BANKS SPECIFIC FACTORS DETERMINING PROFITABILITY OF NEPALESE COMMERCIAL BANKS

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

by:

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "BANK SPECIFIC FACTORS DETERMINING PROFITABILITY OF NEPALESE COMMERCIAL BANKS". The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor. It has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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Shrijana Ghimire

REPORT OF RESEARCH COMMITTEE

Miss Shrijana Ghimire has defended research proposal entitled "BANK SPECIFIC FACTORS DETERMINING PROFITABILITY OF NEPALESE COMMERCIAL BANKS", successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Kamal Prakash Adhikari and submit the thesis for evaluation and viva voce examination.

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Dissertation Proposal Defended Date:
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Dissertation Submitted Date:
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APPROVAL SHEET

We, the undersigned, have examined the thesis entitled "BANK SPECIFIC FACTORS DETERMINING PROFITABILITY OF NEPALESE COMMERCIAL BANKS" presented by Shrijana Ghimire a candidate for the degree of master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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This study entitled “BANK SPECIFIC FACTORS DETERMINING PROFITABILITY OF NEPALESE COMMERCIAL BANKS” has been prepared in partial fulfillment for the Degree of Master of Business Studies (MBS) under the Faculty of Management, Tribhuvan University is based on research models involving the profitability of commercial banks in Nepal.

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Shrijana Ghimire
June, 2024

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ABBREVIATIONS

AD	:	Anno Domini
ATM	:	Automated Tailor Machine
C&BB	:	Cash & Bank Balance
CA	:	Current Assets
CV	:	Coefficient of Variation
L & A	:	Loan and Advance
Ltd.	:	Limited
NRB	:	Nepal Rastra Bank
ROA	:	Return on Assets
ROE	:	Return on Equity
SD	:	Standard Deviation
T.A	:	Total Assets
TD	:	Total Deposit
NBL	:	Nepal Bank Limited
NABIL	:	Nabil bank Limited
SBL	:	Siddhartha Bank Limited
TU	:	Tribhuvan University

ABSTRACT

The purpose of this study was to examine the variables influencing Nepal's commercial banks' profitability. Research using both descriptive and causal comparison methods has been conducted in order to meet the specific goal of the study. Panel data from Nepal's commercial banks spanning ten years, from 2012–13 to 2021–22, is used in the study. The ratio of cash and bank balance to total deposits, cash reserve ratio, total investment to deposit ratio, loan and advance to deposit ratio, and current assets to deposit ratio are the independent variables, and the dependent variable is profitability (ROA and ROE), which measures liquidity.

In this study, secondary data was utilized. Panel data analysis was employed, focusing on regression and correlation analysis as the primary tools. The current to deposit ratio showed a significant positive correlation with ROE. Ratios such as cash and bank balance to total deposits, cash reserve, total investment to deposits, and loan and advance to deposits exhibited an insignificant relationship with ROE. The regression results indicated that the loan and advance to deposit ratio and current assets to deposit ratio had a significant positive impact on ROA. Conversely, the cash and bank balance to total deposits ratio, cash reserve ratio, and total investment to deposit ratio had an insignificant negative impact on ROA. Nonetheless, the study found that liquidity significantly affects the profitability of commercial banks. These findings could assist bankers and policymakers in implementing effective strategies to enhance the profitability of financial institutions.

Keywords: Profitability, Commercial Banks, ROE, ROA, Liquidity.

CHAPTER I

INTRODUCTION

1.1 Background of the Study

The amount of money made from a sale that is more than what was originally paid, or just the profit. According to the definition of commerce, profit is the excess that remains after a predetermined trading time and is an incentive for allocating resources in speculative risky situations in order to satisfy consumer demand. However, the first and most important expense for a firm must be considered profit. Since it supplies finance for operations in the future, its absence must eventually result in a decrease in effective capital resources and the competitive collapse of the company (Akhter, 2018).

Two meanings can be assigned to the term "profit." It is an owner-oriented concept that describes the quantity and share of national revenue that is paid to business owners, or those who contribute equity capital as a condition of profitability. Stated differently, profitability refers to a situation where the value produced by the use of resources exceeds the total amount of resources utilized. A word that differs from "profit" is "profitability," which describes the ability to make a profit as the main measure of a company's performance. It is only summarizing any firm's basic test performance. The excess of sales revenue over expenses is what is referred to as profit, yet the term "profit" is hotly debated and has multiple interpretations (Duan, 2020).

Profitability acts as a benchmark for all business enterprises, including commercial businesses. However, an increase in non-performing loans directly impacts a company's profitability by diminishing returns on assets. Consequently, non-performing assets adversely affect return on assets (ROA), a key profitability measure. Non-performing loans decrease a company's profitability due to potentially high disposal costs. Opportunity costs are associated with non-performing loan assets because the non-interest generating assets (often cash) could have been invested elsewhere for a return. Additionally, institutions must allocate funds to cover losses on non-performing assets, affecting profitability, and incur expenses in attempts to recover non-performing loans. However, managers can use provisions for losses on non-performing loans to achieve their own objectives, such as profit-smoothing, which is supported by agency theory and information asymmetry (Gurung & Gurung, 2022).

Profit is a well recognized and accepted measure of how well a business is running. As a result, a company's perceived efficiency and profitability increase with its profits. This criterion's primary advantage is that it provides a consistent standard for assessing the efficacy of different firms. Profit-seeking behavior is still the main driver of an organization and promotes productivity. Undoubtedly, the necessity to produce a profit drives the quest of more profitable practices, lower unit costs, better organization, and higher turnover (Hanh et al., 2022). The word profitability is formed by combining the concepts "ability" and "profit". As we covered in our earlier discussion of the definition of profit, ability is the ability of a business to make a profit. The ability of an organization also reveals its operational efficacy or profitability. An investment's profitability can be defined as its ability to produce income from its use. Profitability is a relative concept, whereas profit is an absolute one. Profit and profitability are two different concepts, even though they are closely related and mutually dependent. Stated differently, even though they are all generic, each one has a special function in business (Dangol, 2017).

A word that differs from "profit" is "profitability," which describes the ability to make a profit as the main measure of a company's performance. It is only summarizing any firm's basic test performance. Profit is the difference between sales revenue and expenses, yet the definition of "profit" is disputed and has several definitions (Javaid & Alalawi, 2017).

The credit policy is largely used by the board and senior management to guide lending activity. In addition to setting guidelines, the policy outlines the companies' basic credit philosophy. It sets boundaries for acceptable levels of risk, provides a structure for achieving goals related to asset quality and profitability, and guides the lending activities of the businesses in a manner consistent with their strategic direction. Credit policies set rules for creating portfolios, allocating credit equitably, and managing compliance (Kamande et al., 2016).

Businesses employ ratios like net interest margin, return on equity, and firm's returns on asset to measure their profitability since they provide a summary of a large quantity of financial data and enable a qualitative evaluation of the firm's profitability (Neupane, 2019). Marketable securities, company size, capital, risk management, expense management, and non-performing loans are considered micro- or company-specific variables influencing profitability. On the other hand, inflation, interest rates, GDP growth,

and tax rates are viewed as macro-variables. This study focuses on specific variables such as company size, capital adequacy ratio, liquidity ratio, credit deposit ratio, and non-performing loan ratio as company-specific factors affecting profitability (measured by ROA and ROE). Few businesses timely review and update their credit policies, guidelines, and manuals. To address this, the NRB has mandated lending in certain sectors. The primary challenge for the NRB (Nepal Rastra Bank) is to find the right balance between directed lending and discretionary lending by businesses (Nepal Rastra Bank, 2021).

A firm is lucrative, in the opinion of Rawal and Thapa (2019), if it can make a profit over its costs and other relevant expenses in a specific amount of time. Because they are more interested in dividends and rising stock prices, prospective investors pay closer attention to the profitability figures. Conversely, managers are interested in learning how to measure operational effectiveness in terms of financial gain. A low profit margin would therefore deter potential investors from supporting the company and raise questions about poor management.

According to Niresh (2012), because liquidity is closely linked to a company's day-to-day operations, it affects analysts, both internal and external. Weak liquidity poses a risk to a company's safety and soundness and jeopardizes its profitability.

Mahmud, Mallik, Imtiaz, and Tabassum (2016) found that capital, operating expense, gearing ratio, and bank size all had a favorable effect on the profitability of Bangladeshi banks. However, the cash and bank balance to deposit ratio, the liquid fund to current obligation ratio, and the liquid fund to deposit ratio were three other statistically significant variables that showed a negative link with performance. Msomi (2022) posits that non-performing loans are positively impacted by the inflation rate, capital adequacy ratio, and liquidity ratio, all of which ultimately have an adverse influence on banks' profitability.

The sole ratio that is significant and positive in regard to return on assets, according to Rijal (2019), is the credit to deposit ratio; the liquidity ratio and asset quality ratio are also positive and significant in relation to net interest margin. Gnawali's (2018) research indicates that non-performing loans negatively impact government banks in Nepal's return on assets. Similarly, non-performing loan to total loan (NPLTL) negatively impacts return on equity (ROE) and business profitability. Research has demonstrated that the relationship

between a company's liquidity risk and its financial success is not entirely consistent. Therefore, the purpose of this study is to ascertain how liquidity influences the profitability of Nepali microfinance firms (Khan et al., 2016).

Thus, advances and loans, as well as non-performing loans and deposits, could all have an impact on banks' bottom lines. Deposit collection is a need for loan eligibility, demonstrating that as NPL decreases, net profit increases as well.

1.2 Problem Statement

Profitability analysis is the primary tool used to demonstrate an organization's efficiency in making a profit. The primary short- and long-term objectives of any business organization are to maximize profit. An organization's profit ratio improving steadily is a good sign. It is plausible to believe that there is a favorable correlation between asset quality and bank performance in general. One can assess a bank's security and soundness using this ratio. As this ratio rises in value, the probability of bankruptcy will decline, enhancing investor confidence and profitability (Budathoki & Rai, 2020).

The variables related to money and quasi-money, along with the fluctuating net interest margin, significantly impact the profitability of banks. The results showed that changes in nation-specific external factors and business-specific internal factors have an impact on commercial bank earnings (Khan, Islam, Rizwan & Rasheed, 2016). The capital, operating expenses, gearing ratio, and bank size were found to be the main determinants of Bangladeshi banks' profitability. Three other statistically significant variables had a negative correlation with performance, notwithstanding the positive correlation between capital and bank profitability (Mahmud, Mallik, Imtiaz & Tabashsum, 2016).

It was discovered that the cost of funds, liquidity, funding gap, interest rate term structure, and economic growth rate had a negative effect on bank profit, however the inflation rate had a positive effect. The bank's size and the rate at which deposits are growing are not particularly significant. The loan to deposit ratio has a negative impact on bank profitability. Both a country's interest rate and GDP growth rate have a negative impact on bank profitability (Islam & Nishiyama, 2016).

On the other hand, the rate and bank profitability have a negative relationship. This finding indicates that the profitability of banks has been negatively impacted by the decline in interest rates in India. Bank profitability is positively impacted by deposits relative to total assets as well. The relationship between loans to total assets and profitability is positive, meaning that the likelihood of a better return on assets is correlated with the number of loans. On the other hand, because costs typically rise more quickly than revenue in inflationary contexts, inflation has a negligible and detrimental effect on ROA. It was also shown that ROA is directly impacted by GDP (Karimzadeh, Akhtar &Karimzadeh, 2013).

A significant positive correlation between bank profitability and liquidity was discovered by Khan and Ali (2016) after doing correlation and regression analysis. Khasharmeh (2018) claims that there is a positive association between the total cash amount in bank deposits, due ROE, CDT, and investment, and the total assets in INVSTD. Additionally, there is a negative correlation between ROE and investments to total assets (INVSTA) and cash due from banks to total deposits (CDDTD). The asset structure that describes how the flow of deposits enhances the credit/loan operation of banks and helps them generate a profit is evaluated by the credit to deposit ratio, on the other hand.

Credit is another significant source of income for banks, and the profitability of banks is significantly influenced by the ratio of credit deposits to total deposits (Neupane, 2019). The capital adequacy ratio, liquidity ratio, and inflation rate all have a significant influence on non-performing loans (Msom, 2022).

Mishra and Pradhan (2019) found that ROA is significantly impacted negatively by CDR and IDR, and that there is no discernible relationship between banks' profitability and liquidity. Shrestha (2012) asserts that the NRB to deposit ratio and the cash-vault to deposit ratio have a favorable and significant effect on Nepal's profitability. Furthermore, no appreciable impact on profitability has been noted for the ratios of liquid funds to deposit, cash and bank balance to deposit, or liquid fund to current obligation.

Almaqtari, Al-Homaidi, Tabash, and Faharan (2018) found that ROA and ROE were positively impacted by liquidity, but statistically insignificantly. In a similar line, Paolucci (2016) found that liquidity and ROA, ROE, and NIM had a positive association that was statistically insignificant. Liquidity was found to be favorably correlated with NIM and

inversely correlated with ROA by Adolopo, Lloydking, Western, and Tauringana (2018). Tan's (2017) study indicates that there is a little positive association but a minor negative correlation between ROA and liquidity.

According to Neupane (2019), the size of the bank significantly affects the ROA and NIM of Nepalese commercial banks. It also found that the credit to deposit ratio, operational expense to operational income, and non-interest income to total assets all have a beneficial impact on net interest margin. Additionally, CD helps to improve ROA. The capital adequacy ratio, GDP, inflation, and credit risk do not significantly affect the profitability of commercial banks in Nepal. Khanal (2016) concluded that equity to total assets, loan loss provision to total loan, GDP growth rate, inflation return on assets, and return on equity were all advantageous. The relationship between bank size, the expense to revenue ratio, and the total loan to total deposit ratio is inversely correlated with return on equity and return on assets.

Neupane (2019) claims that the ratio of credit to deposit gauges the asset structure that exemplifies how the flow of deposits enhances banks' ability to provide credit and loans while also assisting banks in making a profit. Credit is another significant source of income for banks, and the profitability of banks is significantly influenced by the ratio of credit deposits to total deposits. Given this, the study attempts to address the following questions:
In this regard, this study attempts to address the following questions:

1. What are the major bank specific factors that determine the profitability of Nepalese commercial banks?
2. What is the structure of profitability of Nepalese commercial banks?
3. What is the impact of bank specific factors in profitability of commercial banks?

1.3 Objectives of the Study

The objectives of the study are:

1. To identify the bank specific factors that determine the profitability of sampled commercial banks.
2. To assess the relationship between banks specific factors with profitability.
3. To analyze the effect of bank size (i.e. total assets), loan to assets ratio, equity to assets ratio, cash reserve ratio and non-performing loan ratio on profitability of sampled commercial banks.

1.4 Rationale of the Study

The substantial rise in deposit interest rates had a negative effect on the bank's profit. In this scenario, the banks also need to control their cost of capital and keep operating expenses to a minimum. Although the profitability of microfinance organizations has been the subject of numerous studies, most of them have concentrated on financial analysis and the role of investments. The study will mainly help shareholders, depositors, and other creditors assess how well their money is being used in commercial banks. Similarly, other financial authorities, including financial specialists, are also interested in the bank's performance. In addition to this, a trustworthy body of literature will be available for any individual or future researcher to assess in relation to the project's outcomes.

1.5 Limitations of the Study

Along with the significance of this study also have some limitations which are as follows:

4. This study is based on the profitability analysis of three commercial banks only, which may not represent all commercial banking industry.
5. This study covers ten year time period from 2012/13 to 2022/23.
6. This study is based on secondary data taken form annual financial report of sample banks and other secondary sources.
7. Only profitability, limited bank specific factors (i.e. bank size (i.e. total assets), loan to assets ratio, equity to assets ratio, cash reserve ratio and non-performing loan ratio) has been taken into consideration for the analysis.
8. Only selected financial and statistical tools are used in this study.

CHAPTER-II

LITERATURE REVIEW

2.1 Introduction

Reviewing the literature entails looking into research papers or other pertinent claims made in the field of study in order to become aware of all previous studies, their shortcomings, and their findings so that new research can be carried out. It is an essential and required procedure for research projects. In this regard, the researcher will be assisted in developing a suitable project structure by a review of prior related research projects. Reviewing the literature is like taking stock of what is written about the subject of one's inquiry. It includes the idea of financial analysis, a conceptual assessment, and an examination of relevant literature, journals, publications, and earlier research in the field of study.

2.2 Theoretical Review

2.2.1 The Efficiency Theory

Conversely, the efficiency argument argues that banks' greater efficiency accounts for their large profits. The X-efficiency and Scale-efficiency hypothesis are two different approaches that fit under the efficiency category. The X-efficiency idea states that companies with lower overhead make more money. Even though there is no correlation between profitability and concentration, these companies typically increase their market shares, which could result in higher levels of market concentration (Athanasoglou et al. 2008).

2.2.2 The Market Power Theory

Tregena (2009) asserts that the market power theory states that the industry's market structure affects a bank's performance. The Relative Market Power (RMP) and Structure Conduct Performance (SCP) theories make up the two main components of the market power hypothesis. The degree of market concentration in the banking industry, according to the SCP approach, offers banks the opportunity to gain market power, which could increase their profitability. Regardless of their efficiency, banks operating in highly concentrated markets are more likely to make remarkable profits than businesses in less concentrated markets because they can charge higher lending rates and lower deposit rates for monopolistic or collusive reasons (Tregenna 2009).

2.2.3 The Balanced Portfolio Theory

According to Olweny and Shipo (2011), the portfolio theory technique is the most significant and applicable for examining bank performance. The Portfolio Balance Model of Asset Diversification states that a number of factors, such as the size of the portfolio, the risk vector attached to each financial asset, and the rates of return of each asset in the portfolio, affect the best way to allocate the assets in an individual's portfolio. According to this concept, bank management decisions determine the portfolio diversity and composition of commercial banks. Furthermore, the capacity to maximize earnings is influenced by the management's choice of viable assets and liabilities as well as the expenses made by the bank in generating each asset component (Olweny & Shipo, 2011).

2.2.4 Bankruptcy Cost Theory

Aremu, Ekpo, and Mustapha (2013) propose that the bankruptcy cost theory explains the positive correlation between capital sufficiency and profitability. According to this idea, banks must raise their equity and improve their capital ratio in order to lower the predicted costs of bankruptcy and prevent financial distress, particularly in cases where bankruptcy costs are unexpectedly large because of environmental changes.

2.2.5 Structure-Conduct-Performance (SCP) Hypothesis

According to the SCP hypothesis, individual banks' market strength decreases as the banking industry grows more competitive, as seen by the wide range of bank sizes and numbers. It is anticipated that the increased competition among banks will lead to decreased profitability and profit margins. This theory emphasizes how market structure affects banks' behavior and performance.

2.2.6 Efficiency-Structure (ES) Hypothesis

The ES hypothesis states that the relationship between profitability and bank competition is mediated by bank efficiency. In other words, more competition pushes banks to increase productivity in order to stay profitable. As a result, inefficient banks tend to disappear from a more competitive market and be replaced by more profitable and effective ones.

2.2.7 X-inefficiency Theory

The concept of "x-inefficiency" postulates that businesses might function inefficiently in marketplaces that are competitive. This hypothesis suggests that, regardless of the degree

of competition, banks could not always be as efficient as they could be because of a variety of internal issues. As such, variations in bank competition may not directly affect profitability.

2.2.8 Innovation and Risk-Taking Theory

In order to stand out from the competition and draw in customers, banks may be forced to innovate and take on greater risks in a more competitive market. There are advantages and disadvantages to this behavior in terms of profitability. While innovations might open up new revenue streams, increased risk-taking can result in possible losses.

2.3 Empirical Review

Connell (2024) examined on determinants of bank profitability: evidence from the UK. This research aims to analyze the impact of macroeconomic, industry-specific, and bank-specific factors on the profitability of domestic UK commercial banks. The study utilized an empirically driven single equation framework that incorporates the classic structure–conduct–performance (SCP) hypothesis. To account for profit persistence, data from a panel of UK banks spanning from 1998 to 2018 were analyzed using a generalized method of moment's strategy. The findings indicate that all bank-specific factors, except for credit risk, significantly affect bank profitability as expected. However, there was no evidence supporting the SCP theory. Interest rates, especially long-term rates, and inflation have a significant impact on bank profitability, while the business cycle has minimal influence when other factors are considered. The results suggest that profitability in the UK banking sector is reasonably maintained, indicating that the market structure is not entirely competitive.

AI- Matari (2024) examined the determinants of bank profitability of GCC: The role of bank liquidity as moderating variable—further analysis. The primary aim of the study is to investigate the factors influencing bank profitability in GCC countries. Ordinary least squares (OLS) regression was employed to analyze data from GCC banks spanning 2000 to 2018. The findings reveal that bank size and asset management significantly impact the performance of GCC banks. Additionally, bank liquidity moderates the relationship between capital adequacy, asset quality, and bank performance. Further analysis indicates a positive correlation between the bank's profitability score and its performance. There is also a positive but moderate association between bank liquidity and profitability. The

study's implications are valuable for policymakers, regulators, and shareholders in emerging economies, as they provide insights into the factors that enhance the attractiveness of banks to investors.

Jigeer and Koroleva (2024) investigated the determinants of profitability in the city commercial banks: Case of China. This study examines the profitability of Chinese city commercial banks by using a panel data regression model to analyze the effects of both internal and external factors. The research sample consists of 16 city commercial banks with an unbalanced dataset spanning from 2008 to 2020. To identify the factors influencing profitability, a panel data regression method is applied. Various techniques can be used to estimate panel data, with fixed effects and random effects models being the most common. The pooled OLS model is often used for comparison in panel data regression, and statistical hypothesis testing determines the best model. The findings reveal that while liquidity does not significantly impact profitability, internal factors such as bank size, capital adequacy, credit quality, and operating efficiency, as well as external factors like inflation and provincial GDP, have a significant effect. This study contributes to the literature by identifying the factors influencing the profitability of city commercial banks within the current Chinese banking industry context. It also provides valuable recommendations for enhancing bank profitability, which are crucial for regulators, financial institution management, and local and state governments.

Ahmeti and Iseni (2023) analyzed to examine the effects of specific company factors, namely independent variables such as: liquidity, company size, company age, tangible asset, leverage, company capital and growth of company, on profitability represented by return on assets (ROA) and net profit margin (NPM) as a dependent variable. Eleven insurance firms covering the years 2015 through 2020 make up the study's sample. The regression's findings show that the company's size, age, and leverage have a significant influence on ROA. Meanwhile, company expansion and size have a big impact on the NPM of insurance businesses in Kosovo.

Ibrahim (2023) investigate the determinants of profit and loss sharing financing in Indonesia. This article aims to explore the dynamic relationships between Indonesian banking-specific characteristics, macroeconomic variables, religiosity, and profit and loss sharing (PLS) financing. The study considers seven factors: bank size, interest rate, PLS

financing, Islamic financing rate, risk-sharing deposits, economic growth, and degree of religiosity. Utilizing monthly time series data from 2009 to 2019, the study employs ARDL and ECM as robustness check mechanisms within the structural vector auto regression algorithm. The results indicate that in the short term, changes in risk-sharing deposits and bank size significantly impact PLS financing. Furthermore, variance decomposition analysis reveals that the dynamics of PLS financing are a stronger predictor of its variation than other factors. These findings support the introduction of the PLS scheme as an alternative monetary channel in Indonesia's dual banking system and highlight the resilience of PLS financing to interest rate fluctuations.

Vojinovi et al. (2022) examined the determinants of sustainable profitability of the Serbian insurance industry: Panel data investigation. This research aims to identify the main factors driving sustainable profitability in Serbia's insurance sector from 2008 to 2019. Our study is motivated by the importance of insurance companies in supporting economic growth, emphasizing the need to understand the elements that ensure their financial stability and soundness. We use classic panel regression models, such as the mixed-effects model, and a more robust GMM estimation to examine the relationship between several micro-specific, macroeconomic, and institutional factors, and return on assets (ROA) and return on total premiums (ROTP). This study makes a significant contribution to the existing literature due to its comprehensive institutional datasets and rigorous methodology. The findings indicate that business size, GDP, population growth rates, political stability, and specialization degree (in some models) positively impact profitability. Conversely, we observe that inflation and excessive risk-taking have a negative relationship with profitability in certain model specifications.

Agaba and Eton (2022) examined the relationship between Credit Risk Management Practices and Loan Performance of Commercial Banks in Mbarara City. Using a standardised questionnaire, the credit staff and management of 19 commercial banks contributed numerical data for the study. Regression and correlation analysis are used to examine the relationships and effects between credit risk management and the loan performance of commercial banks in Mbarara City. The study's findings showed a strong relationship between loan performance and the discovery, assessment, monitoring, and control of credit risk. The investigation also found that a number of commercial banks

lacked the experts required to evaluate the decisions made by loan officers or accurately forecast credit risks.

Chaudhary, Dhakal and Adhikari (2021) analyzed the practice and relationship between liquidity and the profitability of Nepalese Joint Venture banks i.e., Everest Bank ltd. and Himalayan Bank Limited. Both a descriptive and an inferential research strategy were employed in this study to achieve its goals. It was discovered that there is a very high degree positive link between the total deposit and the cash and bank balances of EBL and HBL. During the study period, there was a noteworthy positive correlation seen between net profit and the total deposit of both EBL and HBL. Compared to HBL, EBL had a greater average cash and bank balance to total deposit ratio. This demonstrates their depositors' ability to withdraw money right away and, even better, their ability to cover their deposits.

Kosumi and Kosumi (2021) examined the Performance evaluation of commercial banks. It is based on the unique characteristics of the banks and makes use of data from 12 commercial banks for the years 2012 to 2018. Return on assets (ROA) is considered the dependent variable for this purpose, while the independent variables include capital adequacy (CAP), bank size (SIZE), credit risk (CR), revenue diversification (DIV), liquidity (L), and leverage (LEV). Since liquidity and bank size were found to have a strong beneficial impact on profitability, the study concluded that these factors have mostly driven the profitability of commercial banks. However, this analysis also discovered that the banks' ROA and their capital adequacy, credit risk, and leverage were inversely correlated.

Hallunovi (2018) examined the determinants of profitability of commercial banks in Albania. This study used return on equity (ROE) and return on assets (ROA) as the dependent variables to measure profitability. It evaluated macroeconomic factors like GDP, inflation, and exchange rate, alongside banking-specific variables such as bank size, asset management, credit risk, asset liquidity, capital adequacy, operational efficiency, and cost of financing. Multiple regression analysis was applied to assess the impact of these factors on bank profitability. The findings revealed a positive correlation between capital adequacy and profitability in both models (ROA and ROE), with significant statistical relevance only in the ROA model. Total assets positively impacted profitability (ROA and ROE), albeit with a low coefficient for ROA. Liquidity assets showed a negative correlation with both ROA and ROE profitability; however, the correlation was statistically significant for ROE

at 1% but not for ROA. There was a statistically significant negative correlation between credit risk and profitability in both models, with a significance level of 5% for ROA and 1% for ROE.

Javaid and Alalawi (2017) analyzed on performance and profitability of Islamic banks in Saudi Arabia: An empirical analysis. The aim of this study was to examine the profitability and performance of Saudi Arabia's banking industry, with a focus on the contribution of Islamic banking. Employing robust fixed effect regression models using unbalanced panel data, the study analyzed how profitability is influenced by factors specific to banks, the sector, and the macroeconomic landscape. The findings revealed that although not statistically significant, size and the natural logarithm of total assets have a positive impact on profitability. The study suggests that increasing in size can offer advantages that enhance profitability. Saudi banks demonstrated strong financial health, as indicated by positive and highly significant coefficients of the capital adequacy variable (CAR) in both return on assets (ROA) and return on equity (ROE). Moreover, the ratio of non-performing loans to total loans exhibited a positive relationship with both performance metrics, implying that higher asset quality is associated with improved bank performance. Essentially, Saudi Islamic banks maintain sufficient reserves to manage non-performing loans. Operating efficiency emerged as highly significant but negatively correlated at the 1% level with both profitability measures. Additionally, cash and balances less than assets showed negative and insignificant relationships with both performance ratios, while management quality demonstrated a significantly positive correlation with profitability measures. Lastly, growth and profitability exhibited significant negative associations.

Islam and Nishiyama (2016) examined the determinants of bank profitability of South Asian countries. This study empirically investigates the specific factors influencing bank profitability, including industry-specific and macroeconomic factors, using the GMM estimator. Profitability is measured through ROA and ROE in the empirical model. Various ratios such as equity to assets ratio, non-performing loan ratio, liquidity ratio, cost of fund ratio, productivity ratio, earning power, growth rate of deposit, credit deposit ratio, interest income ratio, interest rate, inflation rate, funding gap, and GDP growth rate were used to analyze profitability. The findings indicate that capital plays a significant role in determining bank profitability, with ROA being positively and significantly affected by the equity to total assets ratio. Factors such as cost of funds, liquidity, funding gap, interest rate

term structure, and economic growth rate negatively impact profitability, while inflation rate positively affects bank profit. The size of the bank and the rate of deposit growth were found to have negligible impacts on profitability. However, factors like loan to deposit ratio, rate-sensitive assets, and rate-sensitive liabilities significantly impair banks' profitability. Furthermore, the study reveals that a nation's macroeconomic growth rate and interest rate term structure have adverse effects on bank profitability.

Khan, Islam, Rizwan and Rasheed (2016) examined on effect of firm specific and country specific factors on profitability of banks in Pakistan. The study aimed to investigate the factors influencing the profitability of banks in Pakistan. Various parameters were analyzed to understand their impact on profits. A panel data approach was used to measure the outcomes of both fixed effect and random effect models. Overall, the analysis indicated that independent variables significantly affect bank profitability. Variables related to money and quasi-money, as well as changes in net interest margin, were found to have a substantial influence on banks' profitability. The findings suggest that alterations in firm-specific and country-specific variables, along with internal factors specific to the firm, play a role in shaping commercial bank earnings.

Saeed (2014) investigated the impact of bank-specific, industry-specific, and macroeconomic variables on bank profitability before, during, and after the financial crisis of 2008. After conducting regression and correlation analyses on the dataset, it was revealed that GDP and inflation rate negatively affect both ROA and ROE, whereas factors such as bank size, capital ratio, loans, deposits, liquidity, and interest rate have positive effects. These findings can provide valuable insights for decision-making and improving the performance of financial institutions in the future, benefiting UK banks, the government, investors, policymakers, and shareholders alike.

Shehzad, Haan and Scholtens (2013) investigated the relationship between bank size and the level of profitability and growth of banks and to examine the link between bank size and the variability of profits and bank growth. Banks from a huge variety of developing economies were included in this study. Panel and cross-sectional regressions were employed in the study to estimate the growth and profit models. This study uses a two-step GMM model to evaluate the relationships between bank profitability and growth. It was discovered that the degree and unpredictability of bank expansion, as well as the variability

of bank profitability, are not influenced by the size of the bank. It was also shown that larger banks in high-income countries for economic cooperation and development expand more slowly than small banks, but nevertheless turn a profit. It is discovered that both variety in profitability and variability in bank growth are unaffected by bank size. Both increased inflation and the cost/income ratio considerably lower bank profitability and returns on equity.

Karimzadeh, Akhtar and Karimzadeh (2013) investigated the profitability of banking sector in India in the light of aforementioned changes by showing the relationship between banks profitability and the factors that determine the level of profitability of Indian banking system and identify and critically examine the main internal and external factors that affect banks' profitability in India. The study employed a linear regression model to determine the effects of market concentration, GDP, inflation rate, bank size, lending rate, and loan to total assets ratio on banks' return on assets. It was discovered that the SIZE and ROA have a favorable association. This positive correlation demonstrates how a bank's profitability is impacted by its size. On the other hand, the rate and bank profitability have a negative relationship. This finding indicates that the profitability of banks has been negatively impacted by the decline in interest rates in India. Bank profitability is positively impacted by deposits relative to total assets as well. The relationship between loans to total assets and profitability is positive, meaning that the likelihood of a better return on assets is correlated with the number of loans. On the other hand, because costs typically rise more quickly than revenue in inflationary contexts, inflation has a negligible and detrimental effect on ROA. It was also shown that ROA is directly impacted by GDP.

Table 1

Summary of Major Reviewed Literature

	Studies	Major findings
1.	Karimzadeh, Akhtar and Karimzadeh (2013)	There is a positive impact of SIZE, deposit to total assets ratio, loans to total assets ratio and GDP on the profitability of the bank. But the lending rate and inflation have a negative impact on profitability.

3	Saeed (2014)	There is positive effect of bank size, capital ratio, loan, deposits, liquidity, and interest rate on ROA and ROE while GDP and inflation rate have negative impact.
4.	Khan, Islam, Rizwan and Rasheed (2016)	There is significant impact of independent variables on the profitability. The variable Net interest margin, money and quasi money have significant impact on the profitability of the banks
5.	Kosumi and Kosumi (2021)	There is a positive effect of profitability on liquidity and bank size.
6.	Mahmud, Mallik, Imtiaz and Tabassum (2016)	There is a positive effect of bank size, operating expense, gearing ratio and capital on the bank profitability of Bangladesh. Another but other three statistically significant variables showed negative relation to performance.
7.	Msomi (2022)	There is positive effects of liquidity ratio, capital adequacy ratio and inflation rate on non-performing loans
8.	Yeasin (2022)	There is a negative effect of Non-performing Loan (NPL), Capital Adequacy Ratio (CAR) on profitability. Whereas Loan to deposit ratio (LDR) had positive impact on financial performance of commercial banks.
9.	Agaba and Eton (2022)	There is a positive effects of credit risk identification and loan performance; credit risk assessment and loan performance; credit risk monitoring and loan performance; and credit risk control and loan performance.
10.	Mishra, Kandel and Aithal (2021)	There is a negative relation between ROA and ROE with loan ratio, deposit ratio and capital ratio, there is positive relation with bank size and inflation. NIM, bank size, loan ratio, deposit ratio and inflation exhibit a positive relation while the capital ratio shows the negative relationship with NIM.
11.	Chaudhary, Dhakal and Adhikari (2021)	There is a positive correlation between total deposit and cash and bank balance of EBL and HBL. There is also significant positive relation between net profit and total deposit of EBL and HBL during the study period
12.	Hallunovi (2018)	There is a positive relationship between capital adequacy and profitability in both the models (ROA/ROE). Total assets had a positive impact on

	profitability (ROA/ROE), Liquidity assets has a negative relationship with profitability in both ROA and ROE
13. Javaid and Alalawi (2017)	There is a positive effect of total assets, ROA CAR, on profitability. Non-performing loans to total loans is positively related to both of the bank performance indicators.
14. Kamande, Zablon and Ariemba (2016)	There is positive impact of asset quality on profitability and the financial performance of banks. The study concludes that Asset quality of the bank have the highest influence on ROA of banks.
15. Islam and Nishiyama (2016)	There is positive effect of Equity to total assets ratio, ROA on profitability. There is a negative effect of Cost of fund, liquidity, loan to deposit ratio, funding gap, term structure of interest rate and economic growth rate on bank profit. There is a no significant effect deposit growth rate and a bank size have on bank profitability.
16. Narwal and Pathneja (2015)	There is a negative impact of technological change on productivity of the banks
17. Shehzad, Haan and Scholtens (2013)	There is variability in bank growth is not influenced by bank size and variation in profitability is not affected by bank size. The cost/income ratio significantly reduces returns on equity and higher inflation reduces bank profitability significantly.

2.3.1 Review of Nepalese Literature

Poudel (2021) analyzed the profitability position of the sample bank, to analyze the relationships between loan and advance and net profit net profit and total working fund and to evaluate the forecasted value of Net profit, total deposit and total investment of Everest Bank Limited. The primary focus of this study is the analysis of profitability ratios, and the results indicate that the sample bank's profitability condition is good. The positive correlation between net profit and loan advance indicates that there is a positive relationship between the two. It suggests that positive financial results are anticipated in the future.

Tamang (2020) examined the profitability position of the sample bank. In order to assess the predicted values of Net Profit, Total Deposit, and Total Investment for Himalayan Bank Limited, this study also examined the linkages between loan and advance, net profit, net profit, and total working fund. The sample bank's profitability status is assessed to be at a

satisfactory level. It suggests that future financial performance should be expected to be strong. Sharma (2019) examined the profitability position of the sample bank, analyze the relationships between loan and advance and net profit and total working fund and study the growth of the business of the bank over the period. This study revealed that the profitability position of sample bank is satisfactory level. The status of income generating deployment of loan and advance is in increasing trend over the period. The current ratio of NSBI has not meet 2:1, it means the firm has meeting current obligation.

Neupane (2020) examined the key determinants of profitability of Nepalese commercial banks. In order to characterize the profitability of Nepalese banks and its factors, this study used descriptive statistics. A panel data regression model (Fixed Effect Model and Random Effect Model) was also used in this study to examine the factors that influence Nepalese commercial banks' profitability. It was discovered that the concentration ratio, the growth of the banking industry, GDP expansion, inflation, and exchange rate all had a significant negative impact on the bank profitability of Nepalese commercial banks as determined by ROA. Only the capital adequacy, total number of branches, and inflation rate have a substantial impact on NIM. The study found that bank deposits and capital sufficiency have a negative impact on banks' return on assets (ROA).

Budathoki and Rai (2020) analyzed the impact of assets quality, capital adequacy ratio, assets diversification and operating efficiency on banks' profitability. Bank scope data from eight commercial banks between 2002/03 and 2016/17 are used in this study. Ordinary least squares regression models are used in this study to assess the correlation between response and predictor variables. In this study, bank ROA used as a proxy for profitability. It was discovered that the capital adequacy ratio, operating efficiency, and asset quality are independent variables that significantly lower bank profitability. The study's findings assist bankers and legislators in making wise decisions that will increase banks' profitability.

Ranabhat (2019) examined the impact of bank specific variables on financial performance of joint venture banks. The dependent variables in this study were the return on equity and the return on assets, which were chosen as indicators of the bank's performance. To determine the importance and impact of a bank-specific variable on the financial performance of Nepalese joint venture banks, pooled OLS multiple regression models are

utilized. The outcome demonstrated that interest rate spread significantly improves banks' ROA and ROE. In a similar vein, asset size has a considerable negative influence on ROA while liquidity and loan ratio have a big negative impact on banks' ROE.

Neupane (2019) examined the factors influencing profitability in Nepalese Commercial Banks. This study utilized return on assets and net interest margin as indicators of bank profitability, while employing capital adequacy ratio, size, credit-to-deposit ratio, operational expense to operational income, non-performing loan to total loan, and non-interest income to total assets as bank-specific variables. GDP and inflation were considered as macroeconomic variables to assess the influence of these independent variables on bank profitability. Regression analysis was employed to examine the impact of bank-specific and macroeconomic factors on profitability. The findings indicate that operational expense to operational income and non-interest income to total assets affect return on assets, while the credit-to-deposit ratio significantly affects net interest margin. Moreover, size has a significant effect on both return on assets and net interest margin of Nepalese commercial banks. Additionally, return on assets is positively influenced by the credit-to-deposit ratio, suggesting that an increase in credit and deposit flow leads to enhanced profitability. However, the study revealed that capital adequacy ratio, credit risk, GDP, and inflation have no significant effect on Nepalese commercial bank profitability.

Gauttam (2018) evaluated the nonperforming assets of the different banks that has become the challenge to the Commercial Banks in the Nepalese banking industry, to access the relationship between the profitability and the non-performing assets of the Commercial Banks and to find out the internal and external factors that influence the performing assets to become the non-performing one. The empirical analysis conducted in the study revealed that while the ratio of non-performing assets (NPA) to total lending has decreased, there has been fluctuation observed in the ratios of total lending to total deposit and net profit to total assets. RBBL has shown an increasing trend in total assets, total deposits, total lending, and net profit. Concurrently, there has been a decreasing trend observed in the NPA. Additionally, correlation analysis indicates that there is an insignificant correlation between the level of NPA and return on assets (ROA), with a negative correlation observed between them. RBLL has proven to be more effective in managing credit to generate higher interest income.

Nepali (2017) examined the level of profit on loan and advance, to analyze the annual growth rate of net profit, total deposit and loan and advance of NBL and EBL and to study the impact of NPL management on profitability of sample banks. The analysis showed that EBL has consistently outperformed NBL in terms of net profit to loan and advances ratio. Raymajhi (2016) analyzed the profitability position of the sample bank, to analyze the relationships between loan and advance and net profit net profit and total working fund and from the view point of forecasted trend, all the variable like net profit, total deposit and total investment are in increasing trend. It suggests that future financial performance should be expected to be strong.

Khanal (2016) examined the bank specific and macroeconomic determinants of profitability of Nepalese commercial banks. Return on assets (ROA) and return on equity (ROE) were utilized as measures of profitability in this study. Pearson's correlation coefficients and regression models were employed to assess the significance and impact of both bank-specific and macroeconomic factors on the profitability of Nepalese commercial banks. The analysis revealed that equity to total assets, loan loss provision to total loan, GDP growth rate, and inflation are positively correlated with both return on assets and return on equity. Conversely, the expense to revenue ratio, total loan to total deposit ratio, and bank size exhibit negative correlations with return on assets and return on equity. These findings suggest that higher levels of equity to total assets, loan loss provision to total loan, GDP growth rate, and inflation are associated with higher ROA and ROE, while larger values of the expense to revenue ratio, total loan to total deposit ratio, and bank size are linked to lower ROA and ROE.

Shrestha (2014) examined the profitability position of the sample bank, analyze the relationships between loan and advance and net profit and total working fund and study the growth of the business of the bank over the period. This study demonstrated that the sample bank's profitability position is satisfactory. The correlation between loans and advances and net profit is positive, indicating a consistent direction of change between loans and advances and net profit. NSBI is performing well in deposit collection, with the researcher noting a 100% achievement of targets in resources other than deposits. The deployment of loans and advances for income generation has shown an increasing trend over the period. However, the current ratio of NSBI does not meet the 2:1 requirement, suggesting that the firm is meeting its current obligations.

Table 2 summarizes the major reviewed Nepalese literature on the determinant of bank's profitability.

Table 2

Summary of major reviewed Nepalese literature

Studies	Major findings
Budathoki and Rai (2020)	There are independent variables such as assets quality; operating efficiency and capital adequacy ratio have significant negative effect on bank profitability.
Poudel (2021)	There is positive impact on Correlation between loan and advance and net profit on loan advance and net profit
Tamang (2020)	There are positive relationships between loan and advance and net profit net profit and total working fund and to evaluate the forecasted value of Net profit, total deposit and total investment of Himalayan Bank Limited. It is found that the profitability position of sample bank is satisfactory level.
Sharma (2019)	There is a positive impact on profitability position of the sample bank, analyze the relationships between loan and advance and net profit and total working fund and study the growth of the business of the bank over the period.
Gautam (2021)	There is significant correlation between Level of NPA and ROA. Furthermore they have negative correlation between them. RBLL has remained more effective in managing credit to gain highest interest income.
Nepali (2017)	There are level of profit on loan and advance, to analyze the annual growth rate of net profit, total deposit and loan and advance of NBL and EBL and to study the impact of NPL management on profitability of sample banks. The study revealed that EBL has maintained higher net profit to loan and advances ratio than NBL.
Raymajhi (2016)	There are all independent variable like as loan and advance and net profit net profit and total working fund, net profit, total deposit and total investment are in increasing trend
Niraula (2015)	On this research has the trend and composition of non-performing assets of commercial banks, to analysis the major profitability indicators of

	commercial banks, to access the relationship between the profitability and the non-performing assets of the commercial banks
Shrestha (2014)	On this research profitability position of sample bank is satisfactory level
Neupane (2020)	Bank profitability measured by ROA of Nepalese commercial banks is significantly affected by concentration ratio, banking sector development, GDP growth, inflation and exchange rate significantly in opposite direction. NIM is significantly affected only by capital adequacy, absolute number of branches and inflation rate. The capital adequacy and deposit of the bank have negative effect on ROA of the banks.
Budathoki and Rai (2020)	There are independent variables such as assets quality, operating efficiency and capital adequacy ratio have significant negative effect on bank profitability
Ranabhat (2019)	There is a significant positive impact of interest rate spread on ROA and ROE of the banks. Similarly, there is significant negative impact of asset size on ROA and significant negative impact of liquidity and loan ratio on ROE of the banks.
Neupane (2019)	There are positive effects of operational expense to operational income and non- interest income to total assets effect return on assets, credit to deposit ratio on net interest margin, bank size significant effect on both ROA and NIM of Nepalese commercial banks. Furthermore, ROA is positively influenced by CD. The capital adequacy ratio, credit risk, GDP and inflation have no significant effect on Nepalese commercial bank profitability.
Khanal (2016)	There are positive effects of equity to total assets, loan loss provision to total loan, GDP growth rate and inflation return on assets and return on equity. Expense to revenue ratio, total loan to total deposit ratio and bank size are negatively correlated with return on assets and return on equity.

2.4 Research Gap

Adhikari (2020) and Akhter (2018) are studies that examine the profitability analysis of several banks from the perspectives of researchers, specialists, and students. However, the results of earlier research are constrained by the narrow conclusions, thorough testing, and essential variable adjustments. A new, validating study was necessary because the previous

ones had limitations in their research (Kamande, Zablon, & Ariemba, 2016).

The aim of this research differs from that of Kosumi and Kosumi (2021) in terms of specific variables, time period, and analytical methods employed. Firstly, this study utilizes a data analysis model to examine the impact of bank size, loan-to-assets ratio, equity-to-assets ratio, cash reserve ratio, and NPL ratio on the profitability of commercial banks, focusing on bank-specific factors. Additionally, the recent time period covered in this study spans ten years of data from sample banks, which contrasts with the five-year data period examined by Mehrotra (2019). Moreover, the use of different data analysis techniques such as statistical relationship analysis and multiple regression analysis sets this study apart from previous research. These analyses provide a clearer understanding of the influence of bank-specific variables on the profitability of commercial banks.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology delineates the approach, protocols, and strategies employed in carrying out research. It is a roadmap for reaching the objective. More correct conclusions and discoveries are produced by appropriate and sufficient methods, which eventually aids in suggesting workable solutions to their search issues.

3.1 Research Design

The goals of the study determine how the research is organized. In order to achieve these goals, a certain study design is required. The analysis of the profitability drivers unique to banks has been done through the application of a combination of descriptive and causal comparative research designs. The comparative examination of the variables influencing the sample banks' profitability is conducted using the descriptive research design. In the meantime, the influence of variables like cash reserve ratio, non-performing loan ratio, loan to asset ratio, and bank size (total assets) on the return on assets, return on equity, and net interest margin of the sample banks is investigated using the correlational research design.

3.2 Population and Sample

Nepal Rastra Bank stated that there were twenty commercial banks operating in Nepal as of March 2024. These banks were regarded as the study's population. But just three banks were selected to be included in the sample: NBL, Nabil, and SBL has been selected as the study's sample on the basis of profit earned and highest home loan giver bank of 2023. The selection procedure attempted to represent the ownership distribution of commercial banks in Nepal, which includes joint venture, government, and private ownership. In order to guarantee representation from all three ownership sectors of Nepalese commercial banks, the sample banks were chosen at random from the population.

3.3 Nature and Sources of Data

For research purposes, data is a very reliable and effective resource. The primary source of data used in this study is secondary data, with a focus on information from publicly available annual reports of particular institutions. Extra information for analysis is also obtained from earlier studies and publications.

3.4 Data Analysis Tools

The study makes use of a variety of statistical and financial approaches, such as regression analysis to determine how variables affect bank profitability, correlation coefficient analysis to evaluate relationships, and descriptive analysis of financial and profitability ratios. These analytical methods serve as the study's foundation.

3.4.1 Financial Tools

Loan to Deposit Ratio

The relationship between a bank's advances and deposits and loans is shown by the loan-to-deposit ratio. Loans are a bank's main source of income and have a significant impact on how well the banking sector performs (Ranabhat, 2019). This ratio is determined by:

$$\text{Loan to deposit Ratio} = \frac{\text{Loan and Advance}}{\text{Total Deposit}}$$

Total Equity to Total Assets Ratio

The percentage of equity and reserves maintained by a bank relative to its total assets is measured by the total equity to total assets ratio (Saeed, 2014). Ratio analysis is used in this study to evaluate the bank's equity position and risk management capabilities with regard to depositor claims and unanticipated losses. The total equity ratio, also known as the capital adequacy ratio, is expected to have a significant link with the financial performance of the bank. This ratio is computed as follows:

$$\text{Equity to Assets Ratio} = \frac{\text{Total Equity}}{\text{Total Assets}}$$

Cash Reserve Ratio

The quantity of cash and bank balance compared to the total amount of deposits held by banks yields the cash reserve ratio. This metric contributes to lowering the likelihood of bank collapse. Insufficient cash and bank balance might make it difficult for a bank to pay its monthly expenses and fulfil its duties to depositors (Kosumi & Kosumi, 2021). The liquidity ratio of a bank is computed as follows:

$$\text{Cash reserve ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$$

Non-Performing Loan Ratio

This ratio evaluates the percentage of non-performing assets across the portfolio of loans and advances. Higher ratios indicate that the bank's assets are of worse quality (Mahmud, Mallik, Imtiaz, & Tabassum, 2016). It is therefore desirable to have a smaller percentage of non-performing assets to loans and advances. NPA is permitted up to 5% of the total advance and loan amount. Nepal Rastra Bank is required to take corrective measures if it exceeds 5%.

$$\text{NPL to Loans and Advances Ratio} = \frac{\text{Non-performing Loan}}{\text{Loan and Advance}}$$

Return on Assets

The ratio is a crucial indicator of managerial efficacy since it shows how well the bank uses its assets (Ranabhat, 2019). It measures the degree to which the bank's management has used its resources to pursue profitable ventures. A higher ROA indicates improved asset-liability efficiency, whereas a lower ratio implies the opposite.

$$\text{Return on assets (ROA)} = \frac{\text{Net profit after tax}}{\text{Total Assets}}$$

Return on Equity

The ownership stake that a bank holds is referred to as equity. Also known as shareholder equity or net worth, it denotes the excess of total assets over external liabilities (Budathoki & Rai, 2020). This measure evaluates the efficiency with which management uses shareholder funds to advance its goals and increase net worth. It measures the return rate available to the bank's investors, demonstrating the potential of the business to provide positive returns on equity. Net profit is divided by total equity capital in the computation.

$$\text{Return on equity (ROE)} = \frac{\text{Net profit after tax}}{\text{Shareholders equity}}$$

3.4.2 Statistical Tools

Statistical Tools

The following list contains statistical methods that were utilized in this study to more precisely analyze the data:

- Arithmetic mean
- Standard deviation

- Co-efficient of variation (CV)

Correlation Analysis

It is proposed in the hypothesis (H_1) that $\rho \neq 0$, showing a statistically significant correlation between the population's variables. The significance level, represented by α, is fixed at 5%. According to the decision rule, the null hypothesis is rejected and the coefficient's significance in the population is suggested if the p-value of the computed correlation coefficient is smaller than the significance level. In contrast, the null hypothesis is accepted and the coefficient's lack of significance in the population is indicated if the p-value exceeds the significance level.

Regression Analysis with Model Specification

Regression analysis methodologies were used in this study to investigate the profitability aspects inside Development Banks. It evaluated the effects of a number of variables on profitability metrics like ROA and ROE, including bank size, loan to asset ratio, equity to asset ratio, cash reserve ratio, and non-performing loan ratio. Using a regression equation, the analysis concentrated on examining the relationship between these factors.

Model 1

$ROA = \beta_0 + \beta_1 LnSize + \beta_2 LAR + \beta_3 EAR + \beta_4 CRR + \beta_5 NPLR + e$

$ROE = \beta_0 + \beta_1 LnSize + \beta_2 LAR + \beta_3 EAR + \beta_4 CRR + \beta_5 NPLR + e$

Where,

ROA = Return on assets

ROE = Return on equity

β = Beta coefficient of the regression equation

Ln Size = Logarithm of total assets

LAR = Loan to assets ratio

EAR = Equity to assets ratio

CRR = Cash reserve ratio

NPLR = Non-performing loan ratio

E = Residual term of the regression equation

3.5 Research Framework

A multiple conceptual framework is used to examine the relationship between the

dependent variable, Return on Assets (ROA), and a number of independent factors, such as bank size, loan to deposit ratio, equity to assets ratio, cash reserve ratio, and Non-Performing Loan (NPL) ratio. This study is based on a framework that was developed from research conducted by Saeed (2014), Mahmud et al. (2016), Ranabhat (2019), Neupane (2019), Mishra et al. (2021), and Kosumi and Kosumi (2021). The following is an outline of the conceptual framework:

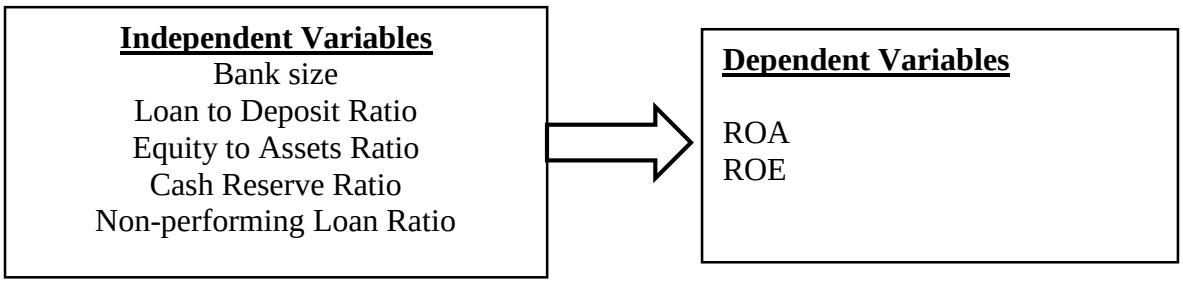

Figure 1

Research Framework

Source: Saeed (2014), Mahmud, Mallik, Imtiaz and Tabassum (2016), Ranabhat, (2019), Neupane (2019), Kosumi and Kosumi (2021) and Mishra, Kandel and Aithal (2021).

Bank Size

The natural logarithm of the bank's total assets can be used to determine the size of the institution in this study. This indicator of bank size is used to indicate that larger businesses can more easily take advantage of economies of scale during transactions, which increases profitability (Kosumi & Kosumi, 2021).

Loan to Deposit ratio

The loan-to-deposit ratio (LDR), which compares a bank's total loans to its total deposits over a given period of time, is a useful tool for evaluating liquidity. Usually, this ratio is expressed as a percentage.

Equity to Total Assets Ratio

The percentage of equity and reserves held by the bank relative to its total assets is shown by the total equity to total assets ratio (Saeed, 2014). In order to evaluate the bank's overall equity position and its capacity to protect against depositor claims and unanticipated losses, ratio analysis is used in this study.

Cash Reserve Ratio

By comparing the cash and bank balance to the total amount of deposits held by banks, the cash reserve ratio is ascertained. By doing this, the chance of bank failure is decreased. If a bank does not have enough cash on hand or in its bank account, it may find it difficult to pay its normal expenses and depositor commitments, which could eventually cause the bank to fail (Kosumi & Kosumi, 2021).

Non-Performing Loan Ratio

The percentage of non-performing assets in the total loan and advance portfolio is shown by this ratio. A greater ratio indicates that the bank's assets are of lesser quality (Mahmud, Mallik, Imtiaz, & Tabassum, 2016).

Return on Assets

The ratio is a crucial indicator of managerial efficacy since it shows how well the bank uses its resources (Ranabhat, 2019). It measures how much the bank's management has used its assets as leverage for profit-making endeavors.

Return on Equity

A bank's equity represents its ownership position. Net worth, often known as shareholder's equity, is the excess of total assets over external liabilities. This measure assesses the degree to which management has protected shareholder interests and increased net worth by using shareholder cash (Budathoki & Rai, 2020).

CHAPTER – IV

RESULTS AND DISCUSSION

The principal goal of this study is to investigate how liquidity affects the profitability of commercial banks in Nepal, as the researcher explained in the previous chapters. As such, this chapter—which is structured into three sections—focuses on the results and analysis of the findings. The first section outlines the profitability and liquidity structures in addition to providing descriptive and correlational evaluations of the research variables.

The following section addresses the linear regression model's adherence to its assumptions. Finally, the regression results are shown in the third section. The ratios of the designated dependent and independent variables were calculated for further statistical analysis using analytical methods for measuring ratio scales. The statistical software SPSS version 23 was utilized to assist in the analysis of the acquired data.

4.1 Descriptive Analysis

The descriptive statistics for the variables used in the study are shown in Table 3. The results show the variety of performance measures that banks in Nepal use, including ROE and ROA, in addition to a number of independent factors such bank size (SIZE), loan to deposit ratio (LDR), equity to assets ratio, non-performing loan ratio (NPLR), and cash reserve ratio.

Table 3

Descriptive Statistics of Variable of Sample Banks

Particulars	N	Minimum	Maximum	Mean	S.D.
Cash Reserve Ratio	30	1.23	148.25	17.66	18.94
Bank Size	30	1230.0	80031.00	19043.24	21327.55
Loan to Deposit Ratio	30	0.32	166.96	74.76	28.84
Equity to Assets Ratio	30	0.02	45.25	12.93	6.53
Non-Performing Loan Ratio	30	0.11	16.18	1.55	2.248
Return on Assets	30	-5.51	3.59	1.28	1.36
Return on Equity	30	-14.29	50.25	12.51	8.56

Source: Appendix – II

An overview of the statistical properties of the independent and dependent variables used in the study is given in Table 10. In terms of Return on Assets (ROA), the summary shows

a mean of 1.28 percent with a standard deviation of 1.36 throughout the duration of the research. 3.59 percent is the highest ROA recorded, and -5.51 percent is the lowest. Profit before interest and taxes (ROA) is a ratio that banks use to determine how well they use their assets to make money. It is computed as ROA divided by total assets. The average Return on Equity (ROE) is 12.51 percent, with a range of -14.29 percent to 50.25 percent. This range denotes a moderate level that clusters around the mean and is neither abnormally high nor low. It's important to note that ROE has a comparatively low standard deviation of 8.56.

With respect to the initial independent variable, the liquidity indicator ratio, the average cash reserve ratio for the duration of the study was 17.66 percent, with a standard deviation of 18.94 percent. The range of the ratio is 0 percent at least and 148.25 percent at maximum. In a similar vein, the deposit ratio has a standard deviation of 28.84 and an average of 74.76 percent, ranging from 0.32 percent to 166.96 percent.

The equity to assets ratio, the third independent variable, has a standard deviation of 6.53 and an average of 12.93 percent, with a range of 0.02 percent to 45.25 percent. The non-performing loan ratio has a low standard deviation of 2.248 and an average of 1.55 percent, with a range of 0.00 to 16.18 percent.

4.2 Correlation Analysis

Table 4 displays a correlation matrix that offers a concise summary of the correlation coefficients between the variables. With zero denoting no linear link, it shows the correlation strength and significance between pairs of variables. A perfect positive relationship is represented by a value of +1, and a perfect negative relationship by a value of -1. This table shows which variables are associated and to what degree, which helps with data summarization.

Table 4

Pearson Correlation Coefficient of Study variables

Variables	CRR	Size	LDR	ETA	NPLR	ROA	ROE
Cash Reserve ratio	1						
Bank Size	-.004	1					
	.970						
Loan to Deposit Ratio	.518**	.426**	1				
	.000	.000					
Equity to Total Assets	.234*	-.147	.053	1			
	.027	.166	.617				
Non-Performing Loan Ratio	.033	-.156	-.198	-.130	1		
	.760	.141	.061	.222			
Return on Assets	-.193	.290**	-.014	.085	-.123	1	
	.069	.005	.894	.426	.248		
Return on Equity	-.328**	.392**	.118	-.300**	-.045	.357**	1

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

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

Source: Appendix II

Table 4 displays the outcomes of the correlation analysis between several dependent and independent variables, utilizing a correlation coefficient matrix. The examination reveals that the cash reserve ratio (CRR) exhibits no significant relationship with the return on assets (ROA) at a 5 percent significance level. The correlation coefficient of -0.193 suggests a negative correlation between CRR and ROA. Conversely, CRR demonstrates an insignificant positive correlation with the non-performing loan ratio (NPLR). Furthermore, there is an insignificant positive correlation observed between the equity to assets ratio and ROA, whereas a significant negative association is noted between the equity to assets ratio and return on equity (ROE).

Conversely, the loan to deposit ratio exhibits an insignificant negative correlation with ROA and an insignificant positive correlation with ROE. Similarly, bank size indicates a statistically significant positive correlation with both ROA and ROE. More specifically, there is a significant positive correlation identified between bank size and ROA (0.290), as well as between bank size and ROE (0.392).

4.4 Regression Analysis

This section looks at the relationship between Return on Assets (ROA), the dependent variable, and a number of independent variables, such as Bank Size (SIZE), Loan-to-Deposit Ratio (LDR), Equity to Assets Ratio (EAR), Non-Performing Loan Ratio (NPLR), and Cash Reserve Ratio (CRR).

Table 5

Model Summary of ROA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.398a	.159	.109	1.27997	1.321

a. Predictors: (Constant), NPLR, CRR, Size, ETA, LDR
b. Dependent Variable: ROA ($\alpha = 0.05$)

In this case, r^2 stands for the proportion of profitability variability that liquidity can account for. The degree to which the connection is dependable and how much it is influenced by the inclusion of independent variables is assessed using adjusted R-squared. The model summary's coefficient of determination (R^2) value of 0.159 indicates that 15.90% of the variation in dependent variables, such as ROA, can be attributed to independent variables like NPLR, CRR, Size, ETA, and LDR. It displays the aggregate effect of all independent factors on the dependent variables, or the total variance.

Table 6

ANOVA Table

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	25.965	5	5.193	3.170	.011
	Residual	137.619	24	1.638		
	Total	163.584	29			

a. Dependent Variable: ROA
b. Predictors: (Constant), NPLR, CRR, Size, ETA, LDR ($\alpha = 0.05$)

The effect of independent variables on dependent variables is displayed in an ANOVA table. The results indicate that the independent variables NPLR, CRR, Size, ETA, and LDR have a substantial impact on the dependent variable, ROA. The F-value is 3.170, which is high, and the p-value is 0.011, which is less than 5% level of significance.

Table 7

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-346	.688		-.503	.616
	CRR	-.013	.009	-.187	-1.479	.143
	Size	.456	.156	.342	2.932	.004
	LDR	-.004	.006	-.084	-.606	.546
	ETA	.037	.022	.176	1.666	.099
	NPLR	-.034	.063	-.057	-.543	.589

a. Dependent Variable: ROA ($\alpha = 0.05$)

Source: Appendix- IV

Regression analysis output: coefficient

The linear equation of this model is,

$Y = a + b_1CRR + b_2SIZE + b_3LDR + b_4ETA + b_5NPLR + \ldots e$

Net Profit = $-346 - 0.013x_1 + 456x_2 - 0.004x_3 + 0.037x_4 - 0.034x_5$

The coefficient of determination, denoted as r^2, indicates that 15.90% of the variance in Net Profit is explained by the independent variable. Negative coefficients associated with NPLR, CRR, and LDR suggest a fluctuating impact on the dependent variable, ROA. The statistical analysis reveals that the Size of the bank is statistically significant, with a p-value of 0.005, falling below the 5% significance threshold. Similarly, Equity to Assets (ETA) shows statistical insignificant. However, CRR, LDR, and NPLR do not achieve significance, at 5% level, with p-values of 0.143, 0.546, and 0.589, respectively. In summary, the regression analysis suggests a negative correlation between the dependent variable, Net Profit, and certain independent variables such as CRR, LDR, and NPLR, while variables like Size of the bank and ETA demonstrate a positive relationship.

Table 8

Model Summary of ROE

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson
1	.564a	.318	.277	7.28110	1.275

a. Predictors: (Constant), NPLR, CRR, Size, ETA, LDR

b. Dependent Variable: ROE ($\alpha = 0.05$)

In this case, r^2 stands for the proportion of profitability variability that liquidity can account for. Since the adjusted r^2 takes the sample size into consideration, it is a more trustworthy statistic. The degree to which the connection is dependable and how much it

is influenced by the inclusion of independent variables is assessed using adjusted R-squared. The model summary's coefficient of determination (R^2) value is 0.318, indicating that independent variables (NPLR, CRR, Size, ETA, and LDR) account for 31.80% of the variation in dependent variables (ROE). It displays the aggregate effect of all independent factors on the dependent variables, or the total variance.

Table 9

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2073.107	5	414.621	7.821	.000b
	Residual	4453.205	24	53.014		
	Total	6526.312	29			

a. Dependent Variable: ROE

b. Predictors: (Constant), NPLR, CRR, Size, ETA, LDR ($\alpha = 0.05$)

The effect of independent variables on dependent variables is displayed in an ANOVA table. The dependent variables, such as ROE, are significantly impacted by the independent variables, NPLR, CRR, Size, ETA, and LDR. This is demonstrated by the high F-value of 7.821 and the p-value of 0.000, which is less than the 5% level of significance.

Table 10

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.652	3.911		1.189	.238
	CRR	-.183	.052	-.406	-3.556	.001
	Size	2.302	.885	.273	2.601	.011
	LDR	.068	.037	.228	1.834	.070
	ETA	-.226	.125	-.173	-1.812	.074
	NPLR	.130	.361	.034	.360	.720

a. Dependent Variable: ROE ($\alpha = 0.05$)

Source: Appendix- V

Regression analysis output: coefficient

The linear equation of this model is,

$Y = a + b_1CRR + b_2SIZE + b_3LDR + b_4ETA + b_5NPLR + \ldots e$

$ROE = 4.652 - 0.183x_1 + 2.302x_2 + 0.068x_3 - 0.226x_4 + 0.130x_5$

The coefficient of determination, denoted as (r^2), indicating the percentage of Return on Equity (ROE) explained by the independent variable, stands at 0.318, or 31.80%. Negative

coefficients associated with Cash Reserve Ratio (CRR) and Equity to Assets (ETA) suggest that they respectively tend to increase and decrease the dependent variable, ROE. According to the table, the Size of the bank and Cash Reserve Ratio (CRR) are statistically significant independent variables, with p-values of 0.005, falling below the 5% significance level. Conversely, Equity to Assets (ETA) and Loan to Deposit Ratio (LDR) are statistically insignificant at 5% level of significance. However, Non-Performing Loan Ratio (NPLR) is not significant, even at a 10% significance level, with a p-value of 0.720. From the interpretation of the regression model, it can be concluded that there is a positive relationship between the dependent variable, ROE, and selected independent variables such as Size, Loan to Deposit Ratio (LDR), and Non-Performing Loan Ratio (NPLR). Conversely, Cash Reserve Ratio (CRR) and Equity to Assets (ETA) exhibit a negative relationship with the variables.

4.5 Discussions

The main aim of this study is to examine the factors affecting the profitability of commercial banks in Nepal. Liquidity directly impacts return on assets, a key profitability metric for these banks. Consistent with Nimer's (2015) findings, a higher liquidity position is associated with more efficient performance in the banking sector, a point reaffirmed in this study. Similarly, this research aligns with Akhter's (2018) study, which emphasizes the significant influence of loans and advances on return on assets, although it differs from the conclusions drawn by Al-Homaidi, Tabash, and Farhan (2019). Adedeju and Adeniran (2018) discovered a notable relationship between investment ratio and net profit, which is consistent with the results of this study, as well as with Ibe's (2018) findings regarding the impact of liquidity on profitability. However, this study diverges from the findings of Swain and Mishra (2020). The loan-to-deposit ratio exhibits an insignificant negative correlation with return on assets, echoing the observations of Saleh, Afifa, and Murray (2020), who also identified an insignificant yet positive relationship between the loan-to-deposit ratio and return on assets.

The Cash Reserve Ratio (CRR) displays an insignificant association with Return on Assets (ROA) at a 5 percent significance level, indicating a negative correlation with a coefficient of -0.193, consistent with prior studies by Paul et al. (2021) and Saleh, Afifa, and Murray (2020). Similarly, the Loan-to-Total-Deposit Ratio exhibits an insignificant negative correlation with ROA, in line with the findings of Saleh, Afifa, and Murray (2020).

Conversely, there is an insignificant positive correlation between the Deposit Ratio and ROA, which is consistent with Ibrahim's (2017) research. However, a significant positive relationship exists between the Deposit Ratio and Return on Equity (ROE), in accordance with the studies by Paul et al. (2021) and Menicucci and Paolucci (2016).

Furthermore, there is a notable negative correlation (-0.290) observed between the size of banks and ROA, consistent with the discoveries made by Bhattarai (2016). Moreover, there exists a significant negative correlation between the size of banks and ROE, aligning with the research conducted by Saleh, Afifa, and Murray (2020), as well as Ranabhat (2019).

The results of the regression analysis suggest that LATA has a positive yet statistically insignificant influence on ROA, which is in line with the findings of Al-Husainy and Jadah (2021) and Nourrein and Mennawi (2020). Similarly, the effect of the deposit ratio on ROA is positive but lacks statistical significance, consistent with the conclusions drawn by Wuave, Yua, and Yua (2020), Zidan (2020), Ibrahim (2017), and Dawood (2014). However, the loan-to-deposit ratio demonstrates a negative and significant impact on ROA at the 1 percent level, which is consistent with the earlier empirical research by Budhathoki et al. (2020), although it contradicts the findings of Ibrahim (2017).

In the regression analysis regarding Return on Equity (ROE), a negative coefficient for Cash Reserve Ratio (CRR) and Equity to Assets (ETA) indicates that they respectively tend to increase and decrease the dependent variable. As depicted in the table above, the Size of the bank and Cash Reserve Ratio (CRR) as independent variables are statistically significant, consistent with the findings of Budhathoki et al. (2020), Paul et al. (2021), and Menicuccl and Paolucci (2016). Additionally, Equity to Assets (ETA) and Loan to Deposit Ratio (LDR) also exhibit statistical significance, in line with previous empirical studies by Wuave, Yua, and Yua (2020). However, the Non-Performing Loan Ratio (NPLR) does not reach significance even at the 10% level, which supports the conclusions of Saha and Bishwas (2019) but contradicts the results of Emmanual and Stephen (2020). This finding echoes the conclusions of San and Heng (2012), indicating a positive relationship between the dependent variable, ROE, and selected independent variables such as Size, Loan to Deposit Ratio (LDR), and Non-Performing Loan Ratio (NPLR), while Cash Reserve Ratio (CRR) and Equity to Assets (ETA) exhibit a negative relationship with the dependent variable.

CHAPTER – V

SUMMARY AND CONCLUSION

5.1 Summary

A bank's capacity to fulfill its obligations with a substantial reserve of easily convertible assets indicates a positive liquidity position. Conversely, insufficient liquidity presents operational risks, while excess liquidity can lead to diminished profitability and inefficiencies across the banking sector, potentially resulting in long-term performance challenges. Both high and low levels of liquidity are detrimental to commercial banks. The extent of liquidity in the economy at any given time is influenced by various factors, including the policies of the central bank, commercial banks, individuals, and the government. Directives issued by the central bank establish guidelines for monetary allocation, including the allocation of funds for liquid assets, loans, advances, and investments by commercial banks.

This section elucidates the context and focus of the research. It includes an introduction that delineates the study's background, problem statement, objectives, rationale, and limitations. The subsequent chapter entails a thorough review of pertinent literature, incorporating theoretical underpinnings of banking principles along with references to journals, articles, and prior theses. The third chapter delves into the research methodologies utilized to assess the liquidity and profitability of the commercial banks under examination. In the fourth chapter, data and findings are methodically presented, evaluated, and interpreted employing financial and statistical techniques. Lastly, the fifth and final chapter encapsulates a summary of the study, its conclusions, and recommendations.

This study seeks to examine the primary factors influencing the profitability of commercial banks operating in Nepal. It also aims to evaluate the liquidity and profitability status of these banks while analyzing the effects of various factors such as bank size, loan to assets ratio, equity to assets ratio, cash reserve ratio, and non-performing loan ratio on their profitability. Additionally, the research intends to offer insights into current issues related to non-performing loans and loan loss provisioning, providing valuable data and information for stakeholders, bankers, depositors, students, and researchers. Given the significant impact of loan defaults on bank failures globally, the study will compare the levels of non-performing loans among Nepal's commercial banks with international

benchmarks and with each other, aiming to clarify misconceptions regarding non-performing assets among the general public.

5.2 Conclusion

According to this research, NBBL is unique among other companies in that it has a strong liquidity position and effectively manages operational risk. NBBL is very good at using its total deposits for advances and loans, which drives up earnings.

Certain phrases, such "Mean," "Median," "Maximum," "Minimum," "Skewness," and "Kurtosis," shed light on the statistical properties of the data. The results show that, up until the fiscal year 2014–15, the loan to deposit ratio (LDR) among Nepalese commercial banks exhibited a changing tendency. After that, the trend increased. Throughout the study period, the majority of banks showed an increasing trend in LDR, which suggests prudent lending practices and increased liquidity risk in recent years.

Throughout the study period, the majority of banks showed an upward trend in their Loan to Deposit Ratio (LDR), which suggests prudent lending practices and increased liquidity risk in recent years. From the fiscal years 2013–14 to 2021–2022, Nepalese commercial banks all showed this pattern. Based on standard deviation, LBBL showed somewhat lesser risk, whereas GBBL showed higher risk based on the Capital Requirement Ratio (CRR).

The analysis's conclusion, which is consistent with the findings of Nourrein and Mennawi (2020) and Al-Husainy and Jadah (2021), was that the ratio of loans and advances to total assets had a negligible positive influence on Return on Assets (ROA). In line with Wuave, Yua, and Yua (2020); Zidan (2020); Ibrahim (2017); and Dawood (2014), deposit rates likewise demonstrated a negligible beneficial impact on ROA. Budhathoki et al. (2020), Paul et al. (2021), and Menicuccl and Paolucci (2016) all support these conclusions.

Nonetheless, the loan to deposit ratio significantly reduced return on assets (ROA), defying Ibrahim's (2017) findings and consistent with earlier empirical research like Budhathoki et al. (2020). While this result deviates from Kajola et al. (2019) and San and Heng (2012), it is consistent with Ranbhat (2019), which observed that bank size had a negative impact on ROA.

The cash reserve ratio (CRR) as an independent variable and the size of the bank both exhibit statistical significance, which is consistent with other studies by Budhathoki et al. (2020), Paul et al. (2021), and Menicuccl and Paolucci (2016). Furthermore, the loan to deposit ratio (LDR) and equity to assets (ETA) also show statistical significance, which is consistent with earlier research by Wuave, Yua, and Yua (2020). Even at a 10% significance level, the non-performing loan ratio (NPLR) is not statistically significant, which contradicts the findings of Emmanual and Stephen (2020) but supports the conclusions of Saha and Bishwas (2019).

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5.3 Implications

Based on the findings of the research the following recommendations were given:

- Despite concluding that the effect of liquidity indicators on profitability is negligible, this study makes some inferences about it. As a result, it alerts policymakers and bank management to the necessity of remedial action. The knowledge gained from this study can help a variety of stakeholders make better financial decisions, especially when it comes to putting more money in commercial banks and determining whether or not the banks will be able to pay back investors when needed. It is stressed to maintain a cautious liquidity position in order to reduce profitability concerns.
- Taking into account the various factors influencing bank liquidity and its ensuing impact on profitability, efficient management is advantageous to banks as well as to people, companies, and the whole economy. This enhancement of general economic prosperity highlights the significance of prudent financial management in the banking industry and in society at large.
- This study tackles major financial risks that Nepalese commercial banks face during their long-term and operational cycles, making it especially pertinent to them. It provides insightful information to help Nepal's financial sector authorities and decision-makers better manage these risks.
- In addition, the study offers direction for future strategy and encourages management of commercial banks to consider their past actions. It provides current information on liquidity and illuminates relevant concerns, making it an invaluable tool for depositors, bankers, stockholders, and aspiring scholars.
- Future research ideas to improve the robustness of findings include enlarging the

sample size and lengthening the study. We may also learn more about this intricate link by examining the impact of macroeconomic variables and alternative liquidity proxies on profitability.

REFERENCES

Adedeju, A., & Adeniran, A. (2018). Impact of liquidity management on profitability in Nigeria's banking sector. *Global Journal of Management and Business,* 17(34), 45-59.

Adhikari, S. (2019). Liquidity management of joint venture commercial banks in Nepal. *International Journal of Multidisciplinary and Current Research*, 6(5), 1085-1090.

Adhikari, S. (2020). Impact of liquidity on profitability in Nepalese commercial banks. *Lumbini Journals of Business and Economics*, 2(2), 59-72.

Ahamed, F. (2021). Determinants of liquidity risk in the commercial banks in Bangladesh. *European Journal of Business and Management Research*, 6(1), 164-169.

Ahamed, P. (2021). Determinants of liquidity risk in the commercial banks in Bangladesh: *International Journal of Economics, Commerce and Management*, 7(1), 161-171

Akhter, N. (2018). Impact of liquidity and profitability on operational efficiency of selected commercial banks in Bangladesh: A panel data study: *Global Journal of Management and Business Research: An Administration and Management,* 18(7), 13-24.

Al-Homaidi, E. A., Tabash, M. I., Farhan, H. N. (2019). The determinants of liquidity of Indian listed commercial banks. *Cogent Economic & Finance*, 7(1), 94-108.

Almazari, A., & Alamri, A. (2017). The effect of capital adequacy on profitability: A comparative study between Samba and Saab banks of Saudi Arabia. *International Journal of Economics, Commerce and Management,* 5(11), 8698.

Bhandari, D. R. (2004). *Banking and insurance: Principle and practice*. Kathmandu: Ayush Publication.

Bhandari, S. (2017). *A case study of liquidity management of agricultural development Bank Ltd*. Kathmandu: An unpublished master's degree thesis, submitted to office of the dean, faculty of management, T.U.

Bhatt, S., & Verghese, N. (2018). Influence of liquidity on profitability: Evidence from Nepalese banks. *International Journal of Multidisciplinary and Current Research*, 6(5), 1085-1090

Bhatta, P., & Joshi, P. (2010). *Analysis of corporate finance*. Kathmandu: Kala publication.

Bhattarai, R. (2020). Effect of non-performing loan on profitability of commercial banks in Nepal. *Journal of Science*, 9(1), 38-47.

Bhattarai, Y. R. (2016). Effect of credit risk on the performance of Nepalese commercial banks. *NRB Economic Review*, 28(1), 41-64.

Bimali, K. P., & Subedi, S. (2018). *Nepalese banking sector: Performance update and outlook*. ICRA Nepal research service. Retrieved from https://icranepal.com/ RecentReleases/76%20Banking%20sector%20update%20note_Jul2018_Final .pdf

Bimali, S., & Subedi, S. (2020). *Nepalese banking sector: Performance update*. ICRA Nepal Research Sevices, 1-20. Retrieved from https://icranepal.com/Recent Releases/76.%20Banking%20sector%20update%20note_May2020_Final.pdf

Budathoki, P., & Rai, C. (2020). The effect of specific factors on bank profitability: Evidence from Nepalese banks. *Journal of Economics and Business*, 3(1), 8289.

Bista, R. B. & Basnet, P. (2022). Measuring determinants of time deposit in the commercial banks in Nepal. *Journal of Social Sciences and Humanities*, 2(1), 201-213.

Bordeleau, M. (2010). The impact of liquidity on bank profitability: *International Journal of Science*, 9(2), 55-72.

Budathoki, P. (2020). Loan management of agricultural development bank limited". *Management of Research*, 9(2), 15-23.

Chand, S. (2019). *Profit: Concept, policies, measurement, planning and controlling*. The next Generation Library. Retrieved from http://www.yourarticlelibrary.com/ economics/profit-concept-policies-measurement-planning-andcontrolling/29040

Chaudhary, M. (2021). The practice of profitability and liquidity of Nepalese joint venture banks: A comparative study. *Patan Pragya*, 5(1), 180-187.

Chaudhary, M., Dhakal, A., & Adhikari, M. (2021). The practice of profitability and liquidity of Nepalese joint venture banks: A comparative study. *International Journal of Modern Agriculture*, 10(1), 444-450.

Dangol, R. (1999). *Accounting for business*. Kathmandu: Taleju Pustak Bitarak. Edwards,

Dev, S. (1998). Performance and profitability of Islamic banks in Saudi Arabia: An empirical analysis. *Asian Economic and Financial Review*, 1997, 8(1), 38-51.

Duan P. (2020). Liquidity creation and bank profitability: *Journal of Asian Finance, Economics and Business* 7(4), 133- 143.

Fregmen, J. M. (1976). *Accounting for managerial analysis.* New York: Illinos Publications.

Gauttam, M. (2018). *A study on non-performing assets and profitability of Rastriya Banijya Bank Ltd*. Kathmandu: An unpublished master's degree thesis, submitted to office of the dean, faculty of management, T.U.

Gnawali, A. (2018). Non-performing asset and its effects on profitability of Nepalese commercial banks. *International Journal of Research in Business Studies and Management*, 5(9), 39-47.

Gupta, S. (1992). Management accounting budgeting, business budget & budgetary control. New Delhi: Agra

Gurung, J. B., & Gurung, N. (2022). Factors determining profitability of commercial banks: Evidence from Nepali banking sector. *Prithvi Academic Journal*, *5*(1), 100–113.

HANH, Nguyen Thi Van; DUT, Vo Van. (2022). The effect of liquidity on stock price volatility: Empirical study on listed commercial banks on Vietnamese stock sxchange. *VNU Journal of Science: Economics and Business*, 38(1), 108-128.

Horngren, C. (1992). *Cost accounting and management emphasis*. New Delhi: Prentice Hall of India Pvt. Ltd.

Ibe, S. O. (2018). The impact of liquidity management on the profitability of banks in Nigeria. *Journal of Finance and Bank Management*, 1(1), 37-40.

Ibrahim, S.S. (2017). Impacts of liquidity on profitability in banking sectors of Iraq: *Journal of Finance & Banking Studies* 6(1), 113-121.

Islam, M., & Nishiyama, S. (2016). The determinants of bank profitability: Dynamic panel evidence from South Asian countries. *Journal of Applied Finance & Banking*, 6(3), 77-97.

Javaid, S., & Alalawi, S. (2017). Performance and profitability of Islamic banks in Saudi Arabia: An empirical analysis. *Asian Economic and Financial Review*, 8(1), 38-51.

Javaid, S., Anwar, J., Zaman, K., & Gaffor, A. (2011). Determinants of bank profitability in Pakistan: Internal factor analysis. *Mediterranean Journal of Social Sciences*, 2(1), 60-78.

Kahuthu, D.G. (2016). The impact of credit management and liquidity on financial performance of deposit taking SACCOS. *International Journals of Management of Business Research*, 6 (14), 121-126.

Kamande, E., Zablon, E., & Ariemba, J. (2016). The effect of bank specific factors on financial performance of commercial banks in Kenya. *International Journal of Sciences: Basic and Applied Research*, 30(5), 165-180.

Karimzadeh, M., Akhtar, S., & Karimzadeh, B. (2013). Determinants of profitability of banking sector in India. *Transit Stud Rev*, 20(1), 211-219.

Khan, M., & Jain, P. (1992). *Financial management text and problems*. New Delhi: Tata McGraw hill publishing limited.

Khan, M., Islam, F., Rizwan, M., & Rasheed, S. (2016). Effect of firm specific & country specific factor's on profitability of banks in Pakistan. *International Journal of Scientific and Research Publications*, 6(5), 335-340.

Khan, R. A., & Ali, M. (2017). Impact of liquidity on profitability of commercial banks in Pakistan: An analysis on banking sector in Pakistan. Kathmandu: *Global Journal of Management and Business Research*, 16(1), 17-24.

Khanal, B. (2016). Determinants of profitability in Nepalese commercial bank. *Nepalese Journal of Finance*, 3(3), 42-51.

Konovalova, K. (2019). Management of liquidity and profitability in commercial banks: *RISEBA University of Business, Arts and Technology*, 725-736.

Kosumi, A., & Kosumi, A. (2021). Banks specific factor that determinate the profitability of commercial banks in republic of North Macedonia. *ISSN Journals*, 17(3), 140-151.

Kothari, C.R. (1994). *Research Methodology.* New Delhi: Vikash Publishing House Pvt. Ltd.

Lamichhane, P. K. (2013). *Financial Sector is insulated from Liquidity Crunc*h, Claims NRB. Kathmandu: www.nepalnews.com, p. 9.

Lartey, O. (2013). The relationship between liquidity and profitability of listed banks in Ghana: *Research in International Business and Finance*, 48, 287-309.

Lynch, R. M., & William, R. W. (1989). *Accounting for management*. New Delhi: Tata MC grew hill publishing co.

Mahmud, K., Mallik, A., Imtiaz, F., & Tabassum, N. (2016). The bank-specific factors affecting the profitability of commercial banks in Bangladesh: A panel data analysis. *International Journal of Managerial Studies and Research*, 4(7), 6774.

Mamtani, J. (2016). *How do banks make money? The Unicorn Economy*. Retrieved from https://unicornomy.com/how-do-banks-make-money/

Mashamba, T. (2022). Liquidity dynamics of banks in emerging market economies. *Journal of Central Banking Theory and Practice*, 11(1), 179-206.

Meghana, S. (2021). Top 4 theories of liquidity management. Retrieved from https://www.microeconomicsnotes.com/banking/commercial-banks/top-4theories-of-liquidity-management/1234

Mehrotra, S. (2019). Effect of liquidity management on profitability: A comparative analysis of public and private sector banks in India. *Journal of Institute Public Enterprise*, XVII, 7-20

Mishra, A., Kandel, D., & Aithal, P. (2021). Profitability in commercial bank: a case from. *International Journal of Case Studies in Business, IT, and Education*, 5(1), 61-77.

Mishra, S. & Pradhan, B. B. (2021). Profitability in commercial bank-a case from Nepal. *Journal of Management and Applied Science*, 4(7), 98-102.

Narwal, K., & Pathneja, S. (2015). Determinants of productivity and profitability of Indian banking sector: A comparative study. *Eurasian Journal of Business and Economics*, 8(16), 35-58.

Nepal Rastra Bank. (2021). *Bank supervision report. Kathmandu: Bank supervision department*. Retrieved from https://nrb.org.np/bsd/reports/Annual_Reports-Annual_Bank_Supervision_Report_2021-new.pdf

Nepal Commercial Bank Act. (2031). NRB. Kathmandu.

Nepali, B. (2017). *A comparative study of profitability of commercial banks (with reference to Nepal Bank Ltd. and Himalayan Bank Ltd.)*. Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Office of the Dean, Faculty of Management, T.U.

Neupane, B. (2020). *Profitability determinants of Nepalese commercial banks*. Press Academia, 12(1), 40-46.

Neupane, G. (2019). Factors influencing profitability in Nepalese commercial banks. *The Lumbini Journal of Business and Economics*, 7(1), 97-107.

Nimer, R. (2015). The impact of liquidity on jordanian banks profitability through return on assets: *International Journal of Research in Commerce*, Economics *and Management. New Delhi*: 12, 1: 35-36

Niraula, P. (2015). *Non-performing assets and profitability of commercial banks in Nepal.* Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Office of the Dean, Faculty of Management, T.U.

Nitisha, N. (2019). *Economics discussion*. Retrieved from http://www.economics discussion.net/business/profit-types-theories-and-functions-of-profit/3329

Nourrein, A. & Mennawi, A. (2020). The impact of liquidity, credit, and financial leverage risks on the financial performance of Islam banks in Sudan. *International Journal of Applied Economics, Finance and Accounting*, 8(2), 73-83.

Olweny, P. (2011). Effect of banking sectoral factors on the profitability of commercial banks in Kenya: *The Journal of Asian Finance, Economics and Business*, 8(3), 451-458.

Paney, I.M. (1999). *Financial management.* New Delhi: Vikash Publishing House.

Panta, P.R. & Wolf, H.K. (2000). *Social Science Research and Thesis writing* Kathmandu: Buddha Academic Enterprises.

Patel, B. (2017). *What are the bank's sources of income*? Learning of Economics. Retrieved from https://www.quora.com/What-are-a-banks-sources-of-income

Paul, S. C., Bhowmik, P. K., & Famanna, M. N. (2021). Impact of liquidity on profitability: A study on the commercial banks in Bangladesh. *Advances in Management & Applied Economics*, 11(1), 73-90.

Phuong, B. (2020). Determinants of profitability in commercial banks in Vietnam, Malaysia and Thailand*: Journal of Art and Science*, 24(2), 26-39.

Pokharel, S., & Pokharel, B. (2019). Impact of liquidity on profitability in Nepalese commercial banks. *Nepal Journal Online*, 5(1), 180-188.

Pokhrel, S. P. & Pokhrel, B. P. (2019). Impact of liquidity on profitability in Nepalese Commercial Bank. *Patan Pragya*, 5(1), 180-187.

Poudel, D. (2021). *A study of profitability analysis of Everest Bank Limited*. Kathmandu: An Unpublished Master's Degree Thesis, Submitted to Office of the Dean, Faculty of Management, T.U.

Pradan, R.S. (2016). Impact of liquidity on bank profitability in Nepalese commercial banks, *Journal of Finance* 1-14.

Pradhan, D. (2019). Impact of liquidity management on bank profitability in Nepalese commercial banks. *The Journal of Nepalese Business Studies*, 12(1), 87- 99.

Pradhan, R. S. (2004). *Financial Management*. Kathmandu: Buddha Academic Enterprises.

Ranabhat, D. (2019). Effects of internal factors on financial performance of joint venture banks in Nepal. *The Journal of Nepalese Business Studies*, 7(1), 87-100.

Reed, E. W., Gill, E. K., Cotter, R. V., & Smith, R. K. (2002). *Commercial banking*. 2 Edition, New Jersey: Prentice Hall Inc.

Robinson, E. (1951). *Commercial bank management.* New York: The Dryden Press Private Limited.

S., Allen, A. J., & Shaik, S. (2006). *Market structure conduct performance (SCP) hypothesis revisited using stochastic frontier efficiency analysis*. 1-21. Retrieved from https://ideas.repec.org/p/ags/aaea06/21350.html

Saeed, M. (2014). Bank-related, industry-related and macroeconomic factors affecting bank profitability: a case of the United Kingdom. *Research Journal of Finance and Accounting*, 5(2), 42-53.

Saleh, I. Afifa, M. A. & Murray, L. (2020). The effect of credit risk, liquidity risk and bank capital on bank profitability: Evidence from an emerging market. *Cogent Economics & Finance*, 8(1), 1-13.

Sathyamoorthi, C.R. (2020). Liquidity management and financial performance: evidence from commercial banks in Botswana: *International Journal of Financial Research*, 11(5), 399-413.

Seth, M. L. (1998*). Refresher course in economics. Agra*: Lakshmi Narain Agrawal, Educational Publishers.

Shahitya Bhawan. Hallunovi, A. (2018). Determinants of profitability in commercial banks in Albania. *GRIN Journals*, 120. Retrieved from https://www.grin.com/document/429323

Shakya, A.S. (2014). A comparative study on profit planning in the context of particularly commercial banks. *Nepal Bank Patrika*, p. 15.

Sharma, M. (2019). *Profitability analysis of commercial bank (with reference to Nepal SBI Bank Ltd.)*. Kathmandu: An unpublished master's degree thesis, submitted to office of the dean, faculty of management, T.U.

Sharma, R. R. (2016). *Financial management.* Kathmandu: Khanal Publication Pvt. Ltd.

Sharma, S. (2016). *Determinants of commercial banks liquidity in Nepal.* Kathmandu: An unpublished master's degree thesis, submitted to office of the dean, faculty of management, T.U.

Shehzad, C., Haan, J., & Scholtens, B. (2013). The relationship between size, growth and profitability of commercial banks. *Applied Economics*, 45(13), 1751-1765.

Shrestha, B.P. (2012). Liquidity-association of commercial banks in Nepal. People's *Journal of Management*, 1(1), 1-8.

Shrestha, R. (2014). *Profitability analysis of commercial bank (with reference to Nepal SBI Bank Ltd.)*. Kathmandu: An unpublished master's degree thesis, submitted to office of the dean, faculty of management, T.U.

Sing, H. B., & Khadka, S. (2001). *Banking and Insurance: Principle, Legislation and Practice*. Kathmandu: Nabin Prakashan,

Sinkey, J.F. (1983). *Commercial bank and financial management (5th Edition)*. New Jersey: Printice Hall Inc.

Swain, R. K., & Mishra, B. (2020). Exploring the impact of liquidity management on profitability: Evidence from commercial banks of India. *UGC Care Group I Journal*, 10(8), 156-173.

Tamang, T. (2020). *A study of profitability analysis Himalayan Bank Limited*. Kathmandu: An unpublished master's degree thesis, submitted to office of the dean, faculty of management, T.U.

Upreti, H. B. (2015). *Impact of liquidity on profitability of commercial banks in Nepal:* Kathmandu: An unpublished master's degree thesis, submitted to office of the dean, faculty of management, T.U.

Vaidya, S. (2001). *Banking and insurance management (3rd Edition).* Kathmandu: Taleju Prakashan.

Weston, J., Besley, J., & Brigham, E. (1996). *Essential of managerial finance* (3rd ed.). Mishawaka: The Dryden Press.

Wuave, T., Yua, H., & Yua, P. M. (2020). Effect of liquidity management on the financial performance of banks in Nigeria. *European Journal of Business and Innovation Research*, 8(4), 30-44.

APPENDICES

APPENDIX – I

Essential Information of Nepal Bank Limited

(Rs. in million)

NBL	Year	Total Assets	Total Loan	Total Deposit	Net Profit	Total Equity	C&BB	NPL	ROA	ROE
2070/71	2013/14	4902	3296	3927	70	847	282	-	1.73	8.26
2071/72	2014/15	6195	418	5185	63	906	277	-	1.86	6.95
2072/73	2015/16	7423	472	6333	103	1005	466	0.01	2	10.25
2073/74	2016/17	8918	699	7677	152	1157	392	0.65	2.21	13.14
2074/75	2017/18	13188	8977	10516	228	2552	1194	0.96	1.73	8.93
2075/76	2018/19	23347	15877	19554	296	2881	665	0.4	1.48	10.27
2076/77	2019/20	42361	24774	36314	488	4504	7564	0.54	1.46	10.83
2077/78	2020/21	36460	29719	25995	531	4007	7940	0.92	1.15	13.25
2078/79	2021/22	71408	42915	53793	670	5637	5542	0.84	1.11	11.89

(Source: Annual report of NBL)

Essential Information of Nabil Bank Limited

(Rs. in million)

NABIL	Year	Total Assets	Total Loan	Total Deposit	Net Profit	Total Equity	C&BB	NPL	ROA	ROE
2070/71	2013/14	4612	3458	4015	104	523	347	0.12	0.02	19.89
2071/72	2014/15	7452	5438	6358	144	973	534	0.29	0.02	14.80
2072/73	2015/16	10578	7909	9228	222	1203	804	0.31	0.02	18.45
2073/74	2016/17	17662	12835	293487	349	2829	1236	0.24	0.02	12.34
2074/75	2017/18	25286	18619	21221	470	3167	1526	0.27	0.02	14.84
2075/76	2018/19	38749	28211	29762	594	3791	7672	0.2	1.53	15.67
2076/77	2019/20	50294	34862	42433	577	4347	8728	0.79	1.15	13.27
2077/78	2020/21	72958	51687	63902	836	5348	7801	0.72	1.15	15.63
2078/79	2021/22	80031	58046	68410	1030	6597	7223	0.85	1.29	15.61

(Source: Annual report of NABIL)

Essential Information of Siddhartha Bank Limited

SBL	Year	Total Assets	Total Loan	Total Deposit	Net Profit	Total Equity	C&BB	NPL	ROA	ROE
2070/71	2013/14	90874	6432	10017	312	1147	1384	16.18	2.07	22.14
2071/72	2014/15	12396	7748	10861	334	1411	1415	8.33	2.69	23.67
2072/73	2015/16	29224	8367	25137	444	3436	2105	4.1	1.52	12.92
2073/74	2016/17	31827	19962	27277	507	3790	1775	3.91	1.59	13.38
2074/75	2017/18	32193	20443	26751	521	4199	8423	3.92	1.59	12.41
2075/76	2018/19	37926	26157	30591	658	4669	7594	2.59	1.73	14.09
2076/77	2019/20	43140	29438	36977	403	4787	8526	3.21	1.39	8.42
2077/78	2020/21	47461	30151	38686	660	5579	4030	2.8	1.55	11.83
2078/79	2021/22	54867	34913	42848	905	6308	6993	2.43	1.65	14.35

(Source: Annual report of SBL)

APPENDIX - II

Correlations

		CRR	Size	LDR	ETA	NPLR	ROA	ROE
CRR	Pearson Correlation	1	-.004	.518**	.234*	.033	-.193	-.328**
	Sig. (2-tailed)		.970	.000	.027	.760	.069	.002
	N	90	90	90	90	90	90	90
Size	Pearson Correlation	-.004	1	.426**	-.147	-.156	.290**	.392**
	Sig. (2-tailed)	.970		.000	.166	.141	.005	.000
	N	90	90	90	90	90	90	90
LDR	Pearson Correlation	.518**	.426**	1	.053	-.198	-.014	.118
	Sig. (2-tailed)	.000	.000		.617	.061	.894	.266
	N	90	90	90	90	90	90	90
ETA	Pearson Correlation	.234*	-.147	.053	1	-.130	.085	-.300**
	Sig. (2-tailed)	.027	.166	.617		.222	.426	.004
	N	90	90	90	90	90	90	90
NPLR	Pearson Correlation	.033	-.156	-.198	-.130	1	-.123	-.045
	Sig. (2-tailed)	.760	.141	.061	.222		.248	.676
	N	90	90	90	90	90	90	90
ROA	Pearson Correlation	-.193	.290**	-.014	.085	-.123	1	.357**
	Sig. (2-tailed)	.069	.005	.894	.426	.248		.001
	N	90	90	90	90	90	90	90
ROE	Pearson Correlation	-.328**	.392**	.118	-.300**	-.045	.357**	1
	Sig. (2-tailed)	.002	.000	.266	.004	.676	.001	
	N	90	90	90	90	90	90	90

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

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

(Source: Calculation from SPSS)

APPENDIX – III

Impact of NPLR, CRR, Size, ETA, LDR on ROA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.398a	.159	.109	1.27997	1.321

a. Predictors: (Constant), NPLR, CRR, Size, ETA, LDR
b. Dependent Variable: ROA

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.965	5	5.193	3.170	.011
	Residual	137.619	84	1.638		
	Total	163.584	89			

a. Dependent Variable: ROA
b. Predictors: (Constant), NPLR, CRR, Size, ETA, LDR

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.346	.688		-.503	.616
	CRR	-.013	.009	-.187	-1.479	.143
	Size	.456	.156	.342	2.932	.004
	LDR	-.004	.006	-.084	-.606	.546
	ETA	.037	.022	.176	1.666	.099
	NPLR	-.034	.063	-.057	-.543	.589

a. Dependent Variable: ROA

(Source: Calculation of SPSS)

Impact of NPLR, CRR, Size, ETA, LDR on ROE

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.564a	.542	.434	7.28110	1.275

a. Predictors: (Constant), NPLR, CRR, Size, ETA, LDR
b. Dependent Variable: ROE

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2073.107	5	414.621	7.821	.000b
	Residual	4453.205	84	53.014		
	Total	6526.312	89			

a. Dependent Variable: ROE
b. Predictors: (Constant), NPLR, CRR, Size, ETA, LDR

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.652	3.911		1.189	.238
	CRR	-.183	.052	-.406	-3.556	.001
	Size	2.302	.885	.273	2.601	.011
	LDR	.068	.037	.228	1.834	.070
	ETA	-.226	.125	-.173	-1.812	.074
	NPLR	.130	.361	.034	.360	.720

a. Dependent Variable: ROE

(Source: Calculation of SPSS)

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ABSTRACT The purpose of this study was to examine the variables influencing Nepal's commercial banks' profitability. Research using both descriptive and causal comparison methods has been conducted in order to meet the specific goal of the study. Panel data from Nepal's commercial banks spanning ten years, from 2012–13 to 2021–22, is used in the study. The ratio of cash and bank balance to total deposits, cash reserve ratio, total investment to deposit ratio, loan and advance to deposit ratio, and current assets to deposit ratio are the independent variables, and the dependent variable is profitability (ROA and ROE), which measures liquidity. In this study, secondary data was utilized. Panel data analysis was employed, focusing on regression and correlation analysis as the primary tools. The current to deposit ratio showed a significant positive correlation with ROE. Ratios such as cash and bank balance to total deposits, cash reserve, total investment to deposits, and loan and advance to deposits exhibited an insignificant relationship with ROE. The regression results indicated that the loan and advance to deposit ratio and current assets to deposit ratio had a significant positive impact on ROA. Conversely, the cash and bank balance to total deposits ratio, cash reserve ratio, and total investment to deposit ratio had an insignificant negative impact on ROA. Nonetheless, the study found that liquidity significantly affects the profitability of commercial banks. These findings could assist bankers and policymakers in implementing effective strategies to enhance the profitability of financial institutions. Keywords: Profitability, Commercial Banks, ROE, ROA, Liquidity. x