

# **LIQUIDITY AND PROFITABILITY OF NEPALESE MICROFINANCE COMPANIES**

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

**By**

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## **CERTIFICATION OF AUTHORSHIP**

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "**Liquidity and Profitability of Nepalese Microfinance Companies**". The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes. The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of this dissertation.

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**REPORT OF RESEARCH COMMITTEE**

Ms. Rojina Bhattarai has defended research proposal entitled “**Liquidity and Profitability of Nepalese Microfinance Companies**” successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Dhruba Subedi. Submit the dissertation for evaluation and viva-voce examination.

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## APPROVAL SHEET

We, the undersigned, have examined the dissertation entitled “**Liquidity and Profitability of Nepalese Microfinance Companies**” presented by Rojina Bhattarai a candidate for the degree of Master of Business Studies (MBS Semester) and conducted the viva voce examination of the candidate. We hereby certify that the dissertation is worthy of acceptance.

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## ABBREVIATIONS

ALM	=	Asset Liquidity Management
CADR	=	Cash Deposit Ratio
CBBL	=	Chhimek Laghubitta Bittiya Sanstha Limited
CDR	=	Credit Deposit Ratio
CR	=	Capital Ratio
CRR	=	Cash Reserve Ratio
DAR	=	Deposit to Assets Ratio
FSA	=	Financial Statement Analysis
IDX	=	Indonesia Stock Exchange
LCR	=	Liquidity Coverage Ratio
LDR	=	Loan to Deposit Ratio
MFI	=	Microfinance Institutions
NCF/TA	=	Net Credit Facilities / Total Assets
NIM	=	Net Interest Margin
NLBBL	=	Nerude Laghubitta Bittiya Sanstha Limited
NMBMF	=	NMB Laghubitta Bittiya Sanstha Limited
NPA	=	Non- Performing Assets
NRB	=	Nepal Rastra Bank
NUBL	=	Nirdhan Utthan Laghubitta Bittiya Sanstha Limited
OLS	=	Ordinary Least Squares
ROA	=	Return on Assets

ROE = Return on Equity  
ROI = Return on Investment  
SWBBL = Swabalamban Laghubitta Bittiya Sanstha Limited

## ABSTRACT

The relationship between liquidity and profitability is a critical area of focus for financial institutions, including microfinance companies. This study investigates the dynamics between liquidity management and profitability within the context of microfinance companies of Nepal. Specifically, it examines the impact of liquidity and the profitability of five selected microfinance companies over a ten-year period, from 2070/71 to 2079/80. The research employs descriptive and analytical methods to analyze the financial data, utilizing various liquidity ratios such as Capital Ratio, Credit Deposit Ratio, Net Credit Facilities to Total Asset Ratio, Deposit Asset Ratio, ROA and ROE. The findings reveal a significant relationship between liquidity and profitability of Nepalese microfinance companies. It also reveals that liquidity management plays crucial role in sustaining profitability, with a delicate balance required between maintaining sufficient liquidity and optimizing returns. Excess liquidity was found to potentially limit profitability due to opportunity cost of idel funds, while insufficient liquidity could threaten operational stability. This study contributes to the existing literature by providing insights into unique challenges faced by microfinance companies in Nepal and offering strategic recommendations for enhancing financial performance through effective liquidity management.

*Keywords: Liquidity, Profitability, Microfinance Companies, Liquidity Management, Profitability Ratios*

## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Liquidity is the capacity of an organization to swiftly convert its assets, particularly current assets like cash, receivables, and inventory, into cash without significant loss in value. This capability is crucial for promptly meeting short-term financial obligations such as paying creditors, suppliers, or immediate expenses. For microfinance companies, which serve low-income clients, maintaining adequate liquidity is essential. It enables microfinance companies to disburse loans, handle client withdrawals, and cover operational costs seamlessly. Balancing current assets is key: insufficient liquidity can lead to financial difficulties, while excessive current assets may indicate inefficient resource use and lower returns on investment. Effective liquidity management involves strategies such as maintaining a balance between liquid assets and longer-term investments, establishing credit lines, and forecasting cash flows to anticipate needs. Overall, liquidity plays a vital role in ensuring organizational stability, operational continuity, and financial health.

The concept of liquidity in microfinance can be summarized as follows: It refers to the methods or processes used by firms, organizations, or financial institutions to convert their assets into cash quickly in order to meet short-term financial obligations when they arise. It is noted that organizations with insufficient current assets may encounter operational difficulties, whereas an excessive amount of current assets may indicate sub optimal returns on investment for the organization (Ahmed, 2016).

Liquidity of assets is determined by their convertibility into cash with ease and without loss of value, along with their price stability. In comparison to equity investments, microfinance deposits and short-term securities are considered more liquid due to their fixed prices (Das et al, 2015).

Effective liquidity management is crucial for organizations as it indicates their ability to meet short-term financial obligations such as operational and financial expenses, as well as long-term debts over the financial year or operating cycle, whichever is

longer. Various liquidity ratios like current ratio, quick ratio, cash ratio, and defensive interval ratio are utilized by organizations to manage their liquidity, significantly impacting their financial performance.

Profitability remains a contentious issue in microfinance, with profit defined as the surplus generated from expenditures and returns over a specified period, usually a year. It is crucial for the continuous survival and growth of microfinance institutions, as sufficient income is necessary to support ongoing operations and facilitate expansion.

Profitability is gauged through several measures, including return on assets (ROA) and return on equity (ROE). ROA assesses how effectively microfinance assets generate profit, though it may be influenced by off-balance-sheet activities. Return on investment (ROI) is another measure used to evaluate profitability. Profitability, fundamentally, refers to the net income of microfinance institutions where revenues exceed expenses. Income is derived from microfinance activities, while expenses represent the costs of resources used to generate profit. Profitability is crucial as it is the primary objective for companies, essential for their long-term market survival. Therefore, assessing past, present, and future profitability is critical.

Revenue and expenses are detailed in the income statement, reflecting a company's profitability, while cash inflows and outflows are outlined in the cash flow statement, indicating its liquidity. The term "profitability" combines "profit" with "ability," signifying a company's capacity to earn profits or its earning power. Profitability can be defined as the capability of an investment to generate returns from its use (Das et.al, 2015).

Profitability and liquidity are critical concerns that every organization's management must carefully consider. Liquidity denotes an organization's ability to fulfill its short-term financial obligations, playing a crucial role in its operational efficiency. Understanding liquidity is essential for both internal and external analysts due to its direct impact on daily business operations. In microfinance, the concepts of liquidity and profitability are intertwined: profitability cannot exist without sufficient liquidity,

and liquidity cannot grow without profitability—they are complementary yet also contradictory. Excessive liquidity ties up funds that could otherwise be invested for higher returns, potentially limiting overall profitability (Bhattarai et al., 2020).

Maintaining adequate liquidity involves a trade-off: too much liquidity can reduce profitability due to idle funds, while insufficient liquidity may harm a firm's reputation and creditworthiness, potentially leading to forced asset liquidation. Therefore, achieving a balance between liquidity and profitability is crucial. Striking this balance ensures that liquidity levels are neither excessively high nor dangerously low, optimizing both operational stability and financial returns.

## **1.2 Statement of Problem**

The relationship between liquidity and profitability varies and has been studied extensively. While some studies suggest a positive correlation between the two, indicating that higher liquidity can enhance profitability, others find a negative relationship, where increased liquidity may detract from profitability. Empirical evidence often shows mixed results, underscoring the complexity of their interaction (Shrestha, 2018; Lartey et al., 2013; Erasmus, 2010; Eljelly, 2004). The theoretical understanding generally predicts a negative relationship between liquidity and profitability, highlighting the challenges in balancing these crucial financial metrics within organizations.

Hence, the present study is initiated to identify the relationship between liquidity and profitability of Microfinance companies in Nepal. So following are the major problems that have been identified for the purpose of this study.

- What are the profitability and liquidity position of Microfinance Companies in Nepal?
- Is there any relationship between liquidity and profitability of Microfinance Companies in Nepal?
- Does liquidity affect the profitability of Microfinance Companies in Nepal?

### 1.3 Objectives of the Study

The overarching goal of this study is to investigate "The relationship between liquidity and profitability analysis of microfinance companies in Nepal." The specific objectives of the study include:

- To evaluate the profitability and liquidity status of microfinance companies in Nepal.
- To analyze the relationship between liquidity and profitability of the microfinance companies in Nepal.
- To examine the impact of liquidity on profitability of microfinance companies in Nepal.

### 1.4 Rationale of the Study

The relationship between liquidity and performance may vary across sectors, but its existence is undeniable. A managerial perspective is crucial for enhancing profitability and effectively managing liquidity. Favorable liquidity and performance growth serve as positive indicators influencing stakeholder behavior (Manyo and Ogakwu, 2013). A decline in profitability often reflects poor liquidity management strategies. This study aims to explore the nature of the relationship between liquidity and profitability variables, providing insights to guide strategic decision-making. Understanding these dynamics will help devise effective policies and highlight critical factors for focused management of liquidity and profitability.

The findings of this study will be beneficial to management teams of companies listed on the microfinance board, offering insights into alternative methods for enhancing profitability through improved liquidity management. Inefficient liquidity management has historically led to the collapse of many companies. This study will also underscore the importance of effective liquidity management across various sectors represented on the microfinance board, emphasizing the potential for improved profitability.

- **Balancing Act:** Achieving optimal liquidity and profitability presents challenges, as these objectives can sometimes be at odds. While maintaining high liquidity ensures institutional stability, it can also make an organization

less competitive. The primary objective is to find effective ways for MFIs to manage excess liquidity to meet financial goals while optimizing business performance.

- **Strategic Insights:** The study aims to provide valuable insights for microfinance managers on how to effectively manage liquid assets, helping them to develop robust financial strategies.
- **Policy Implications:** The findings will be shared with policymakers and regulators to aid in crafting better strategies and implementing policies that strengthen the microfinance sector.
- **Addressing Research Gaps:** This research fills a gap in the current literature by offering an in-depth analysis of liquidity and profitability within Nepal's microfinance sector.
- **Transferability of Outcomes:** The results are expected to be applicable beyond Nepal, potentially informing practices in similar contexts, such as India. The insights gained can help other MFIs enhance their financial resilience and stability.

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

The study has the following limitations:

- Only five microfinance companies, NMBMF, NUBL, SWBBL, NLBBL and CBBL, were included, which may not represent the entire population of 68 microfinance companies in Nepal.
- The study spans a period of ten years, from 2070/71 to 2079/80.
- Descriptive and analytical methods were employed to analyze the data.
- The study utilized a limited set of financial and statistical tools for its analysis.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

This chapter is dedicated to thoroughly examining the existing literature that explores the impact of liquidity on profitability within Nepalese Microfinances. The primary objective of conducting this literature review is to develop a comprehensive understanding of the topic, identify any recent contributions to the field, and gather insights that will inform the design and methodology of the current research study.

Understanding the literature is crucial because it serves as the foundation upon which the present study is built. By reviewing previous research, the study aims to build upon existing knowledge and theories, identify gaps in the current understanding, and propose new avenues for exploration.

Key sources of literature include scholarly journals, academic articles, research papers, and previously conducted theses that have explored similar themes. These sources provide a wealth of information on how liquidity impacts profitability in banking contexts, particularly within the unique environment of Nepalese Microfinances.

The review encompasses various aspects related to liquidity and profitability, such as different measures and metrics used to assess these factors, empirical findings from past studies, theoretical frameworks that explain the relationship between liquidity and profitability, and practical implications for bank management and policy makers.

By synthesizing and analyzing this literature, the study aims to contribute to the existing body of knowledge by offering a nuanced understanding of the dynamics between liquidity and profitability in Nepalese Microfinance Companies. This comprehensive review not only informs the current research but also sets the stage for proposing meaningful recommendations and conclusions based on the findings.

#### **2.1 Conceptual Review**

This chapter focuses on reviewing the existing literature relevant to the chosen topics. It includes an examination of various sources such as books, magazines, journals, articles, research papers, and unpublished thesis reports. Each study builds upon past research, underscoring the importance of previous investigations in shaping current understanding. This chapter serves to gather valuable insights and feedback to enrich

the study's information base. It is structured into two distinct parts, organized in the following sequence:

### **Liquidity**

Liquidity pertains to the portion of assets readily available to meet obligations. It can be assessed both in terms of assets listed on the balance sheet and those obtainable through purchased funds. The level of liquidity hinges on the relationship between cash assets, assets easily convertible into cash, and pending liabilities. The definition and scope of liquidity vary globally, expanding alongside advancements in monetary sectors and financial instruments. Bank liquidity specifically refers to a bank's capability to secure funds promptly and affordably to fulfill financial commitments, particularly to meet customer withdrawal demands. The viability of commercial banks heavily relies on their liquidity, as insufficient liquidity signals financial distress and can undermine public trust, leading to withdrawals.

Effective liquidity management is critical for organizations, indicating their ability to settle short-term liabilities, encompassing operational and financial expenses within the appropriate financial period or operating cycle. Various liquidity ratios such as current ratio, quick ratio, cash ratio, and defensive interval ratio are utilized by organizations to manage liquidity effectively, influencing overall financial performance.

### **Profitability**

Profitability signifies the net income of a bank, where revenues exceed expenses. Income is derived from banking activities, while expenses denote the costs incurred in generating profit. Profitability stands as the primary objective for companies, as sustained profitability is essential for long-term market presence. Continuous evaluation of past, current, and projected future profitability is crucial for strategic decision-making within companies. The income statement reflects revenue and expenses, which gauge profitability, while cash flow statements detail cash inflows and outflows, indicative of liquidity. Profitability, etymologically composed of "profit" and "ability," denotes a business entity's capacity to generate earnings. It is defined as the ability of an investment to yield returns from its utilization.

Profit, the difference between revenues and expenses over a specified period, typically one year, serves as the ultimate outcome for a company. Sustainability in the market hinges on consistently generating adequate profits. Thus, financial managers continuously assess company efficiency in terms of profit margins using profitability ratios. Creditors and owners alike are keenly interested in a firm's profitability; creditors seek regular interest and principal repayment, while owners expect a satisfactory return on their investment. Profitability ratios offer insights into the success of achieving desired profit levels and overall management effectiveness within the banking sector (Das et al. , 2015).

### **Relationship between Liquidity and Profitability**

Profitability and liquidity are critical concerns that every organization must carefully consider as primary responsibilities. Liquidity denotes a firm's capability to meet short-term financial obligations promptly, playing a pivotal role in ensuring the smooth operation of business activities. Both internal and external analysts emphasize studying liquidity due to its direct impact on daily business operations. In banking, the concepts of liquidity and profitability are frequently intertwined. Without liquidity, profitability cannot be sustained, and conversely, liquidity cannot flourish without profitability. These elements complement each other but can also conflict. Excessive liquidity can hinder profitability as funds sit idle, uninvested and unproductive. On the other hand, a lack of liquidity can disrupt banking transactions, leading to severe repercussions such as financial losses, damage to reputation, and adverse effects on stakeholders who have invested in the institution (Chukwunweike, 2014).

Legally, banks are restricted from retaining excessive capital funds, which can render them vulnerable to economic fluctuations. Hence, maintaining a balanced liquidity position is crucial. Striking a balance between liquidity and profitability is paramount for achieving organizational goals. Commercial banks are inherently driven by profit motives, prompting them to invest in sectors that promise lucrative returns. However, the pursuit of profitability must be tempered with prudent liquidity management. Sometimes, banks may prioritize safety over profit and invest in less prominent sectors, which can yield either substantial profits or significant losses, depending on market conditions. Achieving equilibrium between liquidity and profitability is challenging yet essential. Neglecting either principle can lead to economic disasters,

underscoring the need for continuous vigilance and a harmonious balance between the two.

- Liquidity is necessary to make payment of all sorts of deposits.
- Liquidity is necessary to save the bank from the economic rise and fall.
- The bank should not keep high (much) liquidity to gain profit.
- In the lack of profitability, the bank can't be operated.
- Also, if there is liquidity crisis in the bank, it can't be run.
- Also, the bank should earn much profit to pay the shareholders, creditors and the employees of the bank.
- Also, for competition, the bank should gain profit.
- The bank can't manage its transactions without gaining profit.

## **2.2 Theoretical Review**

### **Dynamic Theory of Profit**

The Dynamic Theory of Profit posits that profit emerges from the inherent dynamism of society, where uncertainty and risk-taking are inherent. In dynamic societies characterized by changes in demographics, consumer trends, and capital stocks, profit opportunities abound due to the associated risks. Conversely, in stagnant or static societies where these factors remain constant, opportunities for profit diminish as risks are minimized (Clark, 1902).

### **Baumol's Model**

Baumol (1952) formulated a model for managing inventory that businesses could also apply to determine their optimal cash holdings. He analyzed the costs associated with holding cash, similar to the costs incurred with holding inventory, which include both holding costs and ordering costs. According to Baumol's findings, rational individuals would demand cash in an amount proportionate to the square root of the value of their transactions, influenced by prevailing price levels.

In his model, Baumol proposed that excess funds should be invested in interest-bearing securities. This approach allows firms to earn returns on idle cash while ensuring liquidity to meet operational needs. As investment returns increase, the opportunity cost of holding cash rises, prompting cash managers to reduce cash balances. Conversely, as transaction costs for liquidating short-term investments rise,

cash managers decrease the frequency of these transactions, resulting in higher cash balances.

Despite its utility, Baumol's model has its limitations. It assumes a scenario of fixed and predictable demand, as well as instant availability of replacement cash, which may not always align with real-world business dynamics. These assumptions can constrain its applicability in environments characterized by fluctuating cash needs and varying investment opportunities. Thus, while valuable, Baumol's model requires adaptation and consideration of broader economic factors to effectively guide cash management decisions in diverse business contexts.

### **Theories of Liquidity Management**

Diamond and Rajan (2001) proposed that liability management theory primarily concerns banks issuing liabilities to effectively address their liquidity requirements. Liquidity management and liability management are intricately interconnected and crucial for strategic decision-making aimed at enhancing stakeholder value. Asset Liability Management (ALM) is a comprehensive approach to managing the dynamics of a bank's balance sheet. It involves assessing risks, making informed decisions regarding the structure of assets and liabilities, and optimizing interest earnings while considering perceived risks.

The main goal of ALM is not to eliminate risk entirely, but rather to manage it in a manner that minimizes the volatility of net interest income in the short term and safeguards the economic value of the organization in the long term. This strategic approach ensures that banks can navigate through varying economic conditions while maintaining a balance between profitability and risk exposure, thereby enhancing their overall financial stability and resilience.

### **Agency Theory**

Agency theory describes the relationship between shareholders, who are the owners of a company (referred to as principals), and the management, who act as agents on behalf of the shareholders. Shareholders delegate the responsibility of managing and operating the company to the management with the expectation that corporate goals will be achieved. In practice, conflicts termed as agency conflicts arise due to conflicting interests between principals (shareholders) who provide contracts and

agents (management) who accept these contracts and manage the funds of the principals (Shrestha, 2018).

### **Trade-Off Theory**

The trade-off theory proposes that the value of companies initially increases with an increase in debt. However, there exists an optimal level of debt beyond which the value begins to decline. This theory integrates aspects of Modigliani and Miller's capital structure theory, incorporating considerations such as bankruptcy costs and agency costs. It highlights that companies benefit from tax savings due to debt while also facing increased bankruptcy risks (Hailhgebral, 2016).

### **Pecking Order Theory**

Pecking order theory explains why companies with high profitability tend to have lower levels of debt. This lower debt is not necessarily due to a deliberate strategy to maintain low debt levels, but rather because profitable companies rely on internal funds to finance their investments, reducing the need for external financing. This theory reflects how companies prioritize funding sources based on their financial health and the availability of internal funds (Hailhgebral, 2016).

### **Theory of Information Asymmetry and Signaling**

Signaling theory posits that companies take actions to provide signals to investors about their prospects and management's view of the company's future performance. It emphasizes that information about a company's profitability and future prospects is not solely known to managers but is also accessible to investors. Companies use strategic actions to signal their financial health and prospects, influencing investor perceptions and decisions (Risal, 2019).

### **Bankruptcy Theory**

Bankruptcy theory pertains to situations where a company fails to generate sufficient profits to sustain its operations, leading to insolvency or liquidation. This theory addresses the circumstances under which companies face financial distress, unable to meet their financial obligations, and may be forced to close down their operations (Onakoya and Olotu, 2017).

## **Liquidity Theory**

### **1. Shiftability Theory**

Shiftability theory refers to the ability of banks to convert their assets into cash quickly to avoid liquidity shortages. This theory guides banks on managing their asset categories and proportions effectively to enhance liquidity management. By focusing on holding assets that can be easily converted into cash, banks can proactively manage liquidity without solely relying on central bank interventions during unforeseen circumstances. Emphasizing the importance of self-liquidating assets, this theory may not be feasible for banks that lack readily available assets. Consequently, some researchers suggest increasing liability holdings, as liquidity shortages can stem from both asset and liability sides of a bank's balance sheet. Ensuring liquidity involves managing liabilities by borrowing from customers rather than relying solely on holding marketable assets, highlighting the importance of liability management in banks' liquidity strategies (Talreja et al., 2021).

### **2. Liquidity Theories in Stock Market**

Biderman and Santschi (2005) suggest applying liquidity theory to navigate stock market dynamics effectively. They propose that investors should align their investment strategies with those of corporate insiders and public companies, adjusting their stock transactions accordingly. This liquidity theory serves as a valuable reference for both individual and institutional investors, including banks, to mitigate investment risks and enhance market participation.

### **3. Commercial Loan Theories**

Commercial bank theory addresses the strategies banks employ to meet the liquidity needs of their creditors. Due to the timing mismatch between selling goods and collecting receivables, depositors may face cash flow challenges for their next business cycle. To address this, commercial banks are advised to provide short-term commercial loans to creditors. Critics argue that this theory overly prioritizes short-term liquidity management while potentially neglecting the long-term economic growth implications (Eljelly, 2004).

#### **4. Anticipated Income Theories**

The anticipated income theory suggests that banks can manage liquidity by structuring loan commitments based on borrowers' expected income streams. Herbert V. Prochnow's formulation in 1949 emphasizes the soundness of term loans linked to borrowers' anticipated cash flows. This theory encourages commercial banks to adopt balanced loan commitment policies, facilitating effective balance sheet management amidst changing economic conditions and business challenges. It underscores the role of loan commitments in optimizing investment portfolio strategies (Talreja et al., 2021).

#### **Liquidity Risk**

Liquidity plays a critical role in ensuring the stability of financial systems. Insufficient liquidity can lead banks to default on their financial obligations under normal circumstances. More severely, during unexpected crises such as financial meltdowns or economic shocks, liquidity problems can escalate to the point of causing bank bankruptcies and destabilizing the entire financial system.

The 2008 global financial crisis starkly demonstrated the risks associated with inadequate liquidity. For commercial banks, liquidity risk manifests as their inability to meet payment obligations using cash or cash equivalents. From a market perspective, liquidity risk is defined as the inability to offset or unwind a position without impacting its price.

Liquidity risk for banks is not isolated but interconnected with various other risk factors. These include credit risk, reputation risk, market risk, and concentration risk, each influencing the generation and management of liquidity risk. For instance, reputation risk can raise funding costs and subsequently exacerbate liquidity risk for banks.

Sources of liquidity risk can be categorized into three main types. Firstly, systematic sources originate externally and contribute to broader liquidity risks, such as disruptions in financial markets. Secondly, individual sources stem from bank-specific factors like damage to reputation or financial losses, intensifying liquidity risks. Lastly, technical sources arise from mismatches in timing between the inflow and outflow of liquidity assets, further complicating liquidity management (Talreja et al., 2021).

### **Measurement of Liquidity**

Liquidity can be assessed using various quantitative indicators, with working capital being a fundamental measure. Working capital represents the cash necessary for a company's daily operations. Sharma (2008) distinguishes between gross working capital, which denotes current assets, and net working capital, which is the difference between current assets and current liabilities (Hailhgebral, 2016).

Effective financial managers must monitor working capital closely because both excessive and inadequate levels can detrimentally affect a company's profit optimization. Excess working capital can lead to inefficient fund utilization, increased need for control and supervision, bad debt losses, and reduced profitability. Conversely, insufficient working capital can cause disruptions or cessation of business operations, harm to reputation, missed business opportunities, and difficulties in managing sudden crises. Despite its crucial role in a company's survival and growth, working capital often receives inadequate attention for various reasons.

In theoretical terms, high net working capital theoretically signifies strong liquidity for a company. However, it's important to note that different components within the working capital category have varying degrees of liquidity. For instance, risk-bearing securities and treasury bills, though categorized as current assets, differ significantly in liquidity levels. Therefore, a nuanced approach is required when assessing the composition of working capital to gauge liquidity accurately.

Moreover, a direct method of measuring liquidity is through cash flow from operations. This figure is derived from post-tax profits adjusted for changes in working capital, depreciation, and amortization. Positive cash flow from operations is essential for meeting liquidity requirements, with higher cash flow indicating stronger liquidity for a company.

### **2.3 Empirical Review**

Farij and Wardani (2024) investigated how probability ratios, profitability ratios, leverage, and liquidity ratios impact the value of coal mining companies listed on the Indonesia Stock Exchange. The findings revealed that profitability and leverage have a positive and significant impact on company value, whereas liquidity has a positive but insignificant effect.

Makena et al. (2023) studied liquidity's impact on financial performance of star-rated hotels in Nairobi, finding a positive and significant effect, indicating that optimal liquidity management enhanced operational capacity and shareholder wealth.

Rehman and Jannat (2023) analyzed liquidity's influence on Afghan commercial banks' profitability from 2016 to 2020, finding a positive and significant effect of the current ratio on ROA, suggesting effective liquidity management could enhance profitability.

Thinhet al. (2022) tested the relationship between liquidity and profitability of Vietnamese listed banks from 2011 to 2019, revealing a positive relationship with ROA and ROE but an inverse relationship with net interest margin. Policy recommendations emphasized adherence to liquidity regulations and forecasting for financial stability.

Sidhu et al. (2022) explored the impact of liquidity coverage ratio (LCR) on profitability and NPAs of Indian banks from 2010 to 2019. The study indicated compliance with LCR reduced net interest margins and increased NPAs, influencing overall profitability.

Hariatih and Aziz (2022) determined the effect of liquidity and solvency on profitability among Indonesian banks from 2014 to 2018, finding a positive and significant effect of Loan Deposit Ratio (LDR) on ROE but no significant effect from Debt Equity Ratio (DER), suggesting liquidity management's pivotal role in profitability.

Moussa and Boubaker (2020) evaluated liquidity's impact on bank profitability in Tunisia from 2000 to 2017, identifying positive impacts of liquid assets and total credits on ROA but negative impacts on ROE. Current assets had no significant effect on either profitability measure.

Mishra and Pradhan (2019) explored the impact of liquidity management on profitability among Indian private sector banks from 2013 to 2017. Their findings indicated significant negative effects of Cash-Deposit Ratio and Investment-Deposit Ratio on ROA, while no significant relationship was found with ROE.

Mohanty and Mehrotra (2018) investigated liquidity management effects on profitability across public and private sector banks in India, noting significant negative impacts of Cash-Deposit and Investment-Deposit Ratios on ROA. However, no significant relationship was found with ROE.

Ibrahim and Aqeel (2017) assessed the impact of liquidity management on profitability in Pakistani commercial banks from 2004 to 2013. Liquidity indicators and proxies for profitability (ROE, ROA) were analyzed using regression and correlation, revealing positive effects of current and investment ratios but negative effects of capital and liquid assets ratios on profitability.

Ahmad (2016) surveyed the relationship between profitability and liquidity ratios in the banking sector, particularly examining Standard Chartered Bank Pakistan. The study identified a weak positive relationship between liquidity and profitability using quantitative research design, employing correlation and regression analyses.

Singh (2015) emphasized profitability as a crucial measure of business success and survival, highlighting its role in efficiency and control. The study conducted an overall profitability analysis of private sector banks in India, utilizing various profitability ratios to provide insights into financial health and performance.

Ehiedu (2014) examined correlations between current and acid-test ratios with profitability (ROA), finding a significant positive relationship with current ratio but no definitive correlation with acid-test ratio or return on capital employed.

Abdullah and Jahan (2014) investigated the impact of liquidity and profitability on private commercial banks in Bangladesh, focusing on ROA and ROE as dependent variables, and Loan Deposit Ratio, Deposit Asset Ratio, and Cash Deposit Ratio as independent variables. Using simple regression analysis, the study found no significant relationship between liquidity and profitability, as evidenced by accepting the null hypothesis.

Lartey et al. (2013) aimed to explore the association between liquidity and profitability among banks listed on the Ghana Stock Exchange. The study included seven out of nine listed banks, utilizing a descriptive approach with a longitudinal time dimension, specifically employing panel methodology. Secondary data, primarily from financial reports of the seven banks, underwent document analysis. Key liquidity and profitability ratios were computed, with trends analyzed using time series techniques. A regression of the main liquidity ratio against profitability ratios revealed declining trends in both liquidity and profitability during 2005-2010. Importantly, the study found a weak positive relationship between liquidity and profitability among Ghanaian listed banks.

**Table 1**

## Summary of Empirical Review

S.N	Author	Objectives	Methodology	Findings
1.	Farji & Wardani (2024)	To examine how profitability, leverage, and liquidity ratios impact the valuation of coal mining companies listed on the Indonesia Stock Exchange between 2018 and 2022.	This research targeted coal mining firms listed on the Indonesia Stock Exchange, employing purposive sampling to select a sample of 15 companies based on specific criteria. Data collection was carried out through documentation methods, and linear regression analysis was conducted using the SPSS software to interpret the results.	The test and analysis of the research findings indicate that both profitability and leverage have a positive and significant impact on firm value, whereas liquidity has a positive but insignificant effect on firm value.
2.	Rehman & Jannat (2023)	To analyze the impact of liquidity on the profitability of commercial banks in Afghanistan, the study used data from 12 banks over a five-year period, spanning from 2016 to 2020.	The study is based on quantitative survey research involving commercial banks in Afghanistan, employing a positivist philosophy and a logical approach.	Liquidity significantly influences the profitability of commercial banks in Afghanistan.
3.	Makena et al. (2023)	To analyze the influence of capital structure determinants on the financial	This study utilized an explanatory research design and analyzed secondary panel data	Therefore, it can be concluded that the working capital strategies

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	performance of the hotel industry, with a specific emphasis on the effect of liquidity on hotel financial performance.	obtained from the financial statements of 40 star-rated hotels within the target population.	implemented by star-rated hotels improved their operational capabilities and optimized shareholder wealth.
4.	Thinh et al. (2022)	To assess the connection between liquidity and profitability among banks listed in Vietnam, the study analyzed data from 18 listed Vietnamese commercial banks over a 9-year span, from 2011 to 2019.	The article uses a time series approach and applies ordinary least squares (OLS) for the analysis.
			Listed banks demonstrate a positive correlation between liquidity and profitability metrics such as return on assets, return on equity, and net interest margin.
5.	Sidhu et al. (2022)	To examine the impact of the liquidity coverage ratio (LCR) on the profitability and non-performing assets (NPAs) of Indian banks, utilizing annual data from 2010 to 2019.	The article employed the dynamic panel data regression method for its analysis.
			Adhering to the minimum liquidity coverage ratio (LCR) reduces banks' net interest margins (NIMs) because of a narrower interest spread, thus affecting their profitability. Additionally, higher LCRs tend to correlate with increased non-performing assets

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			(NPAs) in banks.
6.	Hariatih & Aziz (2022)	To evaluate the effect of liquidity and solvency on profitability, a primary goal of the company, the study focused on 36 banks listed on the Indonesia Stock Exchange between 2014 and 2018.	This study utilized secondary data obtained from the Indonesia Stock Exchange (IDX), with the sample selected using a purposive sampling method. The liquidity variable (LDR) shows a positive and significant impact on the profitability (ROE) of banks listed on the Indonesia Stock Exchange. Conversely, the solvency variable (DER) does not have a significant negative impact on the profitability (ROE) of these banks. Both liquidity (LDR) and solvency (DER) variables significantly contribute to the profitability (ROE) of banks listed on the Indonesia Stock Exchange.
7.	Moussa & Boubaker (2020)	To explore the impact of liquidity on bank profitability in the Tunisian context, the analysis was carried out using data from a	This empirical research employs two static panel models for analysis. We discovered that the ratios of liquid assets to total assets and total credits to total deposits positively and significantly

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		sample of 18 banks over the period from 2000 to 2017.	affect return on assets (ROA). However, the ratio of current assets to current liabilities does not have a significant impact on ROA. Additionally, we found that the ratios of liquid assets to total assets and total credits to total deposits negatively and significantly impact return on equity (ROE). Again, the ratio of current assets to current liabilities does not significantly affect ROE.	
8.	Mishra & Pradhan (2019)	To investigate the impact of liquidity management on the profitability of private sector banks in India, the study examines 10 private sector banks during the period from 2013 to 2017.	The study employs a purposive sampling method. To represent liquidity management, the independent variables used are CDR (cash held by banks relative to their total deposits), CRDR (the ratio of outstanding credit to total deposit levels), and IDR (the ratio of outstanding investments to total deposits). For measuring bank profitability, the study uses ROA (Net Income/Total Assets)	The research indicates a significant negative impact of credit deposit ratio (CDR) and investment deposit ratio (IDR) on return on assets (ROA). However, when considering all variables, there is no significant relationship between banks' profitability and liquidity in relation to return

		and ROE (Net Income/Total Equity) as proxy variables.	on equity (ROE) across all selected commercial banks in India.
9.	Karim et al. (2019)	To evaluate the effect of the COVID-19 pandemic on the liquidity and profitability of commercial banks in Bangladesh. Data from fifteen selected banks were collected from quarterly financial statements over four years, spanning from Q1 2018 to Q4 2021, which includes the two years before and after the onset of the pandemic.	This study uses a comparative quantitative approach to analyze and compare the liquidity and profitability of commercial banks in Bangladesh both before and after the COVID-19 pandemic. Profitability, as measured by return on assets (ROA) and return on equity (ROE), exhibited higher volatility in the post-pandemic period compared to the pre-pandemic era. However, the overall trend remained similar, and the difference between the two periods was not statistically significant.
10.	Mohanty & Mehrotra (2018)	To examine the effect of liquidity management on the profitability of both public and private sector banks in India, the study includes 27 public sector banks and 20 private sector banks, covering the periods from 2011-12	The study uses purposive sampling to gather data. The Cash-Deposit Ratio (CDR), Credit-Deposit Ratio (CRDR), and Investment-Deposit Ratio (IDR) are employed as independent variables to represent liquidity. The study reveals a significant negative impact of credit deposit ratio (CDR) and investment deposit ratio (IDR) on return on assets (ROA). However, when considering all

		to 2015-16.	management in banks. Return on Assets (ROA) and Return on Equity (ROE) are used as proxy variables to evaluate the banks' profitability.	variables, including different types or forms of commercial banks in India, there is no significant relationship between banks' profitability and liquidity in terms of return on equity (ROE).
<b>11.</b>	Ibrahim & Aqeel (2017)	To analyze the impact of liquidity management on profitability in Pakistani commercial banks from 2004 to 2013, the study selected three banks, each with more than 1,767 branches, to represent the entire banking sector in Pakistan.	The study investigates liquidity indicators such as the investment ratio, current ratio, capital ratio, credit facilities, and liquid assets ratio, with profitability measured by return on equity (ROE) and return on assets (ROA). To test the hypotheses, regression analysis and correlation techniques are used.	An increase in the current ratio and investment ratio of available funds positively impacts profitability, whereas the capital ratio and liquid assets ratio have a negative impact on the profitability of Pakistani commercial banks.
<b>12.</b>	Ahmad (2016)	To explore the connection between two financial ratios—profitability and liquidity—the study focuses specifically on the banking sector.	The relationship is evaluated using the current ratio, quick ratio, and net working capital.	Companies should prioritize liquidity management, as it correlates positively with the company's profitability..

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13. Singh (2015)	To perform an in-depth profitability analysis of different private sector banks in India.	The article examines the performance of several profitability ratios, such as interest spread, net profit margin, return on long-term funds, return on net worth, return on assets, and adjusted cash margin.	A highly profitable business can provide its owners with a substantial return on their investment..
14. Abdullah & Jahan (2014)	To tackle two key issues for the primary stakeholders of banks: liquidity and profitability.	This study aimed to examine how liquidity affects the profitability of private commercial banks listed in the CSE-30 index in Bangladesh, analyzing specific ratios over a five-year period. The research focused on five private commercial banks. Profitability indicators such as Return on Assets (ROA) and Return on Equity (ROE) were used as dependent variables, while liquidity indicators like Loan Deposit Ratio, Deposit Asset Ratio, and Cash Deposit Ratio were considered independent variables. Simple regression analysis was applied to test the hypotheses. The findings supported the null hypothesis,	There is no notable correlation between liquidity and profitability.

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			suggesting no significant relationship between liquidity and profitability.
<b>15.</b>	Ehiedu (2014)	To analyze the impact of liquidity on the profitability of chosen companies.	The study utilizes the Financial Statement Analysis (FSA) technique. Corporate entities should avoid adopting overly conservative liquidity policies that undermine profitability; instead, they should find a balance between these two performance indicators.
<b>16.</b>	Lartey et al. (2013)	To ascertain the relationship between liquidity and profitability among banks listed on the Ghana Stock Exchange, the study included seven out of the nine listed banks.	The study was descriptive and employed a longitudinal approach using the panel method. Document analysis served as the primary research technique for collecting secondary data. The financial reports of the seven listed banks were examined, and key liquidity and profitability ratios were computed. Time series analysis was used to detect trends in liquidity and profitability, with

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the main liquidity ratio  
being regressed against  
the profitability ratio.

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## 2.4 Review of Literature in Nepalese Context

Pandeya (2024) explored the factors affecting profitability in Nepalese banks by analyzing a sample of 30 commercial banks from 2005 to 2015. The study examined the relationships between credit growth and deposit growth, investment growth, NRB balance to deposit, and the number of branches. The findings revealed that Return on Assets (ROA) is significantly impacted by capital adequacy and asset quality.

Shrestha and Chaurasiya (2023) investigated the impact of liquidity management and profitability in joint venture commercial banks in Nepal from 2012 to 2021. Using descriptive statistics, Pearson correlation, regression analysis, and t-test on data from five sampled banks, they found strong positive correlations between liquidity management variables and profitability, with Total Loan to Total Assets Ratio showing a significant impact on ROA.

Chhetri (2023) measured the effect of credit and liquidity risk on profitability in Nepalese commercial banks from 2012 to 2021. Panel least squares regression analysis was employed on data from ten banks, finding positive and significant impacts of Capital Adequacy Ratio on Return On Equity, and negative impacts of Investment Ratio and Capital Ratio on ROE, suggesting that higher credit and liquidity performance and lower non-performing loans decrease bank profitability.

Magar (2022) evaluated the effect of liquidity on profitability in five Nepalese commercial banks over the period 2013 to 2021. The study used Credit to Deposit Ratio, Asset Quality, and Liquidity Ratio as liquidity variables, and Return On Assets and Net Interest Margin as profitability measures. Regression analysis using Eviews-12 revealed significant negative impacts of asset quality on ROA, and positive impacts of Credit to Deposit Ratio on Net Interest Margin, with mixed results for other liquidity indicators.

Khatri (2020) investigated the relationship between liquidity and profitability in Nepalese commercial banks using Credit-Deposit Ratio (CDR), Cash-Deposit Ratio

(CADR), and Asset Quality (AQ) as liquidity indicators, and Return On Equity (ROE) and Return On Assets (ROA) as proxies for profitability. The study employed Hausman test and fixed effects approach on data from ten banks over seven years, finding significant negative relationships between asset quality and ROA, positive but insignificant relationships of CADR with both ROE and ROA, and mixed results for CDR.

Budathoki et al. (2020) examined the impact of liquidity, leverage, and bank size on profitability in Nepal, using data from all 28 commercial banks during 2010/11–2016/17. The study employed three ordinary least squares models, finding that higher loan-to-deposit ratio negatively affected ROA and ROE, while equity-to-assets ratio positively affected ROA but not ROE. Bank size was found to positively impact all three profitability measures: ROA, ROE, and Net Interest Margin (NIM).

Shrestha and Jha (2020) explored the impact of liquidity on profitability in three foreign joint venture commercial banks in Nepal from 2014/15 to 2018/19. They used annual reports for analysis, employing correlation and regression analyses to assess the relationship. The study noted fluctuating trends in average profitability and unstable liquidity ratios among banks, concluding that liquidity measures had significant impacts on ROA and ROE, varying across the selected banks.

Adhikari (2020) examined the impact of liquidity on profitability indicators in Nepalese commercial banks, using Market Price, Earnings Per Share, Net Profit Margin, and Return On Assets as profitability indicators, and Deposit-Credit Ratio, Cash Reserve Ratio, and Capital Adequacy Ratio as liquidity indicators. Cross-sectional secondary data from 27 banks were analyzed using descriptive statistics and causal comparative research, finding no statistically significant associations between liquidity and profitability indicators.

Pokharel and Pokhrel (2019) explored how liquidity affects the profitability of Nepalese commercial banks. The study sampled five banks over the period from 2010/11 to 2016/17, analyzing their liquidity management and profitability using various statistical and financial tools. It noted fluctuating trends in average profitability and unstable liquidity ratios among banks, concluding that liquidity ratios often fell below prescribed standards. The research highlighted a significant relationship between liquidity ratios and profitability, except for one specific liquidity measure.

Sharma (2019) assessed the quarterly impact of liquidity on Nepalese commercial banks using five independent variables and two dependent variables. This secondary research employed exploratory research design and quantitative analysis of quarterly data from 13 commercial banks between 2014 and 2018. The study found an overall negative impact of liquidity measures on profitability, with bank size and cash to total assets ratio showing positive relationships with profitability, while capital adequacy ratio, non-performing loans, and credit to deposit ratio exhibited negative impacts.

Pradhan and Gautam (2019) studied the impact of liquidity management on the profitability of Nepalese commercial banks, examining Total Deposits, Current Ratio, Liquid Asset Ratio, Quick Ratio, Investment Ratio, and Capital Ratio as independent variables, and ROA and ROE as dependent variables. Data from 18 banks over six years were analyzed, showing positive relationships between capital ratio and ROA, and investment ratio and current asset ratio with both ROA and ROE, while liquid asset ratio exhibited negative impacts on profitability measures.

Shrestha (2018) investigated the relationship between liquidity management and profitability in Nepalese commercial banks using Pearson correlation analysis, while regression analysis was employed to examine the impact of liquidity on profitability. The study utilized data spanning from 2012 to 2016 from commercial banks in Nepal. Liquidity management was represented by variables such as Current Reserve Ratio (CRR) and Credit Deposit Ratio (CDR), while profitability was measured using Return On Equity (ROA). The findings indicated that liquidity does not significantly impact Nepalese commercial banks.

Pradhan and Shrestha (2016) investigated the effect of liquidity on the performance of Nepalese commercial banks, using Investment Ratio, Liquidity Ratio, Capital Ratio, and Quick Ratio as independent variables, and Return On Equity (ROE) and Return On Assets (ROA) as dependent variables. Secondary data from annual reports and supervision reports of Nepal Rastra Bank were used, with regression models revealing positive correlations between capital ratio and ROE, and negative correlations between liquidity ratio and ROE and ROA.

Hakaduwal (2014) analyzed the influence of assets, deposits, equity, and loans on the profitability of finance companies in Nepal. This descriptive and analytical research used secondary data, employing correlation analysis, regression analysis, F-test, and t-test to test hypotheses. The study revealed a positive significant impact of assets,

loans, and deposits on the Return On Assets (ROA) of finance companies, but found a negative significant impact of equity on ROA in Nepal.

Sthapit and Maharjan (2012) examined the relationship between liquidity and profitability in NABIL and SCBN, two older private commercial banks in Nepal from 2003/04 to 2010/11. The study used various financial tools to assess liquidity management and profitability, finding that while SCBN exhibited lower average variation in liquidity ratios and profitability compared to NABIL, certain liquidity ratios had significant negative impacts on ROA for SCBN.

Shrestha (2012) assessed the impact of liquidity on the profitability of eight commercial banks established before 1995 in Nepal from 2003/04 to 2010/11. The study used various financial tools to analyze liquidity management and profitability, noting smooth trends in average profitability despite fluctuating liquidity ratios among banks. It concluded that certain liquidity ratios had positive significant impacts on profitability in Nepal.

**Table 2**

Summary of Literature Review in Nepalese Context

S.N	Author	Objectives	Methodology	Findings
1.	Pandeya (2024)	To investigate the factors influencing profitability in Nepalese banks, the study analyzed a sample of 30 commercial banks from 2005 to 2015. It explored the relationships between credit growth and deposit growth, investment growth, NRB balance relative to deposits, and the number of branches.	The study employed CAMEL analysis by integrating relevant banking data. It used secondary data and applied both correlation and multiple linear regression models to analyze the information.	The findings revealed that Return on Assets (ROA) is significantly impacted by capital adequacy and asset quality.

2.	Shrestha & Chaurasia (2023)	To carry out an in-depth analysis of how liquidity management affects the profitability of joint venture commercial banks in Nepal, the study aimed to explore the link between effective liquidity management practices and the financial performance of these banks, specifically examining how fluctuations in liquidity can influence their profitability.	The study employed both descriptive and causal-comparative research designs. It relied on secondary data obtained from 5 of Nepal's 26 commercial banks over the period from 2011-12 to 2020-2021, resulting in 50 observations. The primary data sources were the Nepal Rastra Bank's Bank Supervision Reports and the annual reports of the selected commercial banks. This data was meticulously collected and utilized to meet the study's requirements.	There is a significant influence of total loans to total assets ratio (TLTAR) on return on assets (ROA), whereas the impact of credit deposit ratio (CDR), capital adequacy ratio (CAR), cash reserve ratio (CRR), and total deposits to total assets ratio (TDTAR) on ROA of joint venture commercial banks in Nepal is insignificant..
3.	Chhetri (2023)	To assess the impact of credit and liquidity risks on the profitability of commercial banks in Nepal, the study employed a panel least squares regression model. It analyzed balance sheet data from ten commercial banks over the period from 2012 to 2021, yielding a total of 100 observations.	This study investigates the impact of credit and liquidity risks on the profitability of commercial banks in Nepal from 2012 to 2021, using pooled data regression for 10 commercial banks. The data, including both time series and cross-sectional information, were	Strong credit and liquidity performance, coupled with a high level of non-performing loans, reduces the profitability of the bank.

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			<p>sourced from the annual reports of the sample banks and the NRB website. The study utilized various mathematical and statistical tools and employed both descriptive and causal-comparative research designs. A purposive sampling technique was used to select the sample banks.</p>
4.	Magar (2022)	<p>To investigate the impact of liquidity on the profitability of commercial banks in Nepal, the study focused on five commercial banks and analyzed data spanning from 2013 to 2021.</p>	<p>The study examined secondary data sourced from the bank supervision reports provided by Nepal Rastra Bank and the annual reports of the chosen commercial banks. Liquidity was assessed using metrics like the credit-to-deposit ratio, asset quality, and liquidity ratio, while profitability was evaluated through return on assets and net interest margin. A regression model was employed to explore the relationship between liquidity and profitability, with data analysis conducted</p> <p>Asset quality (AQ) significantly reduces the return on assets (ROA). Meanwhile, the credit-to-deposit ratio (CD) positively and significantly affects the net interest margin (NIM) of commercial banks, whereas AQ negatively and significantly impacts their NIM.</p>

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			using EViews 12 software.	
5.	Adhikari (2020)	To analyze the relationship between liquidity and profitability indicators among 27 out of the 28 commercial banks in Nepal.	The study utilized cross-sectional secondary data from the banks. Both descriptive and causal-comparative research methods were used to analyze this data. Correlation analysis and multiple general linear regression techniques were applied to identify and assess the relationships.	There is no statistically significant relationship between liquidity metrics and profitability indicators in the Nepalese commercial banking sector.
6.	Shrestha & Jha (2020)	To investigate the effect of liquidity on profitability in foreign joint venture commercial banks in Nepal, the study focused on HBL, EBL, and NBB. These three banks were chosen from the 27 commercial banks in Nepal for the analysis. The study spans the period from 2014/15 to 2018/19 AD.	The analysis employed data from the banks' annual reports and accounts for the specified period. Correlation and regression analyses were performed to explore the nature and strength of the relationships between variables and to evaluate any potential cause-and-effect links.	The loan-to-asset ratio (LADR) significantly influences the return on assets (ROA) and return on equity (ROE) of HBL, EBL, and NBB. Cash and cash equivalents (CACL) have a significant effect on the ROA of HBL and EBL, but not on NBB. However, CACL significantly affects the ROE of all three banks.

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7.	Budhathoki et al. (2020)	To examine the impact of liquidity, leverage, and total asset size on bank profitability, the study utilized data from all 28 commercial banks in Nepal covering the period from 2010/11 to 2016/17. A total of 168 observations were analyzed.	This empirical study utilized time-series balanced panel data obtained from the 2017 bank supervision report published by Nepal Rastra Bank, the central bank of Nepal. The time-series data were analyzed using descriptive statistics, Pearson correlation coefficient, and multiple regression models. As a result, the research employed both descriptive and explanatory research designs.	A higher loan-to-deposit ratio was found to negatively impact the bank's return on assets (ROA), return on equity (ROE), and net interest margin (NIM), with ROE and NIM showing no statistical significance. Conversely, a higher equity-to-assets ratio positively influenced ROA and NIM, and this relationship was statistically significant, although it was negatively associated with ROE and lacked statistical significance. Additionally, larger bank size was beneficial for Nepalese commercial banks, as it positively affected all three profitability measures: ROA, ROE, and NIM.
8.	Khatai (2020)	To examine the relationship between liquidity and profitability among commercial banks in Nepal, the study focused on ten out of the twenty-seven listed commercial banks and spanned the period from 2013 to 2019.	This study is based on secondary data obtained from Bank Supervision Reports issued by Nepal Rastra Bank and the annual reports of the selected commercial banks. Liquidity indicators analyzed include the credit-deposit ratio (CDR), cash-deposit ratio (CADR), and asset quality (AQ), while profitability is assessed through return on equity	Asset quality (AQ) shows a significant negative correlation with return on assets (ROA) but a significant positive correlation with return on equity (ROE). The cash deposit ratio (CADR) exhibits a positive but insignificant relationship with both return on assets (ROA) and return on equity (ROE).

		(ROE) and return on assets (ROA).	
<b>9.</b>	Pradhan & Gautam (2019)	To examine the impact of liquidity management on the profitability of commercial banks in Nepal, the study uses return on assets and return on equity as the dependent variables. The independent variables include the capital ratio, total deposits, current ratio, liquid asset ratio, quick ratio, and investment ratio.	<p>The study uses secondary data from 18 commercial banks spanning the period from 2009/10 to 2014/15, with a total of 120 observations. The data were obtained from the Quarterly Economic Bulletin and Bank Supervision Reports published by Nepal Rastra Bank, along with the annual reports of the selected commercial banks. Regression models were used to evaluate the impact of liquidity management on the profitability of Nepalese commercial banks.</p> <p>The capital ratio shows a positive relationship with return on assets. Additionally, the research indicates that both the investment ratio and current assets ratio exhibit positive relationships with both return on assets and return on equity. Conversely, the study finds that the liquid asset ratio is negatively associated with both return on assets and return on equity.</p>
<b>10.</b>	Sharma (2019)	To address liquidity challenges that could result in financial losses for banks, effective liquidity management is employed as a strategy to improve profitability. This analysis examined the quarterly effects of liquidity on commercial banks in Nepal.	<p>This study is a secondary research with an exploratory design, focusing on quantitative analysis. Data were collected quarterly from 2014 to 2018 for 13 different commercial banks. A range of statistical and econometric tools were employed,</p> <p>The comprehensive analysis revealed that liquidity measures had a negative impact on profitability measures overall.</p>

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including descriptive statistics, the Shapiro-Wilk test, Pearson correlation test, Ordinary Least Squares (OLS), and Generalized Least Squares (GLS). To enhance profitability forecasting, the study conducted heteroscedasticity testing using the Koenker test, autocorrelation testing with the Durbin-Watson (DW) test, and multicollinearity diagnostics through Variance Inflation Factor (VIF) analysis.

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|------------|---------------------------|--|--|--|
| <b>11.</b> | Pokharel & Pokhrel (2019) | To examine how liquidity affects profitability in Nepalese commercial banks, the study randomly selected a sample of five banks—Agriculture Development Bank, Everest Bank, Prime Commercial Bank, Sunrise Bank, and Citizens Bank International—from a total of 28 commercial banks in Nepal. The analysis spans the period from 2010/11 to 2016/17 AD. | This study utilized secondary data obtained from the financial statements, annual reports, unpublished official records of the banks, and the websites of Nepal Rastra Bank (NRB) and Nepal Stock Exchange (NEPSE). It covers data from seven years, spanning from 2010/11 to 2016/17. The data were analyzed using MS Excel and tested with | It has been noted that there is a meaningful correlation between liquidity ratios and profitability. |
|------------|---------------------------|--|--|--|
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			descriptive statistics, correlation, and regression. Profitability, measured by return on assets, was treated as the dependent variable, while liquidity was considered the independent variable.
<b>12.</b>	Shrestha (2018)	To investigate the connection between liquidity management and the profitability of commercial banks in Nepal, the study seeks to understand how liquidity management impacts profitability and assess the overall effect of this relationship on profitability.	<p>Pearson correlation analysis is used to evaluate the relationship between liquidity management and profitability, while regression analysis is employed to examine the impact of liquidity on profitability. The data, covering the period from 2012 to 2016, pertains to commercial banks in Nepal.</p> <p>The Liquidity management represents the variables of the current Reserve ratio (CRR), Credit Deposit Ratio (CDR) and the profitability including return on equity (ROA). The result reveals that liquidity does not have its significant impact on profitability in Nepalese commercial banks.</p>
<b>13.</b>	Pradhan & Shrestha (2016)	To examine the impact of liquidity on the performance of commercial banks in Nepal.	<p>The study utilized secondary data from the annual reports of the banks and supervision reports from Nepal Rastra Bank. Regression models were used to evaluate the significance and impact of bank</p> <p>The capital ratio shows a positive correlation with return on equity, whereas return on equity exhibits a negative correlation with the liquidity ratio.</p>

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			liquidity on the performance of commercial banks in Nepal.
<b>14.</b>	Hakuduwal (2014)	To assess the impact of assets, deposits, equity, and loans on the profitability of finance companies in Nepal.	The study uses a descriptive and analytical research design with secondary data. It applies correlation analysis, regression analysis, F-tests, and t-tests as analytical methods to examine and test the hypotheses.
<b>15.</b>	Sthapit & Maharjan (2012)	The study aims to reveal the relationship between liquidity and profitability in the daily operations of NABIL and SCBN. By comparing these two well-established private commercial banks in Nepal, the paper explores how liquidity affects profitability. The analysis focuses on NABIL and SCBN over the period from 2003/04 to 2010/11.	The study used a descriptive and analytical research design, drawing on secondary data from financial statements, annual reports, unpublished official records of the relevant banks, and the websites of Nepal Rastra Bank ( <a href="http://www.nrb.org.np">www.nrb.org.np</a> ) and Nepal Stock Exchange ( <a href="http://nepalstock.com">nepalstock.com</a> ). The loan-to-deposit ratio (LFTDR) and non-resident bank and financial institution-to-deposit ratio (NRBTDR) significantly decrease the return on assets (ROA) of SCBN, while the cash holdings-to-deposit ratio (CHTDR) has a significant positive impact. However, liquidity ratios do not significantly affect the profitability of NABIL. Consequently, SCBN demonstrates superior liquidity performance compared to NABIL.

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16. Shrestha (2012)	The study seeks to evaluate how liquidity affects the profitability of commercial banks in Nepal. To accomplish this, it chose a sample of 8 commercial banks that were established in or before 1995 and analyzed data from the period spanning 2003/04 to 2010/11.	The study utilized a descriptive and analytical research design, relying on secondary data from financial statements, annual reports, unpublished official records of the relevant banks, and the websites of Nepal Rastra Bank and Nepal Stock Exchange.	In Nepal, the ratios of 'NRB to deposit' and 'Cash vault to deposit' positively and significantly influence profitability for banks. Conversely, 'Liquid fund to deposit ratio,' and 'Cash and bank balance to deposit ratio,' and 'Liquid fund to current liability ratio' do not show a significant impact on profitability.
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## 2.4 Research Gap

After conducting an extensive literature review, it becomes evident that effectively managing liquidity is crucial for improving the performance of business entities, particularly those within the financial sector. Many studies highlight the significant impact that different aspects of liquidity management can have on an organization's profitability. Across various research endeavors, there is compelling evidence showing a strong connection between liquidity and profitability. This relationship underscores how these variables often work together to strengthen financial resilience and ensure long-term sustainability for organizations. However, it's important to recognize that the outcomes of liquidity management strategies can vary significantly depending on the specific industry context in which they are applied.

Most existing research has primarily focused on the microfinance sector, particularly within Nepal, to explore the complex relationship between liquidity and profitability. These studies have identified critical factors such as the current ratio (which assesses short-term liquidity), cash flow management practices, and asset liquidity as key drivers that significantly influence financial performance. Despite these insights, previous research has often struggled to fully clarify the dynamic interplay and the specific challenges that microfinance institutions face in balancing profitability with maintaining adequate liquidity.

Moreover, prior studies have typically been limited in scope, relying mainly on financial and statistical methodologies such as correlation analysis, simple regression, and panel regression. While these methods have provided valuable insights into general trends and relationships between liquidity and profitability, there is a clear need for more comprehensive research. This involves employing a broader range of financial and statistical analyses to delve deeper into the intricate dynamics governing liquidity management and its impact on financial outcomes.

In our study, we adopt a descriptive and analytical research approach covering the period from 2070/71 to 2079/80 to comprehensively address these gaps in the literature. Through rigorous ratio analysis, correlation analysis, and multiple regression analysis, our aim is to explore the nuanced relationships between various liquidity management strategies and profitability within Nepal's microfinance sector. Our expanded methodology aims to offer a more holistic understanding of how effective liquidity management practices not only affect financial performance metrics such as profitability but also contribute to enhancing overall operational efficiency and resilience.

This detailed approach allows us to highlight specific challenges faced by microfinance institutions as they navigate the complex dynamics of profitability and liquidity management. By uncovering these insights, our research seeks to significantly advance knowledge in the field of microfinance and financial management. Ultimately, this knowledge can inform better strategic decision-making and guide the development of more effective financial policies within microfinance institutions, fostering their sustainable growth and stability in the long term.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

Research methodology refers to the structured approach and systematic steps taken by researchers to investigate specific problems with defined objectives. This chapter focuses on several critical aspects that guide the research process.

#### **3.1 Research Design**

The study focuses on analyzing how liquidity impacts the profitability of NMBMF, SWBBL, NUBL, NLBBL and CBBL microfinance institutions. The research design chosen is aligned with this objective, utilizing both analytical and descriptive methods for data collection and analysis. Descriptive studies are particularly valuable for exploring relationships and describing the current state of affairs, often preceding experimental studies to inform experimental design decisions. The study adopts a descriptive and casual comparative research design, which allows for the generalization of findings and the exploration of variable distributions. This approach is selected for its effectiveness and practicality in conducting financial analysis within the microfinance sector.

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

The study aims to assess how liquidity affects the profitability of microfinance companies in Nepal. The population for this research includes all 68 microfinance companies currently operating in Nepal, as reported by Nepal Rastra Bank. For the study, a sample of five microfinance institutions was selected using a convenience sampling method. The chosen sample consists of NMB Laghubitta Bittiya Sanstha Limited (NMBMF), Swabalamban Laghubitta Bittiya Sanstha Limited (SWBBL), Nirdhan Utthan Laghubitta Bittiya Sanstha Limited (NUBL), Nerude Laghubitta Bittiya Sanstha Limited (NLBBL), and Chhimek Laghubitta Bittiya Sanstha Limited (CBBL). These organizations were selected for their relevance to the study's objectives and the availability of data. The research uses data from these microfinance companies covering the period from 2070/71 to 2079/80, spanning ten years.

### **3.3 Nature and Sources of Data**

The study relies on secondary data obtained from the financial reports of NMBMF, SWBBL, NUBL, NLBBL and CBBL microfinance companies. This includes data extracted from their profit and loss accounts, balance sheets, and other published reports. Secondary data sources provide valuable information for analyzing financial performance and evaluating the impact of liquidity on profitability within these institutions.

### **3.4 Data Analysis Tools**

To analyze the liquidity and profitability positions of NMBMF, SWBBL, NUBL, NLBBL and CBBL, the study employs two primary analytical tools: financial ratios and statistical analysis. Ratio analysis helps in assessing liquidity and profitability metrics, while statistical methods are used to explore relationships and patterns within the data. These analytical tools are essential for gaining a comprehensive understanding of how liquidity management practices influence financial performance in microfinance institutions.

By employing these detailed methodologies, the study aims to provide robust insights into the relationship between liquidity and profitability in microfinance institutions. This research contributes to advancing knowledge in the field of financial management and informs strategic decision-making processes aimed at enhancing operational efficiency and sustainability within microfinance organizations.

#### **3.4.1 Financial Tools**

The upcoming analysis will focus on evaluating the following financial ratios as part of the liquidity and financial position assessment of the chosen microfinance company.

- **Credit Deposit Ratio**

The ratio indicates the proportion of total loans granted by the microfinance institution relative to its total deposit amount. A higher ratio suggests greater liquidity risk, whereas a lower ratio indicates stronger liquidity. It is calculated as:

$$\text{Credit Deposit Ratio} = \frac{\text{Total Loan}}{\text{Total Deposit}}$$

- **Net Credit Facility/ Total Assets**

NCF/TA reflects a bank's capacity to use its available funds to generate profits. It also helps assess the financial pressure the bank faces, which is crucial for evaluating its risk level. This ratio is calculated by dividing the Net Credit Facility by the bank's Total Assets. It is obtained by following calculations:

$$\text{Net Credit Facilities by Total Assets} = \frac{\text{Net Credit Facilities}}{\text{Total Assets}}$$

- **Capital Ratio**

The Capital Ratio indicates a bank's financial stability by measuring its financial strength. It represents the relationship between the capital invested in the bank and its total assets, showing what percentage of the assets is covered by capital. Capital encompasses funds from shareholders, reserves, retained earnings, and long-term debt, while assets include both current and long-term assets, fixed assets, and other resources. It is calculated as under:

$$\text{Capital Ratio} = \frac{\text{Capital}}{\text{Total Assets}}$$

- **Deposit to Asset Ratio**

The Deposit to Asset Ratio measures the proportion of total deposits relative to total assets. It is calculated by dividing total deposits by total assets. Research has shown a positive and significant correlation between this ratio and the bank's profitability.

It is calculated by the following:

$$\text{Deposit Asset Ratio} = \frac{\text{Total Deposit}}{\text{Total Assets}}$$

- **Return on Equity**

ROE evaluates a bank's profitability by showing how much profit is generated from the funds invested by shareholders. It connects the bank's profitability to shareholder equity, which includes share capital as well as reserves and surplus.

ROE is calculated by following:

$$\text{ROE} = \frac{\text{Net Profit}}{\text{Shareholder's Equity}}$$

- **Return on Assets**

ROA links a company's profitability to the total assets it employs. It assesses how effectively assets are utilized to generate profits and evaluates the efficiency of using funds from both owners and creditors. ROA is a key metric for determining a bank's

performance, with a higher ROA indicating strong profitability and effective asset management.

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

### 3.4.2 Statistical Tools

#### Arithmetic Mean

The arithmetic mean is the sum of all values in a dataset divided by the number of observations. It provides a measure of central tendency and is useful for understanding the average value of a variable across a data set V

We have,

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

Where  $\sum x$  = sum of all values of the observations

n = Number of observation

x = Value of variables

#### Standard Deviation

Standard deviation measures the dispersion or spread of values in a dataset around the mean. It indicates the degree of variation or volatility in the dataset. A lower standard deviation suggests that values are closer to the mean, while a higher standard deviation indicates greater variability.

We have,

$$\sigma = \sqrt{\frac{\sum(x-\bar{x})^2}{n}}$$

Where,

$\sigma$  = Standard Deviation

x = Value of variables

n = Number of observation

### Coefficient of Variation (C.V.)

The coefficient of variation is a relative measure of dispersion based on the standard deviation. It is calculated as the ratio of the standard deviation to the mean, multiplied by 100. A lower coefficient of variation indicates less variability or greater consistency in the dataset, while a higher coefficient of variation suggests more variability.

Thus,

$$\text{C.V.} = \frac{\sigma}{\bar{x}} \times 100\%$$

Where  $\sigma$  = Standard Deviation

$\bar{x}$  = Mean Value of Variables

### Correlation Coefficient (r)

The correlation coefficient measures the strength and direction of the linear relationship between two variables. It ranges from -1 to +1, where -1 indicates a perfect negative correlation, +1 indicates a perfect positive correlation, and 0 indicates no correlation. It is useful for understanding how changes in one variable are associated with changes in another variable.

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

Where,

$\sum xy$  = Sum of the products of paired scores

$\sum x$  = Sum of x scores

$\sum y$  = Sum of y scores

$\sum x^2$  = Sum of squared x scores

$\sum y^2$  = Sum of squared y scores

### Simple Regression Analysis

Simple regression analysis examines the relationship between a dependent variable and a single independent variable. It involves fitting a regression equation to the data to understand how changes in the independent variable(s) affect the dependent variable. The regression equation includes a constant (intercept) and coefficient (slope) that quantify the relationship between the variables.

The regression equation of Y on X be

$$Y = a + bx$$

Where,

Y = Dependent Variable, i.e. Net Profit

a = Regression Constant

b = Regression Coefficient

x = Independent Variable i.e. Cash and Bank balance

**Regression Constant (a):** The regression constant, represented as 'a', is the intercept of the model that signifies the average level of the dependent variable when the independent variable is zero. It indicates the baseline or average effect on the dependent variable, considering all variables included in the model. The regression constant is computed specifically for the chosen dependent and independent variables outlined in this study.

**Regression Coefficient (b):** The regression coefficient, denoted as 'b', for each independent variable illustrates the incremental relationship between that variable and the value of the dependent variable. This coefficient holds constant the impact of all other independent variables included in the regression model. It clarifies how alterations in independent variables influence the estimated value of the dependent variable.

### 3.5 Conceptual Framework

The conceptual framework serves as the foundation of the study, providing a structured basis to support the research and illustrating the relationships between

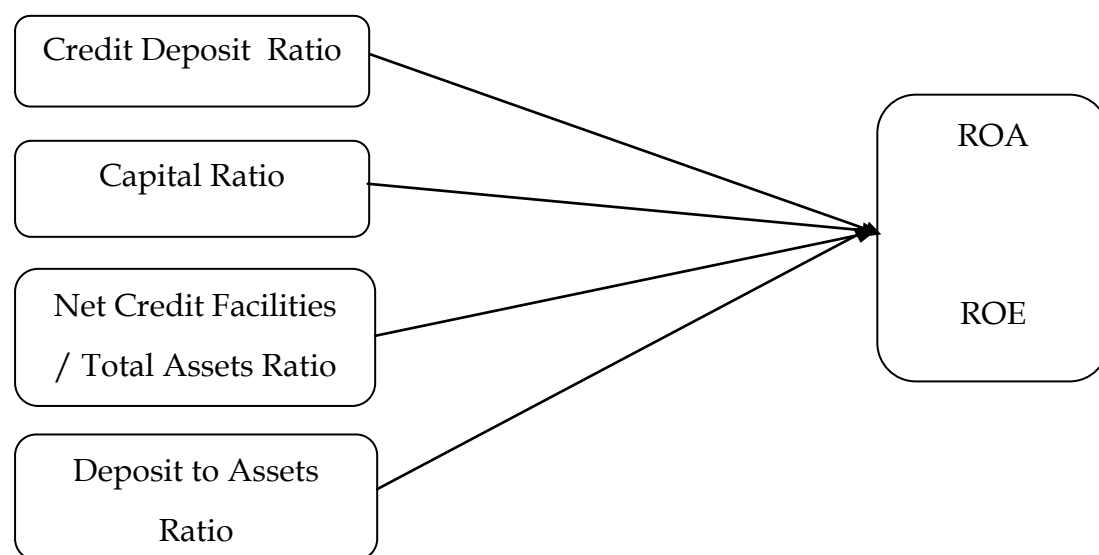
variables. It is derived from a review of existing literature and theories. In this study, profitability is the dependent variable, measured by Return on Equity (ROE) and Return on Assets (ROA). Liquidity, the independent variable, is assessed using various indicators including the investment ratio, net credit facility to total assets, capital ratio, liquid ratio, current ratio, deposit-to-asset ratio, and quick acid ratio.

**Figure 1**

*Conceptual Framework*

**Independent Variables**

**Dependent Variables**



*Source: Ibrahim and Aqeel,(2017)*

### **Independent Variables**

Independent variables are those that the researcher controls or manipulates. They are considered the cause and have a direct impact on the dependent variables. The study includes the following independent variables.

- **Credit Deposit Ratio**

This ratio indicates the proportion of total loans granted by the microfinance institution relative to its total deposit amount. A higher ratio suggests greater liquidity risk, whereas a lower ratio indicates stronger liquidity. The Credit Deposit Ratio is calculated as Total Loan / Total Deposit.

- **Capital Ratio**

It assesses the bank's capacity and financial strength, reflecting its level of financial stability.  $\text{Capital Ratio} = \text{Capital} / \text{Total Assets}$

- **Net Credit Facility / Total Asset Ratio**

This percentage reflects the bank's capability to effectively utilize available funds to generate profit and also indicates the financial pressures that help the bank assess its level of risk.

- **Deposit to Asset Ratio**

This ratio measures the relationship between the bank's deposits and its total assets.

$\text{Deposit to Total Assets Ratio} = \text{Total Deposit} / \text{Total Assets}$

### **Dependent Variables**

A dependent variable is one that changes in response to variations in independent variables. This study aims to understand how liquidity affects profitability, making profitability the dependent variable, which is measured using Return on Assets (ROA) and Return on Equity (ROE).

- **Return on Assets**

The ratio shows the bank's profitability in relation to its assets, providing insight into how effectively management utilizes assets to generate earnings.

$\text{ROA} = \text{Net Income} / \text{Total Assets}$ .

- **Return on Equity**

It measures the company's profitability by showing how much profit is generated from the funds invested by shareholders.

$\text{ROE} = \text{Net Income} / \text{Shareholder's Equity}$

### **3.6 Research Hypothesis**

The following alternatives hypothesis has been formulated to test the objectives of the study:

H1a: There is a significant relationship between Credit Deposit Ratio and Return on Assets of microfinance companies in Nepal.

H1b: There is a significant relationship between Credit Deposit Ratio and Return on Equity of microfinance companies in Nepal.

H2a: There is a significant relationship between Net Credit Facilities to Total Assets and Return on Assets of microfinance companies in Nepal.

H2b: There is a significant relationship between Net Credit Facilities to Total Assets and Return on Equity of microfinance companies in Nepal.

H3a: There is a significant relationship between Capital Ratio and Return on Assets of microfinance companies in Nepal.

H3b: There is a significant relationship between Capital Ratio and Return on Equity of microfinance companies in Nepal.

H4a: There is a significant relationship between Deposit to Asset Ratio and Return on Assets of microfinance companies in Nepal.

H4b: There is a significant relationship between Deposit to Asset Ratio and Return on Equity of microfinance companies in Nepal.

## CHAPTER IV

### RESULT AND DISCUSSION

This chapter is crucial to the study, as it involves the mathematical analysis and presentation of the collected data. Utilizing the previously mentioned financial and statistical tools, the researcher has analyzed and interpreted relevant data from the sample microfinance, following the research methodology outlined in the preceding chapter. The data analysis process includes organizing, tabulating, and evaluating the gathered information.

#### 4.1 Financial Ratio Analysis

Financial ratios are valuable tools that assist business managers and investors in analyzing and comparing the financial relationships between a firm's accounts on its financial statements. These ratios facilitate financial analysis across the firm's history, industry, or business sector. By using data obtained from ratio calculations, financial ratio analysis aids in making decisions to enhance a firm's profitability, solvency, and liquidity. As a widely utilized financial analysis tool, ratio analysis involves systematically using ratios to interpret financial statements, enabling the identification of a firm's strengths and weaknesses, as well as its historical performance and current financial condition.

**Table 3**

*Descriptive Statistics*

<b>Variable</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>S.D.</b>
CDR	3.677	29.910	16.768	9.500
NCF/TA	2.199	8.591	5.933	2.704
CR	0.607	0.942	0.733	0.142
DAR	2.445	6.253	4.318	1.480
ROE	1.921	5.216	3.906	1.479
ROA	0.157	0.304	0.252	0.060

(Source: Appendix I)

#### **4.1.1 Credit Deposit Ratio**

The Credit Deposit Ratio (CDR) represents the proportion of loans and assets that banks create from the deposits they receive. A higher CDR indicates that more loans and assets are generated from deposits. A high CDR can lead to an increase in interest rates. Consequently, a higher ratio suggests liquidity risk, while a lower ratio indicates strong liquidity.

According to the data displayed in table 3, the values range from a minimum of range in between 3.677 to 29.910 and with the average being 16.768. This ratio measures the total proportion of credit given to the deposits held. Owing to the fact that immense variation exists in between the institutions in their lending practices, the range is very wide. Some are very conservative with their lending compared to their deposits while others are much more aggressive. This high standard deviation being 9.500, we can say that there would be a lot of variability around the mean. Therefore, although the average institution has a CDR of 16.768, in reality individual ratios vary considerably, reflecting very different lending strategies and risk profiles among the sample.

#### **4.1.2 Net Credit Facilities / Total Assets Ratio**

The NCF/TA ratio measures how effectively a bank utilizes its available funds to generate profits. Specifically, it indicates the proportion of total assets that is allocated towards credit facilities. To calculate this ratio, you divide the Net Credit Facilities (NCF) by the Total Assets of the microfinance company.

This ratio is significant because it provides insight into how much of the bank's assets are being used for lending and other credit-related activities. If the NCF/TA ratio is too high, it might indicate that the bank is over-leveraged or taking on excessive credit risk. Conversely, if the ratio is too low, it could suggest that the bank is not fully utilizing its assets to generate potential income from credit facilities. Therefore, maintaining an optimal NCF/TA ratio is crucial for balancing risk and profitability.

As it is shown in Table 3, The NCF/TA ratio goes from a minimum of 2.199 to a maximum of 8.591, with an average of 5.933. This is the ratio describing the efficiency of the company in translating its total assets into net cash flow. With the standard deviation being 2.704, there is quite a wide dispersion around the mean for

how efficiently institutions are managing their assets to generate cash flow. This basically suggests that some HEIs are very good at turning their assets into cash flow, compared to others, which inherently points to operational efficiency differences.

#### **4.1.3 Capital Ratio**

The Capital Ratio measures the proportion of a bank's capital relative to its total assets. Capital refers to the sum of funds contributed by shareholders, including equity investments, reserves, retained earnings, and long-term debt. Assets, in this context, encompass all types of resources owned by the bank, including both current and long-term assets, fixed assets such as property and equipment, and other forms of assets.

This ratio is a key indicator of the bank's financial strength and stability. By comparing the capital to the total assets, it helps assess the bank's ability to absorb losses and support its operations. A higher Capital Ratio generally signifies a stronger financial position and greater ability to withstand economic pressures, while a lower ratio may indicate a higher level of risk or vulnerability.

Through Table 3, it can be seen that the Capital Ratio ranges from 0.607 to 0.942, with an average of 0.733. This ratio implies the percentage of capital to total assets for each institution. The small standard deviation of 0.142 indicates that most of the institutions have a similar capital ratio, implying a generally homogeneous capital management among the institutions. It could imply that the institutions have relatively similar levels of capital in comparison to their assets, probably because of a similar environment or risk management practices.

#### **4.1.4 Deposit Asset Ratio**

The Deposit Asset Ratio calculates the proportion of a bank's total deposits compared to its total assets. This ratio helps determine how much of the bank's assets are funded by deposits. Numerous studies have demonstrated a positive and significant relationship between this ratio and the bank's profitability. In other words, a higher Deposit Asset Ratio is often associated with increased profitability for the bank, indicating that banks with a greater proportion of deposits relative to their total assets tend to perform better financially.

In Table 3, we can observe the fact that the deposit asset ratio has an average of 4.318, with a range of 2.445 to 6.253. This ratio is used to assess the proportion of the institution's assets being funded by deposits. A standard deviation of 1.480 indicates moderate dispersion in the institution's reliance on deposits for funding its assets. The more one, the more the institution relies on deposits against its assets, hence having a strong deposit base. The lower it is, the greater an institution relies on other funding sources. This variability reflects the various funding strategies and financial structures across institutions.

#### **4.1.5 Return on Assets Ratio**

Return on Total Assets (ROA) measures how effectively a company's assets are used to generate net profit. It reflects the efficiency of asset utilization, indicating how well assets contribute to overall profitability. In other words, ROA assesses the firm's earning power and operational efficiency by evaluating its ability to generate profits from its assets. This ratio assists management in identifying key factors that influence the firm's overall performance.

As shown in the table 3, the average ROA ranges from 0.157 to 0.304, with a mean of 0.252. This ratio calculates how efficiently the institution is using its assets to generate a profit. The low standard deviation of 0.060 indicates that ROA values do not vary too much across the institutions. That means most institutions perform alike in terms of efficiency in using their assets to generate profits.

#### **4.1.6 Return on Equity Ratio**

Shareholders receive returns only after fixed interest charges to creditors and taxes to the government have been paid. The profit remaining after these deductions represents the earnings available to shareholders. Thus, Return on Equity (ROE) is calculated using equity as the basis. ROE measures how much profit a company generates relative to the total shareholder equity reported on the balance sheet.

By checking the data presented in the table 3, it is clear that ROE ranges from 1.921 through 5.216, with a mean of 3.906. The ratio expresses the profitability of the institutions to their shareholders' equity. A standard deviation of 1.479 indicates that there is moderate variability in profitability. Thus, high ROE makes the institution more efficient at earning profits from shareholders' equity, while low ROE may

sometimes bring problems to achieve high levels of profitability. The range and the standard deviation show that these institutions have very different levels of financial performance.

## 4.2 Statistical Analysis

### 4.2.1 Correlation Analysis

The correlation analysis is done to correlate net profit margin profitability indicators with liquidity risk factors that are considered independent in this research.

**Table 4**

*Correlations Analysis*

	1	2	3	4	5	6
CDR (1)	1					
NCF/TA (2)	.637	1				
CR (3)	.710	-.024	1			
DAR (4)	-.798	-.225	-.950**	1		
ROE (5)	-.596	.146	-.987**	.917*	1	
ROA (6)	-.761	-.017	-.986**	.940*	.953*	1

Table 4 shows the results of the analysis of the correlation among the correlation among the different dependent and independent variables. Correlation coefficients near zero show no linear correlation, while values near +1 or -1 denote a perfect linear correlation in the positive or negative direction respectively.

The CR has strong and negative correlation with ROE. Thereafter, the higher a capital ratio, the lower its return on equity. The inverse relationship of the two metrics thus formed suggests that increased liquidity, as represented by a high capital ratio, relates to reduced profitability in relation to shareholders' equity. The correlation between CR and ROA is strong and negative which implies that when CR increases, ROA tends to decrease. It interprets that the higher liquidity is associated with reduced efficiency in yielding a profit from the assets. The DAR has high and positive correlation with ROE at 0.917. Therefore, the higher the deposit-to-assets ratio—this being a measure of liquidity—the higher the relative profitability to equity. A dependence on more deposits transforms institutions into more profitable ones. The

strong and positive correlation between DAR and ROA dictate that a higher deposit-to-assets ratio goes hand in hand with better efficiency in generating profits from assets—in essence, institutions that have more deposits are also best at using their assets.

In brief, the data shows that the higher the capital ratio, a measure of liquidity, the lower the level of profitability, while an increased deposit-to-asset ratio, another measure of liquidity, means higher levels of profitability. This exemplifies that different dimensions of liquidity might have different effects on financial performance: more liquidity coming from deposits helps boost profitability and asset efficiency, while more capital may not always be so beneficial.

#### **4.2.2 Regression Analysis**

Regression analysis is a statistical technique designed to investigate and define the relationships between different variables. It aims to identify how changes in one or more independent variables (predictors) affect a dependent variable (outcome). By establishing a functional relationship, this method helps in understanding and quantifying these interactions. It is widely used to analyze how different factors are related and to predict the impact of changes in independent variables on the dependent variable, making it a key tool in examining complex variable relationships and assessing their influence.

##### **4.2.2.1 Regression Analysis of ROA**

The regression analysis of Return on Assets (ROA) is carried out by treating ROA as the dependent variable and using the credit deposit ratio, net credit facilities to total assets ratio, capital ratio, and deposit to total assets ratio as independent variables. To evaluate the results of this regression analysis, the following hypotheses are formulated: H<sub>0</sub>: Liquidity management does not have a statistically significant impact on the profitability of microfinance institutions in Nepal.

H<sub>1</sub>: Liquidity management has a statistically significant impact on the profitability of microfinance institutions in Nepal.

The decision making guidelines will be based on :

Accept H<sub>0</sub> if (Sig F)>5%

Accept H<sub>1</sub> if (Sig)<5%

The formula for this regression model is outlined below:

$$\text{ROA} = a_1 + b_1\text{CDR} + b_2\text{NCF/TA} + b_3\text{CR} + b_4\text{DAR}$$

Where,

ROA= Return On Assets

CDR= Credit Deposit Ratio

NCF/TA= Net Credit Facilities to Total Assets

CR= Capital Ratio

DAR= Deposit to Total Assets Ratio

**Table 5**

*Model Summary*

Model	R	R Square	Adjusted Square	R	Std. Error of Estimate
Regression on ROA	0.501	0.251	0.185		0.1069

Source: SPSS

The regression analysis table indicates that the model's coefficient of determination is 0.251. This means that 25.1% of the variation in Return on Assets (ROA) is explained by the factors included in the model—namely, the credit deposit ratio, net credit facilities to total assets ratio, capital ratio and deposit to assets ratio. The remaining 74.9% of the variation in ROA is due to other variables not accounted for in this analysis.

*ANOVA*

	df	Sum of Squares	Mean Square	F	Significance F
Regression	4	0.0017	0.0004	3.6869	0.0111
Residual	45	0.0052	0.0001		
Total	49	0.0069			

Dependent Variable: ROA

The significance level (p-value) for the F-statistic is 0.0111, which is below the 0.05 threshold which shows that the overall model is statistically significant, implying that all variables in a collective manner have meaningful impacts on ROA.

### Coefficients

Regression on ROA	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig
1					
(Constant)	0.046	0.011		4.159	0.000
CDR	-0.003	0.003	-0.297	-1.198	0.237
NCF/TA	0.006	0.008	0.119	0.700	0.507
CR	-0.224	0.066	-0.448	-3.372	0.002
DAR	-0.007	0.016	-0.093	-0.441	0.661

Dependent Variable: ROA

The regression analysis of Return on Assets (ROA) based on the CDR, NCF/TA, CR and DAR shows that the intercept value is 0.046 with a very low p-value of 0.000, indicating that when all independent variables are zero, the expected Return on Assets (ROA) is 0.046. This value is statistically significant and suggests a positive baseline level of ROA. The coefficient for CDR is -0.003, with a p-value of 0.237 which implies that the relationship of the independent variable, CDR, to ROA is negative, but the effect is not statistically significant, given that p-value > 0.05. There is hence no sufficient evidence to establish a claim of a significant effect of CDR on ROA in this sample. While the NCF/TA holds a coefficient of 0.006, its p-value is, needless to be stated, equal to 0.5071, hence positivity with regards to ROA. However, it is but not statistically significant, with a p-value more than 0.05. It implies that the NCF/TA does not have a significant effect on this context of ROA. While the CR holds a coefficient of -0.224, its p-value is, needless to be stated, equal to 0.002 so hardly

there is a strong negative relation between CR and ROA. More specifically, a high Capital Ratio is associated with a low Return on Assets. The p-value is well below 0.05, showing that this effect is statistically highly significant. The coefficient on DAR is -0.007, with a p-value of 0.661. This points to a negative but statistically insignificant relationship of the DAR to ROA since the p-value is  $> 0.05$ . Hence, in this sample, DAR does not make a significant contribution to ROA.

#### 4.2.2.2 Regression Analysis of ROE

The regression analysis of Return on Equity (ROE) involves using ROE as the dependent variable, while the credit deposit ratio, net credit facilities to total assets ratio, capital ratio and debt to assets ratio serve as the independent variables.

To evaluate the results of this regression analysis, the following hypotheses are formulated:

H0: Liquidity management does not have a statistically significant effect on the profitability of microfinance institutions in Nepal.

H1: Liquidity management have a statistically significant effect on the profitability of microfinance institutions in Nepal.

The decision making guidelines will be based on :

Accept H0 if (Sig F) $>5\%$

Accept H1 if (Sig) $<5\%$

The formula for this regression model is outlined below:

ROA:  $a_1 + b_1 \text{CDR} + b_2 \text{NCF/TA} + b_3 \text{CR} + b_4 \text{DAR}$

Where,

ROA= Return On Assets

CDR= Credit Deposit Ratio

NCF/TA= Net Credit Facilities to Total Assets

CR= Capital Ratio

DAR= Deposit to Total Assets Ratio

**Table 6***Model Summary*

Model	R	R Square	Adjusted Square	R	Std. Error of Estimate
Regression on ROE	0.710	0.505	0.461		0.1585

Source: SPSS

The regression analysis table indicates that the model's coefficient of determination is 0.505. This means that 50.5% of the variation in Return on Equity (ROE) is explained by the factors included in the model—namely, the credit deposit ratio, net credit facilities to total assets ratio, capital ratio and deposit to assets ratio. The remaining 49.5% of the variation in ROE is due to other variables not accounted for in this analysis.

**ANOVA**

	<i>df</i>	<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F Statistic</i>	<i>Significance F</i>
Regression	4	1.1487	0.2872	11.3776	0.0000
Residual	45	1.1358	0.0252		
Total	49	2.2845			

Dependent Variable: ROE

The significance level (p-value) for the F-statistic is 0.000, which is below the 0.05 threshold which shows that the overall model is statistically significant, implying that all variables in a collective manner have meaningful impacts on ROE.

**Coefficient**

Regression on ROE	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig
1					
(Constant)	0.820	0.165		4.955	0.000
CDR	-0.033	0.038	-0.176	-0.869	0.389
NCF/TA	0.131	0.118	0.154	1.112	0.272
CR	-6.102	0.985	-0.669	-6.194	0.000
DAR	-0.008	0.236	-0.006	-0.036	0.971

Dependent Variable: ROE

The regression analysis of ROE based on the CDR, NCF/TA, CR and DAR shows the intercept value is 0.820 with a p-value of 0.0000, indicating that if all independent variables are set to zero, the anticipated Return on Equity (ROE) would be 0.820. This result is statistically significant, reflecting a positive baseline ROE. The coefficient for CDR is -0.033 with a p-value of 0.389, suggest a negative association between CDR and ROE. However, since the p-value exceeds the typical significance threshold of 0.05, this relationship is not statistically significant. Therefore, there is not enough evidence to conclude that CDR has a substantial effect on ROE. The coefficient for NCF/TA is 0.131 with a p-value of 0.272, indicating a positive association between NCF/TA and ROE. However, the high p-value suggests that this effect is not statistically significant. As a result, NCF/TA does not have a meaningful impact on ROE in this analysis. The coefficient for CR is -6.102 with a p-value of 0.0000, indicating a significant negative correlation between Capital Ratio and ROE. In particular, a higher Capital Ratio corresponds to a notably lower Return on Equity. The p-value being far below 0.05 confirms that this result is statistically significant. The coefficient for DAR is -0.008 with a p-value of 0.971, suggesting a negative relationship between DAR and ROE. However, the p-value is very high, meaning this effect is not statistically significant. Therefore, DAR does not have a notable impact on ROE.

**Table 7**

*Summary of Results of Hypothesis Testing*

Hypothesis	p-value	Remarks
H1a: There is a significant relationship between Credit Deposit Ratio and Return on Assets of microfinance companies in Nepal.	0.237	Rejected
H1b: There is a significant relationship between Credit Deposit Ratio and Return on Equity of microfinance companies in Nepal.	0.389	Rejected
H2a: There is a significant relationship between Net Credit Facilities to Total Assets and Return on Assets of microfinance companies in Nepal.	0.507	Rejected
H2b: There is a significant relationship between Net Credit	0.272	Rejected

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Facilities to Total Assets and Return on Equity of microfinance companies in Nepal.

H3a: There is a significant relationship between Capital Ratio and Return on Assets of microfinance companies in Nepal. 0.002 Accepted

H3b: There is a significant relationship between Capital Ratio and Return on Equity of microfinance companies in Nepal. 0.000 Accepted

H4a: There is a significant relationship between Deposit to Asset Ratio and Return on Assets of microfinance companies in Nepal. 0.661 Rejected

H4b: There is a significant relationship between Deposit to Asset Ratio and Return on Equity of microfinance companies in Nepal. 0.971 Rejected

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### 4.3 Discussion

The study shows significant relationship between liquidity and profitability of the sampled Microfinance Institutions of Nepal. According to the Unified Directives of NRB, the deposit collecting microfinance companies must maintain the CRR of 2% whereas the microfinance companies which are not deposit oriented must maintain the CRR of 0.5%. Every microfinance companies must maintain SLR of 4% and Capital Adequacy of 8%.

The study analyzed the profitability and liquidity status of five microfinance companies in Nepal (NMBMF, NUBL, SWBBL, NLBBL and CBBL) over the period 2070/71 to 2079/80 revealing variations in both liquidity and profitability across these institutions. The findings reveal that microfinance companies in Nepal maintain a delicate balance between liquidity and profitability, as supported by various liquidity ratios like credit deposit ratio, net credit facilities to total assets ratio, deposit assets ratio and capital ratio. The analysis shows that while these institutions are generally able to meet their short-term obligations without significant distress, the levels of profitability are often constrained by the need to maintain high liquidity. This is consistent with the findings of Mishra and Pradhan (2019) and Mohanty and Mehrotra (2018), who observed that in Indian banks, higher liquidity ratios often lead to reduced profitability, measured by Return on Assets (ROA).

The study finds that liquidity management plays a crucial role in shaping the profitability of the microfinance companies. Specifically, the results reveal that while maintaining liquidity is essential for operational stability, excessive liquidity can lower profitability due to the under utilization of available resources. This findings is in line with the Trade-Off Theory, which posits that while liquidity is necessary, beyond a certain point, it can negatively impact profitability. Similar conclusions were drawn by Moussa and Boubaker (2020) in the context of Tunisian banks, where excessive liquidity was found to reduce profitability, particularly when the liquid assets were not optimally invested.

The average Return on Assets (ROA) for the sampled microfinance companies is 0.252, with a range from 0.157 to 0.304. This indicates that the microfinance companies generally exhibit similar levels of efficiency in using their assets to generate profits, as evidenced by the low standard deviation of 0.060, which points to minimal variability in ROA across the institutions. In comparison, the Return on Equity (ROE) displays more variability. With an average ROE of 3.906 and a range from 1.921 to 5.216, alongside a standard deviation of 1.479, there is considerable variation in how effectively the microfinance companies are generating profits relative to their equity. This variability reflects differences in operational efficiency and financial strategies among the institutions.

The Credit Deposit Ratio (CDR) has an average of 16.768 and varies between 3.677 and 29.910, with a high standard deviation of 9.500. This broad range and significant variability reflect that institutions adopt diverse strategies for managing liquidity risk through their lending practices in relation to deposits. The Net Credit Facilities to Total Assets (NCF/TA) ratio has an average of 5.933, with values spanning from 2.199 to 8.591 and a standard deviation of 2.704. This indicates substantial differences in how efficiently institutions use their total assets to generate net credit facilities. The Capital Ratio (CR) averages 0.733, with a range from 0.607 to 0.942 and a relatively small standard deviation of 0.142. This low standard deviation suggests that most institutions have similar levels of capital relative to their assets, indicating a generally consistent approach to capital management. The Deposit Asset Ratio (DAR) has an average of 4.318, ranging from 2.445 to 6.253, with a standard deviation of 1.480. The moderate variability in this ratio shows that institutions differ

in their dependence on deposits relative to their assets, which influences their financial structure and performance.

The correlation and regression analyses demonstrate that the Capital Ratio (CR) exhibits a strong negative correlation with both Return on Assets (ROA) and Return on Equity (ROE). This implies that increased liquidity from higher capital levels is linked to lower profitability. This study aligns with the research done by Chhetri (2023), where he measured the effect of credit and liquidity risk on profitability in Nepalese commercial banks from 2012 to 2021 and his findings show that positive and significant impacts of Capital Adequacy ROE and negative impacts of Investment Ratio and Capital Ratio on ROE, suggesting that higher credit and liquidity performance and lower non-performing loans decrease bank profitability. On the other hand, a higher Deposit Asset Ratio (DAR) is positively associated with improved profitability, suggesting that a larger proportion of deposits relative to total assets boost both profitability and operational efficiency. Regression analysis further reveals that the Capital Ratio has a significant negative effect on both ROA and ROE. However, other liquidity indicators, such as the Credit Deposit Ratio (CDR), Net Credit Facilities to Total Assets (NCF/TA), and DAR, do not have statistically significant effects on ROA. For ROE, only the Capital Ratio demonstrates a significant negative impact, while the other variables do not show significant effects.

## **CHAPTER -V**

### **SUMMARY AND CONCLUSION**

#### **5.1 Summary**

Liquidity and profitability are essential facets of corporate life, where a firm's survival hinges on maintaining adequate liquidity. While profitability signals a firm's health, insufficient liquidity can precipitate its downfall. Thus, effective liquidity management is critical for assessing corporate performance. This study aims to analyze how liquidity relates to profitability in NMBMF, NUBL, SWBBL, NLBBL and CBBL, employing various financial tools like credit deposit ratio, net credit facilities to total assets, capital ratio, deposit to total assets ratio, return on shareholders' equity, and return on total assets.

First Chapter provides an introduction to the study, outlining its background, objectives, significance, and scope. It contextualizes the role of microfinance in Nepal and underscores the economic importance of institutions like NMBMF, NUBL, SWBBL, NLBBL and CBBL. The chapter identifies the research problem of liquidity and profitability in microfinance, stressing the need to understand these dynamics for effective financial management.

Second Chapter conducts a comprehensive literature review, examining theoretical frameworks and reviewing relevant national and international research. It synthesizes empirical and theoretical insights from previous theses, journals, articles, and reports to build a foundational understanding of liquidity and profitability in the microfinance sector.

Third Chapter outlines the methodology used to investigate the relationship between liquidity and profitability in microfinance institutions. It details the research design, data collection methods, and analytical techniques employed to provide structured insights into enhancing financial performance and guiding regulatory policies.

Fourth Chapter presents the findings of the study, emphasizing the pivotal role of liquidity management in shaping the financial health and profitability of microfinance institutions in Nepal. Through rigorous financial analysis and statistical methods, the chapter offers insights valuable to stakeholders such as managers, policymakers, and regulators, emphasizing informed decision-making and operational efficiency within the microfinance sector.

Fifth Chapter offers a concise summary of the entire research report and its conclusions. It synthesizes the study's findings on liquidity and profitability dynamics in microfinance institutions, highlighting implications for stakeholders and suggesting avenues for future research to contribute to the development and stability of Nepal's microfinance industry.

## **5.2 Conclusion**

Liquidity and profitability are essential components for the financial well-being of microfinance institutions (MFIs), as evidenced by the empirical findings from analyzing NMBMF, NUBL, SWBBL, NLBBL and CBBL. The study revealed that liquidity, which allows MFIs to swiftly convert current assets into cash to meet short-term obligations, is critical for maintaining operational continuity and trust within the financial ecosystem, including obligations to creditors, suppliers, and clients.

Profitability, on the other hand, measures how effectively MFIs generate earnings from their operational activities over a specific period, serving as a key indicator of financial sustainability. It influences the institution's capacity to expand operations, attract investors, and fulfill social missions through reinvestment in growth initiatives.

The strong negative correlation between the Capital Ratio (CR) and profitability metrics (ROA and ROE) suggests that higher capital levels are linked to lower profitability. This indicates a possible trade-off where increased liquidity, achieved through higher capital, might reduce profitability. Institutions with a higher CR may have more liquidity, but this may not translate effectively into profits, possibly due to less efficient asset utilization or increased costs associated with maintaining higher capital levels. Conversely, the positive correlation between the Deposit Asset Ratio (DAR) and both ROA and ROE indicates that a greater proportion of deposits relative to assets is associated with better profitability. Institutions that rely more on deposits for their funding tend to perform better financially and use their assets more efficiently. This suggests that having a robust deposit base can positively impact financial performance.

The regression analysis reveals that the Capital Ratio (CR) significantly negatively affects Return on Assets (ROA). This finding emphasizes that while higher capital levels are crucial for financial stability, they may hinder effective asset utilization and

reduce profitability. Other liquidity measures, such as Credit Deposit Ratio (CDR), Net Credit Facilities to Total Assets (NCF/TA), and Deposit Asset Ratio (DAR), do not show statistically significant impacts on ROA, indicating that their influence might be indirect or affected by other variables. Regarding Return on Equity (ROE), the analysis confirms a significant negative relationship with the Capital Ratio. This reinforces the idea that higher capital levels may decrease profitability relative to equity. The other variables (CDR, NCF/TA, and DAR) do not demonstrate significant effects on ROE, suggesting their impact on profitability might be less significant or overshadowed by the effects of capital management.

### **5.3 Implication**

The implications drawn from the findings are quite contributory to the existing literature, putting forward insight into how liquidity management impacts financial performance in microfinance contexts. In this respect, the research can be used by stakeholders such as investors and creditors to guide decisions pertaining to credit, whereby the financial stability and risk exposure for MFIs like NMBMF, NUBL, SWBBL, NLBBL and CBBL would be assessed based on their metrics of liquidity and profitability ratios. The findings also provide an important guide to depositors and corporate clients in the selection of banks with sound liquidity positions that would ensure prompt fulfillment of their short-term financial obligations. It also brings out the strategic imperative for banks to adapt their liquidity management strategies from time to time in response to the varied approaches documented between NMBMF, NUBL, SWBBL, NLBBL and CBBL. Policymakers can draw lessons on fine-tuning regulatory frameworks in support of sound financial management practices and stability in the sector. The study also underlines the point that, within the competitive market, every bank has to work out its own strategic plans of liquidity management and profitability, ensuring operational efficiency and satisfaction of stakeholders. Therefore, the overall contribution of the study can be said to provide actionable implications across various stakeholder groups for making an informed decision and strategy alignment in this dynamic landscape of microfinance.

In summary, the analysis underscores the complex interplay between liquidity management and profitability within microfinance institutions. Although higher capital ratios can enhance financial stability, they may also diminish profitability. On

the other hand, a stronger deposit base is generally linked to improved financial performance. Therefore, institutions need to strike a careful balance between maintaining adequate liquidity and optimizing profitability to ensure long-term financial health and operational effectiveness.

### **5.3.1 Practical Implications**

- **Liquidity-Investment Balance:** MFIs can achieve a better balance between liquid assets and investments instead of keeping excess liquid funds, which might get converted into investments yielding greater returns.
- **Strategic Allocation:** Insight by liquidity ratios on the Investment Ratio and Net Credit Facility to the Total Assets will help the MFIs place its resources to yield more profitability, while remaining liquid.
- **Maximizing Asset Utilization:** By varying the liquidity level, MFIs may be able to maximize the use of their assets so that funds are not misused or lie idle.
- **Minimizing Idle Funds:** Excess liquidity would reduce idle funds so that these resources may be put to some productive assets or lending activities that enhance profitability.
- **Liquidity Ratios:** Liquidity ratios like Liquid Ratio, Current Ratio, Quick Acid Ratio denotes the capability of an institution to pay its short term liabilities. Also these ratios are monitored occasional to keep the best possible level of liquidity.
- **Profitability Ratios:** Ratios like ROE and ROA tests the effective usage of assets and the returns of the shareholders on their investments. These ratios can, after all, lead to providing workable information on making financial decisions and evaluating the performances.
- **Liquidity Policies:** Policies can be drawn up by MFIs that will ensure a harmonious balance, ensuring that both liquidity and profitability work in tandem whereby the MFIs meet their short-term requirements while at the same time being able to be competitive in the pursuit of new opportunities.
- **Performance Indicators:** Inclusion of profitability indicators in performance appraisal is most likely to ensure that a strategic decision-making process occurs, leading to good financial goodwill.

- **Regulatory Guidelines:** Guidelines could be developed whereby the regulator would entice the MFIs to hold the optimum level of liquidity in order to foster financial stability and operational efficiency.
- **Monitoring and Compliance:** A stringent monitoring mechanism would ensure that the MFI is complying with the liquidity and profitability norms for the sustenance of overall good health of the microfinance sector.
- **Training and Capacity Building:** Training programs for liquidity and profitability management enhance the level of financial decision-making by MFI management teams.
- **Technical Assistance:** Policymakers can support by providing technical assistance and other means that support MFIs to integrate effective liquidity management.
- **Risk Assessment:** An appreciation of the position of liquidity to the profitability of the microfinance institution provides the investor with a window through which to profile the risk and return of an investment in a given MFI, therefore making good investment decisions.
- **Performance Evaluation:** Financial ratios can be used in order to assess the financial health or financial performance of MFIs so as to guide in strategic investment decisions.
- **Informed partnerships:** MFIs would be subjected to partnerships that are informed on the level of their financial stability and profit-making nature, hence making the collaboration more efficient.
- **Client confidence:** Clients gain their level of confidence in MFIs that show good management in terms of liquidity and profitability, hence increasing the level of their engagement and satisfaction.

### **5.3.2 Academic Implications**

- **Sectoral Analysis:** The dynamics of liquidity and profitability can be researched for different sectors within the microfinance industry. Cross-sector comparisons can give a deeper insight into the challenges and best practices of those that are sector-specific.
- **Longitudinal Studies:** Longitudinal studies can trace the trends of this relationship between liquidity and profitability over long periods. The

approach helps to understand how the relationships evolve with time, how they get influenced by the economic cycle, and regulatory changes.

- **Comparative Studies across Countries:** Comparison studies across different countries on microfinance institutions can provide valuable insights into how different economic environments and regulatory frameworks are affecting liquidity and profitability. Such research can also be utilized to absorb best practices and strategies globally.
- **Advanced Analytical Techniques:** In the future, advanced statistical and econometric techniques could be employed to derive more subtle inferences pertaining to the liquidity-profitability relationship. Such techniques include panel data analysis and structural equation modeling.

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ABSTRACT The

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