

**LOAN MANAGEMENT AND ITS IMPACT ON PROFITABILITY
OF COMMERCIAL BANKS IN IN NEPAL**

**A Dissertation submitted to the Office the Dean, Faculty of Management in partial
fulfillment of the requirements for the Master's Business Studies (MBS)**

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "**Loan Management and Its Impact Profitability of Commercial Banks in Nepal** " 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 this dissertation.

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Report of Research Committee

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We, the undersigned, have examined the thesis entitled "**Loan Management and Its Impact Profitability of Commercial Banks in Nepal**" presented by Bimal Regmi, 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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Figure 1: Conceptual Framework

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ABBRIVATION

| | | |
|-------|---|---|
| ANOVA | : | Analysis of Variance |
| BOD | : | Board of Directors |
| C.V. | : | Coefficient of Variation |
| CA | : | Correlation analysis |
| CDR | : | Credit to deposit ratio |
| DER | : | Debts to equity ratio |
| ICAN | : | Institute Of Chartered Accountants of Nepal |
| IPO | : | Initial Public Offering |
| LC | : | Letter Of Credit |
| LDR | : | Loan to deposit ratio |
| NEPSE | : | Nepal Stock Exchange |
| NPLR | : | Non-performing loan ratio |
| NRB | : | Nepal Rastra Bank |
| ROA | : | Return on assets |
| ROE | : | Return on equity |
| S.D. | : | Standard Deviation |
| SC | : | Standardized Coefficient |
| SD | : | Standard Deviation |
| SPS | : | Statistical Packaged for Social Sciences Software |

ABSTRACT

This study examines the loan management and bank performance of commercial banks. The study based on secondary data of five commercial banks with 50 observations for the periods 2013/14 to 2022/23. The return on assets (ROA) and return on equity (ROE) were selected as dependent variables while Loan to deposit ratio (LDR), non-performing loan ratio (NPLR), debts to equity ratio (DER), credit to deposit ratio (CDR) are the independent variables. The data were collected from annual reports of concern sample bank. The Pearson's correlation coefficients and regression models, variance inflation factors (multicollinearity in regression model results) are too estimated to test significant impact of bank specific factors on the loan management and bank performance of commercial banks. Calculated data has been tabulated and analyzed by using MS-Excel and SPSS.

The result shows that Loan to deposit ratio (LDR), non-performing loan ratio (NPLR), debts to equity ratio (DER), credit to deposit ratio (CDR) are positively significant with return on assets (ROA) whereas debts to equity ratio (DER) has significant with return on equity (ROE). The study concludes Loan to deposit ratio (LDR), non-performing loan ratio (NPLR), and credit to deposit ratio (CDR) are insignificant with return on equity (ROE) of Nepalese commercial banks.

Keywords: Loan to deposit ratio (LDR), Non-performing loan ratio (NPLR), Debts to equity ratio (DER), Credit to deposit ratio (CDR), Return on equity (ROE), Return on assets (ROA)

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

Instead of using actual property, financial institutions gather money from the general public and invest it in financial assets like bonds, deposits, and loans. A bank is a type of financial intermediary that offers the full range of services associated with any financial organization, including taking deposits and making loans. Among other things, banks do currency exchanges, discount commercial notes, provide business loans, provide deposit services, store assets securely, assist with government initiatives, and lease equipment. The topic of the banking industry's profitability has drawn a lot of attention lately (Rajeswari, 2014).

Since loan management has an impact on commercial banks' profitability, it has become a major concern for academics and banking institutions alike. Since loan management establishes the ratio of loan losses to total loan amount, it provides insight into how banks handle credit risk. At its most basic, loan management is closely associated with non-performing loans, which occur when borrowers fail to make their contractually required repayments. An NPL is defined as a quantity of borrowed money for which the debtor has not completed scheduled payments for at least ninety days in many countries and for many firms (Bholat, et al., 2016).

To account for anticipated future losses on loans in their current portfolios, banks establish loan loss provisions. Bank management have a great deal of latitude in determining this provision because it is impossible to predict these future losses with precision. Loans are classified as either performing or non-performing by Nepal Rastra Bank, with the latter group more likely to become non-performing assets. Non-performing assets lower overall operating and administrative costs in addition to overall earnings. For banks, a disbursed loan is considered non-performing assets (NPA) when consumers fail to return it on time and it becomes past due. Every commercial bank has always faced a serious challenge in trying to reduce NPA. The management of non-performing assets (NPAs) is posing several challenges for commercial banks, resulting in decreased profitability and survival struggles. Any

bank's assets section of the balance sheet is dominated by loans and advances. In a similar vein, the profits from these loans and advances take up a significant portion of the banks' income statements. Recalling that the majority of bank failures worldwide were caused by a decline in the value of advances and loans is crucial. Loans are hence referred to be risky investments. The chance of a loan not being repaid is referred to as credit risk or default risk. While non-performing loans destroy even existing capital, performing loans have numerous positive effects on society (Bhattarai, 2015).

NPLs are giving the banking industry greater issues in the current banking environment. In general, advances that don't produce revenue are what are referred to as non-performing assets. Stated differently, it describes any company's idle assets that are not able to be turned into cash within a defined amount of time. NPLs are produced when credit that banks and other financial institutions approve goes bad. NPLs as a percentage of assets indicates the bank's health (Sharma, 2004). Profit is a widely acknowledged and accepted indicator of how efficiently a business is operating. Therefore, the bank is considered to be more efficient and lucrative the higher the earnings. The main benefit of this criterion is that it offers a uniform benchmark for evaluating the effectiveness of various banks. The desire for profit continues to be an enterprise's primary motivator and encourages efficiency. The pursuit of more profitable procedures, lower unit costs, improved organization, and higher turnover is undoubtedly motivated by the need to earn a profit (Dhakal, 2002).

Profitability is essential to commercial banks' ability to succeed. The main source of revenue for commercial banks is loans. Nonetheless, the bank will be more profitable if there are fewer non-performing loans. However, if the percentage of non-performing loans is large, banks might not be able to make money; instead, they might suffer a loss since they would have to set aside reserves to cover the amount of non-performing loans (Farhan, 2012). Today, the financial industry and business community are terrified by the three letters NPA. The NPA rule, which is often feared, states that if any amount owed to a bank, including interest, is not paid within 90 days, the bank loan as a whole becomes non-performing (Barth, Caprio, & Levine, 2004). For banks and other financial institutions, loan recovery has never been easy (Goyal & Kaur, 2011). According to Borio and Lowes, the banking crisis resulted in an output loss that represented a two-digit percentage of GDP. Various studies have

identified a number of factors that contribute to the rise in non-performing loans in banks, including the national economy's downturn, insider lending, bank owners' political connections, customers' failure to disclose important information, and inadequate banking staff skills (Bario & Lowe, 2002; Richard, 2011).

High-risk loans are a concern for commercial banks. The greater the amount of delinquent loans, the more likely it is that many commercial banks have had reduced returns as a result of these loan losses. It is discovered that the majority of Nepalese commercial banks approve loans without doing thorough examinations. Increased loan defaults and non-performing loans could result from this (Bhattarai, 2015). As a result, Nepal's current financial and economic issues cannot be met by the loan management processes in place. It is necessary to look into the banks' viability of this credit risk management investment. Therefore, the purpose of this study is to look into how loan management affects a commercial bank in Nepal's profitability. Using a strong sample, this study examines the impact of loan management on banks' profitability. The results will form the foundation for policy recommendations that will help different authorities address the impact of loan management and improve the quality of banks' risky assets. Five of the twenty commercial banks that make up the study's sample are chosen for this particular analysis. They are Nepal SBI Bank Limited, Agricultural Development Bank Limited, Everest Bank Limited, Rastriya Banijya Bank, and Nepal Bank Limited.

1.2 Problem of Statements

Profitability and credit risk indicators are inversely correlated. Studying the connection between commercial banks' profitability and credit risk is highly interesting. Furthermore, no study has been conducted that can satisfactorily explain how credit risk and the profitability of Nepal's commercial banks are related. This thesis' main goal is to ascertain whether credit risk affects Nepal's commercial banks' profitability. High-risk loans can occur in commercial banks. Many commercial banks have seen lower profitability as a result of loan losses in proportion to the amount of delinquent debt that has accumulated. The majority of commercial banks in Nepal approve loans without doing a comprehensive review. This could lead to an increase in nonperforming loans and loan defaults (Poudel, 2012).

A non-performing loan is considered to be in default or very nearly so. After three months of default, many loans become nonperforming, though this can vary based on the conditions of the agreement. When principal and interest payments are overdue by more than ninety days, a loan is considered non-performing. When a loan is not repaid within a time frame set by the applicable legislation, it is considered non-performing. For the past few decades, financial institutions' non-performing loans (NPL) have been viewed as a serious problem in Nepal. Bank failure is the direct result of the banking system's high NPL level. Numerous studies examining the reasons behind bank failures conclude that a failed banking institution's level of non-performing loans is always high before it fails, and that asset quality is a statistically significant predictor of insolvency (Dhungana and Updhyaya, 2012). One measure of its performance is the quantity of non-performing loans. A lower NPL indicates improved bank financial soundness. A higher percentage of non-performing loans will indicate bad financial health and even an economic disaster (Gautam, 2018). Both academics and banking institutions are very concerned about the study of non-performing loans in Nepal. This is mostly due to the worrying rate at which the amount of commercial bank default loans in Nepal has been rising. Due to excessive governmental meddling and unlawful business interruption, Nepal has experienced a severe rise in the prevalence of fraud, embezzlement, and loan default in recent years. Because of poor risk management, the number of non-performing loans is rising, endangering banks' capacity to remain profitable. Furthermore, it is discovered that the majority of Nepalese commercial banks approve loans without doing thorough examinations. This could also result in a rise in non-performing and defaulted loans. As a result, Nepal's current financial and economic issues cannot be met by the loan management processes in place. Furthermore, given that Nepal's banking sector is still expanding, it is imperative that efficient measures are taken to reduce risk and optimize loan performance at each stage of the business's life. Therefore, the purpose of this study is to examine how non-performing loans affect the profitability of commercial banks that are listed on the Nepalese Stock Exchange. Bank executives may be able to adopt the proper lending methods after reading the study's findings and understanding how non-performing loans impact profitability (Bhattarai, 2017).

Without controlling its liquidity position, the bank cannot continue to exist. The ability to manage loan disbursements on time, their independent capacity, and all

costs determine their liquidity status. If there is an effective loan management system in place, a bank or other financial institution can pay their borrowers the necessary amount and collect the total disbursement amount on schedule. Enterprises cannot achieve their predetermined aims and objectives if they do not practice proper and effective debt management. It is therefore essential to every financial organization (Bajracharya, 2010). According to Saundeers (2005), the reason behind the extreme sensitivity of the banking industry is that deposits from depositors account for over 85% of their liability. The majority of banks rely on these deposits to create credit for their borrowers, which is how they make money. The banks are exposed to a high default risk through this credit generation process, which could result in financial hardship, including bankruptcy. Nevertheless, in addition to providing other services, banks need to extend credit to their customers in order to generate revenue, expand, and endure fierce competition in the marketplace.

The lockout and the conflict between Russia and Ukraine had a detrimental effect on Nepal's BFI industry as a whole (Pervitva, 2023). Therefore, it is imperative to investigate how loan management affects the sample commercial bank's profitability in the contemporary Nepali setting.

The purpose of the study is to provide a response to the following query.

1. What is the current pattern of the five Nepalese commercial banks' chosen LDR, NPLR, DER, and CDR in relation to their ROA and ROE?
2. Are the ROA and ROE of a chosen five Nepalese commercial banks correlated with LDR, NPLR, DER, and CDR?
3. How do LDR, NPLR, DER, and CDR affect the ROA and ROE of a chosen group of five Nepalese commercial banks?

1.3 Objectives of the study

Analyzing the effect of loan management on the profitability of commercial banks in Nepal is the main goal of this study. The particular goals are:

1. to contrast the ROA and ROE of a chosen five Nepalese commercial banks with the LDR, NPLR, DER, and CDR.
2. to investigate the correlation between five selected Nepalese commercial banks' ROA and ROE and LDR, NPLR, DER, and CDR.

3. to evaluate how LDR, NPLR, DER, and CDR affect Nepalese commercial banks' ROA and ROE.

1.4 Rationale of the study

Banks constantly deal with the issue of non-performing and bad loans during the lending and credit management process. From a macro perspective, a bank's sound lending practices benefit the nation's economic growth and vice versa. However, commercial banks' lending policies are ineffective and unproductive for a variety of reasons. Non-performing or non-productive loans typically rise in the banking industry as a result of policy implementation flaws. As to Wehnert and Shakya (2001), the central bank of Nepal, Rastra Bank, has directed an increase in loan loss provision.

The loan loss and provision portfolios have an impact on the banks' overall financial stability. The purpose of this study is to draw attention to current problems with nonperforming loans and loan loss provisions. However, this study will contrast the consequences of non-performing loans (NPLs) on different parts of the main activities of government and private banks, such as deposit collecting and loan lending (Timilsina, 2001).

The primary source of revenue for any commercial bank is credit. Without a doubt, the amount of quality loans a bank makes determines how much money it makes. Studying the lending processes of commercial banks is important for professionals, shareholders, bankers, and students who are interested in learning about credit practices and management. The foundation of this research is an evaluation of the credit practices of Nepal Investment Bank Ltd., Nabil Bank Ltd., and Everest Bank Ltd. Finding out how productively their money is being used by shareholders, depositors, and other creditors in the NBL, RBB, ADBL, SBI, and EBL banks is the primary benefit of the study. Similarly, the performance of banks also interests other financial agencies, such as financial specialists. In addition to this, the study will assist the bank's management in evaluating the efficiency of the loan program and the bank's policies relative to those of its rivals. Due to a few gaps, non-performing assets are now thought to be the primary issue facing commercial banks. As such, the study will be equally important to the central bank in developing its new credit strategy.

1.5 Limitation of the study

The following are the study's limitations:

- i. Using a quota sampling technique, the study uses secondary data taken from commercial banks' audited financial reports. As such, the results of the study might not be easily applied or extrapolated outside of the particular banks that were part of the sample.
- ii. Out of all the commercial banks over a ten-year period, just five banks make up the sample. The study's capacity to capture the diversity found throughout the commercial bank industry may be hampered by the small sample size.
- iii. The lack of pertinent literature on the connection between non-performing assets and bank profitability in Nepal is a problem for the study, particularly when applying the quota sample method. The study's breadth and depth may be impacted by this vacuum in the literature.
- iv. While the study uses metrics like ROA and ROE to analyze the relationship between exploratory variables and bank profitability and performance, it ignores other variables that could have been very useful in providing explanatory power, like earnings per share and the percentage of non-performing loans to total assets.
- v. Not all of the elements affecting bank performance are included by the study. This omission may restrict the study's ability to fully comprehend the issues involved.
- vi. .It is important to use caution when extrapolating the study's conclusions to the whole commercial bank market in Nepal because it is based on data gathered from a sample of commercial banks. It's possible that the features of the chosen sample don't accurately reflect the dynamics of all of the nation's commercial banks.

CHAPTER-II

LITERATURE REVIEW

Reviewing the literature entails looking into research papers and 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. The literature review may also function as a reader's guide and bibliographic index. It also shows how the current study fits into the bigger picture. Developing specific knowledge and competence in one's field is the aim of reviewing the literature. There are four main sections in this chapter.

2.1 Conceptual review

2.1.2 Conceptual Loan Management

The theory of loan management takes into account a number of factors related to lending decisions and their effects. Long-term lending contracts with one-sided lender commitment are one part of the subject; these contracts are designed to finance certain investments and provide intertemporal consumption for borrowers who are unable to repay their loans. An additional facet scrutinizes the fluid character of loan pricing determinations, taking into account the enduring associations between lenders and borrowers. While high interest rates can be profitable in the short run, they also damage a bank's customer base and long-term earnings. Scholars also examine the practice of applying concepts from one theoretical domain to problems in another, emphasizing the benefits and drawbacks of integrating theories from other fields. In addition, the bank considers observed phenomena like client loyalty, off-balance sheet activity, and the predicted value of the complete customer relationship when making a lending decision. Last but not least, experiments verifying the division of loan contracts according to project quality are used to analyze the Rothschild-Stiglitz equilibrium in the context of competitive lending under adverse selection (Funso, et al. 2012).

Commercial banks use their customers' information to select which loans to make; this information is based on the customers' solvency, level of management, financial standing, and the bank's own credit demand. On the one hand, the commercial banks will be more vulnerable to default if their decision is overly

lenient. However, if the lending restrictions set by commercial banks are very onerous, it may result in a certain amount of client attrition and a decline in market share. Furthermore, the use of loan limitations will have an immediate impact on the business's operational performance if clients of the company receive commercial bank loan limitations. Consequently, it is crucial from a theoretical and practical standpoint to identify and utilize the commercial bank in a reasonable manner in order to restrict the amount of loans that the firm offers its clients, enhance the commercial banks' risk prevention and control mechanisms, and enhance both parties' operational performance. Currently, the three primary areas of focus for both local and international commercial bank loan limitation research are as follows: First, the factors that impact commercial banks' loan limitations. The second is the procedure used to determine the limitation on commercial bank loans. The effectiveness of commercial bank loan limitations comes in third. In order to encourage the application and development of the loan limitation management theory and method, this article will provide an overview of the research status regarding domestic and international commercial bank loan limitation from three perspectives: factors influencing the credit of commercial banks, methods of determination, and the efficiency of commercial bank loan limitation. (Kolade, & Oja 2012)

A loan is the total amount of money given to a borrower (customer) by a creditor (bank), either with or without security. A loan is the total amount of money that a bank lends (Oxford Advanced Learners Dictionary, 2005). A significant line item on the asset side of a commercial bank's balance sheet is loans and advances. One of the main sources of income for banks is interest from loans and advances. A bank must plan its credit portfolio in order to avoid adding bad loans and negatively affecting profitability (Varshney & Swaroop 2001).

Credit is the financial resources that arise when a lender gives a borrower cash or other assets in exchange for a promise to repay the lender at a later time or on demand. There are four main ways that banks offer loans (Chhabra & Taneja, 2008).

a. Overdraft: It represented the amount that was taken out over what was deposited. Stated differently, banks offer a maximum amount of money to valued customers based on their trust and transaction volume.

b. Cash loan: The loan amount is credited to a bank account formed in the credit taker's name rather than being given in cash directly. Every loan generates deposit in this way.

c. Direct credit: A direct credit is an automated clearing house system-based electronic money transfer. The payer starts the payment process by sending money straight to the bank in the form of guarantees and letters of credit.

4. Bill discounting: The act of cashing a bill prior to its maturity date is known as bill discounting. The charges are subtracted from the bill by the bank.

Factors Affecting the Loan management of Commercial Banks

a) Main Influencing Factors.

Risk reward, contract term, commitment cost, mortgage condition, and other factors are some of the main factors that affect the loan limitation of commercial banks (Dennis & Nandy, 2000; Andre, Mathieu & Zhang, 2001; Zambaldi, Aranha & Lopes et al, 2011); on the other hand, the following factors have a relationship with credit rating: loan limitation and enterprise scale, growth, stability, profitability, the industry, ownership concentration, diversification, current assets, current liabilities, owner's equity, fixed assets net value (Ariccia & Marquez, 2004; Sumit, 2004; Chakraborty & Hu, 2006; Sufi, 2009; Pessarossi, Godlewski & Weill, 2012; Tong, 2012; Sheng Lisheng and Wang Heng, 2007). For instance, credit rating, owner's equity, current assets, fixed assets net value, current liabilities, main business cost, initial inventory, ending receivables, and ending inventory are used as explanatory variables by Shen Lisheng and Wang Heng (2007). The artificial neural network model is used to test the factors that influence bank credit risk.

b) Other Influencing Factors.

A number of domestic academics have also examined the other variables, including interest rates, corporate returns, and default rates. Liu Lvke and

Zhang Dingsheng (2012), for instance, used data from the Australian third quarter of 1997 to the fourth quarter of 2010 to examine how sensitively various loan amounts were to changes in interest rates. The findings demonstrated that while there is no discernible impact on large loans, changes in policy rates for varying loan amounts clearly affect small and medium-sized loans. In addition, the degree of interest rate policy's influence over secondary loan amounts is greater than that of small loans. Hu Jinyan and Zhang Qiang (2016) conducted an empirical investigation into the link between the average loan amount, the rate of return, and the default rate using panel data from 66 small lending enterprises in Shandong province between 2013 and 2015. The average loan amount and income have an inverted U-shaped relationship, according to the data; the loan amount's marginal revenue is influenced by the company's default rate and exhibits a nonlinear threshold relationship.

Off balance sheet activities

operations carried out by banks that generate assets and liabilities based on uncertain events are known as off-balance sheet operations. Commercial banks' balance sheets do not accurately depict their entire range of operations. Banks engage in a wide range of fee-based activities, including the issuance of various guarantees, loan commitments, derivatives, endorsements, and credit letters. There are two different kinds of off-balance sheet activities (OBS). The first type moves onto the assets side of the balance sheet, where income items are realized on the income statement upon the occurrence of contingent events. The second type moves onto the liabilities side of the sheet, where expense items are realized on the bank's income statement upon the occurrence of contingent events. OBS operations have an impact on the bank's credit risk and are disclosed in order to evaluate that risk. Some significant loans for off-balance sheet activities:

I. Loan sales: Another name for this is participation in secondary loans. A bank that sells loans to other financial institutions enters into an arrangement to sell all or a portion of the loan's cash flow streams. The sold loans were deleted from their balance sheet. Banks maintained their serving rights, and borrowers are required to

send the selling bank the required amount of loans. In order to satisfy their liquidity needs and turn a profit, they sold the loan for a little more than what they had originally intended to, and they also paid a premium for it because they were able to earn a higher interest rate.

ii. Creation of fee income: Off-balance sheet commercial letters of credit (LCs) are one of the international trade finance components. A bank's letter of credit serves as an assurance to its client that the loan will be paid as agreed. Credit and documentary risk are borne by banks. It only demonstrated the bank's commitment to giving clients loans within a set maximum amount within a given time frame.

III. Derivative securities: In addition to credit risk, banks were particularly exposed to interest and foreign exchange risks. Financial instruments known as derivative securities have values that are based on the values of other assets that are generated from underlying assets. traded a variety of derivative securities, including swaps, options, futures, and forwards. Financial derivatives transactions have an impact on a bank's risk profile even though they are not recorded on the balance sheet (source: <https://www.fdic.gov/regulations/safety/manual/section3-8.pdf>).

Credit risk management

The world of finance is ever-changing. Interest rate, currency rate, commodity, and real estate price fluctuations are nothing new in our dynamic financial world. The bank's corporate strategies and performance are weakened by these swings in economic and financial variables. As a result, banks must have a risk management framework. By managing credit risk well, commercial banks can lower risk and possibly even non-performing assets. Commercial banks will be able to identify their most profitable business and adjust product prices based on risk once they have a thorough understanding of their expenses and hazards. As a result, financial institutions need to have a clear strategy for managing credit risk that includes new credit procedures and systems, organizational modifications, and risk assessment methods.

Five key areas should be the emphasis of credit risk management.

- a) The procedure for sanctioning and monitoring credit.
- b) Methodology for Collateral

- c) New business prospects give rise to credit concerns.
- d) Exposures to credit in relation to capital or overall advances.
- e) Specializing in associated risk factors

Credit risk management technique

Since loans are a straightforward function that adds value to businesses, the majority of the assets of finance organizations are in the form of loans. The primary risk is the borrower's potential failure to make loan payments. Therefore, it is imperative that credit risk be managed appropriately and sensibly. In their paper that was published in the Journal of Banking and Finance, Merton and Morten proposed three methods for managing credit risk (Miller & Merton; 1995: 483-489).

Risk base pricing

It has been demonstrated that risk-based pricing forces lenders to adjust the interest rate to reflect the loan's inherent risk. Pricing should follow a clear process rather than relying exclusively on past loan loss data. Loan pricing typically follows the prime rate plus basis in practice. The bank's creditworthy clients are able to bargain for rates that are lower than the prime rate because it is not the lowest rate they charge. Banks try to finish with open market instruments like corporate bonds and commercial paper using the discount prime rate (Isanzu, 2017).

Assets restriction

The assets of the borrower are subject to claims by banks, lenders, and other creditors. Creditors are safeguarded since all claims are covered by the proceeds from the sale of assets, so long as the market value of assets is greater than the value of obligations. Alternatively, businesses will not turn over assets to creditors that exceed the value of claims made against them as long as they have a positive net worth. Therefore, trying to make sure that the value of assets constantly exceeds the value of claims is one strategy for lenders to defend themselves. The fundamental methods of achieving this goal are limiting the quantity of debt that a borrower takes on and limiting the unpredictability of asset value. Lenders can effectively apply asset limits or try to create borrower incentives for compliance through the use of restrictive covenants in loan agreements and the quality of bank customer relationships (Isanzu, 2017).

Monitoring

Loan losses can be reduced by auditing asset values, seizing assets before shortages arise, or requiring the posted value of collateral assets to equal or exceed the promised payments, if lenders are granted a contractual right to continuously monitor asset values and to confiscate assets. Monitoring with constant surveillance is expensive for private loans, for which financial organizations have significant organizational experience (Ali & Dhiman, 2019).

Type of risk

I. Credit risk is the chance of suffering a loss if a borrower defaults on a loan or doesn't fulfill their end of the bargain. On the other hand, credit risks include counterparty, default, and nation risk (Lalon, 2015).

ii. Operational risk: According to Lalon (2015), operational risk is the possibility of suffering a loss as a result of insufficient or ineffective internal processes, personnel, controls, systems, and outside occurrences.

ii. Market risk is the possibility of uncontrollably large financial losses for financial institutions as a result of changes in market pricing. According to Lalon (2015), the fluctuation of interest rates, foreign exchange rates, equities risk, currency risk, and commodity risk are among the sources of market risk.

2.2 Theory of Loan Management

The real bills concept, also known as the commercial loan theory, is the oldest theory of banking. According to the commercial loan theory, banks should only make short-term, self-liquidating loans on commercial paper. The commercial loan theory, according to Hosna & Manzura (2009), is designed to persuade bank lending as well as other economic activity. If this theory is strictly applied, it will become clear that its expected function is to provide money for changes in overall economic activity. It is clear that Deposit-Money Banks (DMBs) in Nigeria are fond of this ideology. Nigerian bankers think that depositors' funds should be used appropriately in short-term loans because their resources were repayable quickly (Abedin, 2020).

According to Kargi (2011), the strong ties to this idea seem quite conventional when one considers that there were little or no secondary reserve assets available at the time the theory was dominant, which may have provided the bank with a buffer against liquidity. Furthermore, this hypothesis ignores the credit requirements of Nigeria's emerging economy. It hasn't inspired banks to provide financing for the acquisition of real estate, machinery, plants, and homes. A theory's inability to acknowledge the relative stability of bank deposits is demonstrated by its insistence that all loans must be repaid in the regular course of business. Demand deposits are on demand, although it's unlikely that every depositor will ask for payment at once. As a result, a bank can extend funds for a respectable amount of time without running the risk of illiquidity because to deposit stability. Despite its shortcomings, the real bills doctrine, often known as the commercial loan theory, has been a widely accepted banking theory. There are still traces of it in the way many bankers think, the way bank regulatory bodies are structured, and the way banks examine themselves. It is impossible to comprehend modern banking without comprehending our financial past, and it is impossible to comprehend banking past without comprehending commercial loan theory (Abedin, 2020).

.2.2.1 The Credit Risk Theory

According to Salas and Saurina (2002), credit risk is the chance that a borrower will stop repaying the loan, leading to a default. Losses on principal and interest are included in the risk, which ultimately belongs to the lender. A whole or partial disruption loss could occur, for instance, if an insolvent bank is unable to reimburse a depositor for their money. The lender may run a credit check on the potential borrower, demand that they obtain the necessary insurance, like mortgage insurance, or look for collateral or guarantees from other sources in order to lower their risk. According to Owojori, Akintoye, and Adidu (2011), debtors' needed interest rates typically rise in proportion to the degree of risk involved in their loans.

2.2.2 The Anticipated Income Theory

After doing a great deal of research, Prochnow created a revolutionary lending theory in 1949 that he called "the Anticipated Income Theory". According to

Afriyie and Akotey's (2011) analysis, the bank aimed to liquidate term loans from the borrower's predicted earnings in all circumstances, regardless of the structure and type of the borrower's organization. Liquidity is obtained by predicting the borrower's future income as opposed to selling the borrower's assets, as in the conventional or commercial theories of liquidity, or moving the term loan to another lender, as in the shiftability theory of liquidity. This notion basically says that banks should base their loan choices on the borrower's future income rather than his present income. This hypothesis is referred to as a "future-oriented approach" to bank advances by Kolapo, Ayeni, and Oke (2012). Sometimes it's referred to as the "cash flow approach" to financing. If this theory is understood correctly, the commercial loan concept was the only idea it faced competition from, not the shift ability hypothesis. It does not disprove the shiftability argument, which maintains that a bank's secondary reserves serve as its primary source of liquidity. Instead, it concentrated again on the kind of loans that banks should be allowed to make, but it came to very different conclusions than those of those who backed the theory of commercial lending (Moti, et al. 2012).

2.2.3 Commercial Loan Theory

The commercial loan conception, often known as the real bills concept, is the earliest banking theory. According to the commercial loan theory, banks should only offer short-term, self-liquidating commercial paper loans. The goal of the commercial loan hypothesis, according to Hosna and Manzura (2009), is to significantly impact both bank lending and overall economic activity. Applying this idea strictly will show that it is anticipated to react financially to changes in the general level of economic activity. It is clear that this attitude is endorsed by Nigeria's Deposit-Money Banks (DMBs). Nigerian bankers think it's better to use these depositors' money for short-term loans because it may be returned quickly (Masinde & Mugenda 2012).

According to Kargi (2011), the strong connections to this theory appear fairly traditional when one considers that the theory gained popularity when secondary reserve assets were scarce or nonexistent, possibly serving as a buffer against the bank's lack of liquidity. Furthermore, this hypothesis ignores the credit requirements of Nigeria's expanding economy. It hasn't made banks more willing to lend money to people buying houses, vehicles, equipment, or plants. The

inability of a theory to acknowledge the relative stability of bank deposits is demonstrated by its insistence that all loans must be repaid in the regular course of business. Demand deposits are made on demand, despite the unlikely scenario in which every depositor will ask for payment at once. Because of deposit stability, a bank can thus extend money for a reasonable period of time without having to worry about illiquidity. The real bills concept, also referred to as the commercial loan idea, has gained widespread acceptance in the financial community despite certain drawbacks. It remains evident in the mindset of many bankers, the organization of bank regulatory agencies, and the self-evaluation practices of banks. One cannot understand modern banking without understanding our financial history, and one cannot understand banking history without understanding commercial loan theory.

2.2.4 The Shift ability Theory

According to this idea, assets can be held in other movable open-market assets, such as government securities, in addition to self-liquidating bills (Moti, Masinde & Mugenda, 2012). It is crucial to stress that the commercial loan theory was neither superseded nor rendered invalid by the shiftability thesis. Instead, by broadening the scope of assets considered suitable for bank ownership, the shiftability hypothesis offered a more comprehensive picture of the banking industry. The shiftability argument only says that there are other acceptable assets outside commercial loans, not that they are bad assets for banks. The main tenet of the shiftability theory is that a bank's liquidity is determined by its capacity to sell its assets to a third party at a predetermined price. Thus, short-term open market investments in a bank's asset portfolio would be quite reasonable.

Hosna and Manzura (2009) assert that there is little doubt that the shiftability hypothesis has a significant impact on banking operations. Essentially, it shifted the emphasis of regulators and bankers from loans to investments as a way to provide bank liquidity. Indeed, proponents of the idea argued that the purported liquidity of short-term, commercial loans was fundamentally false in the first place. According to Kargi (2011), the shiftability hypothesis and the commercial loan theory both had serious flaws. The various writers on the subject all agreed

that the real issue lay not so much with the theory itself as it did with the bank management practices that the theory gave rise to. The problem with the notion was that, although an individual bank might move its assets to obtain the necessary liquidity, this was not the true for all banks put together.

2.2.5 The Liability Management Theory

According to this hypothesis, if a bank has a reserve shortage, it need not adhere to conventional norms because reserve funds can be bought or acquired through short-term loan instruments on the money market. It is made clear by Shafiq & Nasr (2010) that this does not imply that the bank handles its obligations and assets in a passive manner. Instead, the theory still holds that a bank's asset structure is a major factor in supplying liquidity to the bank. However, the theory only considers one aspect of liquidity, contending that the bank may create liquidity by using its responsibilities. A bank needs liquidity to permit deposit withdrawals and to satisfy the justifiable lending demands of its customers. A bank that cannot or will not lend money to its depositors in times of need is unlikely to keep those depositors for very long (Shafiq & Nasr 2010). Bank loans are not only profitable.

2.2.6 Theory of Profitability

Economists and philosophers have worked hard to understand the concept of "profit" and advance their theories. Numerous theories of profit in economics have emerged as a result of this effort to investigate the causes of profit. Gaining an understanding of the basic theories would be wise.

Walker's Theory of Profit (Profit as Rent of Ability): F. proposed one of the most well-known theories of profit. A. Walker, who defined 'profit' as the rental of an entrepreneur's "exceptional abilities" over other people. F. According to A. Walker, profit is the differential between the lowest and highest-earning entrepreneurs. Walker makes the assumption that there is perfect competition and that all businesses have equal access to managerial talent. Walker believed that in an environment of perfect competition, there could be neither pure nor economic profit, and all businesses would simply make marginal wages—also referred to as "normal profit" in the field of economics. Walker stated that the difference between what a more efficient firm can produce and what the least efficient firm

can generate with the same amount of capital and labor is what drives earnings for profit-making firms (Charles & Kenneth 2013).

Clark's Dynamic idea: Profit Is Derived from Dynamic Entrepreneurship: In 1900, J. B. Clark promoted his idea of profit. J. According to B. Clark, profits develop in a dynamic economy as opposed to a static one. A static economy is one in which there is complete freedom of competition, capital and population are stationary, the production process does not change over time, goods remain homogeneous, factor mobility is unrestricted, risk and uncertainty are absent, and risk that does exist is insurable. Therefore, in a static economy, businesses only generate "normal profit" or management salaries. Conversely, general changes are what define a dynamic economy. The elements in the dynamic environment are subject to change (Charles & Kenneth 2013).

Hawley's Theory of Risk and Profit: F. B. Hawley promoted the risk theory of profit in 1893. Hawley claims that a variety of factors might cause risk in business, including a product's obsolescence, an unanticipated decline in market pricing, the unavailability of necessary raw materials, the introduction of superior replacements by competitors, and the possibility of fire, war, or other similar incidents. Taking risks is seen as a necessary prerequisite for dynamic production, and those who do so might legitimately expect a separate benefit known as "profit." According to Hawley, profit is merely the cost that society bears when taking on corporate risk. He contends that businesspeople would not take on risk if they did not anticipate receiving a sufficient return above actuarial value, or a premium on calculable risk. According to Hawley, profit is divided into two components: the first is the incentive to suffer the possibility of being exposed to risk, and the second is the compensation for the average loss associated with the various classes of risks that the entrepreneur is required to assume (Charles & Kenneth 2013).

Knight's thesis of Profit: Accepting Uncertainty is the Foundation of Profit: Unlike Hawley's thesis, Frank Knight viewed profit as a residual return to accepting uncertainty rather than risk. Risk was divided by Knight into calculable and non-calculable hazards. He attempted to discern between risk and uncertainty during this process. Risks that can be statistically estimated based on available

data are known as calculable risks. Examples of these risks include those resulting from theft, fire, accidents, and similar events. Carved out hazards can be insured. Risk categories that have non-calculable likelihood of occurring, like some production cost components that are difficult to estimate precisely, are not covered by insurance. "Uncertainty" is a symbol for the unfathomable risks. Decisions must be made by the entrepreneur in this unpredictable environment. He makes money if he makes wise choices. Before Knight, Hawley and Pigou demonstrated that business owners made money by taking on the risks involved in producing a project. Nonetheless, F.H. Knight has made a substantial contribution to the notion of profits based on uncertainty. He has made a distinction between known and unanticipated changes and risks and uncertainty. Knight claims that as long as changes and their effects are unpredictable, profit will result from dynamic adjustments. Profit arises only from those modifications whose happening is unknown beforehand. There wouldn't have been any future uncertainty or profits if the changes had been anticipated and foreseeable or if they hadn't happened at all. Profits arise as a result of future uncertainty. People would undoubtedly change things to the ideal state where all prices would equal expenses and profits would not develop if future conditions could be fully predicted in the present. Profits are the result of ignorance and uncertainty about the future. Thus, it is evident that entrepreneurs must do the task of manufacturing in order to reverse the uncertain condition. They have to project in advance the future state of the product's demand as well as other elements that impact price and expenses. They enter into contracts with suppliers of production elements in advance at predetermined rates of compensation based on their predictions and anticipations (Charles & Kenneth 2013).

The Innovation Theory of Profit, as promoted by Joseph A. Schumpeter in 1934, states that innovation is rewarded with profit. According to Schumpeter, elements like the emergence of interest and profits and the recurrence of trade cycles are merely incidental to a specific process of economic development. He also thought that certain economic variables or factors could be explained by the same principles that could explain the process of economic development. Based on his theory of economic growth, Schumpeter developed his theory of profit. Schumpeter began his explanation of the process of economic growth with the

concept of stationary equilibrium, which is characterized by equilibrium in all domains. There is no profit when there is stationary equilibrium, meaning that total business receipts and total outlays are exactly equal (Charles & Kenneth 2013).

2.3 Empirical Review

This section reviews the research studies, work papers, and dissertations completed by academics from different geographic regions, including dissertations completed by scholars in Nepal. These studies and work papers are related to the financial performance analysis of commercial banks, finance companies, and other study areas.

2.2.1 Review of Previous Journals

The impact of non-performing loans (NPLs) on bank profitability was investigated by Jaswal et al. in 2019. This study examined the ways in which public sector banks manage non-performing loans resulting from lending to priority sectors, the impact such loans have on the bank's overall profitability, and the areas in which the bank's operational structure falls short when it comes to effectively managing loans to critical industries. The secondary data for the study was sourced from publications, journals, websites, and studies that described the development of India's banking sector. The investigation of non-performing loans from public sector banks between 2007 and 2016 is the exclusive topic of this study. They found that private sector banks are far more skilled at managing their non-performing loans (NPLs) and recovering loans that they have made than public sector banks. Private sector banks have a stronger relationship between net profit and nonperforming loans than do public sector banks. Private sector banks have higher net profit growth and a positive relationship with non-performing loans (NPLs) than do public sector banks based on correlation and regression analysis. Regression analysis of the data shows positive trends, suggesting that an increase in non-performing loans (NPLs) is correlated with an increase in other variables.

The impact of NPLs on bank profitability was examined by Ramaswamy (2020). The aim of this study was to determine whether non-performing loans (NPLs) were significantly impacted by the financial head (total assets, total advances, and total deposits), as well as how NPLs impacted bank profitability. A descriptive research

design was employed in the study. Convenience sampling was employed. secondary data obtained from bank annual reports and the RBI website between 2014–2015 and 2018–2019. To ascertain the impact and relationship, regression analysis and correlation will be employed. They found that NPL in public banks was higher than in private banks. To recover from nonperforming loans (NPLs), the banks will now need to step up and be ready to take decisive action. The analysis also demonstrated that NPL is not a reliable indicator of a bank's soundness on its own. With the exception of HDFC Bank, the analysis indicated a negative association between net profits and non-performing loans (NPLs). Furthermore, NPLs had a big impact on net profits—but only in the situations of SBI, Axis, and HDFC Bank. Multiple regression analysis shows that the financial heads as independent variables have no appreciable impact on bank non-performing loans (NPLs), aside from SBI.

Khadka (2020). This study examined the percentage of non-performing loans (NPLs) in total assets, total deposits, and lending by commercial banks to ascertain whether or not Nepalese commercial banks are following NRB criteria on non-performing loans. The type of study design that is being used is descriptive. Through annual reports, NRB instructions, and banking publications, five sample banks provided the secondary data for this study. Regression analysis, correlation, mean, and standard deviation were among the techniques used in data analysis. Of all the banks in the investigation, Nepal Bangladesh Banks limited appeared to have the highest percentage of non-performing loans (NPL). In a similar vein, Nepal SBI Banks and Bank of Kathmandu are placed third and second, respectively. The bank's situation seems to be fairly satisfactory given that Nabil Bank Limited has been reducing its non-performing loan (NPL) each year, Nepal Investment Bank's NPL has been reducing at a minimum in comparison to all other banks, and no bank has been following the NRB's instructions regarding the loan loss provision.

According to Bhattarai's (2020) research, non-performing loans (NPLs) represent a major problem for the banking industry. It significantly affects profit margins as well as the success or failure of banks. This study examines the impact of non-performing loans on Nepal's commercial banks' profitability. A total of sixty observations were collected during a five-year period, from 2013–2014 to 2017–2018, using panel data from twelve commercial banks. Multiple regression analysis has been performed on the data. The fixed effect model, random effect model, and pooled ordinary least

square model have all been used to evaluate profitability. The following variables were regarded as independent: inflation (INF), non-performing loans (NPL), capital adequacy ratio (CAR), liquidity (LIQ), and bank size (SIZE). Return on equity (ROA), a measure of profitability, was considered a dependent variable. The results of three different models demonstrated a substantial negative correlation between ROA and NPL, CAR, and LIQ. Similarly, SIZE and ROE have a significant positive association. The INF has a positive but insignificant impact on ROE. Based on the analysis, it was determined that the factors SIZE, NPL, CAR, and LIQ significantly affected profitability. In terms of profitability, the INF has little effect. Nevertheless, the profitability is severely harmed by nonperforming loans. Sincere payments have been received by the bankers for more than ninety days. It logically influences the nation's economy as well.

Abedin (2020) conducted study on nonperforming loans and their impact on the banking sector, taking a close look at Bangladesh's current circumstances. Finding out the current status of non-performing loans (NPLs) in Bangladeshi banks was the aim of this study. The study uses publicly accessible data that was collected from the websites of Bangladesh's scheduled banks, the annual reports published by the Bangladesh Bank, and World Bank observations conducted between 2008 and 2019. He learned that for the previous 20 years, non-performing loans have been the main problem facing Bangladesh's banks. Although the global average for non-performing loans (NPLs) is 2% or lower, Bangladesh's situation is far more intricate. Bangladesh's NPL percentages are four to five times greater than the average, which is concerning the overall banking industry. The current analysis's findings indicate that the NPL ratio has been trending rising over time.

According to Pokharel & Pokharel (2020), the best measure of a nation's financial health is its non-performing loans (NPLs). The amount of non-performing loans affects the banking industry, the country's economy, and the financial system as a whole. This investigation is motivated by the need to evaluate the impact of non-performing loans on the profitability of Nepalese commercial banks. July 16, 2013, to July 16, 2018 is the study's time span. Furthermore, a study is carried out to examine the impacts of various bank groups. Particularly, municipal and government-owned banks that engage in this type of financial sector activity. Five out of the twenty-four distinct private division banks and one of the three banks that the government claims

have been the final targets of the inquiry as a sample. The investigation is dependent on optional information gathered from Nepal Rastra Bank's website and the yearly report of banks of note.

Singh et al. in (2021) The impact of nonperforming loans (NPL) from Nepalese conventional banks was found by. The biggest commercial banks in Nepal make up the study's population, and the data used in it span the years 2015 through 2019. The secondary data used in this study came from each bank's annual report as well as GDP and inflation data that were taken from the World Bank database. The data analysis method used in this study is multiple regression analysis. The study's independent/explanatory factors included bank size, GDP growth, inflation, return on asset (ROE), and capital adequacy ratio (CAR); the dependent variable was non-performing loans (NPLs). The study's conclusions show that while bank non-performing loans (NPL) are not considerably impacted by CAR, NPL is highly impacted by bank size, GDP, inflation, and ROE. In other words, although most studies show a negative influence, this research shows a notable and beneficial impact of GDP on NPL. It demonstrates that there is a significant increase in the expansion of Nepalese banks when GDP growth increases, even in the absence of discernible changes in income growth. Therefore, GDP growth has a favorable and considerable impact on commercial banks' non-performing loans (NPL). Therefore, while making decisions regarding non-performing loans (NPLs), lenders and regulators need to consider GDP growth closely.

The impact of non-performing loans on profitability was studied by Uddin (2022) after accounting for operational efficiency loans. The focus of the study is on state-owned commercial banks in Bangladesh. Purposive sampling is the method used to choose the sample banks. One source of secondary data has been the annual reports of particular banks. The techniques used are path analysis, multiple regression analysis, and descriptive data analysis. Examining the effect of non-performing loans (NPLs) on Indian banks' financial performance was their goal. Two prestigious banks—one from the public and one from the private sector—have been selected for the study. The websites of the banks and their independent financial statements provided the secondary data on net profit and NPL provisions. Data from 2012 to 2019 have been collected over eight years. Throughout the analysis process, the data have been shown graphically and tabularly. They found that the banks' allowances for non-performing

loans had an effect on their net earnings. The amount that banks set aside for non-performing loans has a significant influence on their ability to turn a profit. Because of the sheer volume of non-performing loans (NPLs), which serves as a barrier to making larger profits, provisions for NPLs have a stronger impact on net profit in the case of SBI. Banks generate more revenue from a wider range of sources than SBI does, and HDFC Bank is less affected. It is clear from this comparison that public sector banks have considerably more non-performing loans (NPLs) than private sector banks. Government banks have so many non-performing loans (NPL) that the loss is turned into a profit when their provisioning is deducted from the net loss.

Reshmi (2023) examined the impact of nonperforming loans on the profitability of Nepal's commercial banking sector. An unbalanced data set from secondary sources, encompassing 13 commercial banks operating in Nepal between 2069 and 2070 B.S., was used for study. & 2078–2079 B.S. been put to use. Conclusions were drawn after assessing the adequacy of the fixed effect, random effect, and pooled OLS regression models using the Hausman and Breusch-Pagan tests. The study's findings demonstrate that both return on equity and return on asset are statistically considerably impacted negatively by the nonperforming loan ratio. Loan loss provisions have a slight negative influence on bank profitability (ROA and ROE). Interest income has a favorable and significant impact on ROA but a negligible yet positive influence on ROE. While it has a significant positive impact on ROA, the total loan to deposit ratio has a negative impact on ROE. Bank size has a statistically significant negative influence on both ROA and ROE. ROE is significantly impacted by CAR, but ROA is not as much.

Table 1

Summary of Empirical Review

| Author /Year | Objectives | Methodology | Finding |
|-------------------|--|---|---|
| Reshmi, B. (2023) | To examine the impact of nonperforming loan on the profitability of Nepalese | 13 Commercial banks of Nepal over the period of 2069/70 B.S to 2078/79 B.S have been employed | According to the findings from the study it is observed that nonperforming loan ratio has |

| | | | |
|--|---|--|---|
| | Commercial banking sector | for the purpose of analysis. Pooled OLS model, random effect model and fixed effect model as a regression model after testing their appropriateness using Breusch pagan test and Hausman test. | negative and statistically significant impact on both return on asset and return on equity. Loan loss provision has negative but insignificant impact on banks profitability (ROA and ROE). |
| Uddin, M. K. (2022) | To investigate the effect of nonperforming loans on profitability with operating efficiency as an intervening variable. | The technique of data analysis used is descriptive, multiple regression analysis, and path analysis. PROCESS Macro Mediation Model 4 has been applied to examine the mediation effect. | The study finds that non-performing loan has a positive but insignificant effect on operating efficiency; on the other hand, operating efficiency has a negative and insignificant impact on profitability. |
| Singh, R., Sharma, R., Poudel, N., & Bhandari, B. (2021) | To find out the effect of Non-Performing Loan (NPL) of Nepalese conventional banks | Multiple regression analysis with secondary data of major commercial banks in Nepal from 2015–2019. | ROA, Bank Size, GDP, and Inflation have a significant effect on NPL but CAR does not. The GDP effect on NPL is positive and Significant while most studies show a negative effect. |
| Gaur and Mohapatra | To examine the NPL and profitability | Fixed effect and random effect panel | A highly negative correlation exists |

| | | | |
|-----------------------|--|---|--|
| (2021) | relationship for the Indian banking sector. | the regression models with secondary data of 37 scheduled commercial banks of India from 2005–2018. | between NPL and the two profitability measures ROA and ROE. |
| Jagongo (2021) | To investigate the effect of nonperforming loan on financial stability of deposit taking SACCOs in Kenya | Desk research with secondary data from published studies, reports and statistics | Non-performing loans and their effect on the financial stability of SACCOs have not been adequately featured in any of the studies reviewed. |
| Jha and Grover (2021) | To examine the extent to which the NPLs affect the profitability of the banks in India. | Tabular and graphical analysis with secondary data of two leading banks (one private and one public) from 2012 to 2019. | Provisions for NPL do impact the net profits of the banks. The impact is more in case of SBI (public sector bank) than HDFC Bank (private sector bank). Public sector banks are much worse in terms of NPLs than private sector banks. |
| Singh et al. (2021) | To find out the effect of Non-Performing Loan (NPL) of Nepalese conventional banks | Multiple regression analysis with secondary data of major commercial banks in Nepal from 2015-2019. | ROE, Bank Size, GDP, and Inflation have a significant effect on NPL but CAR does not. The GDP effect on NPL is positive and |

| | | | |
|------------------------------------|---|--|---|
| | | | significant while most studies show a negative effect. GDP growth has a positive and significant effect on the NPL of commercial banks. |
| Pokharel, S. & Pokharel, S. (2020) | To evaluate the effect of Nonperforming loan on the profitability of Nepalese commercial banks. | Secondary data analysis with data from the Nepal Rastra Bank's website and annual reports of five private banks and one government bank from 2013 to 2018. | The study did not report the specific findings or results of the data analysis. |
| Abedin, M. Z. (2020) | To investigate the current status of NPL in the banking industry of Bangladesh. | Published data from the annual reports of Bangladesh Bank, websites of the scheduled banks of Bangladesh and the World Bank from 2008 to 2019. | NPL are the burning problems for the banks in Bangladesh. The NPL percentages in Bangladesh are 4 to 5 times higher than the standard of 2% or less. The NPL ratio is increasing constantly with the advancement of time. |
| Bhattarai, R. (2020) | To examine the effects of nonperforming loan on profitability of commercial banks in | Panel data from twelve commercial banks of five years from 2013-2014 to 2017-2018. Multiple | NPL, CAR, LIQ have significant and negative effect on ROA. SIZE has significant and |

| | | | |
|----------------------|---|---|--|
| | Nepal. | regression model with Pooled OLS, fixed effect and random effect models. | positive effect on ROE. INF has positive but insignificant effect on ROE. NPL, CAR, LIQ and SIZE have major role to determine profitability. |
| Khadka, N. (2020) | To analyze the Nonperforming loan of the commercial Banks, examining the level of NPLs in total assets, total deposits and lending of commercial banks and examining whether the Nepalese commercial banks are following the NRB directives regarding Nonperforming loan or not | Descriptive research design with secondary data from annual reports, NRB directives and banking magazine from 5 sample banks. Mean, standard deviation, correlation and regression analysis | The level of NPL of Nepal Bangladesh Banks limited is greater than all the other banks under the study. Nepal SBI Banks and Bank of Kathmandu stand at second and third position respectively. Nabil Bank Limited and Nepal Investment Bank have been reducing their NPL every year. |
| Ramaswany, S. (2020) | To determine whether there is significant impact of financial head (total assets, total advances and total deposits) on NPL and to | Descriptive research approach with convenience sampling. Secondary data from the yearly reports of banks | The study did not report the specific findings or results of the data analysis |

| | | |
|--|---|---|
| | determine the impact on the profitability of banks due to NPL | |
| Jaswal, R., Patil, S., and Giri, A. (2019) | To examine how public sector banks manage Nonperforming loan because of giving loans to the priority sector and its overall impact on the profitability of the bank and to identify the gaps in the banks operating structure, in managing the loans given to the primary sector. | Secondary data from Private sector banks report of progress of banking in India, websites, journals and articles. Analysis of Nonperforming loans advanced by public sector banks from 2007 to 2016. Regression analysis of the data. Private sector banks have better relationship with net profit and NPLs. |

2.4 Research gap

Numerous academics have studied the issue of non-performing loans from commercial banks in Nepal, but their findings were limited to the causes, determinants, and contributing factors of the non-performing loan; they were unable to analyze the effect of the non-performing loan on the profitability of Nepal's commercial banks. The influence of loan management on the profitability of Nepal's commercial banks, including NBL, RBB, ADBL, SBI, and EBL, could not be explained by the previous research team. By examining the effect of loan management on profitability, this study closed the gap. The goal of this study was to examine how loan management affected the five banks in Nepal's profitability over the course of ten years, from 2013–14 to 2023–24. Upon reviewing earlier research,

no study that compared such banks using the profitability indicators of loan ratio and profit margin ratio was discovered. Therefore, by examining the relationship between loan management affects on profitability, this study filled the gap. Advanced analytical techniques such as ratio analysis, correlation analysis, and coefficient of variation are included in this study. These techniques are unique to this investigation and are applied in a different way than in Gaur and Mohapatra's (2021) earlier research.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Research methodology

This study uses a descriptive and causal comparative research approach to investigate the impact of loan management on the profitability of Nepali commercial banks over a ten-year period, from 2013 to 2022 A.D., in order to evaluate the hypotheses. This study has chosen return on equity (ROE) and return on assets (ROA), two traditional profitability metrics, as dependent variables. Secondary data were gathered from five different commercial banks. Net profit to loan and advances (NPLA), interest income to loan and advances (IILA), non-performing loans to loans (NPLTL), and credit to deposit ratio (CDR) are the proxies of independent variables used to test the hypotheses. Financial and statistical tools, such as ratio analysis, are used in the data analysis process.

3.2 Research design

Descriptive and causal comparative research designs have been used to analyze the impact of loan management on the profitability of five commercial banks in Nepal in order to meet the specific goal of this study. to determine the kind and strength of the link between the independent and dependent variables that is cause-and-effect.

3.3 Population and sampling procedure

All commercial banks listed with the Nepal stock exchange are the population, but for the study only the commercial banks listed and conducting share transactions in the NEPSE are taken as the population of the study. There are 20 commercial banks but only 5 of them are taken as the sale commercial banks as of their convenience sampling method. Ten years data are taken to conduct the study from 2013/14 to 2022/23.

3.4 Nature and sources of data collection

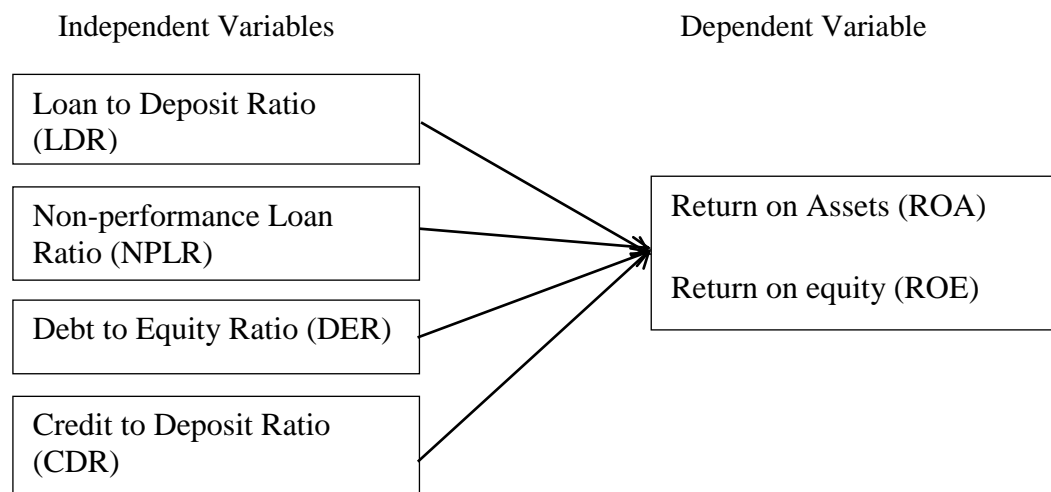
The secondary data collection method was modified to fulfill the goals of the research. The Nepal stock market report, materials from newspapers and magazines, financial and economic journals, information from the concerned bank's bulletins and reports, and the official websites of the five commercial banks are examples of

secondary sources of data. Talking both formally and informally with top employees of the organization helped to learn about the pertinent circumstances.

3.5 Research Framework

Figure 1

Conceptual framework of the study



Source: Jha and Grover (2021)

Return on Assets (ROA)

Return on Asset (ROA) is a metric that indicates how well assets are used and how much net revenue is produced from them. It shows how well the bank's management can turn a profit while making use of the resources at their disposal. For this reason, a high ROA ratio suggests that performance needs to improve in order to turn a profit. When evaluating a bank's profitability in terms of return on assets (ROA), high lending rates, fees, and commissions may be the cause of the bank's disproportionate growth in profitability. Accordingly, it is anticipated that banks with more efficiency will produce more net income per rupee of assets (Jayakkodi and Rengarajan 2016).

ROE, or return on equity

ROE shows how well a bank's management is allocating the capital that belongs to its shareholders. A higher ratio has a favorable impact on the banks' profitability. According to Sharma and Rathore (2016), there is an inverse link between Return on Equity (ROE) and the ratio of Net NPL to Net Advances.

Ratio of Loan to Deposit (LDR)

Divide the entire number of loans made by a bank by the total amount of deposits made during the same time period to find the loan-to-deposit ratio. Generally, a loan-to-deposit ratio of 80% to 90% is optimal. A bank that has a 100% loan-to-deposit ratio lends \$1 to consumers for every \$1 in deposits it receives (Gautam, 2018).

NPLs, or non-performing loans

The overall caliber of the bank's loan book is gauged by the net NPA to loans (advances) ratio. According to Gautam (2018), an NPA is any asset for which interest is past due for more than three months or ninety days.

Ratio of Debt to Equity (DER)

A company's level of debt dependence can be determined by comparing its total liabilities with its shareholder equity using the debt-to-equity (D/E) ratio. Industry-specific D/E ratios are best utilized for direct competitor comparisons or tracking changes in a company's debt load over time (Gautam, 2018).

The ratio of credit to deposit (CDR)

The ratio of how much a bank lends out of the deposits it has mobilized is known as the credit-deposit ratio, or CD ratio for short. Although the RBI does not set a minimum or maximum for the ratio, a very low ratio suggests that banks are not using their resources to the fullest extent possible (Gautam, 2018).

3.6 Method of analysis

Data analysis is the process of classifying, coding, tabulating, and finally making statistical conclusions while keeping the goals in mind. It involves closely linked tasks like compiling the gathered data and arranging it such that it will address the goals of the research. The data acquired for this study was analyzed using percentages, graphs, tables, charts, correlation analysis, and regression analysis. Software called SPSS vs. 20 is used to analyze regression and correlation coefficient

results. The study analyzed data in Microsoft Excel vs. 2019 using statistical and financial techniques (Gautam, 2018).

3.6.1 Descriptive Statistic

Descriptive statistics are numerical summaries and descriptions of data. "Data" is the information obtained from an experiment, survey, historical record, etc. The statistical techniques listed below were applied in this study to evaluate the data more precisely:

The Arithmetic Average

The best value that captures the group as a whole is the arithmetic average of a variable. It is used to calculate the total deposit, interest rate spread, current ratio, mean of loans and advances, and inflation rate. To calculate the mean, use this formula:

$$\text{Mean } (\bar{X}) = \frac{\sum X}{n}$$

Where,

$$\sum X = \text{Sum of given Observation}$$

$$n = \text{No. of Observation}$$

Standard Deviation

Since the standard deviation satisfies most of the requirements for a decent measure of dispersion, it is the absolute measure of dispersion in which the flaw visible in other measures of dispersion is present. More variability will result from a higher standard deviation, and vice versa. Dispersion measures how much the data deviate from the center value. Put another way, it is helpful to evaluate the data's variability in order to judge its quality. It is used to calculate the standard deviation of all computed ratios, including the interest rate spread, inflation rate, loans and advances, total deposit, and current ratio. This is how it is computed:

$$\text{Standard Deviation (S.D.)} = \sqrt{\frac{\sum (X - \bar{X})^2}{n}}$$

3.6.2 Correlation Analysis

When the relationship is quantitative nature, Correlation coefficient is the best mathematical method for discovering and measuring the relationship and expressing it. If the value of the variables is directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, the correlation is said to be negative, but the correlation coefficient always remains within the limit of +1 to -1. By Karl Pearson, the simple correlation coefficient (between two variables, say X and Y) is given by, Where, $r(x, y)$ is the correlation between two variables X and Y.

$$r = \frac{\sum(X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum(X-\bar{X})^2}\sqrt{\sum(Y-\bar{Y})^2}}$$

When, $r = +1$, there is perfect positive correlation.

$r = -1$, there is perfect negative correlation.

$r = 0$, there is no correlation.

r lies between 0.7 to 0.999 (or -0.7 to -0.999) there is high degree of positive or negative correlation.

r lies between 0.5 and 0.699, there is a moderate degree of correlation.

r is less than 0.5, there is low degree of correlation.

Condition Decision

| | |
|---|---|
| When $r = 1$ | There is positive correlation |
| When $r = -1$ | There is negative correlation |
| When r lies between “0.7 to 0.999” correlation | There is high degree of positive correlation |
| When r lies between “0.5 to 0.6999” | There is moderate degree of correlation |
| When r is less than 0.5 | There is low degree of correlation |

Following relationship between variables is studied:

- Correlation between profitability and deposit
- Correlation between profitability and net profit
- Correlation between profitability and NPL
- Correlation between profitability and interest income
- Correlation between profitability and loan & advance

3.6.3 Regression Analysis

Regression analysis is the study of the connection between variables. Regression analysis provides a clearer indication of the cause-and-effect relationship between variables than does correlation analysis. In statistics, regression analysis is used to estimate an unknown variable's value based on the known values of other variables. There are two different kinds of variables in regression: the independent variable is the one that impacts the value, and the dependent variable is the one whose value is influenced. When we want to investigate the relationship between two variables, x and y, and utilize it to predict y from x, we have a regression issue with a single predictor. Whereas y is the dependent variable, x functions as the independent variable. The following formula can be used to determine the regression between two variables based on least square estimations. The dependent variables, or bank performance, are derived from the conceptual farm work in the following ways (Gautam, 2018):

Deposit, net profit, interest income, NPL, loan, and advance add up to profitability = f.

To be more precise, the provided model has been divided into the subsequent models:

Model 1

$$ROA = \alpha + \beta_1 LDR + \beta_2 NPLA + \beta_3 DER + \beta_4 CDR + e$$

Model 2

$$ROE = \alpha + \beta_1 LDR + \beta_2 NPLA + \beta_3 DER + \beta_4 CDR + e$$

Whereas,

ROA= Profitability of Bank i at time t as expressed by return on assets

ROE =Profitability of Bank i at time t as expressed by return on equity

LDR =Loan to deposit ratio

NPLR = Non-performing loan to loan and advances

DER = Debt to Equity Ratio

CDR = Credit to Deposit Ratio

α = Constant

e= Error

The parameters of the independent variables are β_1 , β_2 , β_3 , β_4 , and β_5 .

Regression line prediction: The regression line equation is frequently used to forecast the value of the dependent variable (Y) given the value of the independent variable (X). Regression equations should, however, be employed for estimation and prediction only very carefully (Gautam, 2018).

CHAPTER-IV

RESULT AND DISCUSSION

This chapter presents the research's empirical findings. The chapter begins with the descriptive analysis and goes on to describe the results of the panel data analysis and the pooled regression analysis. Following the discussion of the methodology and data description in chapter three, secondary data were obtained for all research variables for Nepal's commercial banks from 2013–14 to 2022–23. To ascertain the nature of the dataset, descriptive statistics are first produced. A description of the test findings is included in the sections that follow.

4.1 Data presentation and analysis

The mathematical relationship between two accounting statistics is displayed through ratio analysis. Analyzing the banks' financial strengths and weaknesses is beneficial. Additionally, it is necessary for the quantitative assessment that allows banks' financial performance to be accurately portrayed.

4.1.1 Loan to deposit ratio (LDR)

A bank's liquidity can be evaluated by comparing its total loans to its total deposits during a given time period, which is known as the loan-to-deposit ratio, or LDR.

Table 1

Loan to deposit ratio of sample banks

| Fiscal Year | LBL | SBI | EBL | HBL | GIBL |
|-------------|---------|----------|---------|---------|---------|
| 2013/14 | 23.7941 | 23.9181 | 24.5570 | 24.5675 | 23.5687 |
| 2014/15 | 23.9782 | 24.0020 | 24.7453 | 24.1258 | 23.4589 |
| 2015/16 | 24.1180 | 24.2405 | 24.9089 | 24.0258 | 23.8945 |
| 2016/17 | 24.2781 | 24.4203 | 24.9781 | 25.6591 | 24.1254 |
| 2017/18 | 24.5427 | 25.6496 | 25.3199 | 25.1398 | 24.5628 |
| 2018/19 | 24.7341 | 25.0328 | 25.4586 | 25.4371 | 24.6349 |
| 2019/20 | 24.9916 | 25.2217 | 25.4812 | 25.3985 | 25.0054 |
| 2020/21 | 25.1172 | 25.5097 | 25.6958 | 25.4808 | 25.1682 |
| 2021/22 | 25.3961 | 25.7604 | 25.8563 | 25.6127 | 25.1985 |
| 2022/23 | 25.5823 | 23.92604 | 25.9756 | 25.7725 | 25.4589 |
| Mean | 24.6532 | 24.298 | 25.2981 | 25.1878 | 24.8264 |
| S.D. | 0.5818 | 0.6784 | 0.4539 | 0.3748 | 0.42856 |
| C.V. | 0.0236 | 0.0273 | 0.0179 | 0.0150 | 0.0345 |

Source: *Appendix I*

Table 1 displays the mean, standard deviation, and C.V. of descriptive statistics. the chosen commercial bank's loan to deposit ratio (LDR) from the 2013–14 to the 2022–2023 fiscal years. The table shows that Nepal SBI bank has the lowest total loan to deposit ratio (24.298%) and Everest bank has the highest total loan to deposit percentage (25.2981). Commercial banks are able to provide loans to customers in the market using their own deposits rather than obtaining money from outside sources because of the greater credit deposit ratio. However, due to an aggressive standard deviation, the credit deposit ratio has fluctuated and remained inconsistent throughout the course of ten years in all commercial banks.

4.1.2 Non-performing loan ratio (NPLR)

The non-performing loan gauges how well a bank manages to get repayments. The bank assesses the books of related provision as well as the anticipated loss from the non-performing loan. The success of a bank receiving loan repayments is gauged by the non-performing loan.

Table 2

Non-performing loan ratio of sample banks

| Fiscal Year | LBL | SBI | EBL | HBL | GIBL |
|-------------|---------|---------|--------|--------|--------|
| 2013/14 | 0.0090 | 0.0079 | 0.0034 | 0.0422 | 0.0030 |
| 2014/15 | 0.0062 | 0.0152 | 0.0084 | 0.209 | 0.0023 |
| 2015/16 | 0.0151 | 0.0239 | 0.0064 | 0.289 | 0.0025 |
| 2016/17 | 0.01515 | 0.0275 | 0.0097 | 0.0196 | 0.0086 |
| 2017/18 | 0.0130 | 0.0180 | 0.0130 | 0.0320 | 0.092 |
| 2018/19 | 0.0080 | 0.0147 | 0.0030 | 0.0123 | 0.0082 |
| 2019/20 | 0.0093 | 0.0130 | 0.0027 | 0.0085 | 0.0099 |
| 2020/21 | 0.0192 | 0.00075 | 0.0018 | 0.0140 | 0.0106 |
| 2021/22 | 0.0111 | 0.0138 | 0.0016 | 0.0112 | 0.0104 |
| 2022/23 | 0.0104 | 0.0256 | 0.0022 | 0.0101 | 0.0022 |
| Mean | 0.0113 | 0.0152 | 0.026 | 0.0199 | 0.035 |
| S.D. | 0.0036 | 0.0061 | 0.0028 | 0.0106 | 0.0073 |
| C.V. | 0.3157 | 0.4007 | 0.5954 | 0.5306 | 0.4235 |

Source: *Appendix I*

The non-performing loans of particular commercial banks are displayed in Table 2. Himalayan Bank's non-performing loan portfolio began to fluctuate in 2013–14 after declining for a while. Up until 2015–16, the trend for SBL's non-performing loans was rising; after that, it began to decline. Up until 2017–18, the EBL's NPL was trending upward; after that, it began to trend downward. The Laxmi Bank's NPL is trending in and out of volatility. Himalayan Bank reportedly has the lowest average of Everest Bank and the highest average NPL with the biggest standard deviation.

4.1.3 Debt to equity ratio (DER)

A corporation's financial leverage is assessed using the debt-to-equity (D/E) ratio, which is computed by dividing the total liabilities of the company by the equity held by its shareholders. In corporate finance, the D/E ratio is a crucial indicator. It is a gauge of how much a business relies on debt rather than its own resources to fund its operations. One kind of gearing ratio is the debt-to-equity ratio.

Table 3

Debt to equity ratio of sample banks

| Fiscal Year | LBL | SBI | EBL | HBL | GIBL |
|-------------|--------|--------|---------|--------|--------|
| 2013/14 | 0.1163 | 0.1079 | 0.1043 | 0.1068 | 0.1103 |
| 2014/15 | 0.1102 | 0.1106 | 0.1102 | 0.1102 | 0.1139 |
| 2015/16 | 0.1176 | 0.1150 | 0.1159 | 0.1155 | 0.1191 |
| 2016/17 | 0.1191 | 0.1139 | 0.1115 | 0.1153 | 0.1115 |
| 2017/18 | 0.1081 | 0.1118 | 0.1333 | 0.1114 | 0.1283 |
| 2018/19 | 0.1076 | 0.1125 | 0.1266 | 0.1125 | 0.1216 |
| 2019/20 | 0.1399 | 0.1276 | 0.1469 | 0.1273 | 0.1327 |
| 2020/21 | 0.1245 | 0.1212 | 0.1420 | 0.1212 | 0.1177 |
| 2021/22 | 0.1183 | 0.1277 | 0.1374 | 0.1288 | 0.1245 |
| 2022/23 | 0.1195 | 0.1325 | 0.2530 | 0.1371 | 0.1185 |
| Mean | 0.1179 | 0.1180 | 0.13.81 | 0.1177 | 0.1246 |
| S.D. | 0.0089 | 0.0099 | 0.0407 | 0.0082 | 0.0235 |
| C.V. | 0.0750 | 0.0677 | 0.2947 | 0.0698 | 0.0568 |

Source: *Appendix I*

The mean, standard deviation, CV, value, and trends of the deposit to equity ratio (DER) for each year, as well as the DER trends for a selected group of commercial banks over a ten-year period, are displayed in Table 3. When compared to other commercial banks, Everest Bank has the highest average (i.e., 0.0407) and standard deviation (i.e., 0.2947) for each study period. Additionally, the Himalayan Bank consistently maintains the lowest annual average (0.1177) and standard deviation (0.0082). With the highest C.V. is Everest. This denotes the CAR variation that is highest. SBL has a lower C.V. than a commercial bank.

4.1.4 Credit to deposit ratio (CDR)

A bank's liquidity is evaluated using the credit-to-deposit ratio (CDR), which is calculated by dividing its total loans by its total deposits over the same time period. A percentage is used to represent the CDR. The bank could not have adequate liquidity to meet any unforeseen funding requests if the ratio is excessively high. On the other hand, the bank could not be making as much money as it could if the ratio is too low.

Table 4

Credit to deposit ratio of sample banks

| Fiscal Year | LBL | SBI | EBL | HBL | GIBL |
|-------------|--------|--------|---------|---------|--------|
| 2013/14 | 0.0922 | 0.0561 | 0.0955 | 0.0575 | 0.0652 |
| 2014/15 | 0.1960 | 0.1186 | 0.1722 | 0.0872 | 0.0602 |
| 2015/16 | 0.1233 | 0.0960 | 0.1519 | 0.0608 | 0.0768 |
| 2016/17 | 0.1828 | 0.1722 | 0.01691 | 0.0872 | 0.1529 |
| 2017/18 | 0.1259 | 0.0863 | 0.2427 | 0.0832 | 0.1758 |
| 2018/19 | 0.0717 | 0.0600 | 0.161 | 0.0627 | 0.1435 |
| 2019/20 | 0.0732 | 0.0886 | 0.1652 | 0.2664 | 0.1685 |
| 2020/21 | 0.0657 | 0.0637 | 0.1775 | 0.2305 | 0.1680 |
| 2021/22 | 0.0559 | 0.0456 | 0.1856 | 0.02625 | 0.1739 |
| 2022/23 | 0.0829 | 0.0503 | 0.1443 | 0.3139 | 0.1564 |
| Mean | 0.1069 | 0.0837 | 0.1670 | 0.1516 | 0.1056 |
| S.D. | 0.0467 | 0.0368 | 0.0348 | 0.0976 | 0.0526 |
| C.V. | 0.4365 | 0.4391 | 0.2081 | 0.6438 | 0.5468 |

Source: *Appendix I*

The credit to deposit ratio (CDR) of a few chosen commercial banks is displayed in Table 4. The credit deposit ratios of commercial banks, including LBL, SBI, EBL, HBL, and GBL, are determined to be, on average, 0.1069, 0.0837, 0.1670, 0.1516, and 0.1056. Based on these results, Everest Bank has a higher average (i.e., 0.1670), indicating that it has a high degree of liquidity to manage the bank's performance. It also has the lowest C.V. Low risky for bank performance is also indicated. Additionally, SBI Bank's lower average (i.e., 0.0837) shows that it has the least amount of liquidity.

Profitability ratio

Profit is the primary performance metric for any business. A strong return is what investment policy aims to achieve. Any organization needs to want to make a lot of money since it shows that it is operating efficiently and helps the business survive. Making a profit is a crucial component of corporate operations in order to fulfill

internal commitments, prepare for unforeseen events, establish wise investment strategies, increase bank transactions, and other goals.

Efficiency ratios are the most reliable measures of overall profitability. These ratios that are connected to both profit and fund mobilization are shown and examined here. utilizing the ratios listed below.

4.1.5 Return on assets (ROA)

The overall profitability of every working fund is gauged by this percentage. total resources. For a business to survive, it must provide a respectable return on working capital. The return on total assets ratios of the chosen banks are displayed in the following table.

Table 5

Return on assets ratio of sample banks

| Fiscal Year | LBL | SBI | EBL | HBL | GIBL |
|-------------|---------|--------|--------|--------|---------|
| 2013/14 | 0.0176 | 0.0128 | 0.0210 | 0.0191 | 0.0264 |
| 2014/15 | 0.0150 | 0.0112 | 0.0211 | 0.0176 | 0.0157 |
| 2015/16 | 0.0148 | 0.0143 | 0.0239 | 0.0156 | 0.0156 |
| 2016/17 | 0.0138 | 0.0174 | 0.0351 | 0.0130 | 0.0169 |
| 2017/18 | 0.0104 | 0.0151 | 0.0185 | 0.0135 | 0.0165 |
| 2018/19 | 0.0135 | 0.0154 | 0.0125 | 0.0197 | 0.0122 |
| 2019/20 | 0.0161 | 0.0159 | 0.0172 | 0.0203 | 0.0198 |
| 2020/21 | 0.0155 | 0.0147 | 0.0197 | 0.0168 | 0.0158 |
| 2021/22 | 0.0166 | 0.0118 | 0.0192 | 0.0221 | 0.0169 |
| 2022/23 | 0.0122 | 0.0146 | 0.0146 | 0.0178 | 0.0186 |
| Mean | 0.0148 | 0.0152 | 0.0138 | 0.0186 | 0.01498 |
| S.D. | 0.0020 | 0.0019 | 0.0028 | 0.0028 | 0.0022 |
| C.V. | 0.01399 | 0.1347 | 0.1418 | 0.1591 | 0.1452 |

Source: *Appendix I*

Table 5 displays C.V., mean, and standard deviation. and the return on assets (ROA) linked to particular commercial banks over intervals of ten years. Statistics show that SBI bank has the lowest average return on assets compared to other banks, and

Everest bank has the highest average. Compared to other banks, Everest Bank uses its entire assets quite effectively. C.V. is available at SBI Bank. Since 0.1347 is lower than the sample banks' respective values, the bank's return on assets ratio is considered less hazardous.

4.1.6 Return on equity ratio (ROE)

Any bank's owned capital is its equity capital. Any bank's main goal is to maximize wealth, or put another way, to produce a profit that will maximize return on equity capital. Return on equity is a key indicator of a bank's profitability. It illustrates how well the bank has been able to use or mobilize its equity capital. Higher success in mobilizing owned capital is indicated by a higher ratio, and vice versa.

Table 6

Return on equity ratio of sample banks

| Fiscal Year | LBL | SBI | EBL | HBL | GIBL |
|-------------|---------|--------|--------|--------|--------|
| 2013/14 | 0.01775 | 0.1566 | 0.2991 | 0.2235 | 0.1511 |
| 2014/15 | 0.1559 | 0.1511 | 0.2611 | 0.2035 | 0.1551 |
| 2015/16 | 0.1551 | 0.1926 | 0.3047 | 0.1781 | 0.1775 |
| 2016/17 | 0.1510 | 0.2334 | 0.2839 | 0.1577 | 0.1926 |
| 2017/18 | 0.1033 | 0.2068 | 0.2285 | 0.1598 | 0.2068 |
| 2018/19 | 0.1275 | 0.2111 | 0.2032 | 0.2453 | 0.2011 |
| 2019/20 | 0.1111 | 0.1488 | 0.1738 | 0.2122 | 0.2253 |
| 2020/21 | 0.1059 | 0.1398 | 0.1600 | 0.1417 | 0.2622 |
| 2021/22 | 0.1257 | 0.1339 | 0.1733 | 0.1834 | 0.2678 |
| 2022/23 | 0.1010 | 0.1713 | 0.1350 | 0.1540 | 0.2035 |
| Mean | 0.1314 | 0.1722 | 0.2224 | 0.1863 | 0.1998 |
| S.D. | 0.0255 | 0.0323 | 0.0589 | 0.0325 | 0.0294 |
| C.V. | 0.1939 | 0.1889 | 0.2649 | 0.1747 | 0.1823 |

Source: *Appendix I*

The ratio of net profit to net worth, expressed as return on equity, for SBI, Laxmi, Global IME, Everest, and Himalayan banks is displayed in Table 6. Siddhartha Bank, Laxmi Bank, Everest Bank, Himalayan Bank, and others have mean returns on equity of 17.13%, 13.14%, 22.24%, 18.63%, and 19.98%, in that order. When compared to

other sample banks, Everest Bank has the greatest mean ratio, which shows how profitable the owner's investment was. The bank's improved status is indicated by the highest ratio, and its worsened situation is shown by the lowest ratio. But contrast the C.V. The Himalayan Bank exhibits a minimal risk for bank investment performance, with the lowest ratio of 17.47%.

4.2 Descriptive statistic

A descriptive statistic can reflect a sample or the complete population by summarizing or describing the characteristics of a data collection. Measures of variability (spread) and measures of central tendency are two categories of descriptive statistics. The variance, minimum and maximum variables, kurtosis, and skewness are measurements of variability, whereas the mean, median, mode, and standard deviation are measures of tendency. The study's lowest and maximum values, mean, standard deviation, and coefficient variances are computed using descriptive statistics.

Table 7

Descriptive Statistics

| Variables | N | Minimum | Maximum | Mean | Std. Dev. |
|----------------------------------|----|---------|---------|---------|-----------|
| Return on Assets (ROA) | 50 | 1.04 | 3.22 | 1.7173 | 0.4033 |
| Return on Equity (ROE) | 50 | 10.33 | 30.47 | 17.7567 | 5.1567 |
| Loan to Deposit Ratio (LDR) | 50 | 23.7941 | 25.9437 | 25.0039 | 0.6002 |
| Non-performing Loan Ratio (NPLR) | 50 | 0.0160 | 9.3 | 1.6239 | 1.9883 |
| Debt to Equity Ratio (DER) | 50 | 10.43 | 14.69 | 11.976 | 1.0665 |
| Credit to Deposit Ratio (CDR) | 50 | 4.56 | 31.39 | 12.7225 | 6.9430 |
| Valid N (listwise) | 50 | | | | |

Source: *SPSS Analysis*

The variables' descriptive qualities are shown in Table 7. Based on the mean, maximum, minimum, standard deviation, coefficient of variation, and number of observations, the descriptive qualities of the variables were emphasized. The variable's descriptive statistic for this investigation. The information covers the years

2013–14 through 2022–23. While the mean ROE is 17.757, the minimum is 10.33, and the maximum is 30.47, the mean ROA is 1.72, with a minimum of 1.04 and a maximum of 3.22. Non-performing loans (NPLs) have a mean of 1.62, a minimum of 0.016, and a maximum of 9.30. The loan to deposit ratio (LDR) ranges from a low of 23.79 to a maximum of 25.94. The mean LDR is 25.0039. The debt to equity ratio (DER) has a mean of 11.98, a minimum of 10.43, and a high of 14.69. The average credit-to-deposit ratio (CDR) is 12.72, with a minimum of 4.56 and a maximum of 31.39. The sample banks' respective standard deviations for ROA, ROE, NPL, LDR, DER, and NPLR are 0.40, 5.157, 1.988, 0.600, 1.067, and 1.989.

4.1.2 Correlation analysis

A statistical technique for determining the link between two or more quantitative variables is correlation analysis. A significant association between two or more variables is indicated by a high correlation, whereas a weak relationship indicates little to no relationship between two or more variables. One accepted method for summarizing the relationship between two variables with a single number that ranges from -1 to +1 is through correlation analysis. For the ten-year period from 2013–14 to 2022–23, the dependent variables are ROA and ROE as well as independent measures such as the loan to deposit ratio (LDR), non-performing loan ratio (NPLR), debts to equity ratio (DER), and credit to deposit ratio (CDR). Any type of link between the variables is found by computing the correlation coefficients between each of the variables.

An initial indication of the direction of the link between the chosen variable is provided by the correlation matrix. In other words, the independent variables LDR, NPLR, DER, and CDR have full correlations with ROA and ROE.

Table 8
Correlation of the variables

| | | ROA | ROE | LDR | NPLR | DER | CDR |
|------|---------------------|---------|---------|--------|-------|--------|-----|
| ROA | Pearson Correlation | 1 | | | | | |
| | Sig. (2-tailed) | | | | | | |
| ROE | Pearson Correlation | 0.572** | 1 | | | | |
| | Sig. (2-tailed) | 0.002 | 0.77 | | | | |
| LDR | Pearson Correlation | 0.169 | 0.142 | 1 | | | |
| | Sig. (2-tailed) | 0.054 | 0.124 | | | | |
| NPLR | Pearson Correlation | 0.084* | -0.187 | 0.028* | 1 | | |
| | Sig. (2-tailed) | 0.045 | 0.038 | 0.026 | | | |
| DER | Pearson Correlation | 0.048* | 0.305 | 0.151 | 0.212 | 1 | |
| | Sig. (2-tailed) | 0.030 | 0.048 | 0.034 | 0.124 | | |
| CDR | Pearson Correlation | 0.347** | 0.162** | 0.262 | 0.324 | 0.0268 | 1 |
| | Sig. (2-tailed) | 0.028 | 0.031 | 0.062 | 0.121 | 0.024 | |

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

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

Source: *SPSS Analysis*

The correlation matrix, as shown in Table 8, sheds light on the independent factors that have a strong association with the dependent variables ROA and ROE. The outcome demonstrates that the bank's dependent variables, ROA and ROE, are positively correlated with the independent variable. The non-performing loan ratio (NPLR) and bank performance are significantly positively correlated with return on assets (ROA). This suggests that as the NPL ratio rises, the bank's performance will rise as well. Conversely, return on equity (ROE) and NPLR are negatively correlated, suggesting that as the non-performing loan ratio rises, the bank's performance will fall. The findings show a substantial positive correlation between DER and CDR and bank performance ROA, suggesting that when values rise, banks perform better as well. There is also a significant positive correlation between ROE and DER.

Additionally, the loan to deposit ratio (LDR) and return on equity (ROE) are negligible, suggesting that as LDR increases, bank ROE performance will decline.

4.1.3 Analysis of the regression

In order to estimate the average value of the dependent variable from the known values of the independent variable, regression analysis examines how one variable, the dependent variable, depends on one or more other factors, the independent variable. There are two categories of variables in regression analysis. The variable that influences values or is used to make predictions is referred to as an independent variable, while the variable whose value is to be predicted or is affected is referred to as a dependent variable. The dependent variables in this study are ROA and ROE, while the independent variables are LDR, NPLR, DER, and CDR.

First model:

$$\text{ROA} = \alpha + \beta_1\text{LDR} + \beta_2\text{NPLA} + \beta_3\text{DER} + \beta_4\text{CDR} + e$$

Table 9

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|--------------------|----------|-------------------|----------------------------|
| 1 | 0.531 ^a | .282 | .176 | 0.3660563 |

a. Predictors: (Constant), LDR, NPR, DER and CDR

Source: *SPSS Analysis*

The model summary, which explains the entire variation in ROA described by LDR, NPLR, DER, and CDR, is displayed in Table 9. With a 95% confidence interval, 28.2% of the variation in ROA can be explained by the independent variables LDR, NPR, DER, and CDR, according to the coefficient of multiple determinations R Square value of .282. The estimate's margin of error is 36.605663. According to the coefficient of multiple determination (R Square), variations in LDR, NPLR, DER, and CDR may explain for 28.2% of changes in ROA of Nepalese commercial banks, with other factors contributing the remaining 71.8%. The correlation coefficient, or R, illustrates the link between the research variables. As indicated by 0.531a, the table above demonstrates a substantial positive association between the research variables.

Table 10

ANOVA of Variables

| Model | Sum of Squares | Df | Mean Square | F | Sig. | |
|-------|----------------|-------|-------------|-------|-------|-------------------|
| 1 | Regression | 1.788 | 5 | 0.358 | 2.669 | 0.39 ^b |
| | Residual | 4.556 | 44 | 0.134 | | |
| | Total | 6.344 | 49 | | | |

a. Dependent Variable: ROA

b. Predictors: (Constant), LDR, NPLR, DER and CDR

Source: *SPSS Analysis*

The processed data, or the population parameters, in Table 10 of the ANOVA showed a significance level of 0.039b%, indicating that the data is excellent for drawing conclusions about the population's parameters because the value of significance (p-value) is less than the conventional 5%. The Fisher's ratio, also known as the F-statistic, is evidence that the estimated model, which is shown in the model overview above, is true. With a F value of roughly 2.669 and a P value or F (sig) of 0.039b, it is evident that the explanatory variables are significantly connected with each other at the same time. In other words, they have a significant influence on how the return on assets behaves.

Table 11

Coefficient of Variables

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|-----------------------------|------------|---------------------------|-------|-------|-------|
| | B | Std. Error | Beta | | | |
| | (Constant) | 7.772 | 3.412 | | | |
| 1 | LDR | 0.268 | 0.091 | 0.709 | 2.958 | 0.006 |
| | NPLR | 0.084 | 0.038 | 0.413 | 2.232 | 0.032 |
| | DER | 0.268 | 0.091 | 0.709 | 2.958 | 0.006 |
| | CDR | 0.033 | 0.011 | 0.561 | 2.914 | 0.006 |

a. Dependent Variable: ROA

Source: *SPSS Analysis*

The beta coefficient of Nepalese commercial banks' LDR, NPR, DER, and CDR is set to a constant zero in Table 11 of the regression model. The return on assets (ROA) of Nepali commercial banks is estimated to be 7.772. It has been determined that an increase of one unit in LDR will result in an increase in ROA of 0.268; an increase of one unit in NPL ratio will lead to an increase in ROA of 0.084; an increase of one unit in DER ratio will result in an increase of 0.268; and an increase of one unit in CDR will result in an increase of 0.033 in ROA of Nepalese commercial banks. The findings indicate that ROA and the four independent variables—LDR, NPR, DER, and CDR—have a positive connection.

Second model:

$$\text{ROE} = \alpha + \beta_1\text{LDR} + \beta_2\text{NPLA} + \beta_3\text{DER} + \beta_4\text{CDR} + e$$

Table 12

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|--------------------|----------|-------------------|----------------------------|
| 1 | 0.497 ^a | .247 | 0.136 | 4.7921865 |

a. Predictors: (Constant), LDR, NPR, DER and CDR

Source: *SPSS Analysis*

The model summary, which explains the entire variation in ROE explained by LDR, NPR, DER, and CDR, is displayed in Table 12. With a 95% confidence interval, 24.7% of the variation in ROE can be described by the independent variables LDR, NPR, DER, and CDR, according to the coefficient of multiple determinations R Square value of 0.247. The estimated error probability is 4.7921865. According to the coefficient of multiple determination (R Square), changes in LDR, NPR, DER, and CDR may explain for 24.7% of variations in the return on equity (ROE) of Nepalese commercial banks. The remaining 75.3% of ROE can be attributed to other factors. The correlation coefficient, or R, illustrates the link between the research variables. The table above demonstrates a strongly positive link between the research variables, as indicated by the 0.497a value. This outcome is supported by a R square of roughly 24.7%, which is crucial since it indicates the percentage of total variance that the model explains.

Table 13

ANOVA of Variables

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|--------------------|
| 1 | Regression | 256.25 | 5 | 51.25 | 2.232 | 0.044 ^b |
| | Residual | 780.82 | 34 | 22.965 | | |
| | Total | 1037.06 | 39 | | | |

a. Dependent Variable: ROE

b. Predictors: (Constant), LDR, NPR, DER and CDR

Source: *SPSS Analysis*

With a significance level of 0.044b% for the processed data (i.e., the population parameters) in Table 13's ANOVA, the data is ideal for drawing conclusions about the population's parameters because the p-value (or significance value) is less than the conventional 5%. The Fisher's ratio, also known as the F-statistic, is evidence that the estimated model, which is shown in the model overview above, is true. The F value is approximately 2.232, and the P value, or F (sig), is equal to 0.044b. This consistently indicates that the explanatory variables are highly related with one another at the same time. In other words, they control how the return on equity behaves.

Table 14

Coefficient of Variables

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|-----------------------------|------------|---------------------------|-------|-------|-------|
| | B | Std. Error | Beta | | | |
| 1 | (Constant) | 3.571 | 44.667 | | 0.08 | 0.937 |
| | LDR | 1.766 | 2.146 | 0.206 | 0.823 | 0.416 |
| | NPLR | 0.008 | 0.491 | 0.003 | 0.015 | 0.988 |
| | DER | 2.783 | 1.186 | 0.576 | 2.646 | 0.025 |
| | CDR | 0.333 | 0.146 | 0.206 | 0.823 | 0.416 |

a. Dependent Variable: ROE

Source: *SPSS Analysis*

The beta coefficients of the LDR, NPR, DER, and CDR of the commercial banks in Nepal are listed in Table 14 of the regression model. Nepalese commercial banks have a return on equity (ROE) of 3.571. It has been determined that an increase of one unit

in DER will result in an increase of 2.738 in ROE, an increase of one unit in NPL will result in an increase of 0.008, an increase of one unit in CDR will result in an increase of 0.333 in ROE, and an increase of one unit in LDR will result in an increase of 1.766 in ROE. The findings indicate that all independent variables (C LDR, NPR, DER, and CDR) and ROE have a positive connection.

4.2 Discussion

Descriptive and multiple regression analysis were employed in the study to investigate the variables influencing commercial banks' loan management and bank performance. A suitable research methodology was employed to acquire secondary data from the annual reports of specific commercial banks. Many statistical and financial tools are employed to get the study's findings. The results of the regression model showed that the return on assets (ROA) of Nepalese commercial banks is significantly positively correlated with the deposit to equity ratio (DER), non-performing loan (NPLR), loan to deposit ratio (LDR), and credit to deposit ratio (CDR). Additionally, the regression model shows that the loan-to-deposit ratio, non-performing loan ratio, and credit-to-deposit ratio are all negligible, with the exception of the debt-to-equity ratio, which positively correlates with the chosen commercial banks' return on equity (ROE).

The loan to deposit ratio (LDR) results are in line with Singh et al. (2021), Pokharel, S., & Pokharel, S., in that they have a positive association with ROA and ROE. Ekinci & Kenet (2019) and (2020). This could be as a result of high loan to deposit ratios controlling the performance of the bank and loan management.

The findings of Bhattarai, R. are consistent with the non-performing loan ratio's favorable association with ROA and ROE. (2020) as well as N. Khadka. (2020). The findings indicate a favorable correlation between non-performing loan ratios and ROE and ROA. The debt-to-equity ratio's favorable correlation with ROA and ROE is in line with findings of Bhattarai (2020) and M. K. Uddin. (2022). The observation that DER has a positive but negligible relationship with ROE is inconsistent with Pokharel, S., & Pokharel, S. (2020). It shows the weakest correlation between DER and output. The findings are consistent with the credit to deposit ratio's favorable association with ROA and ROE (Khadka, N. S. Ramaswamy (2020). Jaswal, et al.

(2019) and (2020). It suggests that bank performance has an impact on CDR. The central bank can regulate the amount of credit by adjusting CDR. Raising the lending requirement will mean that banks have less money available for loans, which will lower the money supply because there will be less capital in the economy.

CHAPTER-V

SUMMARY AND CONCLUSION

The summary, the conclusion, and the recommendation make up the three primary sections of this chapter. All four chapters are revised or summarized in the summary section. The study findings are summarized in the conclusion section, and recommendations and suggestions are offered based on the knowledge and expertise gained from this thesis project. Recommendations are offered for both additional research and for the interested parties to improve the current situation.

5.1 Summary

This chapter summarizes the full body of work and focuses on the study's main conclusions. The study's goal was to look at the internal variables influencing the bank's performance and loan management. The study's goals and the relationship between loan management and bank performance were thoroughly explained in Chapter 1. The chapter also covered the study's limitations, organization, and importance.

This study's specific goals are to: (1) analyze the relationship between LDR, NPLR, DER, and CDR and ROA and ROE of five selected Nepalese commercial banks; (2) investigate the relationship between LDR, NPLR, DER, and CDR and ROA and ROE of five selected Nepalese commercial banks; and (3) analyze the impact of LDR, NPLR, DER, and CDR into ROA and ROE of five selected Nepalese commercial banks.

The theoretical literature on credit risk management and the performance of commercial banks was reviewed in Chapter 2. Various theories are discussed in this chapter, and a large number of national and international papers about the variables influencing credit risk management and the performance of commercial banks' banks are also examined in this part. This chapter outlined the theoretical foundation, the summary, and the gaps that needed to be filled by the investigation.

The format of the third chapter covered the population, sample design, methods and tools for collecting data, data analysis, and data presentation. Using a convenient sampling method that satisfied the eligibility requirements, four sampled commercial

banks—Laxmi Bank Limited (LBL), Nepal SBI Bank Limited (SBI), Everest Bank Limited (EBL), Himalayan Bank Limited (HBL), and Global IME Bank Limited (GIBL)—were selected from a population of twenty commercial banks. A descriptive and causal comparative research design has been used to meet the study's aims. The findings of an empirical examination of the variables influencing the loan management and bank performance of commercial banks were given and examined in Chapter 4. The right financial descriptive and analytical techniques are used to analyze the data. The outcome demonstrates that the bank's dependent variables, ROA and ROE, are positively correlated with the independent variable. The non-performing loan ratio (NPLR) and bank performance are significantly positively correlated with return on assets (ROA). This suggests that as the NPL ratio rises, the bank's performance will rise as well. Conversely, return on equity (ROE) and NPLR are negatively correlated, suggesting that as the non-performing loan ratio rises, the bank's performance will fall. The findings show a substantial positive correlation between DER and CDR and bank performance ROA, suggesting that when values rise, banks perform better as well. There is also a significant positive correlation between ROE and DER. Additionally, the loan to deposit ratio (LDR) and return on equity (ROE) are negligible, suggesting that as LDR increases, bank ROE performance will decline.

5.2 Conclusion

Examining the loan management and bank performance of commercial banks is the primary goal of the study. In this study, 50 observations from the years 2013–14 to 2022–24 were analyzed using secondary data from five commercial banks. The findings demonstrated that risk management is essential to the success of bank performance and that loan management is a significant predictor of bank financial performance.

The study's findings indicate that the non-performing loan ratio (NPLR), credit to deposit ratio (CDR), debt to equity ratio (DER), and loan to deposit ratio (LDR) have the greatest effects on a bank's performance. This is supported by the noteworthy findings of the debt to equity ratio (DER), which suggests that debt may be viewed as a factor that influences bank performance. Higher debt helps to cover the risk of potential loan and bank run insolvency. The study's findings demonstrate that non-

performing loans have a positive, considerable ROA and a negligible ROE. In other words, non-performing loans simply affect banks' return on assets (ROA). The credit to deposit ratio is a strong indicator of bank performance, suggesting that CDR may be a moderating factor in improving bank performance. While the loan to deposit ratio (LDR) is a useful tool for evaluating bank performance, LDR is a measure of a bank's liquidity. The study discovered markers of credit risk, and these have an impact on bank performance as well.

In contrast to the deposit to equity ratio, which is indicative of a bank's success, it was also examining bank return on equity. It offers owners the ability to forecast and improve bank performance and capital allocation choices. The bank is encouraged to place greater attention on risk management in order to lower credit risk and achieve maximum performance, as loan management generally has a very substantial impact on bank performance.

5.3 Implication

Additionally, this study has a number of implications that suggest intriguing directions for further investigation. Here, some implications and recommendations for more study are covered.

- i) This study was carried out over a brief time period and with a limited sample size within the context of Nepalese commercial banks. Future research might focus on a broad range of businesses over an extended period of time.
- ii) The internal variables influencing loan management and bank performance in Nepalese commercial banks were investigated in this study. The variables included were firm-specific and might not be the only ones influencing the performance of banks. It is advised that more investigation be done to determine whether there are any other external influences.
- iii) In light of the study's findings, analysts who advise customers on banking investments can make use of the data on the elements they should take into account when making investment decisions, as well as forecast bank performance and loan management. According to the study's findings, bankers should consider LDR, NPLR, DER, and CDR before making any investment decisions.

- iv) For listed commercial banks, an event study on the variables influencing loan management and bank performance is required. LDR, NPLR, DER, and CDR are examples of internal factors that are essential to commercial banks. This thesis has made significant contributions to the field of banking in Nepal by shedding light on the variables that affect commercial banks' loan management and performance.
- v) The research guide advises prospective investors in Nepal to consider the aforementioned considerations while making investment selections. It improves bank performance and profitability while lowering loan risk.

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APPENDIX I

| Years | Banks | LDR | NPLR | DER | CDR | ROA | ROE |
|---------|-------|----------|---------|--------|---------|--------|---------|
| 2013/14 | LBL | 23.7941 | 0.0090 | 0.1163 | 0.0922 | 0.0176 | 0.01775 |
| 2014/15 | LBL | 23.9782 | 0.0062 | 0.1102 | 0.1960 | 0.0150 | 0.1559 |
| 2015/16 | LBL | 24.1180 | 0.0151 | 0.1176 | 0.1233 | 0.0148 | 0.1551 |
| 2016/17 | LBL | 24.2781 | 0.01515 | 0.1191 | 0.1828 | 0.0138 | 0.1510 |
| 2017/18 | LBL | 24.5427 | 0.0130 | 0.1081 | 0.1259 | 0.0104 | 0.1033 |
| 2018/19 | LBL | 24.7341 | 0.0080 | 0.1076 | 0.0717 | 0.0135 | 0.1275 |
| 2019/20 | LBL | 24.9916 | 0.0093 | 0.1399 | 0.0732 | 0.0161 | 0.1111 |
| 2020/21 | LBL | 25.1172 | 0.0192 | 0.1245 | 0.0657 | 0.0155 | 0.1059 |
| 2021/22 | LBL | 25.3961 | 0.0111 | 0.1183 | 0.0559 | 0.0166 | 0.1257 |
| 2022/23 | LBL | 25.5823 | 0.0104 | 0.1195 | 0.0829 | 0.0122 | 0.1010 |
| 2013/14 | SBI | 23.9181 | 0.0079 | 0.1079 | 0.0561 | 0.0128 | 0.1566 |
| 2014/15 | SBI | 24.0020 | 0.0152 | 0.1106 | 0.1186 | 0.0112 | 0.1511 |
| 2015/16 | SBI | 24.2405 | 0.0239 | 0.1150 | 0.0960 | 0.0143 | 0.1926 |
| 2016/17 | SBI | 24.4203 | 0.0275 | 0.1139 | 0.1722 | 0.0174 | 0.2334 |
| 2017/18 | SBI | 25.6496 | 0.0180 | 0.1118 | 0.0863 | 0.0151 | 0.2068 |
| 2018/19 | SBI | 25.0328 | 0.00147 | 0.1125 | 0.0600 | 0.0154 | 0.2111 |
| 2019/20 | SBI | 25.2217 | 0.0130 | 0.1276 | 0.0886 | 0.0159 | 0.1488 |
| 2020/21 | SBI | 25.5097 | 0.00075 | 0.1212 | 0.0637 | 0.0147 | 0.1398 |
| 2021/22 | SBI | 25.7604 | 0.0138 | 0.1277 | 0.0456 | 0.0118 | 0.1339 |
| 2022/23 | SBI | 23.92604 | 0.0256 | 0.1325 | 0.0503 | 0.0146 | 0.1713 |
| 2013/14 | EBL | 24.5570 | 0.0034 | 0.1043 | 0.0955 | 0.0210 | 0.2991 |
| 2014/15 | EBL | 24.7453 | 0.0084 | 0.1102 | 0.1722 | 0.0211 | 0.2611 |
| 2015/16 | EBL | 24.9089 | 0.0064 | 0.1159 | 0.1519 | 0.0239 | 0.3047 |
| 2016/17 | EBL | 24.9781 | 0.0097 | 0.1115 | 0.01691 | 0.0351 | 0.2839 |
| 2017/18 | EBL | 25.3199 | 0.0130 | 0.1333 | 0.2427 | 0.0185 | 0.2285 |
| 2018/19 | EBL | 25.4586 | 0.0030 | 0.1266 | 0.161 | 0.0125 | 0.2032 |
| 2019/20 | EBL | 25.4812 | 0.0027 | 0.1469 | 0.1652 | 0.0172 | 0.1738 |
| 2020/21 | EBL | 25.6958 | 0.0018 | 0.1420 | 0.1775 | 0.0197 | 0.1600 |
| 2021/22 | EBL | 25.8563 | 0.0016 | 0.1374 | 0.1856 | 0.0192 | 0.1733 |

| | | | | | | | |
|---------|------|---------|--------|--------|---------|--------|--------|
| 2022/23 | EBL | 25.9756 | 0.0022 | 0.2530 | 0.1443 | 0.0146 | 0.1350 |
| 2013/14 | HBL | 24.5675 | 0.0422 | 0.1068 | 0.0575 | 0.0191 | 0.2235 |
| 2014/15 | HBL | 24.1258 | 0.209 | 0.1102 | 0.0872 | 0.0176 | 0.2035 |
| 2015/16 | HBL | 24.0258 | 0.289 | 0.1155 | 0.0608 | 0.0156 | 0.1781 |
| 2016/17 | HBL | 25.6591 | 0.0196 | 0.1153 | 0.0872 | 0.0130 | 0.1577 |
| 2017/18 | HBL | 25.1398 | 0.0320 | 0.1114 | 0.0832 | 0.0135 | 0.1598 |
| 2018/19 | HBL | 25.4371 | 0.0123 | 0.1125 | 0.0627 | 0.0197 | 0.2453 |
| 2019/20 | HBL | 25.3985 | 0.0085 | 0.1273 | 0.2664 | 0.0203 | 0.2122 |
| 2020/21 | HBL | 25.4808 | 0.0140 | 0.1212 | 0.2305 | 0.0168 | 0.1417 |
| 2021/22 | HBL | 25.6127 | 0.0112 | 0.1288 | 0.02625 | 0.0221 | 0.1834 |
| 2022/23 | HBL | 25.7725 | 0.0101 | 0.1371 | 0.3139 | 0.0178 | 0.1540 |
| 2013/14 | GIBL | 23.5687 | 0.0030 | 0.1103 | 0.0652 | 0.0264 | 0.1511 |
| 2014/15 | GIBL | 23.4589 | 0.0023 | 0.1139 | 0.0602 | 0.0157 | 0.1551 |
| 2015/16 | GIBL | 23.8945 | 0.0025 | 0.1191 | 0.0768 | 0.0156 | 0.1775 |
| 2016/17 | GIBL | 24.1254 | 0.0086 | 0.1115 | 0.1529 | 0.0169 | 0.1926 |
| 2017/18 | GIBL | 24.5628 | 0.092 | 0.1283 | 0.1758 | 0.0165 | 0.2068 |
| 2018/19 | GIBL | 24.6349 | 0.0082 | 0.1216 | 0.1435 | 0.0122 | 0.2011 |
| 2019/20 | GIBL | 25.0054 | 0.0099 | 0.1327 | 0.1685 | 0.0198 | 0.2253 |
| 2020/21 | GIBL | 25.1682 | 0.0106 | 0.1177 | 0.1680 | 0.0158 | 0.2622 |
| 2021/22 | GIBL | 25.1985 | 0.0104 | 0.1245 | 0.1739 | 0.0169 | 0.2678 |
| 2022/23 | GIBL | 25.4589 | 0.0022 | 0.1185 | 0.1564 | 0.0186 | 0.2035 |

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ABSTRACT This study looks at how well commercial banks manage their loans. The study used 50 observations from 2013–14 to 2022–23 from five commercial banks' secondary data. The independent variables are the loan to deposit ratio (LDR), non-performing loan ratio (NPLR), debt to equity ratio (DER), and credit to deposit ratio (CDR), whereas the dependent variables are the return on assets (ROA) and return on equity (ROE). The information was gathered from the sample bank's annual reports. To examine the important

impact of bank-specific factors on the loan management and bank performance of commercial banks

, the variance inflation factors (multicollinearity in regression model results) and Pearson's correlation coefficients are too estimated. SPSS and MS-Excel have been used to tabulate and evaluate the calculated data. The findings indicate that while the debt to equity ratio (DER) has a significant relationship with return on equity (ROE), the loan to deposit ratio (LDR), non-performing loan ratio (NPLR), debt to equity ratio (DER), and credit to deposit ratio (CDR) have a positive significant relationship with return on assets (ROA). The study comes to the conclusion that Nepalese commercial banks' return on equity (ROE) is unaffected by the loan to deposit ratio (LDR), non-performing loan ratio (NPLR), and credit to deposit ratio (CDR). Keywords: Loan to deposit ratio (LDR), Non-performing