

**PROFITABILITY POSITION OF DEVELOPMENT  
BANKS IN NEPAL**

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

By

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## **CERTIFICATE OF AUTHORSHIP**

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **“Profitability Position of Development Banks in Nepal (with reference to MNBBL, GBBL, MBBL, KSBBL and JBBL)”**. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purposes. The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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## REPORT OF RESEARCH COMMITTEE

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## **ABBREVIATIONS**

A.M	:	Arithmetic mean
ADB	:	Asian Development Bank
AGM	:	Annual General Meeting
ATM	:	Automated Teller Machine
BAFIA	:	Bank and Financial Institution Act
BOK	:	Bank of Kathmandu Limited
CADR	:	Cash deposit ratio
CAPM	:	Capital Assets Pricing Model
CAR	:	Capital Adequacy Ratio
CATAR	:	Current assets to total assets ratio
CC	:	Cash Credit
CDR	:	Credit deposit ratio
CHTDR	:	Cash in hand to total deposit ratio
CRR	:	Cash Reserve Ratio
CV	:	Coefficient of Variation
D/E	:	Debt Equity Ratio
DTOR	:	Debtor Turnover Ratio
EBIT	:	Earnings before Interest and Tax
EBL	:	Everest Bank Limited
EPS	:	Earning Per Share
Excl	:	Excluding
F&D	:	Fixed Deposit
FIs	:	Financial Institutions
FY	:	Fiscal Year
GBBL	:	Garima Bikas Bank Ltd
HBL	:	Himalayan Bank Limited
i.e	:	That is
IBC	:	Inward Bill Collection
Incl	:	Including

JBBL	:	Jyoti Bikas Bank Limited
JVBs	:	Joint Venture Banks
KSBBL	:	Kamana Sewa Bikas Bank Limited
L & A	:	Loan and Advance
LACLR	:	Liquid assets to current liabilities ratio
LADR	:	Loan and advances to deposit ratio
LC	:	Letter of Credit
LDTA	:	Long Term Debt to Total Assets
M/c	:	Money at call
MBBL	:	Mahalaxmi Bikas Bank Ltd
MNBBL	:	Mukatinath Bikas Bank Ltd
MPS	:	Market Price Per share
NBL	:	Nepal Bank Ltd.
NEPSE	:	Nepal Stock Exchange
NIM	:	Net Interest Margin
No	.	Number
NPA	:	Non-performing Assets
NPAT	:	Net Profit after Tax
NPL	:	Non-performing Loan
NRB	:	Nepal Rastra Bank
NRBTDR	:	NRB balances to total deposit ratio
OTC	:	Over the Counter
Pe	:	Probable error
ROA	:	Return on Asset
ROE	:	Return on Equity
SBI	:	State Bank of India
SCBNL	:	Standard Chartered Bank Nepal Limited
SD	:	Standard Deviation
SE	:	Stock Exchange
SEBON	:	Security Exchange Board of Nepal
SML	:	Security Market Line

STDTA	:	Short Term Debt to Total Assets
TA	:	Total Assets
TDTA	:	Total Debt to Total Assets
TDTE	:	Total Debt to Total Equity
WACC	:	Weighted Average Cost of Capital

## ABSTRACTS

Profitability is a critical aspect for the growth and survival of banks, and managing the balance between profitability and liquidity is crucial. This study investigates into the profitability status of development banks in Nepal, aiming to examine their liquidity position, profitability status, and the relationship between liquidity and profitability. Adopting a descriptive research approach, secondary data from the annual reports of Nepalese development banks and the NRB were utilized. The analysis involved correlation and regression techniques to explore the connection between liquidity, deposits, loans, advances, and profitability, measured through indicators like ROA and ROE. The study spans a decade, from 2012/13 to 2021/22, covering five development banks: MNBBL, GBBL, MBBL, JBBL, and KSBBL. The findings reveal a mixed relationship between liquidity indicators and profitability measures, with some indicators showing significant correlations while others remain insignificant. Overall, the study suggests a positive and significant relationship between liquidity, deposits, loans, advances, and profitability among Nepalese development banks over the examined period. Notably, GBBL and MNBBL demonstrate strong positions in liquidity, deposits, loans, advances, and profitability. However, it's essential to note that these findings are specific to the selected banks and may not be generalized across the entire banking sector.

**Keywords:** Banks and financial institutions, profitability position (*CHTDR, LADR, NRBTD, LACLR and CATAR*), profitability (*ROA and ROE*) of the development banks in Nepal.

# CHAPTER I

## INTRODUCTION

### 1.1 Background of Study

The banking sector stands out as a dynamic industry in Nepal, serving as a crucial pillar for national development and economic growth. The significance of banking in the contemporary era cannot be overstated, as it provides avenues for public participation in development through share issuance and deposit acceptance. The banking sector plays a pivotal role in facilitating advancements in agriculture, tourism, trade, and commerce, serving as a means for investment and job creation. Acting as intermediaries between financial deficits and surpluses, development banks, in particular, are financial institutions dedicated to promoting and fostering growth in industry, agriculture, and other key sectors.

Studies indicate that higher interest-margin revenues in developing markets contribute to the profitability and stability of banks. These margins enable banks to cover potential credit losses, establishing a positive correlation between interest margins and bank stability. Conversely, a global study across 23 developed countries reveals a negative relationship between market power and overall risk exposure in banks. This study also suggests that while loan portfolio risk may increase with market power, higher capital ratios tend to offset the additional risk.

Characterized as living organisms, development banks adapt to the socio-economic environment, and their success hinges on their ability to respond effectively to this environment. Meeting the socio-economic needs of the economy is crucial for their success. Previous research, such as the work of Bourke (1989) and Molineux & Thornton (1992), employed simple linear regression models with variables like Return on Assets (ROA) or Return on Equity (ROE) as dependent variables and other determinants as explanatory variables. Later studies adopt the General Methods of Moments (GMM) models, which offer advantages in addressing issues like potential endogeneity of the dependent variable in dynamic panel data settings. A development bank holds the potential to foster enterprise by conceptualizing and promoting investment proposals, guiding others to pursue them, or undertaking these initiatives

itself, from conception to realization. While development banks are well-suited for this role, the creation of enterprises involves costs and risks that cannot be ignored. Prudent undertaking of these costs and risks requires development banks to possess the necessary financial strength, technical expertise, and managerial skills. In essence, a development bank is an institution dedicated to nurturing industrial enterprises from their inception to completion, recognizing the inherent costs and risks involved in this process.

The history of banking activities dates back to ancient civilizations, “where the practices of collecting and safeguarding money as deposits and engaging in lending activities have been in existence. In our country, prior to the establishment of Nepal Bank Limited (NBL), monetary activities were prevalent during the Rana rule. Prime Minister Ranodip Singh introduced Tejarathadda, lending gold and valuables to government staff and outsiders. Additionally, people used to borrow money from merchants at high-interest rates. The systematic development of the banking sector occurred through the establishment of Nepal Bank Limited (NBL) in 1994 B.S, with an authorized capital of Rs.10 million and a paid-up capital of Rs.842 thousand. During this period, NBL was privately owned, marking the inception of the first development bank in Nepal. Following NBL, Rastriya Banijya Bank was established, and numerous other development banks and financial institutions (FIs) emerged in the country with various schemes and facilities. All development banks are regulated and controlled by the central bank of Nepal, i.e., Nepal Rastra Bank (NRB), established on April 26, 1956, with an authorized capital of Rs.10 million and a paid-up capital of Rs.2.5 million”.

Consequently, as an open and liberal economic policy was put into place, the number of banks increased as well. Today, the nation is home to a number of banking industries that provide enticing programs and services. The Bank and Financial Act of 2063 states that banks are given the appropriate licenses in accordance with their class—A, B, C, and D—based on their minimum paid-up capital. Especially development banks have a dual focus on making a profit and satisfying their clients' needs for dependable services. They are responsible for carrying out agency duties, taking deposits, and making loans.

It is clear from looking at the current state of the banking industry in our nation that development banks run a variety of alluring programs and offer a wide range of services. Banks provide individuals with chances to engage in in the country's development process by issuing shares owned by them, accepting deposits, and mobilizing and investing accumulated resources in agriculture, trade, commerce, industry, tourism, and various projects. A robust banking system is crucial for the economic development of the country.

Key challenges in development banks include weak corporate governance, a shortage of adequate and skilled manpower, difficulties in rural access, cyber threats, and the lack of maintenance and improvement of equipment.

## **1.2 Problem Statement**

Modern banks are facing intense burden to encounter the expectations of various stakeholders, including employees, depositors, stockholders and stealing customers, all while satisfying direction and regulators. Development banks, in particular, must navigate a delicate balance between fulfilling their responsibilities and maintaining a certain level of profitability to survive in the market. The banking sector in Nepal, spurred by an open and liberal economic policy, has witnessed the emergence of numerous private and joint venture banks, intensifying competition. This heightened competition directly impacts the profitability of banks. Challenges such as government monetary policies, inter-bank competition, strikes, and the political climate further complicate the profitability landscape. The evolving banking environment, characterized by complexity and sophistication, introduces both risks and opportunities, making the future of banking dynamic and challenging ( Nicolae, 2015).

While development banks are generating satisfactory profits, they face challenges such as low loan volume compared to deposits, inefficient deposit mobilization, and a failure to utilize funds effectively for income-generating purposes. Poor liquidity positions also plague development banks. This study aims to investigate differences among particular banks in relation of resource mobilization, deposit collection, liquidity, among other key factors.

### **Research Questions:**

- What is the profitability position of the sampled development banks in Nepal?
- What is the trend of liquidity and profitability among development banks?

- Does there exist any relationship between deposits, loans, and advances?
- How do deposits, loans, and advances impact profitability?

### **1.3 Objectives of the Study**

Building upon the identified problems and research questions, the specific objectives of this study are as follows:

- To identify trends in liquidity and profitability among development banks in Nepal.
- To analyze the relationship between deposits, loans, and advances in development banks.
- To examine the impact of deposits, loans, and advances on the profitability of development banks.

### **1.4 Rationale of the Study**

This study focuses on assessing the profitability positions at Development banks, specifically MNBBL, GBBL, MBBL, KSBBL, and JBBL. It analyzes the profitability of these banks by several tools, providing valuable strategies for future researchers interested in listed banks. The study evaluates diverse profit-related factors, shedding light on the primary drivers of profitability. Both academically and practically, this research holds significance. The findings offer valuable insights for stakeholders related to these banks, including organization, shareholders, the over-all public (depositors, customers, investors), and policy makers.

Profitability is defined as the ability of an investment to generate returns. Similar to the variability of temperature and humidity on a given day, profitability is a dynamic aspect. Accountants and analysts define profitability, much like meteorologists interpret temperature readings and humidity studies to forecast the weather. Recording the wealth of a day enables the anticipation of future prospects. Profitability is widely regarded as a key criterion for assessing the success of management in maximizing profits or minimizing losses.

The significance of this study for the banking sector's performance lies in providing essential information, including:

- Significance for shareholders, depositors, and other creditors to discern the productivity of their funds.
- Assistance in identifying various problems related to the profitability of banks.

- Serving as a valuable source of literature review for individuals and future researchers, summarizing the findings of this research.
- Particularly significant for long-term investors seeking to invest in Muktinath Bikas Bank Limited, Garima Bikas Bank Ltd, Mahalaxmi Bikas Bank Limited, Jyoti Bikas, Bank Limited, and Kamana Sewa Bikas Bank Limited.

### **1.5 Limitations of the Study**

Like any research endeavor, this study is not exempt from limitations, as it was conducted to fulfill partial requirements for a Master's Degree in Business Studies (MBS). The scope of this study spans a decade, encompassing financial statements from F/Y 2012/2013 to 2021/2022, focusing on the analysis of profitability positions. The following limitations should be considered:

- The precision of the study relies on the data and various published documents sourced exclusively from the selected banks.
- Secondary sources were used to gather data for this study.
- The study concentrates solely on measuring the profitability of MNBBL, GBBL, MBBL, KSBBL, and JBBL among the 17 Nepalese Development banks.
- Its applicability is restricted to the aforementioned five development banks and does not encompass a broader spectrum of banks.
- Given its exclusive focus on profit, only a few measurement tools are applied.
- The consistency of secondary data is contingent upon the accuracy of the reports of the sampled banks.
- This research utilizes ROA, ROE and EPS as the dependent variables, and TDT, STDTA, LTDTA and TDTE as the independent variables.
- Descriptive and analytical methods are employed to analyze the data in this study.

## **CHAPTER II**

### **LITERATURE REVIEW**

The literature review is structured into two main segments. The initial part of this chapter encompasses the theoretical framework, while the subsequent section is dedicated to examining previous studies conducted by various researchers. Within this chapter, the overarching concept and perspective of "profitability position" are refined by reviewing relevant literature pertinent to this study. This chapter comprises the conceptual framework, an assessment of empirical studies, a review of Nepalese research, and an identification of research gaps.

#### **2.1. Conceptual Review**

This research explores literature applicable to its focus. The concept of development banks and their functions, the notion of profitability, a evaluation of preceding studies, articles, and dissertation are presented.

##### **2.1.1. Concept of Development Bank**

Development banks play a crucial role in the Nepalese finance industry as components of the banking sector. These institutions accept deposits, extend business loans, and provide related services, including various deposit accounts. While they “operate for profit and are owned by a group of individuals, some may also be members of the Federal Reserve System. Though they offer services to individuals, development banks are primarily concerned with receiving deposits and lending to businesses. A development bank serves as both a financial intermediary and a bank”, often referred to as business banking.

Specialized financial institutions, development banks provide medium and long-term financing to the industrial and agricultural sectors, catering to both private and public enterprises. With a multifaceted approach, they engage in term lending, securities investment, and other financial activities, aiming to foster saving and investment habits in the public. Categorized as 'Kha' or Class 'B' financial institutions under Section 49 of the Bank and Financial Institutions Act, 2073, the primary objective of development banks is to promote development sectors by offering technical and economic assistance.

The American Institute of Banking defines development banks as corporations that accept demand deposits, repeatedly extend short-term loans to business enterprises, and may provide additional services (American Institute of Banking, 1972).

Regulations by the Nepal Rastra Bank stipulate that new development banks established at the national level in Kathmandu must have “a minimum paid-up capital of Rs. 1 billion. Some development banks operate as joint ventures, while others are entirely domestic”. Currently, there are 17 development banks operating within Nepal. They are classified based on geographical coverage and activity level into three types: a) 1-3 districts type, b) 4-10 districts type, and c) national type. The new paid-up capital requirements for these development banks are respectively NRs. 500 million, 1.2 billion, and 2.5 billion, replacing the previous requirements of NRs. 100 million, 200 million, and 640 million.

### **2.1.2 Functions of Development Banks**

The functions of development banks are outlined in Section 2 of BAFIA 2073. Some of the specific functions include:

- Extending credit with collateral for a project and providing credits through consortium financing in collaboration with other banks or financial institutions.
- Issuing guarantees on behalf of customers.
- Engaging in the issuance, acceptance, payment, discounting, purchase, and sale of financial instruments.
- Accepting loans with movable and immovable assets as collateral.
- Conducting transactions related to letters of credit and remittances with the prior approval of Rastra Bank.
- Executing transactions for the transfer of amounts within Nepal.
- Exchanging details, information, and notices on debtors or customers who have obtained credit with Nepal Rastra Bank or other banking and financial institutions.

### **2.1.3 Concept of Profitability**

Profit serves as the primary metric for assessing the success of a business firm. It is the financial gain understood when the income generated from a business movement surpasses the expenses, costs, and taxes required to sustain that activity. The term 'profitability' refers to a business's ability to earn a profit.

The concept of profitability “comprises two words: 'profit' and 'ability.' There are two main perspectives regarding the term 'profit' – economic and accounting. According to Adam Smith, the father of economics, profit is the sum remaining after the payment of all wages and includes payments to officers of corporations, proprietors, partners, and farmers. The term 'profitability' denotes the ability of a business to earn a profit”. Profit is the excess remaining after deducting total cost from total revenue, forming the basis for tax computation and dividend payments. It is a well-known measure of success in an enterprise.

Bank profitability is influenced by internal and external factors. Internal factors, within the control of bank managers, are influenced by policies and decisions related to fund utilization, capital, liquidity, and expense management. The impact of internal factors on bank profitability can be analyzed by examining the balance sheet and income statement of the concerned development bank (Rama & Tekeste, 2012).

## **2.2 Theoretical Review**

The primary objective of development banks is to effectively handle liquidity, ensuring the robust financial health of the institution. Various measurement criteria exist for banks to mitigate risks arising from poorly managed liquidity positions (Shipho, 2011). However, there are multiple approaches that banks employ in the management of liquidity risk. The incorporation of effective liquidity management theories has been advocated for organizations to enhance overall performance (Khokhar, 2015). Theories related to liquidity management serve to avert issues associated with liquidity shortages and also provide a framework for monitoring liquid assets with safety precautions. These competing theories encompass Commercial Loan Theory, Shiftability Theory, and Anticipated Income.

### **2.2.1 Commercial Loan Theory**

Dodd (1982) and Nwankwo (1992) have also expressed critiques of this hypothesis. This concept proves incompatible with the requisites of economic development, particularly in emerging nations, as it dismisses long-term loans—widely regarded as the catalyst for growth from many perspectives. Moreover, the theory gives prominence to the maturity structure of bank assets (loans and investments) rather than their marketability or adaptability.

Furthermore, the theory posits that repayment from the bank's self-liquidating assets is adequate to ensure liquidity. This perspective overlooks the reality that seasonal bank withdrawals and the fulfillment of credit requests might adversely impact the liquidity position. Additionally, the theory fails to consider the inherent stability of demand deposits when evaluating liquidity.

According to this notion, a development bank's liquidity is inherently generated through the self-liquidation of a loan provided for a limited duration, intended to fund working capital. Borrowers are expected to repay the borrowed funds upon the successful completion of their trading cycles. The theory contends that, due to the extended time frames associated with real estate or consumer goods transactions, as well as investments in stocks and bonds, banks do not lend money for these purposes. However, the theory finds relevance in catering to traders requiring short-term financing for specific trading transactions.

### **2.2.2 Shift Ability Theory**

According to this concept, a bank can sustain its liquidity by possessing assets that can be easily transferred or sold for cash to other lenders or investors. From this standpoint, “a bank's liquidity can be enhanced if it consistently holds assets available for sale, and if both the Central Bank and the discount market are willing to purchase the offered assets at a discount. Consequently, this theory asserts that a bank's liquidity” is contingent on the shift ability, marketability, or transferability of its assets.

This theory posits that highly marketable securities serve as an excellent source of liquidity for a bank. Dodd (1982) outlines three requirements that such assets must meet to be swiftly convertible without substantial loss. The Liability Management Theory, as described by Dodds (1982), encompasses activities related to acquiring funds from

savers and other creditors (primarily the market) and defining the optimal fund mix for a specific bank.

The focus of liquidity management theory is on the liabilities side of the bank balance sheet. It contends that a bank's obligations can be leveraged to generate additional liquidity. Nwankwo (1991) argues that since banks can procure all the necessary funds, there is no imperative need to hold liquidity as an asset on the balance sheet.

Several authors have raised doubts about the credibility of liquidity theory. The prevailing opinion is that during times of distress, a bank may encounter challenges in obtaining necessary liquidity due to severe damage to market trust and a probable lack of creditworthiness. Liabilities, including deposits, market funds, and other creditors, emerge as crucial sources of liquidity for a functional bank. Shift ability serves as a strategy to maintain bank liquidity by facilitating the movement of assets. This approach allows banks to operate more efficiently by reducing reserves and investing in long-term assets. The banking system seeks to avert liquidity crises by enabling banks to sell or repo assets at favorable prices whenever necessary.

### **2.2.3 Anticipated Income Theory**

According to this concept, a bank's liquidity can be effectively governed by strategically timing and structuring the loan commitments it extends to its clients. When a customer's projected loan repayments are aligned with their future earnings, liquidity can be methodically planned. Nzotta (1997) asserts that this approach underscores a borrower's earning potential and creditworthiness as the ultimate assurance for maintaining sufficient liquidity. Nwankwo (1991) suggests that the notion signifies a shift towards self-liquidating commitments by banks. Many development banks have incorporated a ladder effect into their investment portfolios in line with this theory. This theory proposes that a bank can regulate its liquidity by appropriately directing the loans it disburses, ensuring the timely collection of these loans upon maturity, and mitigating the risk of repayment delays. It suggests that a "bank's management can strategically plan its liquidity based on the anticipated income of borrowers, enabling the provision of medium and long-term loans, as well as short-term loans. This is feasible as long as loan repayments are linked to the borrower's expected income and paid in periodic and regular installments, allowing the bank to maintain high liquidity when cash inflows are foreseeable" and consistent.

## **2.3. Empirical Review**

Examining prior research is crucial for the researcher to conduct the current study effectively. The primary purpose of this review is to explore similar concepts investigated by previous researchers in a novel manner. To enhance the effectiveness of this research, various journals, theses, academic papers, and articles related to similar topics will be consulted. The review of literature serves as a guide for the current research, providing valuable insights and frameworks.

### **2.3.1. Review of Journal and Articles**

In Sudha's (2022) article "Deposit Mobilization of Commercial Banks: A Comparative Study with AXIS LTD and CUB LTD," the author delves into the importance of deposit mobilization in banking. The study assesses deposit mobilization trends and growth in AXIS LTD and CUB LTD from 2011-2012 to 2020-2021, focusing on demand, savings, and term deposits. Data is sourced from official bank websites and analyzed using descriptive statistics like mean, standard deviation, coefficient of variance, and Compound Annual Growth Rate (CAGR). Results highlight significant growth in all deposit types for AXIS LTD and CUB LTD in India during the specified period.

Singh (2021) conducted a study titled "Impact of Branch Expansion Dimensions on Deposit Mobilization: A Case Study of Dashen Bank S.C." It employed a quantitative approach due to constraints like time and cost, aiming to enhance reliability and minimize bias. The study focused on Dashen Bank S.C. staff in Bahir Dar district, using purposive sampling. Data from 283 staff members were analyzed using SPSS 20 for descriptive, correlation, and regression analyses. Results showed government policy as the most significant factor affecting deposit mobilization, followed by population growth. Location of branch and branch office rent were considered least influential. The study suggested expanding research beyond Bahir Dar district for broader insights into branch expansion's impact on deposit mobilization.

Kukaj, Morina, & Misiri (2020) contributed an article titled "Financial Performance of Domestic and Foreign Banks: A Decadal Analysis in Kosovo's Banking Sector (2008-2018)." The study examined financial reviews of domestic and foreign banks over ten years. It conducted an extensive literature review and used STATA software for data processing, employing various models. Empirical results showed significance of return on equity, net sales to net assets ratio, and profit margin ratio. Return on equity and

profit margin positively impacted return on assets, while higher net sales to net assets ratio had a negative impact. The paper offers a comprehensive analysis of commercial banks' profitability in Kosovo, comparing banks with foreign capital to those with local capital.

Shrestha (2021) presented an article titled "Portfolio Behavior of Commercial Banks in Nepal," focusing on Nepalese commercial banks' investment, liability, and asset portfolios. The study observed that domestic banks in Nepal primarily invested in government securities, national saving bonds, debentures, and company shares. It investigated factors influencing the supply and demand of bank credit, considering variables like total deposit, lending rate, bank rate, national income, Treasury bill rate, lagged variables, and dummy variables.

Timilsina (2020) in "Managing Investment Portfolio" discusses challenges during economic downturns. Rational investors diversify across asset classes for risk reduction and reasonable returns. Reduced deposit interest rates raise non-refundable deposit risks due to mismanagement and non-performing assets. In crises, investors minimize risk for reasonable returns. Equity investments offer dividend income and capital gains, balancing risk and rewards. Long-term equity investment is recommended for risk management.

KABA (2019) explores the impact of various factors on deposit growth in commercial banks in "The Effect of Advertising and Publicity on Deposit Growth." Secondary data and ratio scale measurements were used. The study found positive and statistically significant effects on deposit growth from changes in bank branches, exchange rates, loans and advances, and nominal GDP. However, advertising and publicity had a positive but statistically insignificant effect. Conversely, average annual inflation rates and changes in money supply had negative but statistically significant effects on deposit growth.

Agarwal (2019), in the article "Profitability of Indian Public and Private Sector Banks: A Comparative Study," investigates the profitability of public and private sector banks in India. The study focuses on four profitability ratios: return on assets, return on equity, net interest margin, and operating profits. The analysis, spanning from 2005 to 2017,

reveals that private sector banks exhibit better profitability positions compared to public sector banks. Public sector banks, facing increasing non-performing assets, experience negative returns on assets, adversely affecting their profits.

Nicolae (2015), in his article titled "Determinants of Banks' Profitability: Evidence from EU 27 Banking Systems," conducted an assessment of the primary factors influencing the profitability of banks in the EU27 during the period 2004-2011. The study categorized these influencing factors into two broad groups: bank-specific (internal) factors and industry-specific and macroeconomic (external) factors. Empirical findings align with anticipated results, indicating that credit and liquidity risk, management efficiency, business diversification, market concentration/competition, and economic growth all impact bank profitability, as measured by both Return on Average Assets (ROAA) and Return on Average Equity (ROAE). A noteworthy outcome is the positive impact of competition on bank profitability within the EU27.

Xuezhi Qin & Dickson Pastory (2012) in "Commercial Banks Profitability Position: The Case of Tanzania" examines development banks' profitability in Tanzania "over ten years (2000-2009). National Microfinance Bank (NMB), National Bank of Commerce (NBC), and CRDB are case studies. Profitability measures include return on average assets, net interest income to average bearing assets, and non-interest expenses to average assets. ANOVA tests assess significant differences in profitability among development banks. The regression model explores effects of capital adequacy, liquidity, and asset quality on profitability". Findings reveal no significant differences in profitability among development banks, with liquidity and asset quality positively impacting profitability, except for nonperforming loans, which negatively influence it. Capital adequacy shows a negative impact on profitability, confirming the stability and regulatory compliance of development banks in Tanzania.

Kukaj (2010) compares financial performance of domestic and foreign banks in Kosovo's banking sector from 2008 to 2018. It analyzes financial reviews and explores whether banks with foreign capital are more profitable than those with local capital. The study reviews existing literature, examines methods/models used, and processes data with STATA software using various techniques. Empirical results suggest significance of independent variables (ROE, net sales/net assets ratio, and profit margin

ratio) at 5% confidence level. ROE and profit margin positively impact return on assets of development banks in Kosovo, while increased net sales/net assets ratio negatively affects return on assets. The study offers a detailed analysis of development banks' profitability in Kosovo and identifies which type of banks—foreign or domestic capital—are more profitable through comparative analysis.

### **2.3.2 Review of Previous Thesis**

Chhetri (2023) in his study, titled 'Impact of Liquidity Management on the Profitability of Development Banks in Nepal,' conducted in 2023 and published in the Journal of Economics & Management, explores the correlation between liquidity management indicators and the profitability of three development banks in Nepal—SDBL, MNBBL, and GBBL. Data covering Fiscal Years 69/70 to 78/79, totaling 30 observations, were collected from financial reports. Using correlation and regression analyses, the study evaluates indicators like CRR, CDR, NPA, TLTA, and DTA on the banks' ROE. The results show varied effects of these indicators on profitability, with CRR displaying a significant positive correlation with ROE. The study recommends optimizing liquidity management by maintaining an appropriate CRR level and improving credit risk management to enhance overall profitability. These findings offer valuable insights for bank management and policymakers in Nepal.

Bhatt (2022) in his article titled “Profitability Analysis of Commercial Banks in Nepal” emphasized that for banks, maximizing profits is a crucial objective to ensure long-term survival and competitiveness in a dynamic business environment. The author conducted a thorough analysis of the profitability of five selected banks in Nepal over the period 2016-2021, using data extracted from the annual reports of these commercial banks. Various analytical tools, including trend analysis, descriptive analysis, correlations, and regression analysis, were applied in the study.

In this research, profit served as the dependent variable, while independent variables such as bank capital, deposits, lending, size, and capital adequacy ratio (CAR) were examined. The study revealed a positive correlation between return on assets (ROA) and both bank deposits (BD) and CAR. Conversely, negative correlations were observed with bank capital (BC), lending (BL), and bank size (BS). Furthermore, return on equity (ROE) exhibited a negative relationship with BC, BL, BS, and CAR, but a

positive association with BD. These findings highlight the substantial impact of bank capital, deposits, lending, size, and CAR on the profitability of Nepalese commercial banks.

Acharya and Khanal (2020) study extensively examine "The Financial Performance of Development Banks in Nepal within the context of a Dynamic Economic setting and Evolving Regulatory Structures". Employing a robust analytical approach, the research assesses crucial financial metrics, including interest rates, loan quality, regulatory adherence, and technological integration. By scrutinizing these factors, the study aims to determine their influence on the profitability and overall financial well-being of development banks. The outcomes of the study provide valuable insights into the strengths and challenges encountered by these institutions, contributing to a nuanced understanding of Nepal's banking landscape. Beyond informing stakeholders in the financial sector, the research stands as a fundamental resource for policymakers and researchers seeking a deeper comprehension of the intricate financial dynamics characterizing development banks in Nepal.

Adhikari (2019) conducted a study titled "Evaluating the Financial Performance of Nepal Bank Ltd." The study concluded that the bank's investment portfolio management for maximizing returns was not efficient, and operational efficiency, indicated by operational losses, was unsatisfactory. Recommendations included enhancing investment portfolio management and mobilizing resources more efficiently by generating new business and service ideas for economic development. The study focused on fund utilization and mobilization, emphasizing deposit collection, fund disbursement as loans and advances, and analyzing income and expense trends.

Pradhan (2018) conducted a study titled "A Study on Investment Policy of NBL." The study aimed to assess how efficiently Nepal Bank Ltd (NBL) utilized mobilized deposits, specifically focusing on the period from 2029 to 2034 B.S. Using statistical tools such as the coefficient of correlation and ratio analysis, the study found a relationship between deposits and loans and advances. It highlighted NBL's limited investment in the priority sector and recommended increased investment in agriculture, a clear loan policy, and strategic investment in riskier sectors for higher profitability.

The study also suggested adjusting deposit interest rates and decreasing loans and advances.

Additionally, the study emphasized the impact of bank-specific variables on profitability, including current assets, credit portfolio, fixed assets, and other investments. The quality of the loan portfolio was identified as a crucial factor affecting profitability, with non-performing loan ratios serving as indicators of asset quality. The study underscored the importance of monitoring debtor compliance to ensure loan repayment, as delinquent loans posed a significant risk to a bank's profitability.

[Pangani \(2018\)](#) conducted a study titled "A Comparative Study on Profitability Analysis of Rastriya Banijya Bank and Nepal Bank Ltd." The research aimed to compare and assess the profitability and operational financial efficiency of Rastriya Banijya Bank (RBB) and Nepal Bank Ltd (NBL). It scrutinized income and expenditure, analyzed cost and profit trends, and presented suggestions for overall profitability improvement, providing valuable insights to stakeholders. Notably, RBB exhibited a comparatively superior Net Profit Margin, Return on Total Assets, and Net Operating Margin than NBL, showcasing RBB's better profit position over the study period. RBB also outperformed NBL in Return on Equity and Return on Capital employed ratios, highlighting RBB's strength in mobilizing equity for profit generation. The Operating Efficiency Position of RBB surpassed NBL, indicating NBL's challenges in generating profit from operations.

[Kapadi \(2017\)](#) conducted a research study titled "A Comparative Study on Performance of NABIL Bank Ltd and Standard Chartered Bank Limited." The study employed a descriptive analytical method to analyze the financial performance of NABIL Bank and Standard Chartered Bank (SCBNL). It assessed liquidity, capital structure, activity, profitability ratios, and trends in deposits and loans for both banks. The results indicated that NABIL Bank was more leveraged than SCBNL, and both banks had an excessively geared capital structure.

[Lama \(2017\)](#) conducted a study on the "Profitability of Nabil Bank Ltd. with Comparison to Other J/V Banks." The research aimed to examine the profitability of the joint venture (JV) bank industry and Nabil Bank specifically. It analyzed the

profitability trends of Nabil Bank and the JV bank industry over the last five years, compared Nabil Bank's profitability with other JV banks, and assessed its overall performance in assets mobilization, profitability ratios, lending quality, and market prices. Nabil Bank was found to have the second-highest net profit and EPS, and it performed above industry standards, ranking second among JV banks, with SCBNL leading the industry.

Gautam (2016) conducted a research study titled "A Comparative Study on Financial Performance of Standard Chartered Bank Limited and Nepal Bangladesh Bank Limited." The research aimed to compare the financial performance and existing capital structures of Standard Chartered Bank Limited (SCBL) and Nepal Bangladesh Bank Limited (NBBL). It explored the debt-servicing capacity of these banks, analyzed various ratios related to capital structure, and provided recommendations for optimal capital structures. The findings indicated that JVBs had a high percentage of total debt in raising assets, with NBBL exhibiting higher financial risk than SCBL.

Dahal (2014) conducted a study titled "Comparative Study of the Profitability Analysis (A Case Study of Nepal SBI Bank Ltd & Himalayan Bank Ltd)." The research assessed the profitability and financial positions of Nepal SBI Bank Ltd (NSBI Bank) and Himalayan Bank Ltd (HBL). It investigated the impact of deposits and loans on profitability, analyzed income and expenditure trends, and offered suggestions for improvement. The liquidity analysis revealed that HBL's position was less favorable than NSBI Bank's. NSBI Bank exhibited a better trend in deposit collection, lending, investment, and net profit, although HBL outperformed in earnings per share (EPS).

**Table 2.1** *The Literature Review Matrix*

<b>Source</b>	<b>Topic</b>	<b>Objective</b>	<b>Methods</b>	<b>Findings</b>
Dahal (2014)	Comparative Study of the Profitability Analysis (A Case Study of Nepal SBI Bank Ltd & Himalayan Bank Ltd.	To assess the profitability and financial positions of Nepal SBI Bank Ltd (NSBI Bank) and Himalayan Bank Ltd (HBL).	Comparison of annual reports of both banks.	The liquidity analysis revealed that HBL's position was less favorable than NSBI Bank.
Gautam (2016)	“A Comparative Study on Financial Performance of Standard Chartered Bank Limited and Nepal Bangladesh Bank Limited”.	To compare the financial performance and existing capital structures of Standard Chartered Bank Limited (SCBNL) and Nepal Bangladesh Bank Limited (NBBL).	Financial ratio analysis, comparative ratio analysis approach using statistical methods to compare the financial performance and capital structure.	NBBL's debt-heavy asset acquisition indicates greater financial risk than SCBL. Crucial for policymakers, investors, and bank management in decision-making.
Kapadi (2017)	A Comparative Study on Performance of NABIL Bank Ltd and Standard Chartered Bank Limited.	Study NABIL Bank and Standard Chartered Bank's financial performance. Compare leverage, capital structures, and	A descriptive analytical method.	The results indicated that NABIL Bank was more leveraged than SCBNL, and both banks had an excessively geared capital structure.

		identify performance differences or similarities.		
Lama (2017)	Profitability of Nabil Bank Ltd. with Comparison to Other J/V Banks.	To examine the profitability of the joint venture (JV) bank industry and Nabil Bank.	Financial ratio analysis, profitability comparison with other joint venture banks, deposit and lending analysis, and overall performance assessment for Nabil Bank.	Nabil Bank was found to have the second-highest net profit and EPS, and it performed above industry standards, ranking second among JV banks, with SCBNL leading the industry.
Pangan i (2018)	A Comparative Study on Profitability Analysis of Rastriya Banijya Bank and Nepal Bank Ltd.	To compare and assess the profitability and operational financial efficiency of Rastriya Banijya Bank (RBB) and Nepal Bank Ltd (NBL).	Comparison of financial reports of both banks.	The Operating Efficiency Position of RBB surpassed NBL, indicating NBL's challenges in generating profit from operations.
Adhika ri (2019)	Evaluating the Financial Performance of Nepal Bank Ltd.	To evaluate the financial performance of Nepal Bank Ltd.	Quantitative and qualitative methods: portfolio analysis, operational	Bank's investment portfolio management for maximizing returns was inefficient,

			efficiency assessment, income and expense trend analysis.	operational efficiency, indicated by losses, unsatisfactory.
Pradhan (2018)	A Study on Investment Policy of NBL.	To assess how efficiently Nepal Bank Ltd (NBL) utilized mobilized deposits.	Statistical tools such as the coefficient of correlation and ratio analysis.	Increased agriculture investment, clarified loan policy, strategic investment in riskier sectors for profitability. Loan portfolio quality crucial.
Acharya and Khanal (2020)	The Financial Performance of Development Banks in Nepal within the Context of a Dynamic Economic setting and Evolving Regulatory Structures.	To examine the financial performance of development banks in Nepal within the context of a dynamic economic setting and evolving regulatory structures.	Mix of quantitative and qualitative methods: analytical approaches, financial metric assessment, influence analysis, qualitative scrutiny, and maybe a case study.	Study outcomes offer valuable insights into strengths and challenges of these institutions, enriching understanding of Nepal's banking landscape.
Bhatt (2022)	Profitability “Analysis of Commercial Banks in Nepal”.	To analyze the profitability of commercial banks in Nepal.	Annual Reports of commercial banks.	Maximization profits is a crucial objective to ensure long-term

				survival and competitiveness in a dynamic business environment.
Chhetri (2023)	Impact of Liquidity Management on the Profitability of Development Banks in Nepal.	To explore the relationship between liquidity management indicators and the profitability of three development banks in Nepal, namely SDBL, MNBBL, and GBBL.	Data sourced from books, financial reports, correlation and regression analysis, statistical testing, and quantitative interpretation.	Highlights correlations and regression, emphasizing CRR's positive impact on ROE. Stresses liquidity and credit risk management for Nepal's development banks' profitability.
Sudha (2022)	Deposit Mobilization of Commercial Banks: A Comparative Study with AXIS LTD and CUB LTD.	Analyze deposit mobilization in commercial banking, focusing on AXIS LTD and CUB LTD in India to unveil trends, growth patterns, and comparisons, enhancing understanding of	Utilizes primary data, comparative bank analysis, and Indian banking context. Offers comprehensive exploration of deposit mobilization trends in specified banks	Remarkable Growth in Deposit Mobilization, Contribution of Different Deposit Types, Long-Term Trend Analysis.

		<p>this crucial banking activity.</p>		
<p>Singh (2021)</p>	<p>The Impact of Branch Expansion Dimensions (Government Policy, Population Growth, Location of Branch, and Branch Office Rent) on Deposit Mobilization: A Case Study of Dashen Bank S.C.</p>	<p>Assess Dashen Bank S.C.'s branch expansion effects on deposit mobilization, emphasizing government policy, population growth, branch location, and office rent.</p>	<p>Quantitatively explore branch expansion's impact on deposit mobilization in Dashen Bank S.C. using structured questionnaires, purposive sampling, and statistical analysis.</p>	<p>Understanding the factors influencing deposit growth in the context of branch expansion.</p>
<p>Kukaj, Morina, &amp; Misiri (2020)</p>	<p>The Financial Performance of Domestic and Foreign Banks: A Decadal Analysis in the Banking Sector of Kosovo (2008-2018).</p>	<p>Analyze the financial performance of domestic and foreign banks in Kosovo over ten years, using advanced statistical techniques to compare key indicators between the two categories.</p>	<p>Performing literature review, advanced STATA analysis, and comparative study to evaluate financial performance of Kosovo's domestic and foreign banks.</p>	<p>Analyzing factors impacting profitability of Kosovo's commercial banks.</p>

Shrestha (2021)	Portfolio Behavior of Commercial Banks in Nepal.	To investigate into the portfolio behavior of commercial banks in Nepal, with a specific emphasis on their investment patterns.	Examine Nepalese banks' portfolios, analyze investment trends and credit dynamics statistically. Discuss portfolio management challenges, especially during economic downturns.	Contribute to understanding how Nepalese commercial banks manage portfolios and respond to factors influencing credit dynamics.
Timilsina (2020)	Managing Investment Portfolio.	Assist investors in managing portfolios during economic downturns to minimize risk and attain reasonable returns amid uncertainties.	Examines economic downturn investment challenges, discusses risk management, advocates diversification, addresses lower deposit rates risk, and emphasizes long-term equity for risk management.	Higher risks due to lower interest rates, portfolio management challenges, risk reduction during crises, and suggestion for long-term equity investment.
KABA (2019)	The Effect of Advertising and Publicity on	Study the impact of advertising, publicity, and	The statistical analysis, highlighting the	Study found positive impacts on deposit growth

	Deposit Growth: A Study on Bank Branches, Exchange Rate, Inflation, Loans, Advances, Money Supply, and Nominal Gross Domestic Product,"	various factors including bank branches, exchange rates, inflation, loans and advances, money supply, and nominal GDP on deposit growth in commercial banks.	significant and insignificant impacts of various factors on deposit growth in commercial banks.	from bank branches, exchange rates, loans, advances, and nominal GDP changes. Advertising had no impact. Negative effects observed for inflation rates and changes in money supply on deposit growth.
Agarwal (2019)	Profitability of Indian Public and Private Sector Banks: A Comparative Study.	To investigate and compare the profitability of public and private sector banks in India.	Profitability ratios: return on assets, return on equity, net interest margin, and operating profits.	The private sector banks exhibit better profitability positions compared to public sector banks.
Xuezhi Qin & Dickson Pastory (2012)	Commercial Banks Profitability Position: The Case of Tanzania.	To examine the profitability of development banks in Tanzania over the period of ten years (2000-2009).	Profitability measured by return on average assets, net interest income to average bearing assets, and non-interest expenses to average assets. Regression model assesses impacts	It suggest that stability and regulatory compliance, as reflected in capital adequacy, are crucial for development banks in Tanzania, while maintaining

			of capital adequacy, liquidity, and asset quality.	favorable liquidity and asset quality contributes positively to their profitability.
Nicolae (2015)	Determinants of Banks' Profitability: Evidence from EU 27 Banking Systems,	To assess the primary factors influencing the profitability of banks in the EU27 during the period 2004-2011.	Study bank-specific and industry/macroeconomic factors. Empirical findings assess credit/liquidity risk, management efficiency, diversification, market competition, and economic growth's impact on profitability via ROAA and ROAE.	The credit and liquidity risk, management efficiency, business diversification, market concentration/competition, and economic growth all impact bank profitability.
Kukaj (2010)	Comparative Study of Domestic and Foreign Banks in Kosovo,	To compare the financial performance of domestic and foreign banks in the banking sector of Kosovo from 2008 to 2018.	Incorporates literature review for recent research insights. Uses software for data processing and analysis.	ROE and profit margin enhance development banks' profitability in Kosovo, while higher net sales to net assets ratio impedes ROA. It offers valuable insights into Kosovo's banks' financial performance.

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## **2.4. Research Gap**

While several researchers have delved into the examination of the profitability positions of development banks in Nepal through a comparative lens, there exists a research gap as none of these studies have considered government, domestic private, or joint venture banks. Previous investigations primarily focused on analyzing income, expenses, and the impact of non-performing loans on profitability. The emphasis in earlier research was on various cost components, encompassing the cost of money, deposits, borrowing, operational, administrative, and non-administrative costs. The connection between loans and advances and total deposits remained unexplored in prior research endeavors. In the context of Nepal, studies addressing this specific subject are limited. This study aims to fill the existing research vacuum by concentrating on the profitability analysis of selected development banks that were established in different periods, with a specific focus on government, domestic private, and joint venture banks. The study acknowledges a limitation in its duration, encompassing only ten years of data, which may have implications for result accuracy. The research employs various ratios and trend analyses to evaluate the profitability of three banks. Statistical methods such as mean and correlation are also utilized to ascertain the riskiness and relationships associated with loans, advances, and deposits at a particular development bank. Consequently, this study proves valuable from both an academic and policy perspective, offering benefits to diverse stakeholders including individuals, academics, professors, students, and business professionals. It is anticipated that the insights gained from this research will be of utility to others interested in relevant subjects in the future.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

Research Methodology serves as the systematic approach to solving research problems with specific objectives. The primary goal is to assess the profitability of selected Development Banks, namely MNBBL, GBBL, MBBL, KSBBL, and JBBL. The adopted research methodology encompasses research design, population and sample selection, sources of data, data collection procedure, and tools and techniques for data analysis.

#### **3.1. Research Design**

To fulfill the study's objective, both descriptive and analytical research approaches are employed. Descriptive research design is chosen for fact-finding and obtaining adequate information. This type of survey assesses “the opinions, behaviors, and characteristics of a given population, describing the current situation and events”. Given that this study evaluates the profitability position of MNBBL, GBBL, MBBL, KSBBL, and JBBL, a descriptive research design is deemed appropriate.

#### **3.2. Population and Sample**

The total population for this study comprises 17 Development banks in Nepal (NRB, 2022) currently earning high profits. For practicality, three banks are chosen as a sample, representing only 16.66% of the population. Utilizing judgmental sampling, Muktinath Bikas Bank Limited, Garima Bikas Bank Ltd, Mahalaxmi Bikas Bank Limited, Kamana Sewa Bikas Bank Limited, and Jyoti Bikas Bank Limited are considered. These three selected banks constitute the sample for this research.

#### **3.3. Sources of Data**

The study primarily focuses on secondary data, drawn from annual reports, balance sheets, websites, published and unpublished theses, performance reports, newspapers, journals and related magazines, etc.

### **3.4. Data Collection Procedure**

This research is based on a variety of bank-published data sources, including annual reports, financial performance reports, publications, journals, references, and corresponding websites. Additional data is gathered from government agencies and organizations such as the Ministry of Finance, the Nepal Stock Exchange, and the NRB. In addition, a variety of published and unpublished reports and documents, periodicals, bulletins, magazines, and economic journals are consulted for data and information. The main sources of review materials include Shanker Dev Campus, TU Kirtipur, and the central library.

### **3.5. Data Processing Procedure**

First, information is taken out of the banks' yearly reports and put together in a spreadsheet. The information is then input into the spreadsheet to compute financial ratios and produce the required numbers in accordance with the study's specifications. The gathered data is processed using computer tools like Microsoft Word and Excel.

### **3.6. Data Analysis Tools and Techniques**

Various profitability measurement tools and approaches are used in this phase to produce factual results. Karl Pearson's correlation coefficient and other statistical and financial techniques are used to assess and present the methodically organized data.

#### **3.6.1. Financial Tools**

One of the major influential and commonly employed financial tools is ratio analysis. Ratios can be derived from various items within financial statements, representing the mathematical relationship between two accounting figures. A financial ratio encapsulates the quantitative connection between two variables, aiding in the synthesis of extensive financial data for qualitative assessments. Consequently, ratios are deemed as premier indicators for assessing the performance of any business. Numerous ratios exist for scrutinizing and deciphering the financial performance of an enterprise. However, for our specific objectives, we focus on evaluating only the pertinent and significant ratios. Some pivotal ratios for assessing a company's performance include:

**a) Profitability Ratios**

For a company to thrive and expand over an extended period, it is imperative to generate profits. Profitability is crucial not only for sustaining business operations but also for attracting investment funds to fuel growth and contributing to societal welfare through social overheads. Profitability ratios serve as metrics to gauge the operational efficiency of a company, emphasizing the core aspect of its business activity.

**b) Liquidity Ratio**

Liquidity ratios serve as indicators of a firm's capacity to fulfill short-term obligations. These ratios compare short-term obligations with the available short-term resources to meet them. In our study, these ratios are crucial for assessing the ability of listed development banks to meet short-term obligations expected to mature within a brief period.

**c) Turnover Ratios (Activity Ratios /Utilization Ratios)**

Turnover ratios, synonymous with utilization ratios or activity ratios, evaluate how efficiently a firm manages and utilizes its assets. These ratios gauge the effectiveness of the firm in using its investments and economic resources to generate profitable sales.

**d) Leverage Ratio (Capital Structure Ratios)**

Leverage or capital structure ratios assess the long-term financial position of a firm. Debt carries inherent risks from the firm's perspective, as the firm is obligated to pay interest to debt holders regardless of its profitability or losses.

**e) Capital Adequacy Ratios**

The capital adequacy ratio serves as an indicator of whether the firm has maintained an appropriate level of capital. In simpler terms, it aids in determining whether the existing capital is sufficient or if reforms are necessary. This ratio is scrutinized to ensure the firm's safety and stability in the long run. Both overcapitalization and undercapitalization can have adverse effects on the firm's profitability. Excessive capital may remain idle, while insufficient capital may hinder the firm's ability to seize opportunities in potentially profitable sectors. Therefore, central banks have directed development banks to maintain an adequate ratio.

### **3.6.2. Statistical Tools**

Statistical tools perform very important role in business activity. Each and every performance should be calculated in business world to know the exact profit/loss. Here are some mathematical tools which are widely in practice.

#### **1. Arithmetic Means**

Arithmetic mean is the number which is obtained by adding the various numbers of all the items of a series and dividing the total by the number of items. Arithmetic mean is a useful tool in statistical analysis. The arithmetic mean is the simplest and most widely used measure of a mean, or average. It simply involves taking the sum of a group of numbers, then dividing that sum by the count of the numbers used in the series.

#### **2. Standard Deviation**

The standard deviation is a statistic that measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance. It is calculated as the square root of variance by determining the variation between each data point relative to the mean.

#### **3. Coefficients of Variation**

Standard deviation is the absolute measure of dispersion. The relative measure of dispersing based on the standard deviation is known as the measurement of coefficient of standard deviation. The percentage of measure of coefficient of s.d is called coefficient of variation less c.v is more uniformity and consistency vice versa. Only standard deviation is not appropriate to compare two pairs of variables but cv is capable to compare two variables independently in terms of their variability.

#### **4. Coefficient of Correlation**

The correlation coefficient is a statistical measure that calculates the strength of the relationship between the relative movements of the two variables. It is a useful statistical tool for measuring the intensity of the magnitude of linear relationship between two variables. The most important method of measuring the correlation between the two variables is "Karl Pearson's coefficient of correlation. "If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, then the correlation

is said to be negative. The correlation coefficient always remains within the limit of +1 to -1.

### 5. Multiple Regression Analysis

When attempting to explain the link between one continuous dependent variable and two or more independent variables, multiple linear regressions are the most popular type of linear regression. Either continuous or categorical independent variables are acceptable.

A statistical method called multiple linear regression (MLR), or just multiple regression, makes use of many explanatory variables to forecast the value of a response variable. Modeling the linear relationship between the explanatory (independent) factors and the response (dependent) variable is the aim of multiple linear regression (MLR). Several regressions are essentially the expansion of ordinary least-squares (OLS) regressions with several explanatory variables.

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_p x_{ip}$$

Where, for  $i = n$  observation

$y_i$  = dependent variable

$x_i$  = explanatory variables

$\beta_0$  = y-intercept (constant term)

$\beta_p$  = Slope coefficients for each explanatory variable.

#### Research Model:

$$\text{Profitability (Y)} = \beta_0 + X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + X_4\beta_4 + X_5\beta_5 + e$$

Where,

$X_1$  = Liquid assets to current liabilities ratios

$X_2$  = NRB Balance to total deposit ratio

$X_3$  = Cash in hand to total deposit ratio

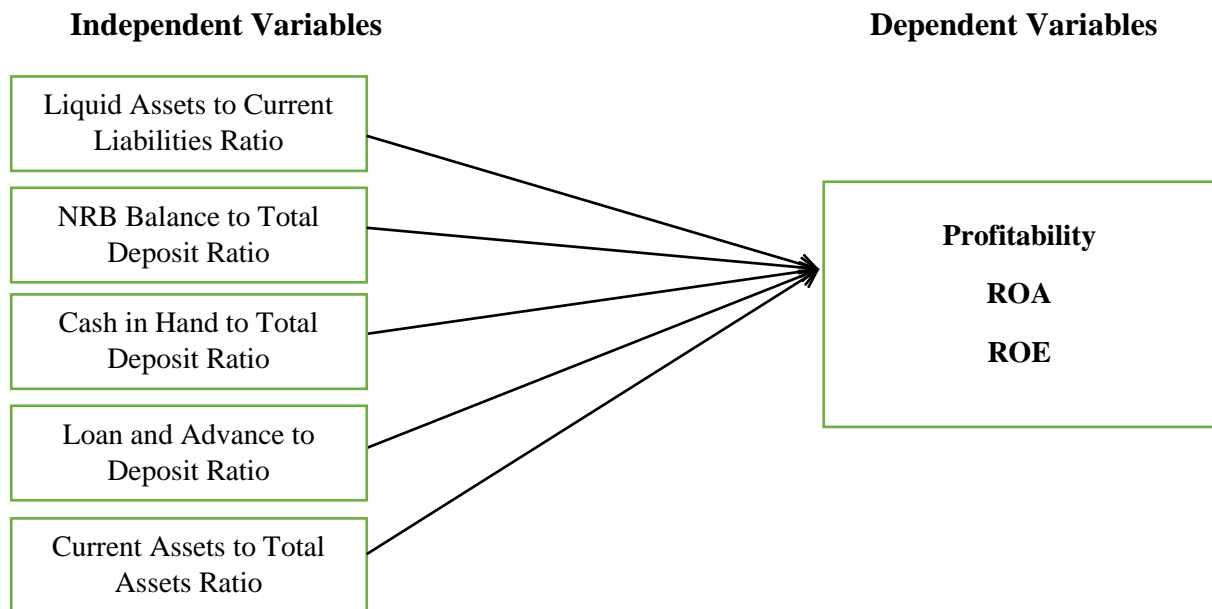
$X_4$  = Loan and advances to deposits ratio

$X_5$  = Current assets to total assets ratio

### 3.7 Research Framework and Definition of Variables:

#### 3.7.1 Conceptual Framework

The conceptual framework of this research is presented in graphic form which reflects the variables selected in research. It is presented below:



(Source: Shrestha and Jha, 2020)

Figure1: The Conceptual Framework

### 3.7.2 Definition of Variables

In research, a variable refers to a person, place, object, or phenomenon that is being quantified. Understanding the distinction between dependent and independent variables can be simplified by considering the implications conveyed by these terms.

#### Independent Variables

In experimental research, an independent variable is one that you manipulate, control, or modify to investigate its effects. It is referred to be "independent" since it is unaffected by any other factors in the research. They are as follows:

##### 1. Financial Ratio

The financial tool primarily measures the banks' capital structure and profitability.

#### Liquidity

Liquidity denotes the ability to meet financial or short-term obligations as they come due. In the context of a commercial bank, liquidity reflects the bank's capacity to fund all contractual obligations promptly. These obligations encompass lending, investment, deposit withdrawal, and maturity of liabilities, all occurring in the ordinary course of the bank's activities. Efficient liquidity management ensures that the bank can meet uncertain cash needs, influenced by external factors and the behavior of other entities.

##### 1. Liquid Asset to Current Liability (LACL) Ratio

Liquid assets to current liability (LACL) indicates that the ratio total liquid assets on current liabilities such as Sum of Current Deposits, Saving Deposits, Bills payables and Creditors as per given in balance sheets of the commercial banks. Higher ratio shows the higher liquidity position of the banks that is beneficial for new investment opportunity. The formula as follows:

A greater ratio indicates that banks have more liquidity, which is advantageous for new investment opportunities.

$$\text{LACL} = \frac{\text{Liquid assets}}{\text{current liabilities}}$$

Where,

Liquid assets = cash in hand + money at call and short notice

Current liabilities = Due to BFI + due to NRB+ Derivatives financial institution + current deposit + saving deposit+ bills payable + income tax payable

## 2. NRB Balance to Total Deposit Ratio (NRBTDR)

NRB balance to total deposit ratio (NRBTDR) indicates the amount deposited in Nepal Rastra Bank and total deposits collected by the commercial banks. Higher ratio means that there is a high liquidity position in the banks. The formula is as follows:

$$\text{NRBTDR} = \frac{\text{NRB Balance}}{\text{Total deposit ratio}} \times 100\%$$

## 3. Cash in Hand to Total Deposit Ratio (CHTDR)

Cash in hand to total deposit ratio (CHTDR) shows the ratio of cash in hand on total deposits per given in balance sheets of the commercial banks. Higher ratio shows the higher liquidity position of the banks that gives more useful for new investment opportunity. The formula is as follows:

$$\text{CBTDR} = \frac{\text{cash in hand}}{\text{total deposit}} \times 100\%$$

## 4. Loan and Advance to Total Deposit Ratio (LTDR)

The loan and advance to deposit ratio (LATDR) is used to analyze a bank's liquidity by comparing a bank's total loans to its total deposits for the same period. A higher ratio indicates a bank's greater liquidity position, which is more advantageous for new investment opportunities. The loan-to-deposit ratio is a percentage figure. If the ratio is excessively high, the bank may not have enough liquidity to fulfill any unexpected funding needs. If the ratio is too low, the bank may not be making as much money as it could. Following is the formula:

$$\text{LTDR} = \frac{\text{Loan and advance}}{\text{total deposit}} 100\%$$

## 5. Current Assets to Total Assets Ratio (CATAR)

The current assets to total assets ratio (CATAR) measures the amount of total funds invested in working capital and sheds light on the relevance of a company's current assets. It's worth noting how much of that portion of total assets is taken up by current assets, as current assets are primarily responsible for forming working capital and also

contribute to growing liquidity. The current assets to total deposit ratio is the ratio of current assets to total assets (CATAR). The following is the formula.

$$\text{CATAR} = \frac{\text{Current assets}}{\text{Total assets}} 100\%$$

Where,

Current assets = cash and cash equivalent + NRB balance + derivative financial instrument + placement with bank & financial institutions + other trading assets

### • Profitability Ratio

A group of financial measurements known as profitability ratios are used to evaluate a company's capacity to turn a profit in comparison to its overhead. For the majority of these ratios, the company is performing well if its value is higher than that of its competitors' ratios or higher than the same ratio from a prior period.

#### a. Earnings per Share (EPS)

Profit per share is a useful metric for assessing the profitability of a business. It is the percentage of earnings allotted to each outstanding share of common stock in a company. The one factor that is usually thought to be the most significant in influencing a share's price is its earnings per share. It also plays a significant role in determining the price-to-earnings valuation ratio.

$$EPS = \frac{NPAT - \text{dividend paid on preference share}}{\text{number of common outstanding share}}$$

#### b. Return on Equity (ROE)

The return on equity is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

$$ROE = \frac{NPAT}{\text{Total equity}} \times 100$$

**c. Return on Assets (ROA)**

Return on asset is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as 'return on investment'.

$$ROA = \frac{NPAT}{Total\ assets} \times 100$$

## CHAPTER IV

### RESULTS AND DISCUSSION

In this section, the gathered data are meticulously scrutinized and elucidated in accordance with the outlined methodology from the preceding chapter. The findings presented in this study are derived from the financial statements spanning from FY 2012/13 to FY 2021/22. The data are methodically illustrated through tables and diagrams, and their analysis is facilitated by financial ratios. Additionally, statistical tools, including “mean, standard deviation, coefficient of variation, correlation coefficient, and regression”, are employed for a comprehensive data analysis.

#### 4.1 Liquidity Ratio

Liquidity is paramount for development banks to meet loan demands and facilitate deposit withdrawals. Furthermore, it is essential for adhering to the cash reserve ratio requirements mandated by the NRB. Striking a balance between a shortage of liquidity and having surplus liquidity is imperative for development banks to maintain a positive credit image and uphold creditor confidence.

##### 4.1.1 Liquid Assets to Current Liability Ratio (LACLR)

The Liquid Assets to Current Liability Ratio is computed to assess a firm's ability to promptly meet short-term obligations, disregarding stock realization and prepaid expenses. It delineates the relationship between short-term assets and short-term liabilities.

*Table 4.1: Liquid Assets to Current Liability Ratio (LACLR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
Mean	5.57	7.47	6.64	9.18	25.91
S.D	3.13	1.33	2.05	3.40	18.17
C.V	56.17	17.81	30.92	37.07	70.13

*(Source: Appendix I to V)*

Table 4.1 illustrates the descriptive statistics, encompassing mean, standard deviation, and coefficient of variation (CV), and assesses the liquid assets to current liabilities ratio for selected banks over the past ten consecutive years. The table reveals the fluctuating trend in the liquid assets to current liabilities of Nabil Bank Limited. For Muktinath Bikas Bank Limited, the ratio in FY 2012/13 to FY 2021/22 varied from 7.33% to 2.53%, with the highest at 10.98% in FY 2019/20 and the lowest at 2.07% in FY 2016/17. On average, Muktinath Bikas Bank Limited maintained a 5.57% ratio, exhibiting a standard deviation of 3.13 and a coefficient of variation of 56.17%.

Similarly, the liquid assets to current liabilities of GBBL displayed a fluctuating trend, ranging from 8.40% to 4.53% across FY 2012/13 to FY 2021/22. The average ratio for GBBL was 7.47%, with a standard deviation of 1.33 and a coefficient of variation of 17.81%. MBBL's ratios fluctuated from 9.54% to 3.23%, averaging 6.64%, with a standard deviation of 2.05 and a coefficient of variation of 30.92%.

JBBL and KSBBL also exhibited fluctuating trends in their liquid assets to current liabilities ratios. JBBL's ratios varied from 8.75% to 5.13%, with an average of 9.18%, a standard deviation of 3.40, and a coefficient of variation of 37.07%. KSBBL's ratios ranged from 9.80% to 32.39%, with an average ratio of 25.91%, a standard deviation of 18.17, and a coefficient of variation of 70.13%.

In summary, a comparison of the five sampled banks based on the liquid assets to current liabilities reveals that KSBBL has the highest average LACLR at 25.91%, while MNBBL has the lowest at 5.57%. A higher LACLR indicates better operational performance, with KSBBL experiencing a higher degree of fluctuation (70.13%), while GBBL demonstrates more consistency with the lowest coefficient of variation at 17.81%.

#### **4.1.2 NRB Balance to Total Deposit Ratio (NRBTDR)**

NRB balance to total deposit ratios are calculated to determine the NRB balance of each bank relative to its total deposits. This ratio is also known as the cash reserve ratio (CRR).

*Table 4.2: NRB balance to Total deposit Ratio (NRBTDR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
Mean	7.32	7.51	7.57	12.63	8.37
S.D	2.95	2.15	2.04	4.22	5.62
C.V	40.26%	28.61%	26.97%	33.37%	67.16%

*(Source: Appendix I to V)*

Data from Table 4.2 reveals a fluctuating trend in NMBBL's NRB balance to total deposit ratio over the past ten fiscal years. The ratio ranged from a low of 3.42% in FY 2021/22 to a high of 12.46% in FY 2015/16. On average, NMBBL maintained 7.32% of its total deposits as NRB balance. However, the standard deviation of 2.95 and the coefficient of variation of 40.26% indicate significant variability in this ratio throughout the analyzed period.

Similar to Nabil Bank, GBBL also exhibited a fluctuating NRB balance to total deposit ratio over the ten-year period. The ratio ranged from 4.2% in FY 2019/20 to a high of 11.35% in FY 2013/14. On average, GBBL kept 7.51% of total deposits as NRB balance. This average, however, masks the fluctuations, as indicated by the standard deviation of 2.15 and the coefficient of variation of 28.61%.

Examining the NRB balance to total deposit ratio for Mega Bank Limited reveals a similar trend of fluctuation as observed in other banks. Over the ten fiscal years, the ratio for MBBL ranged from a low of 3.08% in FY 2021/22 to a high of 9.87% in FY 2016/17. Despite some variation, MBBL maintained an average NRB balance of 7.57% of total deposits. The standard deviation of 2.04 and coefficient of variation of 26.97% further highlight the fluctuations observed in this ratio throughout the analyzed period.

Janata Bank Limited exhibited the most significant variation in NRB balance to total deposit ratio among the analyzed banks. The ratio fluctuated considerably over the ten-year period, ranging from a low of 9.23% in FY 2015/16 to a high of 21.66% in FY 2013/14. On average, JBBL maintained 12.63% of its total deposits as NRB balance. However, the standard deviation of 4.22 and the coefficient of variation of 33.37% reveal a much higher degree of fluctuation compared to the other banks. This indicates that the NRB balance for JBBL deviated more significantly from the average over the analyzed period.

Similar to other banks, KSBBL's NRB balance to total deposit ratio exhibited fluctuations over the ten-year period. The ratio fluctuated significantly, with the highest point being 16.25% in FY 2015/16 and the lowest at a mere 2% in FY 2020/21. Despite the fluctuation, KSBBL maintained an average NRB balance of 8.37% of total deposits. However, the high standard deviation of 5.62 and coefficient of variation of 67.16% indicate a much greater degree of variation compared to the other banks analyzed. This suggests that KSBBL's NRB balance deviated more substantially from the average throughout the observed period.

An analysis of the NRB balance to total deposit ratio (NRBTDR) across five Nepali banks reveals distinct patterns. Janata Bank Limited (JBBL) stands out with the highest average NRBTDR of 12.63%, while Nabil Bank Limited (MNBBL) maintains the lowest at 7.32%. This indicates that JBBL generally keeps a larger portion of its deposits with the Nepal Rastra Bank (NRB) compared to MNBBL. In terms of consistency, the picture becomes clearer when examining the coefficient of variation (CV). Kumari Bank Limited (KSBBL) exhibits the most significant fluctuations in its NRBTDR, reflected by a high CV of 67.16%. This suggests that KSBBL's NRB balance has varied considerably over the analyzed period. Conversely, Mega Bank Limited (MBBL) demonstrates the most consistent NRBTDR with the lowest CV of 26.97%, indicating a more stable relationship between NRB balance and total deposits.

#### 4.1.3 Cash in Hand to Total Deposit Ratio (CHTDR)

Adequate liquidity is also must in the banking sector to protect its solvency and to honor its short-term obligations and liabilities. Hence, banks should have enough cash and bank balance in comparison to total deposit.

*Table 4.3: Cash in Hand to Total Deposit Ratio (CHTDR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
Mean	1.93	3.64	2.54	2.38	1.38
S.D	0.99	0.72	0.45	0.33	0.16
C.V	51.19	19.79%	17.63%	13.66%	11.69%

*(Source: Appendix I to V)*

Table 4.3 presents the banks' cash holdings as a percentage of the total amount of deposits received. The table showed a fluctuating trend in Nabil Bank Limited's cash in hand to total deposit. The cash in hand to total deposit ratio of MNBBL bank limited in the FY 2012/13, FY 2013/14, FY 2014/15, FY 2015/16, FY 2016/17, FY 2017/18, FY2018/19, FY2019/20, FY2020/21 and FY2021/22 are 1.91%, 1.79%, 1.95%, 1.75%, 1.49%, 1.38%, 4.67%, 1.57%, 1.41% and 1.38% respectively. The ratio was highest 4.67% in the fiscal year 2018/19 and lowest 1.38% in the fiscal year 2021/22 and 2017/18. In average, Nabil bank limited kept 1.93% of the total deposit as cash in hand to meet the cash requirement. Its standard deviation is 0.99 and coefficient of variation is 51.19%.

The trend of the cash on hand to total deposit of GBBL was erratic. In the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the cash and bank balance to total deposit ratio of GBBL are 4.75%, 4.39%, 4.05%, 3.8%, 3.81%, 3.70%, 3.75%, 2.83%, 2.73%, and 2.58%. The ratio dropped to 2.58% in the fiscal year 2022–2023 from its highest point of 4.75% in the previous year. To meet the cash requirement, JBBL kept an average of 3.64% of the total deposit as cash on hand. It has a coefficient of variation of 19.79% and a standard deviation of 0.72.

The trend of the cash on hand to total deposit of MBBL was erratic. In the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the cash and bank balance to total deposit ratio of MBBL are 2.23%, 2.10%, 2.80%, 3.40%, 2.76%, 2.43%, 2.82%, 2.60%, 2.42%, and 1.80%. The ratio dropped to 1.80% in the fiscal year 2021/22 from its highest point of 3.40% in the fiscal year 2015/16. To meet the cash requirement, MBBL retained, on average, 2.54% of the total deposit as cash on hand. Its coefficient of variation is 17.63%, and its standard deviation is 0.045.

The trend of JBBL's total deposit to cash on hand was erratic. In the fiscal years 2012–13, 2013, 14, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, JBBL's cash and bank balance to total deposit ratios are 2.03%, 2.33%, 1.84%, 2.23%, 2.30%, 2.87%, 2.50%, 2.84%, and 2.54%, respectively. The ratio dropped to 1.84% in the fiscal year 2014/15 and reached its highest point of 2.87% in the 2018/19 fiscal year. To meet the cash requirement, JBBL retained, on average, 2.38% of the total

deposit as cash on hand. Its coefficient of variation is 13.66%, and its standard deviation is 0.33.

The cash in hand to total deposit of KSBBL was fluctuating trend. The cash and bank balance to total deposit ratio of KSBBL in the FY 2012/13, FY 2013/14, FY 2014/15, FY 2015/16, FY 2016/17, FY 2017/18, FY2018/19, FY2019/20, FY2020/21 and FY2021/22 are 1.42%, 1.74%, 1.33%, 1.37%, 1.43%, 1.27%, .51%, 1.21%, 1.24% and 1.25% respectively. The ratio was highest 1.74% in the fiscal year 2013/14 and lowest 1.21% in the fiscal year 2019/20. In average, KSBBL kept 1.38% of the total deposit as cash in hand to meet the cash requirement. Its standard deviation is 0.16 and coefficient of variation is 11.69%.

GBBL has the practice of collecting the highest percentage of total deposit in the form of cash and bank balance than other banks to meet the immediate cash requirement. This conclusion can be drawn from a comparison of the five sampled banks based on the cash in hand to total deposit ratio.

#### 4.1.4 Loan and Advance to Total Deposit Ratio (LADR)

To make an appropriate profit, a development bank should not keep its all collected fund as cash and bank balance but they should be invested as loan and advances to the customers. In the present study, loan and advances represent local and foreign bills discounted and purchased loans, cash credit and overdraft in local currency and inconvertible foreign currency.

*Table 4.4: Loan and Advance to Total Deposit Ratio (LADR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
Mean	74.96	90.05	73.70	82.60	59.77
S.D	6.1	2.79	14.66	6.42	7.41
C.V	8.132%	3.10%	19.89%	7.77%	12.39%

*(Source: Appendix I to V)*

Table 4.4 presents the results of measuring Loan and advance to the chosen banks' entire deposit ratio for the previous ten years running. The loan and advance to total deposit of MNBBL showed a trend of fluctuation, according to the table. In the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–

21, and 2022–22, MNBBL's loan and advance to total deposit ratios are, respectively, 75.61%, 72.9%, 72.55%, 62.84%, 69.02%, 75.59%, 80.9%, 78.24%, 77.59%, and 84.36%. The ratio dropped to 69.02% in the fiscal year 2016–17 from its highest point of 84.36% in the fiscal year 2021/22. 74.96% of the total deposit is typically provided by Nabil Bank Limited as loans and advances. It has an 8.13% coefficient of variation and a standard deviation of 6.1.

There was a fluctuating trend in the loan and advance to the total deposit of GBBL. In the fiscal years 2012–13, 2013, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the loan and advance to total deposit ratio of GBBL is 91.13%, 91.2%, 86.78%, 89.02%, 90.96%, 88.37%, 94.16%, 91.25%, 84.84%, and 92.5%. The ratio dropped to 84.84% in the fiscal year 2020–21 from its highest of 92.5% in the fiscal year 2021/22. GBBL lends and advances 90.05% of the total deposit on average. It has a coefficient of variation of 3.10% and a standard deviation of 2.79.

There was a fluctuating trend in the loan and advance to the total deposit of MBBL. In the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the loan and advance to total deposit ratio of MBBL is 49.62%, 49.55%, 65.54%, 78.39%, 72.14%, 77.27%, 85.87%, 86.17%, 81.14%, and 91.25%. The ratio dropped to 49.55% in the fiscal year 2013/14 from its highest point of 91.25% in the fiscal year 2021/22. 73.70% of the total deposit is typically loaned and advanced by SBI. It has a coefficient of variation of 19.89% and a standard deviation of 14.66.

There was a fluctuating trend in the loan and advance to the total deposit of JBBL. In the fiscal years 2012–13, 2013, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, JBBL's loan and advance to total deposit ratios are, respectively, 78.01%, 76.2%, 75.56%, 74.31%, 81.85%, 83.52%, 86.59%, 90.39%, 87.85%, and 91.81%. The ratio dropped to 74.31% in the fiscal year 2015–16 from its highest of 91.81% in the fiscal year 2021/22. JBBL lends and advances 82.60% of the total deposit on average. It has a coefficient of variation of 7.77% and a standard deviation of 6.42.

There was a fluctuating trend in the loan and advance to the total deposit of KSBBL. In FY 2012/13, FY 2013/14, FY 2014/15, FY 2015/16, FY 2017/18, FY 2017/18, FY2018/19, FY2019/20, FY2020/21, and FY2021/22, the loan and advance to total deposit ratio of KSBBL are, respectively, 54.43%, 57.84%, 56.11%, 48.32%, 56.17%, 61.47%, 66.45%, 70.11%, 55.58%, and 71.27%. The ratio dropped to 48.32% in the fiscal year 2015–16 from its highest point of 71.27% in the fiscal year 2021/22. KSBBL lends and advances, on average, 59.77% of the total deposit. It has a coefficient of variation of 12.39% and a standard deviation of 7.41.

When comparing the loan and advance ratios of the five sampled banks, it can be seen that GBBL has the highest average LADR (90.05%), while KSBBL has the lowest average (59.77%). The better it is operating, the larger the loan and advance, and vice versa. It reveals that GBBL has the lowest CV, at 3.10%, indicating greater consistency on LADR, and MBBL has the highest CV, at 19.89%, indicating significant fluctuation on LADR.

#### 4.1.5 Current Assets to total Assets Ratio (CATAR)

Current assets to total deposit ratio are computed to know the how much of current assets available from total assets. Current assets are used to meets the short-term liabilities.

*Table 4.5: Current Assets to Assets Ratio (CATAR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
Mean	13.93	12.10	13.09	20.10	30.14
S.D	4.65	1.83	2.71	3.83	6.68
C.V	33.38	15.17	20.77	19.07	22.45

*(Source: Appendix I to V)*

The table 4.5 shows that the current assets to total assets ratio of selected banks for last ten consecutive years. The current assets to total deposit ratio of MNBLL in the FY 2012/13, FY 2013/14, FY 2014/15, FY 2015/16, FY 2016/17, FY 2017/18, FY2018/19, FY2019/20, FY2020/21 and FY2021/22 are 8.10%, 10.27%, 15.16%, 15.98%, 8.55%, 9.43%, 19.98%, 19.04%, 19.32% and 13.43% respectively. In average current assets to total assets of MNBBL is 13.93%, standard deviation is 4.65 and coefficient of variation is 33.38%.

In the fiscal years 2012–13, 2013, 14, 2015–16, 2016,/17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the current assets to total deposit ratio of GBBL was 9.77%, 12.44%, 10.40%, 11.46%, 9.67%, 12.31%, 14.46%, 12.99%, 15.12%, and 12.34%. MNBBL's average return on assets is 12.10%, with a 1.83 standard deviation and a 15.17% coefficient of variation. In the following fiscal years: FY 2012/13, FY 2013/14, FY 2014/15, FY 2015/16, FY 2016/17, FY 2017/18, FY 2018/19, FY2019/20, FY2020/21, and FY2021/22, the percentage of MBBL's current assets to total deposits is 9.79%, 12.12%, 10.89%, 14.23%, 13.27%, 13.26%, 15.96%, 15,18%, 17.32%, and 8.85%, in that order. The standard deviation is 2.71, the coefficient of variation is 20.77%, and the average return on assets for MBBL is 13.09%.

In the fiscal years 2012–13, 2013, 14, 2015–16, 2016,/17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, JBBL's current assets to total deposit ratios are 19.40%, 22.97%, 16.54%, 26.28%, 14.85%, 15.11%, 18.41%, 22.17%, 22.32%, and 22.92%, in that order. The coefficient of variation is 19.07%, the standard deviation is 3.83, and the average return on assets for JBBL is 20.10%.

In the fiscal years 2012–13, 2013, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the current assets to total deposit ratio of KSBBL was 20.38%, 20.63%, 32.16%, 36.27%, 33.54%, 29.98%, 37.15%, 26.89%, 39.06%, and 25.36%. The standard deviation is 6.68, the coefficient of variation is 22.45%, and the average return on assets for KSBBL is 30.14%.

By comparing the current assets to total assets of the five sampled banks, it is possible to determine that KSBBL has the highest average CATAR (30.14%), while GBBL has the lowest average (12.10%). It is operating more effectively the more current assets it has, and vice versa. It reveals that GBBL has the lowest CV, at 15.17%, indicating greater consistency on CATAR, and MNBBL has the highest CV, at 33.38%, indicating significant fluctuation on CATAR.

## **4.2 Profitability Ratio**

The main goals of every organization are to maximize wealth and profits. As a result, every employee in the company works to increase profits. It is critical to their future development and survival in these cutthroat markets. Profit reveals the organization's current state and position in the market. Several profitability ratios that show the bank's

operational effectiveness have been examined in this section. The overall operational efficiency of financial institutions can be measured with great assistance from profitability ratios. A higher ratio indicates a bank with higher efficiency.

#### 4.2.1 Return on Assets (ROA)

The relationship between total assets and producing net profit is explained by return on total assets. Net profit after taxes is divided by the total assets of the business to determine return on total assets. Greater efficiency in the use of total assets is indicated by a higher return on total assets, and vice versa.

*Table 4.6: Return on Total Assets (ROA)*

Fiscal Year	MNBBL	JBBL	MBBL	JBBL	KSBBL
Mean	1.66	2.07	1.32	1.29	1.69
S.D	0.58	0.43	0.42	0.43	0.61
C.V	34.89%	20.96%	31.62%	33.33%	36.28%

*(Source: Appendix I to V)*

The return on assets ratio for the chosen banks over the previous ten years is displayed in table 4.6. For the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, MNBBL's return on assets ratios are 1.24%, 1.03%, 1.43%, 1.57%, 2.01%, 2.48%, 2.36%, 2.11%, 1.46%, and 0.87%, in that order. The standard deviation is 0.58, the coefficient of variation is 34.89%, and the average return on assets for MNBBL is 1.66%.

In the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the return on assets ratio of GBBL was 2.03%, 2.15%, 1.36%, 2.04%, 2.12%, 2.02%, 2.71%, 2.77%, 1.86%, and 1.59%. The coefficient of variation is 20.96%, the standard deviation is 0.43, and the average return on assets for GBBL is 2.07%.

For the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the return on assets ratio of MBBL is 0.83%, 1.10%, 1.31%, 1.25%, 1.37%, 1.54%, 1.97%, 1.94%, 1.17%, and 0.7%. The

standard deviation is 0.42, the coefficient of variation is 31.62%, and the average return on assets for MBBL is 1.32%.

For the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, JBBL's return on assets ratios are, in that order, 0.2%, 1.40%, 1.42%, 1.28%, 1.49%, 1.69%, 1.66%, 1.67%, 0.95%, and 1.17%. The coefficient of variation is 33.33%, the standard deviation is 0.45, and the average return on assets for JBBL is 1.29%.

For the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the return on assets ratio of KSBBL was 1.14%, 1.02%, 2.15%, 1.05%, 1.50%, 1.84%, 2.64%, 2.61%, 1.71%, and 1.22%. The standard deviation is 0.61, the coefficient of variation is 36.28%, and the average return on assets for KSBBL is 1.69%.

When comparing the return on assets (ROA) of the five banks in the sample, it can be seen that GBBL has the highest average ROA (2.07%), while JBBL has the lowest (1.29%). Its operational performance is positively correlated with its return on assets, and vice versa. The data indicates that GBBL has the lowest CV (20.96%), indicating greater consistency in ROA, and KSBBL has the highest CV (36.28%), indicating highly fluctuating ROA.

#### 4.2.2 Return on Equity (ROE)

Return on shareholders demonstrates how effectively the business has utilized the owners' resources. Divided by shareholder equity, profit after taxes is used to calculate it. The degree of social responsibility toward owners can be seen in the ratio of net profit to shareholder equity. Both current and potential shareholders are very interested in this ratio, and management is very concerned about it.

*Table 4.7: Return on Equity (ROE)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
Mean	22.47	14.11	15.77	12.21	18.47
S.D	8.13	3.26	4.57	4.29	6.84
C.V	36.19%	23.12%	28.99%	35.17%	37.02%

*(Source: Appendix I to V)*

The effectiveness of the banks in making money by utilizing the assets of their shareholders is shown in table 4.7. According to the table, MNBBL's return on equity was 7.47%, 13.39%, 18.28%, 19.34%, 25.49%, 24.22%, 22.04%, 30.39%, 33.08%, and 30.98% in the fiscal years 2012–13, 2013, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, and 2022–22. MNBBL's average return on equity was 22.47%, meaning that with the mobilization of Rs. 100 in shareholder equity, the company was able to generate net income of Rs. 22.47. Nabil Bank Limited has a coefficient of variation of 36.19% and a standard deviation of 8.13.

For the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, GBBL's return on equity is 11.20%, 11.70%, 14.78%, 14.07%, 11.81%, 13.60%, 22.21%, 11.68%, 16.10%, and 13.97%. GBBL's average return on equity was 14.11%, meaning that with the mobilization of Rs. 100 in shareholder equity, the company was able to generate net income of Rs. 14.11. GBBL has a coefficient of variation of 23.12% and a standard deviation of 3.26.

For the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, MBBL's return on equity was 6.26%, 10.44%, 16.20%, 15.81%, 14.80%, 19.24%, 18.87%, 20.81%, 20.31%, and 15.02%. The average return on equity for MBBL was 15.77%, meaning that with the mobilization of Rs. 100 in shareholder equity, SBI was able to generate net income of Rs. 4.57. MBBL has a coefficient of variation of 28.99% and a standard deviation of 4.57.

For the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, JBBL's return on equity was 11.32%, 8.18%, 12.97%, 4.24%, 13.58%, 16.08%, 16.08%, 15.42%, 14.87%, and 2.31%, in that order. JBBL's average return on equity was 12.21%, meaning that with the mobilization of Rs. 100 in shareholder equity, the company was able to generate Rs. 12.21 in net income. JBBL has a 4.29 standard deviation and a 35.17% coefficient of variation.

For the fiscal years 2012–13, 2013–14, 2014–15, 2015–16, 2016–17, 2017–18, 2018–19, 2019–20, 2020–21, and 2022–22, respectively, the return on equity of KSBBL was 8.62%, 13.16%, 16.31%, 15.73%, 11.48%, 16.71%, 21.69%, 26.27%, 26.38%, and 28.36%. KSBBL's average return on equity was 18.47%, meaning that with the

mobilization of Rs. 100 in shareholder equity, the company was able to generate net income of Rs. 18.47. KSBBL has a coefficient of variation of 37.02% and a standard deviation of 6.84.

When comparing the return on equity (ROE) of the five banks in the sample, it can be seen that MNBBL has the highest average ROE (22.47%), while JBBL has the lowest average ROE (12.21%). This demonstrates that while JBBL's shareholders received the lowest return, MNBBL's shareholders received the highest return. The data indicates that GBBL has the lowest CV (23.12%), indicating greater consistency in ROE, and KSBBL has the highest CV (37.02%), indicating highly fluctuating ROE.

### 4.3 Coefficient of Correlation (r)

Correlation of coefficient shows the relationship between two or more than two variables. It measures the variables are positively or negatively co-related. For this purpose, Karl Pearson's Co-efficient of correlation has been used to find out and analyze the relationship between liquidity and profitability. Correlation coefficient analysis was used to determine the strength and direction of the linear relationship between the variables under consideration.

*Table 4.8: Correlation Matrix*

	ROA	ROE	CHTDR	LADR	NRBTDR	LACLR	CATAR
ROA	1						
ROE	0.135	1					
CHTDR	0.245	-0.164	1				
LADR	0.250	-.446**	.588**	1			
NRBTDR	-0.277	0.080	0.008	-0.115	1		
LACLR	0.017	0.005	-.328*	-.505**	0.035	1	
CATAR	0.061	-0.101	-.446**	-.471**	0.140	.710**	1

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

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

*(Source: Analysis from SPSS)*

The correlation between the independent and dependent variables is shown in table 4.8. It is clear from this table that there are correlations between the profitability (i.e., return

on equity and assets) and liquidity (i.e., LADR, NRBTD, LACL, CATA, and CHTDR) variables.

CHTDR and ROA have a correlation coefficient of 0.245. Although not statistically significant, there is a positive correlation between CHTDR and ROA. CHTDR and ROE have a correlation coefficient of -0.163. There is a weak and negative correlation between CHTDR and ROE. Additionally, the correlation coefficient of 0.25 indicates a positive but negligible relationship between LADR and ROA. There is a -0.446 correlation between LADR and ROE. There is a significant and negative correlation between ROE and LADR. The correlation coefficient between ROA and NRBTD is -0.277, indicating a weak and negative relationship. The NRBTD and ROE have a 0.80 correlation coefficient. There exists a positive and statistically significant correlation between NRBTD and ROE. The correlation coefficient of 0.017 indicates a positive but not statistically significant relationship between LACL and ROA. The correlation coefficient between LACL and ROE is 0.005. The correlation of LACL and ROE is positive and insignificant relationship.

Finally, the correlation coefficient between CATA and ROA is 0.061. The correlation of CATA with ROA is positive but insignificant relationship. The correlation coefficient between CATA and ROE is -0.101. The correlation of CATA with ROE is negative but insignificant relationship.

#### **4.4 Regression Analysis**

By establishing an approximate functional relationship between the variables, regression analysis is a statistical tool for establishing relationships between the variables. It is thought to be a helpful tool for figuring out how strongly two or more variables are related to one another.

##### **4.1.1 The Multiple Regression of ROA on Liquidity**

By defining the ROA changes in terms of the liquidity position of specific banks, the impact of the regression of ROA and liquidity variables—that is, liquid assets to current liability ratio (LACL), NRB Balance to total deposit ratio (NRBTD), Cash in hand to total deposit ratio (CHTDR), Loan and advance to deposit ratio (LADR), and Current assets to total assets ratio (CATA)—has been examined. The correlation between ROA

and liquidity, as presented in Table 4.4.1. This regression module's equation is as follows:

$$ROA = a_1 + b_1LACLR + b_2NRBTDR + b_3CHTDR + b_4LADR + b_5CATA \dots$$

(i)

Where,

ROA= Return on Asset,  $a_1$ = Constant,  $b_1, b_2, b_3, b_4$  and  $b_5$  = Regression Coefficient.

*Table 4.9: Regression of ROA on Liquidity Position.*

**Model Summary**

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	0.4701	0.221	0.133	0.51999

a) Predictors:(constant), LADR, NRBTDR, LACL, CATAR and CHTDR

The table shows that total variation of the ROA that explained by independent variable i.e. LADR, NRBTDR, LACL, CATA and CHTDR. R is the correlation coefficient which measure the degree of association between dependent and independent variable. R is 0.4701 which shows that there is low degree of positive correlation between dependent and independent variable. The value of coefficient of multiple Determinations ( $R^2$ ) is 0.2210. it indicates that 22.10% of total variation in ROA is explained by independent variables i.e. LADR, NRBTDR, LACL, CATA and CHTDR and remaining is explained by other variables. The standard error of estimate is 0.51999. It indicates that 52% is variation between actual and estimated value.

**Analysis of Variance (ANOVA) Table**

Model	Sum of Square	Df	Mean Square	F	Significance F
Regression	3.376	5	0.675	2.497	0.044
Residual	11.897	44	0.270		
Total	15.273	49			

a) Dependent variable: ROA

b) Predictors (Constant): LADR, NRBTDR, LACL, CATAR and CHTDR

The table shows that the value of F is 0.04 at 5% level of significance, the value is less than 0.05 which indicates that the overall model is reasonably fit and there is a statistically significant association between ROA and independent variable (liquidity).

**Coefficients Table**

Model	Unstandardized		Standardized	T value	Sig.	Collinearity	
	Coefficients		Coefficients			Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.512	0.645		0.793	0.432		
CHTDR	0.156	0.100	0.269	1.560	0.026	0.595	1.680
LADR	0.009	0.008	0.206	1.130	0.264	0.534	1.872
NRBTDR	-0.042	0.019	-0.302	-2.206	0.033	0.946	1.057
LACLR	-0.001	0.010	-0.015	-0.074	0.941	0.443	2.259
CATAR	0.023	0.014	0.331	1.632	0.010	0.431	2.321

*(Source: Analysis from SPSS)*

a) Dependent variable: ROA

The coefficient table shows that the regression coefficient of CHTDR, LADR, NRBTDR, LACLR and CATAR on ROA are 0.1555, 0.008, -0.0415, -0.0007 and 0.0232 respectively which indicates 1 unit increment in CHTDR, LADR, CATAR leads to 0.156, 0.009, 0.023 increments in ROA respectively. Similarly, 1 unit decrement in NRBTDR, LACLR leads to -0.042 and -0.001 decrement in ROA. The independent variable CHTDR, NRBTDR, and CATAR has not effect on ROA having significant level is 0.026, 0.264, and 0.010 respectively. The p value of CHTDR is 0.026 which is less than 5% it means that CHTDR is statistically significant with ROA, CHTDR will result in an on 0.269 point increase in CHTDR will result in a increase of 1 point of ROA .The p value of NRBTDR is 0.033 which is less than 5% it means that NRBTDR is statistically significant with ROA for the study. It means that NRBTDR has significant effect on ROA. VIF in examining multi collinearity problem with cutoff point of more than 0.5 and not more than 10. The VIF ranges from 1.680 to 2.321,

which is less than 10 thus it concluded that the problem of multi collinearity does not exist among variable.

#### 4.4.2 The Multiple Regressions of ROE on Liquidity

By defining the ROA changes in terms of the liquidity position of specific banks, the impact of the regression of ROE and liquidity variables—that is, liquid assets to current liability ratio (LACLR), NRB Balance to total deposit ratio (NRBTDR), Cash in hand to total deposit ratio (CHTDR), Loan and advance to deposit ratio (LADR), and Current assets to total assets ratio (CATA)—has been analyzed. The correlation between ROA and liquidity, as presented in Table 4.10. This regression module's equation is as follows:

$$\text{ROA} = a_1 + b_1\text{LACLR} + b_2\text{NRBTDR} + b_3\text{CHTDR} + b_4\text{LADR} + b_5\text{CATA} \dots \dots \dots$$

(ii)

Where, ROE= Return on Equity,  $a_1$ = Constant,  $b_1$ ,  $b_2$ ,  $b_3$ ,  $b_4$  and  $b_5$  = Regression Coefficient.

*Table 4.10: Regression of ROE on Liquidity*

<b>Model Summary</b>				
Model	R	R square	Adjusted Square	R Std. error of the Estimate
1	0.5746	0.3302	0.2541	5.6611

a) Predictors (Constant): LADR, NRBTDR, LACL, CATA and CHTDR

The table shows that total variation of the ROE that explained by independent variable i.e. LADR, NRBTDR, LACL, CATA and CHTDR. R is the correlation coefficient which measure the degree of association between dependent and independent variable. R is 0.5746 which shows that there is low degree of positive correlation between dependent and independent variable. The value of coefficient of multiple Determinations ( $R^2$ ) is 0.3302. it indicates that 33.02% of total variation in ROE is explained by independent variables i.e. LADR, NRBTDR, LACL, CATA and CHTDR

and remaining is explained by other variables. The standard error of estimate is 5.6611 which indicates that there is variation between actual and estimated value.

**Analysis of Variance (ANNOVA) Table**

Model	Sum of square	Df	Mean Square	F- test	Significance F
Regression	695.360	5	139.072	4.33	0.002
Residual	1410.12	44	32.048		
Total	2105.489	49			

a) Dependent variable: ROE

b) Predictors (Constant): LADR, NRBTDR, LAACL, CATA and CHTDR

The table shows that the value of P is 0.002 at 5% level of significance, the value is less than 0.05 which indicates that the overall model is reasonably fit and there is a statistically significant association between ROE and independent variable (liquidity).

**Coefficients table**

Model	Unstandardized Coefficients		Standardized Coefficients	T Value	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	46.361	7.019		6.605	0		
CHTDR	0.332	1.086	0.049	0.306	0.031	0.595	1.68
LADR	-0.337	0.085	-0.669	-3.963	0	0.534	1.872
NRBTDR	0.089	0.205	0.055	0.434	0.667	0.946	1.057
LACLR	-0.039	0.109	-0.067	-0.361	0.72	0.443	2.259
CATAR	-0.292	0.155	-0.355	-1.888	0.016	0.431	2.321

a) Dependent variable: ROE

(Source: Analysis from SPSS)

The table shows that the constant of ROE coefficient is 46.361, standard error is 7.0189 and t value is 6.6051, P value is 0.000 so the t value is significant because P value is less than 0.05. The regression coefficient of CHTDR, LADR, NRBTDR, LACLR and

CATAR on ROE are 0.3317, -0.3368, 0.0889, -0.03938 and -0.2924 respectively which indicates 1 unit increment in CHTDR leads to 0.3317 increment in ROE. Similarly, 1 unit increment in LADR leads to -0.3368 decrement in ROE and 1 unit increment in NRBTDTR leads to 0.0889 increments in ROE and 1 unit increment leads to -0.0393 decrement in ROE and 1 unit increment in CATR will leads to -0.2924 decrement in ROE of Nepalese development banks. There is positive relationship between ROE and CHTDR and CATAR was positively significant at 5% level while the other variables were negative relationship between ROE and LADR, LACLR and CATAR. The p value of LADR is 0.0002 which is less than 5% it means that LADR is statistically significant for the study. VIF in examining multi collinearity problem with cutoff point of more than 0.5 and not more than 10. The VIF ranges from 1.680 to 2.321, which is less than 10 thus it concluded that the problem of multi collinearity does not exist among variable.

## 4.5 Discussion

The average ratio of liquid assets to current liabilities for MNBBL, GBBL, MBBL, JBBL, and KSBBL stands at 5.57%, 7.47%, 6.64%, 9.18%, and 25.91%, respectively. Notably, KSBBL exhibits the highest ratio, while MNBBL demonstrates the lowest. This indicates that KSBBL maintains the highest proportion of liquid assets relative to current liabilities, with MNBBL having the lowest in comparison. In terms of the average NRB balance to total deposit ratio, MNBBL, GBBL, MBBL, JBBL, and KSBBL showcase ratios of 7.32%, 7.51%, 7.57%, 12.63%, and 8.37%, respectively. JBBL records the highest ratio, while MNBBL reports the lowest. This implies that JBBL holds the highest NRB balance concerning the total deposits collected, with MNBBL having the lowest ratio.

Examining the average cash in hand to total deposit ratio, MNBBL, GBBL, MBBL, JBBL, and KSBBL display ratios of 1.93%, 3.64%, 2.54%, 2.38%, and 1.38%, respectively. GBBL shows the highest ratio, while KSBBL has the lowest. This highlights that GBBL maintains the highest cash in hand in comparison to the total deposits collected, whereas KSBBL has the lowest ratio. The average loan and advance to total deposit ratio for MNBBL, GBBL, MBBL, JBBL, and KSBBL are 74.96%, 90.05%, 73.70%, 82.60%, and 59.77%, respectively. GBBL records the highest ratio, while KSBBL reports the lowest. This suggests that GBBL maintains the highest proportion of loans and advances relative to total deposits collected, with KSBBL having the lowest ratio.

Analyzing the average current assets to total assets ratio, MNBBL, GBBL, MBBL, JBBL, and KSBBL exhibit ratios of 13.93%, 12.10%, 13.09%, 20.10%, and 30.14%, respectively. KSBBL demonstrates the highest ratio, while GBBL has the lowest. This implies that KSBBL maintains the highest proportion of current assets relative to total assets utilized, with GBBL having the lowest ratio. Regarding the average return on assets (ROA), MNBBL, GBBL, MBBL, JBBL, and KSBBL report ratios of 1.66%, 2.07%, 1.32%, 1.29%, and 1.69%, respectively. GBBL records the highest ROA, while MBBL has the lowest. This signifies that, on average, GBBL achieves the highest return in comparison to assets utilized, whereas MBBL reports the lowest ROA.

Finally, in terms of the average return on equity (ROE), MNBBL, GBBL, MBBL, JBBL, and KSBBL demonstrate ratios of 22.47%, 14.11%, 15.77%, 12.21%, and 18.47%, respectively. MNBBL shows the highest ROE, while JBBL has the lowest. This indicates that MNBBL, on average, utilizes equity more efficiently to generate returns compared to JBBL among the selected banks in the study.

This study investigated the connections between liquidity and profitability in Nepalese banks. The findings offer insights that both align with and diverge from previous research on specific liquidity ratios.

**Deposit to Total Assets Ratio (DTAR):** Consistent with Adhikari (2019) and Sudha (2022), a positive and significant correlation emerged between DTAR and ROE. This finding reinforces the notion that effective deposit management practices can enhance a bank's profitability. However, the insignificant relationship between DTAR and ROA differs from these studies, suggesting a need for further exploration into potential moderating factors specific to the Nepalese banking context.

**Loan-to-Auxiliary Ratio (LACLR):** Aligning with the work of Acharya and Khanal (2020) and Chhetri (2023), LACLR displayed an insignificant correlation with both ROA and ROE. This result supports the existing literature suggesting an inverse relationship between high liquidity (as measured by LACLR) and profitability. Banks holding a large portion of assets in less readily available forms (represented by LACLR) might experience a drag on their profit generation.

The correlation coefficients between profitability measures (ROA and ROE) and other liquidity ratios (Credit-to-Total Deposit Ratio (CHTDR), Liquidity Adjusted Current Assets Ratio (LACAR), Non-Recurring Borrowings to Total Deposit Ratio (NRBTDR), and Credit-to-Adjusted Total Assets Ratio (CATAR)) were mostly insignificant. This finding partially aligns with the mixed results reported by Pradhan (2018), Singh (2021), and Kukaj et al. (2020). The inconclusive nature of these correlations highlights the potential for a complex interplay between various liquidity management strategies and profitability outcomes. The regression analysis, however, provided a more nuanced perspective, suggesting further investigation is necessary to fully understand these relationships.

Overall, this study underscores the dynamic nature of the interaction between liquidity and profitability. While maintaining high liquidity through ratios like LACLR might not directly translate to higher profits, effective deposit management (reflected in DTAR) and potentially credit extension practices (indicated by CHTDR in the regression analysis) seem to be crucial for Nepalese banks. The observed fluctuations in profitability across the banks further emphasize the influence of external factors alongside internal liquidity management strategies.

## **CHAPTER V**

### **SUMMARY AND CONCLUSION**

The Final chapter is organized in three segments, starting with a concise overview of the study in the first section. The second section encompasses the study's conclusions, while the third section delves into the implications arising from the research.

#### **5.1 Summary**

Development Banks, entities involved in financial activities, act as intermediaries channeling savings from savers to borrowers, facilitating the utilization of funds in productive sectors. This study explores the impact of liquidity on the profitability of MNBBL, GBBL, MBBL, JBBL, and KSBBL. Liquidity, deposits, loans, and advances are critical components for achieving a bank's objectives. Excessive liquidity hampers profit generation, as a significant portion remains idle. Inadequate liquidity may lead to severe financial issues, eroding public trust and potentially resulting in bank liquidation. Effective liquidity management poses a challenge for banks striving to achieve substantial profitability.

The initial chapter introduces the study's background, problem statement, and significance and limitations. The second chapter reviews relevant literature, including theoretical banking principles from journals, articles, and previous theses. The third chapter outlines the applied methods and techniques to assess the relationship between liquidity, deposits, loans, advances, and profitability. The fourth chapter presents the analyzed data, employing various financial and statistical tools such as averages, standard deviations, coefficients of variation, correlation coefficients, and regression analysis.

Following the financial data analysis, KSBBL and JBBL exhibit high liquidity, indicating a robust capacity for new investment opportunities. GBBL, with a higher Cash Hold to Total Deposit Ratio (CHTDR), demonstrates an extended fund base for creditor payments compared to other sample banks. Additionally, KSBBL maintains a higher Current Asset to Total Asset Ratio (CATAR), showcasing substantial liquid assets to support its asset base. GBBL allocates a significant portion of loans relative to total deposits (Loan Asset Deposit Ratio or LADR), indicating efficient use of

deposits for better profitability. Notably, JBBL's higher Cash Reserve Ratio (CRR) suggests effective inflation control. Correlation analysis reveals positive relationships between Return on Assets (ROA) and CHTDR, LADR, LACLR, and CATAR, whereas negative correlations exist with Non-Reserve Balance to Total Deposit Ratio (NRBTDR). Similarly, NRBTDR and LACLR exhibit positive correlations with Return on Equity (ROE), while CHTDR, LADR, and CATAR correlate negatively.

## **5.2 Conclusion:**

Liquidity emerges as a critical aspect of a bank, analogous to the lifeblood of a human being. Inadequate liquidity signals financial distress, eroding public trust and impacting a bank's profitability. Therefore, maintaining adequate liquidity is an ongoing challenge for bank management, with profound implications for profitability. Liquidity is essential for institutional stability, while profitability reflects an institution's financial strength and efficiency over time.

Among the sample banks, KSBBL displays the most fluctuation in Loan Asset Deposit Ratio (LADR), NRBTDR, and CATAR, while GBBL, MNBBL, JBBL, and MBBL exhibit lower volatility. JBBL's CHTDR and LADR experience the highest fluctuation compared to other banks. In terms of profitability indicators, KSBBL's ROA demonstrates the highest fluctuation, while GBBL, MNBBL, JBBL, and MBBL show lower volatility. MNBBL experiences a slight decrease in ROA over the study period. ROE for KSBBL and MNBBL appears less attractive due to high fluctuations, whereas GBBL, MBBL, and JBBL maintain lower fluctuation, with GBBL demonstrating consistency.

Correlations between ROA and CHTDR, LADR, LACLR, and CATAR indicate positive but insignificant relationships, suggesting that these independent variables do not significantly impact ROA. Negative but insignificant correlations exist between NRBTDR and ROA. Regarding ROE, negative but insignificant relationships are observed with CHTDR, LADR, and CATAR, indicating that as these independent variables increase, ROE decreases and vice versa, but without significant impact. A significant negative relationship is noted between ROE and LADR, signifying LADR's impact on ROE. Overall, correlation analysis suggests no substantial relationship between dependent variables (ROA, ROE) and independent variables (LADR, CHTDR, NRBTDR, LACLR, CATAR).

### 5.3 Implications

Several recommendations are proposed to enhance the liquidity and profitability positions of the selected banks:

- MNBBL should increase its liquidity position, as reflected in its lower liquid ratio compared to other development banks under study.
- KSBBL should maintain an adequate Cash in Hand to Total Deposit Ratio (CHTDR) to strengthen its financial position.
- KSBBL is advised to maintain an appropriate Loan and Advance to Total Deposit Ratio to optimize its lending activities.
- MNBBL should focus on maintaining an adequate Non-Reserve Balance to Total Deposit Ratio (NRBTDR) to bolster its financial stability.
- GBBL should ensure a suitable Current Assets to Total Deposit Ratio (CATAR) to optimize its asset base.
- JBBL needs to enhance asset utilization to improve its Return on Assets (ROA).
- JBBL should work on improving its performance to increase Return on Equity (ROE).
- This study fills gaps in research on the relationship between liquidity and profitability, providing insights into Nepalese development banks' liquidity and profitability positions.
- The study's focus on the relationship between liquidity, deposits, loans, advances, and profitability in five selected development banks allows for further research with larger samples, including other development banks and commercial banks.

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<https://jbbl.com.np/fianacialnotices>

**Appendix I**  
**Mahalaxmi Bikas Bank Limited**

Fiscal Year	CR R	RO A	LA TD R	RO E	CB BT DR	CB BC DR	Cash and Bank Balance	Total Deposit	Current Deposit	Net Profit	Equity
2021/22	3.22	0.7	95.58	6.25	1.79	25.43	1910254794	106238466851	7509073963	963479143	15400071110
2020/21	8.89	1.17	85.5	10.44	2.42	47.37	2673038605	110445872817	5642279943	1543348770	14781851324
2019/20	6.65	1.94	90.52	16.2	2.60	47.19	2546967726	97924444003	5397107408	2292524396	14154449362
2018/19	7.18	1.97	89.6	15.81	2.81	33.28	2374354666	84269219565	7133103928	2023511124	12801103793
2017/18	10.04	1.57	78.07	14.85	2.45	31.98	1984553390	80818815835	6205371596	1564688746	10539742841
2016/17	8.33	1.59	72.9	19.25	2.75	32.53	1799377270	65213519724	5531334474	1331881801	6920462451
2015/16	10.92	1.64	78.39	18.87	3.39	36.40	1753912290	51628221954	4818048457	1065436141	5645914521
2014/15	9.32	1.51	65.54	20.35	2.80	37.10	1527028783	54492993606	4115406375	922984007	4535798670
2013/14	9.58	1.19	49.55	20.31	2.09	24.60	1239453119	59125729453	5037126566	771471129	3798957417
2012/13	9.16	0.83	49.62	15.02	2.22	31.41	1186755022	53337264193	3777858754	480105493	3197458863

**Appendix II**  
**Garima Bikas Bank Limited**

Year	CRR	ROA	LATDR	ROE	CBBTDR	CBBCDR	Cash and Bank Balance	Total Deposit	Current Deposit	Net Profit	Equity
2021/22	36.21	1.59	92.93	11.2	2.57	15.32	4194902166	162814930677	27372923916	3527536906	31505117739
2019/21	33.98	1.86	85.84	11.7	2.72	18.74	3914278855	143628524817	20885876466	3331737575	28471221997
2019/20	27.2	2.77	93.62	14.71	2.82	19.22	3361603828	118884923356	17484157605	4191590635	28489965777
2018/19	29.15	2.71	95.64	13.01	3.74	31.34	3903860922	104178959617	12454132369	3442323796	26458304686
2017/18	31.18	2.15	92.9	10.87	3.71	30.50	3694234763	99515339449	12108302531	2565220197	23594331698
2016/17	23.33	2.32	95.46	13.6	3.80	26.49	3327910591	87387154947	12558579011	2464683088	18127314682
2014/15	28.74	3.12	93.77	21.66	3.8	28.50	2927338487	77035056186	10268496849	3490268417	16111012226
2014/15	30.43	1.76	94.8	10.09	4.05	31.13	2671955715	65898412646	8580489944	1520806289	15076248711
2013/14	32.27	2.97	100.81	16.1	4.38	30.80	2389295181	54477651530	7757016421	2289319963	14222913579
2012/13	36.65	2.9	104.06	13.97	4.75	48.31	2057014070	43264087394	4257773388	1839924770	13172827932

**Appendix III**  
**Kamana Sewa Bikas Bank Limited**

Year	CRR	ROA	LATDR	ROE	CBBTDR	CBBCDR	Cash and Bank Balance	Total Deposit	Current Deposit	Net Profit	Equity
2021/22	7.53	1.22	71.27	8.623	1.24	5.28	1092804548	87564219683	20664199505	1398835199	16222118151
2020/21	14.49	1.71	56.75	13.16	1.23	6.53	1175754169	95020841249	17997841866	1987390942	15102495274
2019/20	7.52	2.61	70.11	16.31	1.21	6.87	920032580	75731527432	13383872446	2434664521	14927074559
2018/19	18.91	2.61	66.45	15.73	1.51	6.6	1014367636	67061046522	15198420680	2189898090	13925502179
2017/18	19.71	1.84	62.2	11.98	1.27	6.53	811609528	63872885452	12422300151	1421596136	11864025316
2016/17	7.98	1.98	56.88	17.18	1.43	5.83	799366056	55727178456	13690280642	1292494632	7524175186
2015/16	24.03	1.99	48.92	21.69	1.37	4.87	785636090	57286482037	16125878269	1290025348	5948554654
2014/15	21.18	2.51	56.87	26.27	1.32	4.98	613768499	46298532040	12315435764	1336589187	5088090898
2013/14	16.43	2.67	58.63	26.38	1.74	5.17	687680696	39466453239	13282342895	1217940754	4617574225
2012/13	22.4	2.8	55.13	28.36	1.41	4.50	509677917	35965630744	11317217357	1168967497	4122168959

**Appendix IV**  
**Muktinath Bikas Bank Limited**

Year	CR R	R O A	LA TD R	RO E	CBB TDR	CB BC DR	Cash and Bank Balance	Total Deposit	Current Deposit	Net Profit	Equity
2021/ 22	3.6 6	1.7 1	89.8 4	13. 37	1.44	10. 53	323414 9797	22347447 0361	3068664 3937	4527552 838	3385810 5545
2020/ 21	11. 2	1.5 8	79.7 2	13. 39	1.40	14. 7	268297 9459	19080646 9972	1823515 5943	3463240 822	2585565 8567
2019/ 20	4.7 8	2.1 1	81.9 6	18. 28	1.57	14. 26	256603 5682	16295399 9572	1798669 0530	4238853 581	2318861 2393
2018/ 19	10. 05	2.6 1	82.6 6	19. 34	4.67	36. 34	629718 8921	13481066 9677	1732580 6590	3981892 950	2058635 7305
2017/ 18	10. 02	2.6 9	65.3 8	25. 86	1.37	9.6 6	163748 3131	11889615 6802	1694601 6377	3645279 751	1409483 4782
2016/ 17	6.7 7	2.3 2	70.4 9	24. 35	1.48	10. 10	164063 2219	11026727 1749	1623727 5994	2823461 039	1159502 5719
2015/ 16	14. 15	2.0 6	64.4 3	22. 04	1.75	14. 16	182020 1446	10395709 5808	1284837 9756	2098162 781	9519511 394
2014/ 15	11. 32	2.8 9	74.5 5	30. 39	1.94	15. 37	146815 4377	75360769 196	9545929 798	2331372 560	7671239 218
2013/ 14	9.3 2	3.2 5	74.9 2	33. 2	1.79	15. 68	114021 2319	63506102 707	7271123 319	2226686 260	6707095 734
2012/ 13	8.6	2.8	77.9 1	31. 05	1.91	15. 98	105066 8504	54905676 208	6572215 166	1693491 387	5453639 845

**Appendix V**  
**Jyoti Bikas Bank Limited**

Year	CR R	R O A	LAT DR	RO E	CB BT DR	CB BC DR	Cash and Bank Balance	Total Deposit	Current Deposit	Net Profit	Equity
2021/ 22	5.6 6	1.1 7	96.6 9	11. 32	2.54	42.7 0	4183569 620	16448928 5837	9795395 294	2711073 708	23943774 455
2020/ 21	5.9 3	0.9 5	92.3 1	8.1 81	2.84	44.6 9	3745462 626	13166036 8354	8379148 670	1712776 521	20935385 243
2019/ 20	4.1 9	1.6 7	94.6 1	12. 97	2.50	43.1 4	2452131 879	97892301 967	5683120 598	2257276 027	17403014 259
2018/ 19	6.6 8	1.6 5	90.4 6	11. 24	2.86	50.3 0	2409717 758	83970867 219	4790516 782	1853792 753	16489809 301
2017/ 18	7.7 2	1.6 9	85.5 85.5	13. 81	2.32	34.6 8	1703496 402	73224062 599	4911254 694	1467347 467	10627149 417
2016/ 17	10. 81	1.4 9	84.0 7	16. 25	2.30	55.8 5	1491151 855	64781463 622	2669761 217	1115064 628	68611595 08
2015/ 16	13. 32	1.2 1	75.3 2	15. 2	2.22	56.0 9	8175850 58	36722917 654	1457615 709	5009896 08	32964469 68
2014/ 15	13. 72	1.3 6	76.7 3	14. 57	1.83	56.4 9	4977475 48	27087258 036	8810624 91	4099229 82	28129502 41
2013/ 14	23. 35	1.4 3	76.2 76.2	14. 87	2.32	77.8 2	5167703 50	22185526 928	6640057 26	3603936 24	24240798 91
2012/ 13	18. 91	0.2 8	78.0 1	2.3 07	2.02	53.1 6	3239394 22	15982555 058	6093090 51	5222444 2	22636861 67

### Appendix VI

Correlations							
		ROA	ROE	CRR	LATDR	CBBTDR	CBBCDR
ROA	Pearson Correlation	1	.637**	.352*	0.037	0.178	-.437**
	Sig. (2-tailed)		0.000	0.012	0.797	0.217	0.002
	N	50	50	50	50	50	50
ROE	Pearson Correlation	.637**	1	-0.159	-.350*	-0.150	-.314*
	Sig. (2-tailed)	0.000		0.270	0.013	0.299	0.026
	N	50	50	50	50	50	50
CRR	Pearson Correlation	.352*	-0.159	1	0.221	.463**	-0.023
	Sig. (2-tailed)	0.012	0.270		0.123	0.001	0.876
	N	50	50	50	50	50	50
LATDR	Pearson Correlation	0.037	-.350*	0.221	1	.666**	.466**
	Sig. (2-tailed)	0.797	0.013	0.123		0.000	0.001
	N	50	50	50	50	50	50
CBBTDR	Pearson Correlation	0.178	-0.150	.463**	.666**	1	.496**
	Sig. (2-tailed)	0.217	0.299	0.001	0.000		0.000
	N	50	50	50	50	50	50
CBBCDR	Pearson Correlation	-.437**	-.314*	-0.023	.466**	.496**	1
	Sig. (2-tailed)	0.002	0.026	0.876	0.001	0.000	
	N	50	50	50	50	50	50
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

### Appendix VII

<b>Variables Entered/ Removed<sup>a</sup></b>			
Model	Variables Entered	Variables Removed	Method
1	CBBCDR, CRR, LATDR, CBBTDR <sup>b</sup>		Enter
a. Dependent Variable: ROA			
b. All requested variables entered.			

<b>Model Summary</b>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.641 <sup>a</sup>	0.411	0.358	0.55074		
a. Predictors: (Constant), CBBCDR, CRR, LATDR, CBBTDR						
<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.518	4	2.379	7.845	.000 <sup>b</sup>
	Residual	13.649	45	0.303		
	Total	23.167	49			
a. Dependent Variable: ROA						
b. Predictors: (Constant), CBBCDR, CRR, LATDR, CBBTDR						
<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.644	0.446		3.685	0.001
	CRR	0.010	0.010	0.135	0.989	0.328
	LATDR	0.002	0.007	0.036	0.226	0.822
	CBBTDR	0.301	0.133	0.418	2.263	0.029
	CBBCDR	-0.025	0.005	-0.658	-4.641	0.000
a. Dependent Variable: ROA						

## Appendix VIII

Variables Entered/ Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	CBBCDR, CRR, LATDR, CBBTDR <sup>b</sup>		Enter
a. Dependent Variable: ROE			
b. All requested variables entered.			

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.479 <sup>a</sup>	0.230	0.161	5.54711
a. Predictors: (Constant), CBBCDR, CRR, LATDR, CBBTDR				

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	412.753	4	103.188	3.353	.017 <sup>b</sup>
	Residual	1384.669	45	30.770		
	Total	1797.422	49			
a. Dependent Variable: ROE						
b. Predictors: (Constant), CBBCDR, CRR, LATDR, CBBTDR						

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.612	4.493		6.369	0.000
	CRR	-0.169	0.099	-0.268	-1.708	0.094
	LATDR	-0.167	0.073	-0.411	-2.285	0.027
	CBBTDR	2.628	1.341	0.414	1.960	0.056
	CBBCDR	-0.114	0.055	-0.335	-2.064	0.045
a. Dependent Variable: ROE						

*Liquid Assets to Current Liability Ratio (LACLR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
2012/13	7.33	8.40	9.54	8.75	9.80
2013/14	8.62	7.69	10.42	12.34	11.61
2014/15	5.04	7.30	7.01	8.76	43.76
2015/16	3.82	8.89	6.42	16.55	32.07
2016/17	2.07	6.60	5.36	9.57	16.79
2017/18	2.35	8.33	5.45	9.65	38.06
2018/19	8.87	8.80	6.17	5.06	12.51
2019/20	10.98	7.73	6.45	9.19	2.36
2020/21	3.27	6.53	6.34	6.78	59.73
2021/22	2.53	4.53	3.23	5.13	32.39
Total	55.69	74.73	66.40	91.83	259.08
Mean	5.57	7.47	6.64	9.18	25.91
S.D	3.13	1.33	2.05	3.40	18.17
C.V	56.17	17.81	30.92	37.07	70.13

*(Source: Appendix I to V)**NRB Balance to Total Deposit Ratio (NRBTDR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
2012/13	6.69	7.58	6.13	18.72	13.44
2013/14	7.53	11.35	8.41	21.66	11.63
2014/15	9.38	6.33	7.1	11.24	14.82
2015/16	12.46	7.68	9.03	9.23	16.25
2016/17	5.28	5.39	9.87	9.87	2.72
2017/18	8.64	9.95	8.97	12.64	11.07
2018/19	5.47	7.94	6.7	8.65	5.9
2019/20	3.8	4.2	9.51	11.06	3.24
2020/21	10.49	8.75	6.86	11.58	2
2021/22	3.42	5.98	3.08	11.68	2.55
Total	73.16	75.15	75.70	126.33	83.74
Mean	7.32	7.51	7.57	12.63	8.37
S.D	2.95	2.15	2.04	4.22	5.62
C.V	40.26%	28.61%	26.97%	33.37%	67.16%

*(Source: Appendix I to V)*

*Cash in Hand to Total Deposit Ratio (CHTDR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
2012/13	1.91	4.75	2.23	2.03	1.42
2013/14	1.79	4.39	2.1	2.33	1.74
2014/15	1.95	4.05	2.8	1.84	1.33
2015/16	1.75	3.8	3.4	2.23	1.37
2016/17	1.49	3.81	2.76	2.3	1.43
2017/18	1.38	3.7	2.43	2.33	1.27
2017/18	4.67	3.75	2.82	2.87	1.51
2019/20	1.57	2.83	2.6	2.5	1.21
2020/21	1.41	2.73	2.42	2.84	1.24
2021/22	1.38	2.58	1.8	2.54	1.25
Total	19.29	36.38	25.36	23.81	13.78
Mean	1.93	3.64	2.54	2.38	1.38
S.D	0.99	0.72	0.45	0.33	0.16
C.V	51.19	19.79%	17.63%	13.66%	11.69%

*(Source: Appendix I to V)**Loan and Advance to Total Deposit ratio (LADR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
2012/13	75.61	91.13	49.62	78.01	54.43
2013/14	72.9	91.2	49.55	76.2	57.84
2014/15	72.55	86.78	65.54	75.56	56.11
2015/16	62.84	89.02	78.39	74.31	48.32
2016/17	69.02	90.96	72.14	81.85	56.17
2017/18	75.59	88.37	77.27	83.52	61.47
2018/19	80.9	94.16	85.87	86.59	66.45
2019/20	78.24	91.52	86.17	90.39	70.11
2020/21	77.59	84.84	81.14	87.85	55.58
2021/22	84.36	92.5	91.25	91.81	71.27
Total	749.60	900.49	736.95	826.09	597.75
Mean	74.96	90.05	73.70	82.60	59.77
S.D	6.1	2.79	14.66	6.42	7.41
C.V	8.132%	3.10%	19.89%	7.77%	12.39%

*(Source: Appendix I to V)*

*Current Assets to Assets Ratio (CATAR)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
2012/13	8.10	9.77	9.79	19.40	20.38
2013/14	10.27	12.44	12.12	22.97	20.63
2014/15	15.16	10.40	10.89	16.54	32.16
2015/16	15.98	11.46	14.23	26.28	36.27
2016/17	8.55	9.67	13.25	14.85	33.54
2017/18	9.43	12.31	13.26	15.11	29.98
2018/19	19.98	14.46	15.96	18.41	37.15
2019/20	19.04	12.99	15.18	22.17	26.89
2020/21	19.32	15.12	17.32	22.32	39.06
2021/22	13.43	12.34	8.85	22.92	25.36
Total	139.25	120.97	130.87	200.97	301.42
Mean	13.93	12.10	13.09	20.10	30.14
S.D	4.65	1.83	2.71	3.83	6.68
C.V	33.38	15.17	20.77	19.07	22.45

*(Source: Appendix I to V)**Return on Total Assets (ROA)*

Fiscal Year	MNBBL	JBBL	MBBL	JBBL	KSBBL
2012/13	1.24	2.03	0.83	0.2	1.14
2013/14	1.03	2.15	1.10	1.40	1.02
2014/15	1.43	1.36	1.31	1.42	2.15
2015/16	1.57	2.04	1.25	1.28	1.05
2016/17	2.01	2.12	1.37	1.49	1.50
2017/18	2.48	2.02	1.54	1.69	1.84
2018/19	2.36	2.71	1.97	1.66	2.64
2019/20	2.11	2.77	1.94	1.67	2.61
2020/21	1.46	1.86	1.17	0.95	1.71
2021/22	0.87	1.59	0.7	1.17	1.22
Total	16.56	20.65	13.18	12.93	16.88
Mean	1.66	2.07	1.32	1.29	1.69
S.D	0.58	0.43	0.42	0.43	0.61
C.V	34.89%	20.96%	31.62%	33.33%	36.28%

*(Source: Appendix I to V)*

*Return on Equity (ROE)*

Fiscal year	MNBBL	GBBL	MBBL	JBBL	KSBBL
2012/13	30.98	13.97	15.02	2.31	28.36
2013/14	33.08	16.1	20.31	14.87	26.38
2014/15	30.39	11.68	20.81	15.42	26.27
2015/16	22.04	22.21	18.87	16.08	21.69
2016/17	24.22	13.6	19.24	16.08	16.71
2017/18	25.49	11.81	14.8	13.58	11.48
2018/19	19.24	19.34	14.07	15.81	11.24
2019/20	18.28	14.78	16.2	12.97	16.31
2020/21	13.39	11.7	10.44	8.18	13.16
2021/22	7.47	11.2	6.26	11.32	8.62
Total	224.69	141.11	157.75	122.05	184.70
Mean	22.47	14.11	15.77	12.21	18.47
S.D	8.13	3.26	4.57	4.29	6.84
C.V	36.19%	23.12%	28.99%	35.17%	37.02%

*(Source: Appendix I to V)*

# PROFITABILITY POSITION OF DEVELOPMENT BANKS IN ...

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ABSTRACTS Profitability is a critical aspect for the growth and survival of banks, and managing the balance between profitability and liquidity is crucial. This study investigates into the profitability status of development banks in Nepal, aiming to examine their

**liquidity position, profitability status, and the relationship between liquidity and profitability**

. Adopting a descriptive research approach,

**secondary data from the annual** reports **of Nepalese** development **banks and** the **NRB** were utilized. The **analysis**

involved correlation and regression techniques to explore the connection between liquidity, deposits, loans, advances, and profitability, measured through indicators like ROA and ROE. The study spans a decade, from 2012/13 to 2021/22, covering five development banks: MNBBL, GBBL, MBBL, JBBL, and KSBBL. The findings reveal a mixed relationship between liquidity indicators and