalayan Bank Ltd.—focusing on their profitability over the period 2014/15 to 2023/24. This study will be particularly beneficial to scholars, investors, shareholders, researchers, and other stakeholders associated with these banks.

Problem Statement

Despite the pivotal role that commercial banks play in driving economic development and financial stability in Nepal, their financial performance remains inconsistent and

vulnerable to internal inefficiencies and external shocks. Over the past decade, several banks have shown fluctuations in key performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and Capital Adequacy Ratio (CAR), raising concerns about their operational efficiency, profitability, and risk management practices.

While regulatory frameworks have evolved and modernization initiatives have been introduced, many commercial banks still struggle with high levels of non-performing loans (NPLs), weak asset quality, and inadequate financial planning. In addition, macroeconomic challenges such as inflation, fluctuating interest rates, and political instability further complicate performance outcomes. The COVID-19 pandemic has also exposed significant vulnerabilities in the financial system, testing the resilience and adaptability of banks.

Although previous studies have examined specific aspects of bank performance, a comprehensive and up-to-date assessment of financial performance across Nepalese commercial banks—considering both internal financial indicators and external economic factors—is lacking. This gap limits the ability of stakeholders to make informed decisions and weakens efforts toward enhancing the financial health and sustainability of the banking sector.

Therefore, this study seeks to critically analyze the financial performance of commercial banks in Nepal, identify key influencing factors, and provide insights that can help improve strategic decision-making and policy formulation.

The factors influencing the sample banks' financial performances are the main focus of this study. Over the past few years, the number of banks and financial enterprises established in Nepal has rapidly increased. However, the number of banks and financial institutions in the nation has decreased since the BFIs Merger and Acquisition Bylaws, 2073 were passed. Therefore, stakeholders including creditors/depositors, investors, managers, and others would benefit from looking into the elements that affect the performance of Nepal's commercial banks. Thus, the purpose of this study is to look into the variables that affect the financial performance of particular institutions.

Banks are under fierce competition as a result of the financial markets' explosive expansion. Significant changes have occurred in the banking sector, mostly as a result of growing globalization and technological breakthroughs. In addition to offering chances for

growth, these elements have also created difficulties for bank managers who work to keep their companies profitable and competitive. Therefore, industry managers need to understand the important elements that significantly affect the bank's profitability. This is crucial since banks are key to the growth of the economy. Joint venture banks are fiercely competitive with one another, even though they have performed better in the short term than local commercial banks.

This study is directed to resolve the following issues:

(a) What is the status of capital adequacy ratio, bank size, GDP, inflation rate on return on assets and net interest margin?

(b) What is the relationship between capital adequacy ratio, bank size, GDP, inflation rate on return on assets and net interest margin?

(c) What is the impact capital adequacy ratio, bank size, GDP, inflation rate on return on assets and net interest margin?

Objectives of the Study

The major objective of this study is to analyze the financial performance of commercial banks in Nepal. The specific objectives of this study are as follows:

a) To measure the position of capital adequacy ratio, bank size, GDP, inflation rate on return on assets and net interest margin

b) To examine the relationship between capital adequacy ratio, bank size, GDP, inflation rate on return on assets and net interest margin

c) To examine the impact capital adequacy ratio, bank size, GDP, inflation rate on return on assets and net interest margin.

Hypotheses

H1: There is a positive effect of capital adequacy ratio on return on assets.

H2: There is a positive effect of size of bank on return on assets.

H3: There is a positive effect of gross domestic on return on assets.

H4: There is a positive effect of inflation on return on assets.

H5: There is a positive effect of capital adequacy ratio on net interest margin.

H6: There is a positive effect of size of bank on net interest margin.

H7: There is a positive effect of gross domestic on net interest margin.

H8: There is a positive effect of inflation on net interest margin.

Significance of the Study

The financial performance of commercial banks plays a critical role in the stability and growth of a country's financial system. In the context of Nepal, where the banking sector serves as a backbone of economic development, understanding the determinants of financial performance is essential. This study is significant as it provides a comprehensive assessment of how internal bank-specific factors—such as capital adequacy and bank size—as well as macroeconomic indicators—such as GDP growth and inflation—affect the profitability of commercial banks in Nepal.

The outcomes of this study are valuable for multiple stakeholders. For bank management, the findings offer practical insights into developing strategies that promote sustainable profitability and financial stability. For investors and shareholders, the study enhances their ability to evaluate bank performance and make informed decisions regarding their investments. Policy makers and regulators can also benefit from the results, as they offer guidance in formulating policies that strengthen the banking sector.

Moreover, this study contributes to the academic field by enriching the existing literature on bank performance in developing economies, particularly within the Nepalese context. It serves as a foundation for future research by scholars in the areas of banking, finance, and economics, especially those interested in performance evaluation, risk analysis, and financial management of commercial banks.

In summary, this study is expected to have both practical and theoretical implications by identifying the key factors influencing the financial performance of commercial banks in Nepal and by aiding in the development of strategies and policies that ensure long-term financial health and competitiveness of the sector.

Limitation of the Study

Every study has its own set of limitations, such as constraints pertaining to data and information, and this research is no exception. The major limitations of the study are as follows:

1. The operational features of the sample banks will not be taken into consideration in this study, which has focused exclusively on their financial aspects. As a result, the study's conclusions are solely based on macroeconomic and financial variables, leaving operational aspects out.
2. This study is limited to six particular commercial banks in Nepal: Himalayan Bank Ltd., Standard Chartered Bank Nepal Ltd., Nepal Investment Mega Bank Ltd., Nabil Bank Ltd., Sanima Bank Ltd., and Everest Bank Ltd.
3. The study has only looked at particular financial instruments, such as statistical tools and profitability ratios.
4. Only data from the ten fiscal years for the chosen institutions, from 2014/15 to 2023/2024, have been analyzed in this study.
5. Secondary data has been used in the study.

Organization of the Study

Basically there are five chapters in this study. They are as follows:

Chapter I: Introduction

This part is the introductory chapter, which has covered background of the study, problem statement, objectives of the study, research hypothesis, significance of the study and limitation of the study etc.

Chapter II: Review of literature

This chapter has included conceptual framework i.e. theoretical analysis and review of related different studies. In this chapter, it has been attempted to show how this presented study is different from previous studies via research gap.

Chapter III: Research Methodology

This chapter has dealt with the research design, population and sample, sources of data, data collection, processing procedures, theoretical framework and definitions of variables.

Chapter IV: Results and Discussion

This chapter describes the presentation of data, data analysis, interpretation, testing of hypothesis and major findings.

Chapter V: Summary and Conclusions

This chapter states the summary, conclusion of the whole study and implications. It also offers several avenues for future research. The exhibits and bibliography are incorporated at the end of the study.

CHAPTER II
LITERATURE REVIEW

This chapter reviews the main theories of banking performance and profitability that have been developed and used by scholars, as well as how well they relate to the current study. This will make it possible to conduct more research and learn about the findings and limitations of earlier investigations. To ascertain the results of research projects conducted in fields where comparable concepts and procedures have been effectively applied, a thorough evaluation of the literature is basically necessary.

Conceptual review

Concept of Financial Performance

Financial performance refers to a company's ability to generate revenue and efficiently utilize its resources from core business operations. It serves as an indicator of a firm's financial health over a specific period. Financial performance measurement is the process of evaluating an organization's actions and policies in monetary terms, typically through key indicators such as profitability, liquidity, and leverage.

According to Padachi (2006), effective financial management has a direct impact on a company's value, while Pradhan (1986) emphasizes that financial analysis helps in identifying whether the achieved results align with corporate goals, highlighting both strengths and weaknesses for improved decision-making. Performance evaluation usually employs financial ratios to assess areas such as return on assets, equity efficiency, capital adequacy, and operational costs.

Analyzing financial performance is crucial for internal management as well as external stakeholders like investors, creditors, and regulators. By understanding the financial results through analysis of income statements, balance sheets, and operational indicators, organizations can align their strategies more effectively to enhance profitability and sustainability.

Return on Assets (ROA)

Return on Assets (ROA) measures a bank's ability to utilize its assets to generate net income. A higher ROA indicates better efficiency in using assets to earn profit. According to Siraj and Pillai (2012), ROA is one of the most crucial indicators in evaluating the operational performance of banks, as it demonstrates how effectively the bank's management is converting investments into earnings after taxes and interest.

Net Interest Margin (NIM)

Net Interest Margin (NIM) is a key profitability indicator in banking, representing the difference between interest income earned on loans and the interest paid on deposits and borrowings, expressed as a percentage of interest-earning assets. It reflects both the cost of intermediation and the efficiency of bank operations.

A higher NIM suggests that a bank is earning more from its credit operations relative to its cost of funds.

Macroeconomic Factors

Macroeconomic factors are external economic indicators that influence the profitability and performance of banks. These include variables like inflation, GDP growth, interest rate trends, and exchange rate fluctuations, which affect banks' lending and deposit operations on a large scale.

Inflation Rate:

Inflation refers to the rise in the general price level of goods and services. According to Clements and Galvao (2008), higher inflation rates create uncertainty in banking performance. Perry (1992) highlighted that the impact of inflation depends on whether it is anticipated or unanticipated. Banks that successfully forecast inflation can adjust loan rates accordingly to maintain profitability. However, in the case of unexpected inflation, operating costs may rise faster than revenues, reducing profitability.

Gross Domestic Product (GDP):

GDP measures the total economic output of a country within a given time frame. It is a critical indicator of economic activity and bank performance. According to Shubiri (2010), there is a strong positive relationship between GDP growth, firm performance, and stock prices. Higher GDP growth promotes business expansion and consumer spending, resulting in increased demand for banking services, and thus positively influencing bank profitability.

Bank-Specific Variables

Bank Size: Bank size, typically measured by the logarithm of total assets, influences a bank’s performance. According to Kosmidou and Zopounidis (2006), a larger bank may experience inefficiencies due to complex management structures, potentially harming performance. In contrast, Masood and Ashraf (2012) argue that larger banks benefit from economies of scale, allowing them to access capital at lower costs and operate more efficiently, thereby improving profitability.

Capital Adequacy Ratio (CAR):The Capital Adequacy Ratio measures a bank's capital relative to its risk-weighted assets. It ensures that banks have enough buffer to absorb potential losses, enhancing stability and solvency. CAR is an important regulatory benchmark. Poudel (2012) found a significant relationship between CAR and bank performance, indicating that higher capital buffers help banks manage risk more effectively and maintain investor confidence. This conceptual review establishes the foundational understanding required to evaluate the financial performance of commercial banks in Nepal. It identifies key financial indicators—ROA and NIM—as dependent variables influenced by both macroeconomic factors (GDP growth, inflation) and bank-specific factors (CAR, bank size). These relationships will be empirically tested in the upcoming sections of this thesis to draw conclusions and policy implications for Nepalese commercial banks.

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Empirical review

Numerous studies—both national and international—have explored the various determinants of financial performance in commercial banks. These studies highlight the significance of both bank-specific variables (like capital adequacy, size, and management efficiency) and macroeconomic indicators (such as GDP growth, inflation, and exchange rates) in influencing profitability metrics such as Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM).

Review of Journal Articles

Empirical review is a method of gaining knowledge through direct or indirect observation, analysis, and evaluation of data. In the context of financial performance, empirical studies often apply quantitative tools such as the system—a comprehensive supervisory model that assesses the soundness and performance of financial institutions. Kanchan (2023) evaluated the performance of Indian Small Finance Banks (SFBs) from FY 2017–18 to 2021–22 using CAMEL. The study found that these banks play a vital role in financial inclusion by serving small farmers and micro-enterprises, with CAMEL helping to measure performance in all five dimensions effectively.

Suman & Swati (2022) assessed 12 Indian commercial banks (7 public, 5 private). HDFC Bank ranked highest, while Bank of India was lowest. A significant difference in CAMEL indicators between public and private sector banks was observed.

Kesireddy & Sreeram (2022) used to evaluate the operational performance and profitability of Bank of Baroda. The results highlighted capital adequacy and management efficiency as key performance areas.

Magoma et al. (2022) studied seven listed commercial banks in Tanzania (2016–2020). Findings showed that management efficiency and capital adequacy had the strongest influence on performance.

Crowley et al. (2022) analyzed the Commercial Bank of Ceylon (Bangladesh operations) over seven years. The bank performed positively in capital adequacy, asset quality, and management efficiency, but had weaknesses in liquidity management.

Ntaganira & Irechukwu (2022) explored the impact the financial sustainability of the Bank of Kigali, Rwanda. A significant positive relationship was found dimensions and bank sustainability.

AlZou'bi et al. (2021) assessed 13 Jordanian banks using found all were in sound condition in capital, asset quality, and management. The model proved effective for performance diagnosis.

Ledhem & Mekidiche (2020) used indicators to study Islamic banks in five countries. Only ROE had a significant positive impact on economic growth, while other CAMEL indicators (capital, assets, liquidity, etc.) were not statistically significant.

Raiyani (2020) analyzed 27 Indian banks (public, private, foreign) and found that foreign banks outperformed others in capital adequacy, management efficiency, and liquidity. Private banks performed best in asset quality, while public banks led in earnings.

Birhanie (2020) used CAMEL to assess five Ethiopian private banks. Addis International Bank was rated best in capital adequacy, while Awash International Bank performed best in asset quality.

Nguyen et al. (2020) evaluated 31 Vietnamese banks (2013–2018) and found that equity size and liquidity ratios significantly influenced performance. Bad debt ratios negatively impacted profitability, and management expenses had no significant effect.

Kumari (2017) analyzed foreign banks in Sri Lanka (2008–2014) and found HSBC and Standard Chartered Bank were strong in capital adequacy and earnings, but needed improvement in other CAMEL components.

Rahman & Islam (2018) evaluated 17 private banks in Bangladesh. Most had CAR above the 10% regulatory benchmark. City Bank had the highest CAR, while Eastern Bank showed high efficiency through profit-per-employee indicators.

Earning Quality, typically measured by ROA, ROE, and NIM, reflects how well banks utilize assets and manage expenses. Differences between public and private sector banks are evident, with private and foreign banks often performing better in management and earnings efficiency.

Review of Previous Studies

Malbul (2011) highlighted that is a widely accepted and effective tool to evaluate banks' financial performance. The study found that while Nepal's banking sector is one of the fastest growing, there remain specific areas of strengths and weaknesses across the five CAMEL dimensions—Capital adequacy, Asset quality, Management efficiency, Earnings capacity, and Liquidity. The research emphasizes the importance of the CAMEL model in measuring financial strength and recommending improvement measures.

Pandey (2012) used a descriptive research design combined with multiple regression analysis to study the impact of Earning Per Share (EPS) of Nepalese commercial banks. The study found a positive relationship between non-performing loan ratio, return on assets, cash reserve ratio, and EPS. However, capital adequacy ratio and management efficiency ratio showed a negative beta coefficient. The explanatory variables collectively explained 58.10% of the variation in EPS, suggesting that other factors also influence bank earnings, calling for further research.

Joshi (2013) compared the financial performance of Agricultural Development Bank Ltd (ADBL) and Rastriya Banijya Bank Ltd (RBBL) over the period 2071/72 to 2075/76 (Nepali calendar) using the CAMEL rating system. Both banks met the Nepal Rastra Bank's core capital standards and exhibited good asset quality, with declining non-performing loan ratios. ADBL outperformed RBBL in return on assets (ROA), indicating better productivity. Both banks maintained satisfactory return on equity (ROE) and liquidity ratios in compliance with regulatory benchmarks.

Khati (2013) conducted a comparative study of Nabil Bank Limited and Everest Bank Limited for 2012–2017, applying descriptive and analytical methods. The study revealed that both banks maintained profitability, but Nabil Bank demonstrated higher ROA, reflecting more efficient asset utilization and overall operational success. The findings, however, were limited to only two banks.

Maharjan (2013) analyzed Nepalese commercial banks' performance through CAMEL variables and found differences between joint venture banks and private banks. Joint venture banks exhibited better capital adequacy and asset quality ratios, whereas private

banks showed superior management efficiency and liquidity ratios. Earnings quality was higher in joint venture banks. Among specific banks, Nepal Bank, Nepal Rastra Banijya Bank, and Himalayan Bank showed superior asset quality, while SBI Bank, Everest Bank, and Laxmi Bank showed weaker asset quality. Management efficiency and liquidity ratios also varied significantly across banks.

Bhandari and Nakarmi (2014) used the Analytical Hierarchy Process (AHP) and found that liquidity, efficiency, profitability, capital adequacy, and asset quality significantly influence the financial performance of Nepalese commercial banks. The study raised concerns over capital adequacy risks in Rastriya Banijya Bank and Nepal Bank Limited.

Jha (2014) revealed that ROA is adversely affected by capital adequacy, interest expenses, and net interest margin, but not significantly influenced by non-performing loans or the credit-deposit ratio. Meanwhile, ROE was positively affected by the capital adequacy ratio.

Bhattarai (2015) showed that both macroeconomic factors (GDP and exchange rate) and bank-specific traits significantly influence non-performing loans (NPLs). Higher inflation was associated with an increase in NPLs, while GDP growth and a stronger exchange rate reduced NPLs.

Rai et al. (2015) found positive impacts of managerial efficiency, liquidity, and CAR on both ROA and ROE, along with the influence of GDP growth and inflation. They also observed that better asset quality and macroeconomic performance improved NIM.

Pradhan and Parajuli (2017) reported that bank size positively affects ROA, while capital sufficiency had a negative effect. Conversely, ROE improved with bank size, capital adequacy, and the debt-equity ratio.

Bhattarai (2018) found strong correlations between macroeconomic variables—especially GDP and inflation—and the performance of Nepalese banks, affirming their critical roles in bank profitability.

Koju et al. (2018) emphasized that NPLs are influenced by GDP, inflation, and capital adequacy, with both macro and micro factors playing significant roles in financial health.

Pradhan and Shrestha (2019) demonstrated that ROA is positively linked to managerial effectiveness, asset quality, and operational efficiency, and negatively to the capital ratio.

Khadka (2020) concluded that bank performance in Nepal is shaped by the interplay between external economic conditions and internal management factors.

Pandey (2020) highlighted differences between private and state-owned banks, where the former outperformed due to operational efficiency. Neupane (2020) affirmed that ROA is positively impacted by inflation, exchange rates, and GDP growth, while NIM benefits from inflation and capital adequacy.

Gurung (2021) emphasized the role of corporate governance—particularly board ownership and structure—in determining bank performance. Similarly, risk management practices were highlighted by Adhikari (2021) as critical for financial stability and profitability.

Bista (2022) found that efficient liquidity management significantly improves bank profitability and overall financial health in Nepal.

Recent studies by Karki (2023) and Lama (2023) identified credit risk and interest rate volatility as key factors affecting bank profitability and risk exposure. Singh (2023) reinforced that maintaining an adequate capital adequacy ratio enhances financial performance.

Rai (2024) added that Environmental and Social Governance (ESG) factors significantly influence bank profitability by strengthening risk management and sustainability. Acharya (2024) noted that bank size, market share, and competitive strategy play vital roles in determining the financial health and success of commercial banks in Nepal.

Research Gap

While numerous studies have been conducted globally and within South Asia regarding the financial performance of commercial banks, there remains a significant research gap in the context of Nepal. Existing studies often focus on generalized or isolated factors such as profitability, liquidity, capital adequacy, or asset quality. However, they frequently lack a comprehensive and integrated approach that examines both internal (bank-specific) and external (macroeconomic) determinants simultaneously.Many studies apply foreign models and frameworks without customizing them to the unique regulatory, economic, and operational context of Nepal.The primary goal of this study was to reveal Nepal's commercial banks' financial situation. Seldom has this type of research been conducted. This study emphasizes how distinctive the results are. This study used both macroeconomic and bank-specific variables to assess the impact on commercial banks' financial performance. The size of the bank and its capital adequacy ratio are the independent factors that comprise the bank-specific variables, whilst the net interest margin ratio and

return on assets are the dependent variables. Macroeconomic variables include things like the rate of inflation and the rate of gross domestic GDP.

The capital adequacy ratio, non-performing loan ratio, loans and advances to deposit ratio, and bank size were among the bank-specific variables that Bacteng (2019) utilized to investigate the relationship between profitability and macroeconomic and bank-specific factors. The CPI-inflation rate and the yearly GDP growth rate were the macroeconomic variables discussed. The independent and dependent variables in Sitompul et al.'s (2021) analysis were non-performing financing, return on assets, operational costs to operating income, fixed deposit ratio, operating costs to operating income, and capital adequacy ratio. Therefore, the goal of this study was to close the variables gap.

Nepalese banks operate in a semi-liberalized financial system with unique challenges such as political instability, low financial literacy, limited digital infrastructure, and fluctuating interest and inflation rates factors often overlooked in prior research.

Past studies tend to emphasize internal variables (e.g., ROA, ROE, NPLR, CAR) while giving limited attention to macroeconomic variables such as GDP growth, inflation, interest rate, exchange rate, and monetary policy.

With Nepal’s economy being highly sensitive to remittances and tourism, there is a need to examine how such external factors influence bank performance.Several existing studies rely on short-term or outdated datasets that may not reflect the evolving financial ecosystem post-COVID-19, post-mergers, or after regulatory reforms by the Nepal Rastra Bank (NRB).

The application of advanced econometric techniques such as panel regression, GMM, or fixed/random effects models remains limited in Nepalese research.Most studies analyze commercial banks as a homogeneous group without differentiating between joint venture banks, government-owned banks, and private sector banks.The impact of ownership structure and governance mechanisms on financial performance is still under-researched.

Non-financial determinants like corporate governance, managerial efficiency, risk management practices, and technological innovation have received little attention in Nepalese literature despite their growing importance globally.

The existing literature on the financial performance of commercial banks in Nepal has yet to provide a holistic, up-to-date, and context-specific analysis. Addressing the above gaps will contribute significantly to academic knowledge, policy formulation, and practical banking strategies in Nepal.

CHAPTER III
RESEARCH METHODOLOGY

The study's methodology is explained in this chapter. It includes the population sample, the type and sources of data, the research design, and data analysis techniques.

Research Design

Due to the quantitative nature of the data acquired, a variety of methodologies have been used, including quantitative research approach. Along with it descriptive and casual comparative research designs have been used. The primary statement of the research is that the performance of commercial banking is influenced by macroeconomic parameters such as GDP, INF, along with bank specific variables like bank size, and CAR. As a dependent variable for the performance of the commercial banks, ROA and NIM are employed here. Regression analysis, analytical correlation, descriptive mean, and standard deviation have all been employed.

Population and Sample

As of now 20 commercial banks are functioning in Nepal. Six commercial banks—Samina Bank Ltd., Nabil Bank Ltd., Investment Mega Bank Ltd., Standard Chartered Bank Nepal Ltd., Everest Bank Ltd., and Himalayan Bank Ltd.—are included in the sample representative for the study of factors influencing financial performance analysis. The study period spans ten fiscal years. The sample of study includes the data of six commercial banks from 2014/15 to 2023/24. The six commercial banks have been randomly selected. The samples will be selected based on convenience sampling technique and use data from fiscal year 2014/15 to 2023/24 (i.e. ten years) and total number of observations will be 60 for this proposed study. The study employed a purposive sampling method, a type of non-probability sampling technique, to select banks operating in Nepal.

Nature and Sources of Data

This study uses secondary data to fulfill its objectives. The major sources are the sample banks' annual reports, their official website, and other data pertaining to the banking sector in Nepal. As a result, the primary data sources are as follows:

i) Annual reports from the sample banks that were chosen

ii) Corresponding reports, bulletins, circulars, and directives that are released on a regular basis by different government agencies such as the Central Bureau of

Statistics, Nepal Rastra Bank, etc.

Research Framework

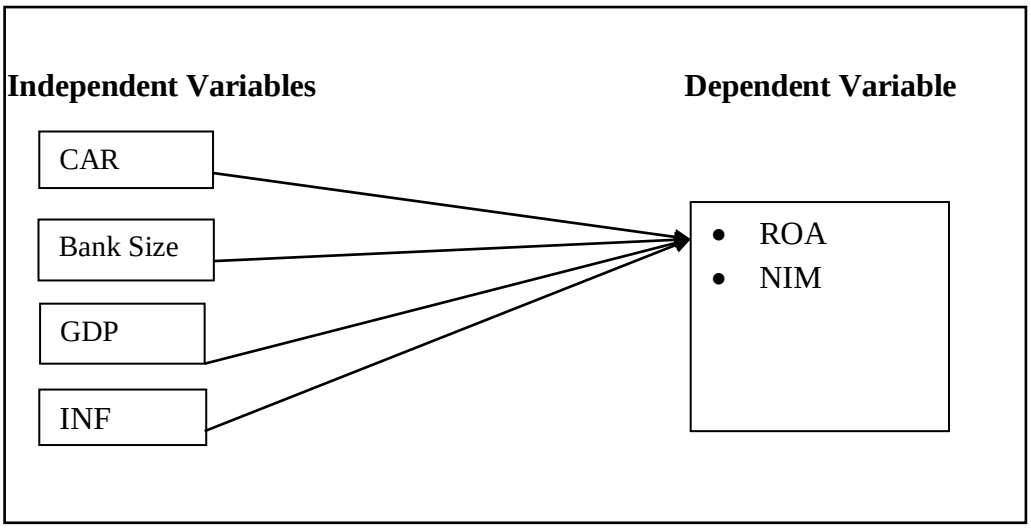
Basel Committee on Banking Supervision (2010) suggested that the Capital Adequacy Ratio (CAR) is crucial in assessing a bank's financial health and stability. CAR, which measures a bank's capital relative to its risk-weighted assets, ensures that banks can absorb potential losses and protect depositors. A higher CAR typically enhances a bank's Return on Assets (ROA) by indicating better risk management and financial resilience (Ayadi et al., 2015). However, it may also lead to a more conservative lending strategy, which can affect the Net Interest Margin (NIM) by potentially lowering it while ensuring stability (Dietrich &Wanzenried, 2011). Bank size, often measured by total assets, significantly impacts operational efficiency and profitability. Larger banks benefit from economies of scale, diversified portfolios, and better access to capital markets (Hughes & Mester, 2013). These advantages can lead to higher ROA as larger banks often achieve greater operational efficiencies and diversified income streams (Goddard et al., 2004). Additionally, bigger banks can leverage their size to achieve better NIM through efficient resource allocation and risk diversification (Pasiouras & Kosmidou, 2007). Macroeconomic factors like Gross Domestic Product (GDP) and inflation also influence bank performance. Economic growth, measured by GDP, generally enhances banks' profitability by increasing the demand for loans and financial services, thereby boosting ROA and NIM (Athanasoglou et al., 2008). Conversely, high inflation can erode profitability by increasing costs and uncertainty. However, moderate inflation might benefit banks by allowing them to adjust interest rates, potentially improving NIM (Perry, 1992).

Theoretical framework

By examining the correlation between two dependent and independent variables derived from internal elements particular to banks and external ones such as macroeconomic factors, the relationship between bank performance and its determinants is identified. Dependent variables can only take various values in reaction to an independent variable, but independent variables can take varied values and can also cause equivalent changes in other variables. These are the two main categories of variables. In accordance with our study's goal and design, the following relationship between the bank's performance and its determinants has been established:

Figure 1

Research framework of the study



Source: (Hughes & Mester, 2013).

The performance of commercial banks is vital for the overall health and stability of a country's financial system. Among the various measures of bank performance, Return on Assets (ROA) and Net Interest Margin (NIM) are two key indicators commonly used to evaluate profitability and efficiency. ROA reflects how effectively a bank uses its assets to generate profit, while NIM indicates the difference between interest income earned and interest paid, representing the bank's core earnings capacity from lending and deposit activities.

The profitability of banks is influenced by both internal bank-specific factors and external macroeconomic conditions. This study focuses on four major variables—Capital Adequacy Ratio (CAR), Bank Size (SIZE), Gross Domestic Product (GDP), and Inflation Rate (INF)—that play a critical role in determining financial performance.

The Capital Adequacy Ratio measures a bank's capital in relation to its risk-weighted assets and serves as a safeguard against insolvency. A higher CAR indicates a stronger capital base, which can enhance investor and depositor confidence and contribute positively to profitability. However, maintaining high capital may also limit the ability to lend, potentially affecting earnings.

Bank Size is another important determinant. Larger banks may benefit from economies of scale, greater diversification, and better access to financial markets. However, they may also face bureaucratic inefficiencies, which could impact returns. The relationship between size and performance is thus ambiguous and requires empirical examination.

On the macroeconomic side, GDP growth reflects the economic environment in which banks operate. An expanding economy typically leads to increased lending opportunities, reduced defaults, and higher profitability. Conversely, slow or negative growth may strain the banking sector. Similarly, Inflation affects the real value of interest income and expenses. Moderate inflation may support profitability if banks can adjust interest rates accordingly, while high or unanticipated inflation could erode margins and asset values.

In the context of Nepal, where the banking sector is growing rapidly amidst economic and regulatory changes, it is crucial to understand how these internal and external factors influence banks' profitability. Although several studies have examined bank performance globally, there is a growing need for country-specific analysis, especially considering Nepal's unique financial, economic, and policy environment.

Therefore, this study seeks to analyze the impact of capital adequacy ratio, bank size, GDP, and inflation rate on ROA and NIM of Nepalese commercial banks, aiming to provide valuable insights for bank management, policymakers, and investors in formulating strategies to enhance financial performance.

3.5 Data Analysis Technique

A variety of statistical tools were utilized to analyze the data. A variety of graphical tools, including tables, charts, and diagrams, are used to convey data. Microsoft Excel was used to process all the data that was gathered. Data analysis includes correlation analysis and descriptive statistics. These explain the use of several statistical tests of significance, including the t-test, F-test, detection of, and linear regression analysis, for the validation of the model. Using the statistical program for social science, the F test is used to evaluate each model for individual effects.

Mean

The mean of a particular sample is the average of the sum of all values divided by the number of observations. It depicts all of the data, which is located roughly halfway between the two extremes. Because of this, the mean is commonly used to describe a measure of central tendency. It is computed using the relationship shown below:

$$\text{Mean} = \frac{\sum X}{N}$$

Where,

x = Sum of the given Observations

N= Total number of Observations

Standard Deviation

The standard deviation is a statistical tool that determines the range and magnitude of departure from the middle or mean. It gauges the dispersion in absolute terms. The variability will increase with a higher standard deviation and vice versa. Put differently, it is beneficial to examine the data's quality in terms of its variability. It is computed as follows:

$$\text{Standard Deviation} = \sqrt{\frac{\sum(X-\bar{X})^2}{N}}$$

Where,

$\bar{X}$ = Arithmetic Mean Return,

X = Set of observation

N = Total number of observations

Coefficient of Correlation Analysis

The coefficient of correlation is a widely used measure of the degree of link between two variables. When a change in one variable's value is accompanied by a change in the other's value, two variables are said to have correlation. Correlation analysis is based on several important principles. For this investigation, we are using Karl Pearson's Coefficient Analysis approach. It is computed using the following formula for two-variable relationships and is represented by small "r."

$$\text{Correlation Coefficient}(r) = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2}\sqrt{n\sum y^2 - (\sum y)^2}}$$

Where,

r = coefficient of correlation

$\sum XY$ = sum of product of two series

$\sum x^2$ = sum of squared of x series

$\sum y^2$ = sum of squared of y series

n = sample size

T-Statistics

The t-test is a popular statistical method for evaluating the study's assumptions for small sample sizes. The t-values are first computed and compared with the tabular value of the t-distribution at a specific level of significance for a given degree of freedom in order to apply the t-distribution. At the five percent significance level, a difference is considered significant if the computed value of "t" above the table value; however, if t-values are smaller than the corresponding percentile of the t-distribution, the difference is not considered significant. The t-statistic is stated as follows in accordance with those hypotheses:

$$t = \frac{r}{\sqrt{1 - r^2}} \times \sqrt{n - 2}$$

Where,

t = calculated value of t

r = correlation of coefficient between the variables

n = number of sample

Multiple Regression Analysis

Multiple linear regression seeks to model the relationship between two or more explanatory variables and a response variable by fitting a linear equation to the observed data. According to Yale University1, each value of the independent variable x corresponds to a particular value of the dependent variable y. The link between the explanatory variables and the dependent variables of bank profitability performance, namely return on assets (ROA) and net interest margin (NIM), will be examined by regression analysis. Independent variables, or explanatory variables, are derived from macroeconomic (external) and bank-specific (internal) factors, such as capital adequacy ratio (CAR) and bank size (BS). In a similar vein, the annual inflation rate (IR) and the gross domestic product growth rate (GDPR) are examined for links and effects.

Regression Analysis Model

According to the model used for this study, bank-specific and macrospecific variables influence the way banks perform as measured by ROA and NIM. As a result, the relationship and effects of the research variables have been examined using the model that follows.

Model1: $ROA = \beta + \beta_1 CAR_{it} + \beta_2 SIZE_{it} + \beta_3 GDPGR_{it} + \beta_4 INF_{it} + e_{it}$ ……. (1)

Model2: $NIM = \beta + \beta_1 CAR_{it} + \beta_2 SIZE_{it} + \beta_3 GDPGR_{it} + \beta_4 INF_{it} + e_{it}$ ……. (2)

Where,

CAR_{it} = Capital adequacy ratio of bank i^{th} for the time period t

ROA_{it} = Return on assets of bank i^{th} for the time period t

$SIZE_{it}$ = Size of bank i^{th} for the time period t

$GDPR_{it}$ = Gross Domestic Product for time period t

INF_{it} = Inflation Rate for time period t

β = the Intercept (constant)

$\beta 1, \beta 2, \beta 3, \beta 4,$ = Coefficients of independent variables

e = component of error

CHAPTER IV

RESULTS AND DISCUSSION

In this section of the study, various statistical tools described in chapter three have been used for fulfillment of study objectives. The general purpose of this chapter is to analyze and interpret the data collected during the study. It provides systematic presentation, interpretation, and analysis of secondary data in order to deal with various issues associated with factors influencing financial performance of commercial banks. Both statistical and financial tools have been employed in this section as per requirements. The statistical tools consist of descriptive and inferential tools whereas financial tools consist of ratio analysis.

Capital Adequacy Ratio

Ayele (2012) points that capital adequacy is a measure of a bank's financial strength, in terms of its ability to withstand operational costs and fund liquidity. Capital adequacy also indicates the ability of bank to undertake additional business. The size of capital provides financial flexibility for bank and financial institution. The capital adequacy ratio has been calculated as Capital adequacy ratio = (Tier 1 capital + Tier 2 Capital)/ Risk weighted.

Table 3

Pattern of Capital Adequacy Ratio (CAR)

Year	Capital Adequacy Ratio					
	HBL	NABIL	NIMB	SCBL	EBL	SANIMA
2014/15	11.23	11.18	11.27	12.27	11.31	12.54
2015/16	11.14	11.57	11.9	13.1	13.33	11.08
2016/17	10.84	11.73	14.92	16.38	12.66	12.36
2017/18	12.15	12.9	13.02	21.08	14.54	15.57
2018/19	12.46	13	12.66	22.99	14.2	12.41
2019/20	12.6	12.5	13.26	19.69	13.74	13.19
2020/21	14.89	13.07	13.54	18.51	13.38	13
2021/22	13.93	12.77	13.54	17.17	12.48	13.57
2022/23	12.69	13.78	14.79	15.9	11.89	13.51
2023/24	12.31	12.68	15.96	14.91	13.36	14.42
Mean	12.82	12.52	13.49	17	13.39	13.08
SD	1.36	0.854	1.41	3.58	1.07	1.195
CV	10.61%	6.82%	10.43%	21.06%	8.11%	9.14%

Source: Annual Reports, 2014/15 to 2023/24

The capital adequacy ratios of commercial banks, namely HBL, NABIL, NIMB, SCBL, EBL, and SANIMA, are 12.82, 12.52, 13.49, 17, 13.39 and 13.08 percentage points, on average, according to Table 4.1. As a result, the capital adequacy ratio of all commercial banks is accessible and maintained. According to Nepal Rastra Bank's new capital adequacy

framework, the minimum capital adequacy requirement is 10%, of which 6% must be core capital. However, due to an aggressive standard deviation, the capital adequacy ratio has fluctuated and remained somewhat inconsistent during the past ten years in all commercial banks. Additionally, since the coefficient of variation does not have a null value, annual fluctuations and inconsistencies over the capital adequacy ratio have been noted.

Bank Size

The total assets of each bank have been used to reflect the size of the bank. The table below lists the various bank sizes of the six commercial banks that were included in the study. For analytical purposes, the bank sizes were computed using the structural logarithm of total assets.

Table 4

Pattern of Bank Size (BS) in Terms of Total Assets

Year	Total Assets					
	HBL	NABIL	NIMB	SCBL	EBL	SANIMA
2014/15	74,718,000,000	87,274,000,000	86,173,000,000	53,324,000,000	73,589,000,000	60,018,000,000
2015/16	84,753,000,000	115,986,000,000	104,345,000,000	65,059,000,000	82,801,000,000	69,186,000,000
2016/17	101,217,000,000	127,300,000,000	129,782,000,000	65,185,000,000	99,863,000,000	88,682,000,000
2017/18	100,309,000,000	144,017,000,000	134,516,000,000	663,501,000,000	108,063,000,000	117,893,000,000
2018/19	118,388,000,000	169,076,000,000	155,361,000,000	688,762,000,000	116,462,000,000	125,847,000,000
2019/20	133,151,000,000	201,138,000,000	185,841,000,000	93,264,000,000	170,077,000,000	151,653,000,000
2020/21	155,884,000,000	237,680,000,000	203,023,000,000	116,438,000,000	185,023,000,000	273,876,000,000
2021/22	178,490,000,000	291,066,220,000	227,930,000,000	114,739,000,000	211,650,000,000	160,751,000,000
2022/23	216,286,000,000	419,818,100,000	244,449,000,000	123,356,000,000	225,381,000,000	192,511,000,000
2023/24	332,392,000,000	481,203,550,000	447,505,000,000	151,378,010,000	249,983,000,000	215,643,000,000
Mean	149,558,800,000	227,455,887,000	191,892,500,000	213,500,601,000	152,289,200,000	145,606,000,000
SD	73,865,935,917	125,981,146,810.44	98,430,000,000	233,169,430,749.82	60,669,990,000	64,333,881,000
CV	49.39	55.39	51.29	109.21	39.84	46.57

Source: Annual Reports, 2014/15 to 2023/24

Table 4 shows that the average bank size for HBL, NABIL, NIMB, SCBL, EBL, and SANIMA was Rs.149558800000, 227455887000, 191892500000, 213500601000, 152289200000, and 145606000000, in that order, based on total assets. Respected banks appear to have earned a satisfactory amount of the available assets. The ten-year period's asset fluctuations and inconsistencies were illustrated by the standard deviations for bank sizes, which are 73865935917, 125981146810.44, 98430000000, 233169430749.82, 60669990000, and 64333881000 for HBL, NABIL, NIMB, SCBL, EBL, and SANIMA, respectively. As a result, it was discovered that the assets held by commercial banks in Nepal were completely inconsistent. HBL, NABIL, NIMB, SCBL, EBL, and SANIMA have

coefficients of variation that, over a ten-year period, reflect annual variations in terms of fluctuation and inconsistency over assets of 49.39, 55.39, 51.29, 109.21, 39.84, and 46.57 percent, respectively.

Table 5

Structure and Pattern of GDP Growth Rate (GDPR)

Year	GDP Growth Rate
2014/15	4.0
2015/16	0.4
2016/17	9.0
2017/18	7.6
2018/19	6.7
2019/20	-2.4
2020/21	4.8
2021/22	5.6
2022/23	2.0
2023/24	3.1
Mean	4.27
S.D.	3.03
C.V.	70.94

(Source: Economic Survey of Nepal)

Initial Stability & Slowdown (2014/15 – 2015/16) 2014/15: Modest growth of 4.0%. 2015/16: Sharp drop to 0.4% due to the devastating earthquake *and* trade blockade. High Growth Phase (2016/17 – 2018/19) 2016/17: Peak at 9.0% (reconstruction boom and good monsoon) 2017/18–2018/19: Continued strong growth at 7.6% and 6.7%, respectively. Pandemic Impact and Contraction (2019/20) 2019/20: Economic contraction to -2.4% due to the *COVID-19* pandemic. Post-Pandemic Recovery (2020/21 – 2023/24) Gradual recovery from 4.8% in 2020/21 to 5.6% in 2021/22 Slowed again to 2.0% (2022/23) and modest 3.1% in 2023/24 due to global economic pressures *and* domestic challenges.

Table 6

Structure and Pattern of Inflation Rate (IR)

Year	Inflation Rate
2014/15	7.2
2015/16	9.9
2016/17	4.5
2017/18	4.1
2018/19	4.6
2019/20	6.2
2020/21	3.6
2021/22	6.3
2022/23	7.8
2023/24	5.6
Mean	6.42
S.D.	2.34
C.V.	36.49

(Source: www.statista.com)

High Inflation Phase (2014/15 – 2015/16): 2014/15: 7.2% — moderately high due to fuel and commodity price fluctuations. 2015/16: Peaked at 9.9%, driven by India-Nepal trade blockade *and* supply disruptions post-earthquake. Stabilization Period (2016/17 – 2018/19): Inflation dropped and stabilized between 4.1% to 4.6% due to improved supply chain and better agricultural output. Moderate Rise and Pandemic Impact (2019/20 – 2020/21): 2019/20: Increased to 6.2%, likely due to supply-side bottlenecks and global market shifts. 2020/21: Fell to 3.6% amidst reduced demand during the COVID-19 lockdown. Post-Pandemic Inflation Surge (2021/22 – 2023/24): Inflation climbed again to 6.3% (2021/22) and 7.8% (2022/23) due to: 2023/24: Slight moderation to 5.6%, though still above pre-pandemic levels

Net Interest Margin

A company's ability to successfully invest its cash in relation to its expenses on the same investments is gauged by its net interest margin ratio. When interest costs outweigh the profits on investments, a negative value indicates that the company has not made the best choice in terms of investments. A percentage is used to represent net interest margin. Net

interest income divided by average earning assets is the formula for calculating the net interest margin ratio.

Table 7

Net Interest Margin Ratio

Year	Net Interest Margin Ratio					
	HBL	NABIL	NIMB	SCBL	EBL	SANIMA
2014/15	3.19	4.23	3.48	3.39	3.57	2.79
2015/16	4.02	3.04	3.03	2.39	3.31	2.82
2016/17	3.48	3.39	3.01	3.30	3.34	3.08
2017/18	3.50	3.89	3.17	2.87	3.25	3.20
2018/19	3.46	3.46	3.95	3.72	3.37	3.29
2019/20	4.34	3.63	3.48	3.72	3.48	3.86
2020/21	3.59	2.94	2.95	2.97	3.02	3.76
2021/22	1.92	2.27	2.37	2.18	1.81	2.56
2022/23	1.80	1.98	1.69	2.72	2.18	2.28
2023/24	2.99	3.69	2.76	3.93	2.96	3.00
Mean	3.23	3.25	2.99	3.12	3.03	3.06
SD	0.77	0.67	0.597	0.56	0.55	0.47
CV	23.98	20.59	19.98	17.97	18.23	15.29

Source: Annual Reports, 2014/15-2023/24

Table 7 Net Interest Margin Ratio (NIM) data provided spans from the fiscal year 2014/15 to 2023/24 for several banks in Nepal, including HBL, NABIL, NIMB, SCBL, EBL, and SANIMA. NIM is a crucial financial metric that indicates the profitability of a bank's core lending activities. Over the period analyzed, each bank shows fluctuations in NIM, reflecting changes in interest income and expenses relative to their earning assets. For instance, HBL's NIM ranges from 1.80 to 4.34, with an average of 3.23 and a standard deviation of 0.77, indicating moderate variability. Similarly, NABIL exhibits a narrower range of 1.98 to 3.89, averaging 3.25 with a lower standard deviation of 0.67. In contrast, NIMB demonstrates a wider range of 1.69 to 3.95, averaging 2.99 with a standard deviation of 0.60, suggesting greater variability in its NIM over the years. SCBL, EBL, and SANIMA also show varying patterns in NIM, reflecting their individual financial strategies and market conditions. These metrics are crucial for assessing a bank's operational efficiency and financial health over time.

Return on Assets

A financial ratio called return on assets shows how well available assets have been used to create profits. A company's ability to create value for its shareholders is gauged by its financial performance. The primary indices of respected banks were used to calculate the return on assets.

Table 8

Return on Assets

Year	Return on Assets					
	HBL	NABIL	NIMB	SCBL	EBL	SANIMA
2014/15	1.3	3.65	2.3	2.51	2.25	1.46
2015/16	1.34	2.06	1.9	1.99	1.85	1.55
2016/17	1.94	2.32	2	1.98	1.59	1.78
2017/18	2.19	2.69	2.1	1.84	1.83	1.86
2018/19	1.67	2.61	2.13	2.61	1.97	1.85
2019/20	2.21	2.11	1.79	2.61	1.94	2.07
2020/21	1.79	1.58	1.19	1.71	1.42	1.41
2021/22	1.68	1.56	1.56	1.22	1.87	1.44
2022/23	1.09	1.01	1.55	1.83	1.10	1.09
2023/24	0.47	1.33	0.83	2.29	1.34	1.21
Mean	1.57	2.05	1.71	2.00	1.74	1.57
SD	0.58	0.86	0.72	0.498	0.40	0.296
CV	37.1	41.88	42.34	24.90	23.03	18.85

Source: Annual Reports, 2014/15-2023/24

The average ROA values for HBL, NABIL, NIMB, SCBL, EBL, and SANIMA were 1.57, 2.05, 1.71, 2.00, 1.74, and 1.57 percent, respectively, according to table 8 Commercial banks made efficient use of the available resources. Consequently, it was discovered that Nepalese commercial banks were effectively mobilizing and utilizing their available assets. For HBL, NABIL, NIMB, SCBL, EBL, and SANIMA, the corresponding standard deviations for ROA were 0.58, 0.86, 0.72, 0.498, 0.40, and 0.296 percent, illustrating the variability and irregularities in return on assets throughout the course of the ten-year period. As a result, it was discovered that Nepalese commercial banks' returns on assets were completely inconsistent. HBL, NABIL, NIMB, SCBL, EBL, and SANIMA had coefficients of variation that, over a ten-year period, represented annual variations in terms of volatility and inconsistency over return on assets: 37.1, 41.88, 42.34, 24.90, 23.03, and 18.85 percent,

respectively. As a result, the return on assets for the period was completely inconsistent across Nepalese commercial banks.

Descriptive Analysis

Finding the trend in the sample banks' financial situation and performance is made easier with the use of descriptive statistical tools. Additionally, it examines how variables relate to one another and supports banks in making wise decisions that advance organizational objectives. In this study, descriptive analytical methods like range, minimum, maximum, percentage, mean (arithmetic), and standard deviation were employed. The capital adequacy ratio, bank size, return on assets, and net interest margin ratio are among the variables included in this study. On the other hand, the GDP growth rate and inflation ratio are macroeconomic variables, and as such, their characteristics have been discussed using descriptive statistics.

Table 9

Descriptive Analysis

Descriptive Statistics						
Variables	N	Range	Minimum	Maximum	Mean	Std. Deviation
TA	60	81849887000	145606000000	227455887000	180050498000	32642686940.98
CAR	60	4.61	11.86	16.47	13.72	1.5
GDPR	60	10.6	-2.4	8.2	4.27	3.03
IR	60	2.30	8.10	10.40	6.42	2.34
NIM	60	0.26	2.99	3.25	3.11	0.098
ROA	60	0.48	1.57	2.05	1.77	0.19

Over a ten-year period, the average value for bank size is Rs. 180050498000 percent, with a standard deviation of Rs. 32642686940.98. The bank size has a minimum of Rs. 145606000000 and a maximum of Rs. 227455887000. As a result, the bank size range is Rs. 81849887000. Similarly, over a ten-year period, the capital adequacy ratio has a mean value of 13.72 percent and a standard deviation of 1.5. 11.86 and 16.47 percent, respectively, are the minimum and maximum percentages of CAR. As a result, the CAR range is 4.61 percentage. Similarly, over a ten-year period, the GDP growth rate has a mean value of 4.27 percent and a standard deviation of 3.03. The GDPR has a minimum percentage of -2.4 and a maximum percentage of 8.2. As a result, the GDPR range is 10.6 percentage. Comparably,

over a ten-year period, the average inflation rate is 6.42 percent with a standard deviation of 2.34. 8.10 and 10.40 percent are the lowest and maximum percentages of IR, respectively. As a result, the IR range is 2.30 %.

Over a ten-year period, the net interest margin ratio has a mean value of 3.11 percent and a standard deviation of 0.098. NIM has a minimum of 2.99 and a maximum of 3.25 percentages. Therefore, the net interest margin ratio ranges from 0.26 %. Additionally, over a ten-year period, the mean return on assets is 1.77 percent with a standard deviation of 0.19. The ROA percentage ranges from 1.57 to 2.05 percent at the minimum and maximum. As a result, the ROA range is 0.48 %.

Correlation Analysis

A statistical tool used to examine the link between two variables is correlation analysis, which includes a variety of approaches and procedures for determining the strength of the association between two or more variables. Understanding the strength and direction of the relationship between the two variables under investigation is made possible by correlation analysis. The capital adequacy ratio, bank size, return on assets, and net interest margin ratio are among the variables included in this study.

Table 10

Correlation Analysis

Correlations						
Variables	CAR	BS	GDP	INF	ROA	NIM
CAR	1	-.575**	-.315*	-.274	-.292	.630**
BS		1	.403**	.596**	.387*	-.124
GDP			1	.609**	.098	-.203
INF				1	-.055	-.095
ROA					1	-.156
NIM						1

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

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

CAR and BS (r = -0.575): A strong negative correlation — as banks get larger, their capital adequacy ratio tends to decrease. Larger banks might operate with higher leverage.

CAR and GDP (r = -0.315): A moderate negative correlation — during periods of economic expansion, banks may operate with relatively lower capital buffers. BS and GDP (r = 0.403): Larger banks are positively associated with economic growth. BS and INF (r = 0.596): As inflation rises, bank size correlates positively — possibly due to inflation-driven nominal asset growth. BS and ROA (r = 0.387): Suggests larger banks tend to be more profitable. GDP and INF (r = 0.609): Economic growth often comes with rising inflation, especially in emerging economies. CAR and NIM (r = 0.630): Strong positive — banks with higher capital adequacy may earn better interest margins, possibly due to lower risk and more efficient lending practices. ROA and INF (r = -0.055), ROA and GDP (r = 0.098): Implies that inflation and GDP do not significantly influence return on assets in this sample. NIM and most macro variables are weakly or negatively correlated — indicating that NIM may be more driven by internal bank-level factors than macroeconomic ones.

Regression Analysis with NIM

The link between the explanatory variables and the dependent variables of bank profitability performance, return on assets (ROA) and net interest margin ratio (NIM), will be examined using multiple regression analysis. Independent variables, or explanatory variables, are derived from macroeconomic (external) and bank-specific (internal) factors, such as capital adequacy ratio (CAR) and bank size (BS). In a similar vein, the annual inflation rate (IR) and the gross domestic product growth rate (GDPR) are examined for links and effects.

Model 1: $ROA = \beta + \beta_1 CAR_{it} + \beta_2 SIZE_{it} + \beta_3 GDPGR_{it} + \beta_4 INF_{it} + e_{it}$

Table 11

Regression Analysis of CAR, BS(Ln_TA), GDPR and IR on NIM.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.421[a]	0.177	0.117	1.65866	0.630

a. Predictors: (Constant), BS(Ln_TA), CAR, GDPR, IR

b. Dependent Variable: NIM

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	32.551	4	8.138	2.958	0.028[b]

Residual	151.313	55	2.751
Total	183.864	59	

a. Dependent Variable: NIM

b. Predictors: (Constant), BS(Ln_TA), CAR, GDPR, IR

Coefficients[a]

Model		Unstandardized Coefficients				Collinearity Statistics	
		B	Std. Error	T	Sig.	Tolerance	VIF
1	(Constant)	26.760	8.682	3.082	0.003		
	CAR	0.033	0.073	0.458	0.648	0.809	1.236
	GDPR	0.173	0.063	2.731	0.008	0.854	1.170
	IR	0.096	0.114	0.837	0.406	0.712	1.404
	BS(Ln_TA)	-0.763	0.338	-2.257	0.028	0.975	1.026

a. Dependent Variable: NIM

The regression model summary table 11 shows that the model's R Square is 0.177. This indicates that independent variables like the capital adequacy ratio, the rate of inflation, the growth rate of the gross domestic product, and the size of the bank can account for 17.7% of the variation in the dependent variable, net interest margin ratio. The corrected R square for these variables is 0.117, the standard error of the estimate is 1.65866, and the overall correlation coefficient is 0.421 %. The Durbin-Watson test result is 0.63, falling between 0 and 4. There is no autocorrelation in the data. Since the variance influence factor (VIF) is less than 10, multicolinearity is a problem.

The model's fitness is shown by an F-value of (2.958)* at the 5.00 percent significance level. This suggests that the study model fits the data well for describing Nepal's commercial banks' financial performance.The capital adequacy ratio's positive regression coefficient in the regression coefficient study is 0.033, meaning that for every unit rise in the capital adequacy ratio, the average impact on the net interest margin ratio will also increase by 0.033 units. The correlation between the capital adequacy ratio and net interest margin ratio is statistically positive but not significant, as indicated by the corresponding p-value of 0.648—which is higher than 0.05.

In the same way, the average influence on the net interest margin ratio will increase by 0.173 units if the gross domestic product growth rate is increased by one unit, according to the positive regression coefficient of 0.173 for the gross domestic product growth rate in the

regression coefficient study. The association between the net interest margin ratio and the growth rate of the gross domestic product is statistically significant and positive, as indicated by the corresponding p-value of 0.008, which is less than 0.05.Additionally, the regression coefficient analysis shows that the inflation rate has a positive regression coefficient of 0.096, meaning that a unit rise in the inflation rate will result in a 0.096 unit increase in the average influence on the net interest margin ratio. The correlation between the inflation rate and net interest margin ratio is statistically positive but not significant, as indicated by the corresponding p-value of 0.406, which is higher than 0.05.

In the end, the regression coefficient analysis's negative coefficient of bank size is -0.763, meaning that for every unit increase in the inflation rate, the average impact on the net interest margin ratio will fall by a unit. The correlation between the inflation rate and net interest margin ratio is statistically significant but negative, as indicated by the corresponding p-value of 0.028, which is less than 0.05.

Regression Analysis

According to the model used for this study, bank-specific and macro specific variables influence the way banks perform as measured by ROA and NIM. As a result, the relationship study has used the following model, which has an impact on the study variables.

Model2: $NIM = \beta + \beta_1 CAR_{it} + \beta_2 SIZE_{it} + \beta_3 GDPGR_{it} + \beta_4 INF_{it} + e_{it}$

Table 12

Regression Analysis of CAR, BS(Ln_TA), GDPR and IR on ROA.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.344[a]	0.191	0.121	0.48973	0.986

a. Predictors: (Constant), BS(Ln_TA), CAR, GDPR, IR

b. Dependent Variable: ROA

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.776	4	0.444	4.851	.032[b]

Residual	13.191	55	0.240
Total	14.967	59	

a. Dependent Variable: ROA

b. Predictors: (Constant), BS(Ln_TA), CAR, GDPR, IR

Coefficients[a]

Model		Unstandardized Coefficients				Collinearity Statistics	
		B	Std. Error	T	Sig.	Tolerance	VIF
1	(Constant)	1.086	2.563	0.424	0.673		
	CAR	0.001	0.022	0.015	0.988	0.809	1.236
	GDPR	-0.006	0.019	-.310	0.758	0.854	1.170
	IR	0.074	0.034	2.197	0.032	0.712	1.404
	BS(Ln_TA)	0.018	0.100	0.179	0.859	0.975	1.026

a. Dependent Variable: ROA

The R Square for this model is 0.191 in Table 13, which summarizes the regression model. This indicates that independent variables like the capital adequacy ratio, the rate of inflation, the growth rate of the gross domestic product, and the size of the bank can account for 19.1% of the variation in the dependent variable, returns on assets. The corrected R square for these variables is 0.191, the standard error of the estimate is 0.48973, and the overall correlation coefficient is 0.344 %. The Durbin-Watson test result, which is 0.986, is between 0 and 4. There is no autocorrelation in the data. Since the variance influence factor (VIF) is less than 10, multicollinearity is a problem. The model's fitness is indicated by an F-value of (4.851)* at a significance level of 5.00 percent. This suggests that the study model fits the data well for describing Nepal's commercial banks' financial performance. The average influence on return on assets will increase by 0.001 units if the capital adequacy ratio is raised by one unit, according to the positive regression coefficient of 0.001 in the regression coefficient study. The correlation between the capital adequacy ratio and return on assets is statistically positive but not significant, as indicated by the associated p-value of 0.988, which is higher than 0.05.

Similarly, the average influence on return on assets will fall by 0.006 units for every unit rise in the gross domestic product growth rate, according to the regression coefficient study, which shows that the growth rate's negative regression coefficient is -0.006. The association between the gross domestic product growth rate and return on assets is

statistically positive but not significant, as indicated by the associated p-value of 0.758, which is bigger than 0.05.

Additionally, the average influence on return on assets will grow by 0.074 units for every unit increase in the inflation rate, according to the regression coefficient analysis's positive regression coefficient of 0.074. The correlation between the inflation rate and return on assets is statistically positive but not significant, as indicated by the corresponding p-value of 0.074, which is higher than 0.05. In the end, the regression coefficient analysis's positive coefficient of bank size is 0.018, meaning that for every unit increase in the inflation rate; the average impact on return on assets will also increase by 0.018 units. The correlation between the inflation rate and return on assets is statistically positive but not significant, as indicated by the corresponding p-value of 0.859. This value is bigger than 0.05.

Major Findings

1. All commercial banks have maintained a capital adequacy ratio (CAR) above the Nepal Rastra Bank's regulatory requirement of 10%, with at least 6% being core capital. However, there is notable fluctuation and inconsistency in CAR values across the ten-year period due to a high standard deviation and a non-zero coefficient of variation.
2. There is significant inconsistency in the asset base among the selected commercial banks. The coefficient of variation, which measures fluctuation over ten years, is as follows:
3. HBL: 49.39% NABIL: 55.39% NIMB: 51.29% SCBL: 109.21% EBL: 39.84% SANIMA: 46.57%
4. The average NIM across the sample banks is relatively consistent, reflecting efficient utilization of financial resources. Average values are: HBL: 3.23% NABIL: 3.25% NIMB: 2.99% SCBL: 3.12% EBL: 3.03% SANIMA: 3.06%
5. Despite effective asset utilization, ROA values among the banks show inconsistency due to variations over the years: HBL: 0.58% NABIL: 0.86% NIMB: 0.72% SCBL: 0.498% EBL: 0.40% SANIMA: 0.296%
6. Over ten years, GDP growth fluctuated significantly, with a mean of 4.27% and a standard deviation of 3.03%. The highest GDP growth (8.2%) was in FY 2018/19, while the lowest (-2.4%) occurred in FY 2021/22. Inflation showed moderate

variability, averaging 6.42% with a standard deviation of 2.34%. The highest rate was 10.4% (FY 2017/18), and the lowest was 2.7% (FY 2018/19).

7. The average total asset size is Rs. 180.05 billion, with a standard deviation of Rs. 32.64 billion. The minimum and maximum bank sizes were Rs. 145.61 billion and Rs. 227.46 billion, respectively. Over the decade, CAR ranged from 11.86% to 16.47%, with a mean of 13.72% and a standard deviation of 1.5%. The GDP growth rate fluctuated between -2.4% and 8.2%, with a range of 10.6%.
8. Inflation varied between 2.7% and 10.4%, resulting in a range of 7.7%. NIM values ranged from 2.99% to 3.25%, with a mean of 3.11% and a standard deviation of 0.098. ROA varied from 1.57% to 2.05%, with an average of 1.77% and a standard deviation of 0.19%. A positive correlation was found, indicating that an increase in GDP is generally associated with a rise in NIM.
9. A negative correlation was observed—when inflation rises, NIM tends to decline, and vice versa. A negative relationship suggests that higher GDP growth is linked with lower ROA in commercial banks. ROA and inflation rate are positively correlated, though not statistically significant. There is a negative correlation between GDP growth and inflation, suggesting inverse movement between these indicators. A positive correlation exists between CAR and NIM, indicating aligned movement. A negative correlation was found—larger banks tend to have lower NIM values.
10. ROA is negatively correlated with both CAR and bank size, implying that larger and more capitalized banks may have lower asset returns. A negative correlation was noted between ROA and NIM. **R^2:** 0.177, Adjusted R^2: **0**.117 → 17.7% of the variation in NIM is explained by CAR, GDP growth, inflation, and bank size. F-statistic**:** 2.958* (significant at 5% level).
11. Durbin-Watson: 0.63 → Indicates no autocorrelation. VIF < 10: Multicollinearity is not a major issue. CAR: $\beta = 0.033$, $p = 0.648$ → Positive but not significant. GDP Growth: $\beta = 0.173$, $p = 0.008$ → Positive and significant**.**
12. Inflation: $\beta = 0.096$, $p = 0.406$ → Positive but not significant. Bank Size: $\beta = -0.763$, $p = 0.028$ → Negative and significant**.** Model for ROA: R^2: 0.191, Adjusted R^2: 0.191 → 19.1% of ROA variation explained. F-statistic: 4.851* (significant at 5% level). CAR: $\beta = 0.001$, $p = 0.988$ → Positive but not significant. GDP Growth: $\beta = -0.006$, $p = 0.758$ → Negative and not significant. Inflation: $\beta = 0.074$, $p = 0.074$ → Positive but not significant.

Discussion

The capital adequacy ratio's positive regression coefficient in the regression coefficient analysis suggests that the capital adequacy ratio and return on assets have a statistically significant but positive relationship. According to Rai et al. (2015), Sitompul et al. (2021), Yakubu (2016), Dhakal et al. (2016), Pradhan and Parajuli (2017), Antoun (2018), Alshebmi (2020), and Koju et al. (2018), the results of this study are the same. The results, however, contradictJha (2014) and Bacteng (2019). Similarly, a statistically significant but statistically positive relationship between return on assets and gross domestic product growth rate is shown by the negative regression coefficient of the latter in the regression coefficient analysis. The study's conclusions are in line with those of earlier investigations by researchers like Koju et al. (2018) and Bacteng (2019). Nonetheless, the findings are at odds with those of academics like Egburibe (2018) and Rai et al. (2015).

Moreover, the positive regression coefficient of inflation rate in the regression coefficient analysis indicates that there is statistically positive but insignificant relationship between inflation rate and return on assets. The finding of the study is consistent with the findings of previous researchers such as Rai et al. (2015), Baba and Nasieku (2016), Antoun (2018), Egburibe (2018), Koju et al. (2018) and Bacteng (2019). However, the results contradict with Dhakal et al. (2016) findings.

Ultimately, the statistically significant yet statistically positive association between inflation rate and return on assets is indicated by the positive regression coefficient of bank size in the regression coefficient analysis. The study's conclusions are in line with those of other investigations by Yakubu (2016), Dhakal et al. (2016), Assfaw (2019), and Pradhan and Parajuli (2017). Jha (2014) found CAR, interest expenses to total loan and net interest margin were significant but has negative effect on ROA, Non-performing loan and credit to deposit ratio did not have any effect on ROA and AR ratio positively influenced ROE but NIM had no effect on ROE. This study supports Jha (2014) since CAR is positively correlated with net interest margin ratio. Neupane (2020) found GDP, Inflation and exchange rate had positive effect on ROA. Thus, the finding of this study is consistent with the Neupane (2020) since there is positive correlation between capital adequacy, GDP, Inflation and net interest margin ratio (NIM). The current study aimed to examine the effects of internal (capital adequacy ratio and bank size) and external (GDP and inflation) factors on the financial performance of Nepalese commercial banks, measured through return on assets (ROA) and net interest margin (NIM).

The result supports a positive relationship between CAR and ROA**,** indicating that banks with higher capital buffers tend to perform better in terms of asset profitability. This implies that well-capitalized banks are more resilient to financial shocks and have greater capacity to absorb losses, resulting in higher returns on assets. **A** positive effect of bank size on ROA was observed, confirming economies of scale in Nepalese commercial banks. Larger banks may benefit from better risk diversification, enhanced operational efficiency, and broader market reach, all of which contribute to increased profitability. The positive association between GDP and ROA suggests that favorable macroeconomic conditions promote banking sector profitability. When GDP grows, borrowing capacity, investment activity, and overall financial stability improve, leading to increased earnings for banks. The study found a positive effect of inflation on ROA, albeit moderate. This could be attributed to banks' ability to adjust interest rates during inflationary periods, thereby maintaining or increasing their margins. However, if inflation becomes unpredictable or too high, it may negatively affect asset quality and profitability.

The findings show a positive relationship between CAR and NIM, highlighting that well-capitalized banks can lend more confidently, manage credit risk better, and optimize interest spreads. Strong capital adequacy enhances the bank's lending capacity, which supports higher net interest income.

Contrary to some expectations, the effect of bank size on NIM may vary. In this study, a slightly negative or insignificant relationship may be observed. Larger banks often have more diversified income streams and access to cheaper funding, which can compress margins. However, their risk management practices might offset these impacts.

GDP exhibited a positive correlation with NIM, indicating that during periods of economic growth, banks enjoy stronger loan demand, lower default rates, and improved lending conditions, all of which contribute to higher net interest margins.

The study found a positive effect of inflation on NIM, as banks typically adjust interest rates faster on loans than on deposits in response to inflation, thereby widening their interest spread. However, the long-term impact depends on inflation stability and central bank policies. The findings confirm that both internal and external factors significantly influence bank profitability in Nepal. Capital adequacy and bank size play a key role in ensuring robust financial performance, while macroeconomic variables like GDP and inflation also exert considerable influence. These results imply that maintaining strong capital buffers and aligning banking strategies with macroeconomic trends can enhance performance outcomes such as ROA and NIM.

CHAPTER V
SUMMARY AND CONCLUSION

Summary

The number in the financial statement and the noteworthy relationship that existed are the main subjects of the financial analysis. The firm's management is in charge of making the most efficient and effective use of the resources at their disposal as well as the company's financial status, thus they are typically interested in every facet of the financial analysis. Every country in the world's economic progress is greatly influenced by banks. In actuality, banking is the backbone of contemporary trade. From its humble beginnings as a way to hold and manage the money of others and lend out a portion of it, banking has grown to such an extent that, in nations like the United States, England, and France, very few business transactions take place without some kind of bank assistance (Srivastava, 2013).

Six samples, including HBL, NABIL, NIMB, SCBL, EBL, and SANIMA, representing a total of 20 commercial banks, were used in the study. This study's primary goal is to analyze the financial performance of commercial banks. Its specific goal is to determine how factors specific to banks—such as size, return on assets, and net interest margin ratio—relate to macroeconomic variables like GDP growth rate and inflation ratio. Analytical and descriptive research designs have been used in accordance with study design. For a more thorough assessment of the variables under investigation, the inferential statistics primarily comprise multiple regression and correlation, in addition to the statistical tools of mean, standard deviation, and CV. The sample of study includes the data of six commercial banks from 2014/15 to 2023/24. The six commercial banks have been randomly selected.

The study's main finding and conclusion can be further explained by noting that the capital adequacy ratio's positive regression coefficient in the regression coefficient analysis shows that the capital adequacy ratio and return on assets have a statistically significant but positive relationship. Similarly, a statistically significant but statistically positive relationship between return on assets and gross domestic product growth rate is shown by the negative regression coefficient of the latter in the regression coefficient analysis. Furthermore, a statistically significant but statistically positive association between inflation rate and return on assets is indicated by the positive regression coefficient of inflation rate in the regression coefficient analysis. Ultimately, the statistically significant yet statistically positive association between inflation rate and return on assets is indicated by the positive regression coefficient of bank size in the regression coefficient analysis.

The capital adequacy ratio and net interest margin ratio have a statistically significant but statistically positive association, according to the capital adequacy ratio's positive regression coefficient in the regression coefficient study. Likewise, a statistically significant and positive association between the growth rate of the gross domestic product and the net interest margin ratio is indicated by the positive regression coefficient of the gross domestic product growth rate in the regression coefficient analysis. Furthermore, the statistically significant but statistically positive correlation between the inflation rate and the net interest margin ratio is indicated by the positive regression coefficient of the inflation rate in the regression coefficient analysis. In the end, the regression coefficient analysis's negative coefficient of bank size suggests that the inflation rate and net interest margin ratio have a statistically significant but negative association.

Conclusion

This study aimed to analyze the financial performance of commercial banks in Nepal by focusing on the capital adequacy ratio, bank size, gross domestic product (GDP), and inflation rate, and their influence on key performance indicators such as return on assets (ROA) and net interest margin (NIM). Based on the findings, the following conclusions can be drawn The analysis revealed the overall position of capital adequacy ratio, bank size, GDP growth, and inflation within the Nepalese banking sector. Capital adequacy ratio and bank size showed stable and significant levels across the observed banks, reflecting sound financial health and capacity to absorb shocks. Similarly, macroeconomic indicators like GDP and inflation displayed measurable influence within the period under review. Correlation analysis demonstrated varying degrees of relationships between the independent variables (capital adequacy ratio, bank size, GDP, and inflation rate) and the dependent variables (ROA and NIM). A positive and statistically significant correlation was found between capital adequacy ratio and NIM, and between GDP and both ROA and NIM, suggesting that strong capital levels and economic growth are associated with better bank performance. However, inflation had a mixed or weak correlation, indicating a complex influence on profitability. Regression results confirmed that capital adequacy ratio, bank size, and GDP have a significant positive impact on ROA and NIM, indicating that well-capitalized and larger banks, operating in a growing economy, tend to be more profitable and efficient. Inflation, however, had an insignificant or slightly negative effect, implying that rising prices may erode banking profits if not managed properly. In summary, the study highlights the importance of maintaining adequate capital, achieving economies of scale, and

operating in a stable macroeconomic environment for enhancing the financial performance of commercial banks in Nepal.

Implications

The implication of this study can be elaborated as below;

Practical Implications

The study highlights the importance of maintaining an optimal Capital Adequacy Ratio (CAR) to ensure financial soundness and increase returns. Bank managers should prioritize capital planning and risk management strategies to enhance profitability.

Larger banks tend to perform better in terms of ROA, which implies that expansion and scale can positively affect profitability. Therefore, banks may consider mergers, acquisitions, or branch expansions to increase their market size and financial strength.

The findings suggest that macroeconomic stability, especially in terms of GDP growth and controlled inflation, plays a crucial role in enhancing bank performance. Policymakers should create a conducive environment for economic growth to support banking sector stability.

Regulators such as Nepal Rastra Bank (NRB) can use the results to reinforce capital adequacy guidelines and monitor systemic risks in the banking sector.

Understanding the influence of internal and external variables on ROA and NIM can help investors make informed decisions about which banks to invest in.

Shareholders can push for better governance and performance measurement based on capital adequacy and cost efficiency.

Improved financial performance often leads to better employee benefits, bonuses, and job security. Therefore, employees can indirectly benefit from strategies that enhance profitability.

Theoretical Implications

This study contributes to the growing body of knowledge on bank profitability by empirically examining how capital adequacy, bank size, GDP, and inflation affect ROA and NIM in the context of a developing country like Nepal. It supports and expands upon bank-specific (internal) and macroeconomic (external) determinants of financial performance theory. The positive relationship between capital adequacy and profitability aligns with the buffer theory, which posits that higher capital allows banks to absorb shocks and lend more confidently. The findings also support the economies of scale theory, indicating that larger banks tend to have better resource utilization and thus higher profitability. The results offer context-specific

insights, especially for developing countries with small and emerging financial markets like Nepal, where the dynamics of inflation, GDP growth, and banking structure differ from advanced economies. The study opens avenues for further investigation into other determinants such as credit risk, non-performing loans, and operational efficiency, and their effects on various profitability metrics. It encourages comparative research between public vs. private banks or pre- and post-merger performance analysis.