DETERMINANTS OF PROFITABILITY OF NEPALESE MICROFINANCE COMPANIES

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CERTIFICATE OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **DETERMINANTS OF 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 the dissertation.

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REPORT OF RESEARCH COMMITTEE

Mr. Binod Chhetri has defended research proposal entitled **"DETERMINANTS OF 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 suggestion and guidelines of supervisor Rishi Ram Pantha Submit the thesis for evaluation and viva-voce examination.

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APPROVAL SHEET

We, the undersigned, have examined the thesis entitled **"DETERMINANTS OF PROFITABILITY OF NEPALESE MICROFINANCE COMPANIES"** Presented by Binod Chhetri Candidate for the degree of Master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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ABBREVIATIONS

ATM	: Automated Teller Machine
BAFIA	: Banking and Financial Institution Act
CLBSL	: Chhimek Laghubitta Bittiya Sanstha Limited
Contd.	: Continued
CV	: Coefficient of Variance
e.g.	: For example
Etc	: Etcetera
FORWAD	: Forward Laghubitta Bitya Sanstha
FY:	: Fiscal Year
i.e.	: That is
JVB	: Joint Venture Bank
NADEP	: Nadep Laghubitta Bitya Sanstha
No.	: Number
NPM	: Net Profit Margin
NRB	: Nepal Rastra Bank
NUBL	: Nirdhan Utthan Laghubitta Sanstha Limited
RBB	: Rastriya Banijya Bank
ROA	: Return on Assets
ROE	: Return on Equity
S.D	: Standard Deviation
SKBLBSL	: Sana Kisan Bikash Laghubitta Bittiya Sanstha Limited
T.U	: Tribhuvan University

ABSTRACT

This study investigates the profitability metrics of microfinance institutions (MFIs) with a focus on Return on Assets (ROA), Return on Equity (ROE), Book Value Per Share (BVPS), Earnings Per Share (EPS), Net Profit Margin (NPM), Capital Adequacy Ratio (CAR), and Price-Earnings Ratio (P/E Ratio). The research aims to evaluate the current status of these financial ratios, analyze their interrelationships, and examine their impact on profitability performance. Based on secondary data from financial statements of five selected MFIs in Nepal Nirdhan Utthan Laghubitta Sanstha Limited, Chhimek Laghubitta Bittiya Sanstha Limited, Nadep Laghubitta Bittiya Sanstha Limited, Forward Microfinance Laghubitta Bittiya Sanstha Limited, and Sana Kisan Bikash Laghubitta Bittiya Sanstha Limited spanning from fiscal year 2013/14 to 2022/23, the study employs descriptive and causal-comparative research designs. The findings reveal notable consistencies and contrasts in the performance metrics across the sampled MFIs. For instance, Nirdhan and Chhimek displayed consistently high ROA and ROE, indicating efficient asset management and strong shareholder returns. Conversely, Nadep and Sana Kisan exhibited significant variability in their P/E ratios and lower CARs, suggesting inconsistencies in market valuation and higher financial risk. The analysis further highlights that EPS and NPM are strong predictors of ROA and ROE, emphasizing their critical role in driving profitability. However, CAR's impact on ROE is negative, suggesting that higher capital reserves may dilute equity returns, while BVPS shows a positive but limited influence on ROE. The P/E Ratio's effect on both ROA and ROE is minimal, indicating that market valuations have a less direct impact on profitability performance. This research underscores the importance of earnings and profit margins in enhancing asset and equity returns, while also noting the varying roles of other financial metrics. The study provides valuable insights into the performance dynamics of MFIs, offering a comprehensive understanding of their financial health and operational efficiency. The results are intended to guide financial management practices and strategic decision-making within the microfinance sector, contributing to improved profitability and sustainability.

Keywords: *Return on assets, return on equity, book value per share, earning per share, net profit margin ratio, capital adequacy ratio and price earning ratio*

CHAPTER-I
INTRODUCTION

1.1 Background of the Study

Profitability is a vital metric for assessing how effectively a firm utilizes its assets to generate revenue and overall financial health. It is often measured through various indicators, such as return on investment (ROI), return on assets (ROA), and value added. These metrics not only provide insights into the firm's financial performance but also enable comparisons between firms within the same industry or across different sectors. As Gitman (1994) notes, profitability is essential for understanding a firm's financial viability and operational efficiency.

Microfinance institutions (MFIs) are unique in their operational models and target markets. They are designed to provide financial services to underserved individuals and businesses, often in developing regions where traditional banking services are limited. These services typically include small loans, savings accounts, and insurance products. Unlike conventional banks, MFIs operate with a dual mission: achieving social impact and ensuring financial sustainability. This dual focus affects their profitability in several ways (Dierich, 1996).

One of the primary factors influencing the profitability of MFIs is their operational cost structure. Microfinance operations are often characterized by high costs due to extensive outreach efforts, frequent client interactions, and the need to tailor financial products to the specific needs of their target demographics. These costs are necessary to serve low-income populations effectively, but they can also impact the financial performance of MFIs. The costs associated with microfinance loans, while relatively small in amount, are often higher in terms of interest rates compared to traditional banking products. These higher rates are designed to cover the additional costs and risks associated with serving underserved communities (Dierich, 1996).

In Nepal, the microfinance sector is in its nascent stages, but it holds significant growth potential. The effective mobilization of funds within this sector could positively impact the broader economy. As such, understanding the factors that influence the profitability

of microfinance institutions in Nepal is crucial. Research should focus on examining the relationships between liquidity, leverage, firm size, and total debt with profitability, as measured by return on assets (ROA). This analysis can provide valuable insights into how these factors affect financial performance and help identify strategies for improving profitability (Harward & Upton, 1961).

Profitability, as a concept, refers to a firm's ability to generate profit from its operations, reflecting how well management uses available resources. It is a relative measure that provides insight into the efficiency and effectiveness of resource utilization. Effective management of profitability involves controlling various internal and external factors, including liquidity and leverage (Sinkey, 1983).

For microfinance institutions in Ethiopia, profitability is essential for sustainability and competitiveness. Factors such as the institution's age, size, leverage ratio, loan portfolio, capital growth, and liquidity all impact profitability. Some of these factors are within the control of the institution’s management, while others are external. Research indicates that higher liquidity tends to correlate with increased profitability, whereas higher leverage can have a negative effect. However, the impact of factors such as institution size, age, and total debt on profitability may be less significant (Berhe & Kaur, 2017).

Understanding these factors is crucial for microfinance managers, policymakers, and regulators. By analyzing the internal and external determinants of profitability, stakeholders can make informed decisions to enhance the efficiency and financial viability of microfinance institutions. This, in turn, supports the broader goal of achieving economic development and financial inclusion in underserved communities (Berhe & Kaur, 2017; Dierich, 1996).

Microfinance institutions (MFIs) face a range of issues and challenges that can impact their profitability and sustainability. Key challenges include managing high operational costs associated with extensive outreach and personalized service to underserved populations, which can strain financial resources. Regulatory constraints, such as caps on interest rates and stringent operational requirements, can limit revenue generation and profitability. Additionally, securing reliable funding from diverse sources such as donor contributions, commercial loans, and equity investments can be complex and

competitive. Technological advancements, while offering potential efficiency gains, require significant upfront investment and ongoing maintenance costs. Market competition can pressure interest rates and profit margins, complicating efforts to balance social impact with financial sustainability. Furthermore, external economic factors, such as inflation and economic instability, can affect borrower repayment rates and overall financial performance, posing additional risks to the stability and growth of MFIs (Dierich, 1996; Berhe & Kaur, 2017).

The study indicates that for microfinance institutions, profitability tends to increase with higher liquidity but decreases with higher leverage. However, it finds that factors such as institution size, age, and total debt have an insignificant relationship with profitability within the sector. Therefore, financial managers must continuously assess and enhance the efficiency of their institutions in terms of profitability. Profitability ratios are vital for measuring operational efficiency and are of interest not only to management but also to creditors and investors. Creditors seek regular interest payments and principal repayments, while investors expect a return on their investment. Achieving sufficient profits is essential to meet these expectations. Profitability ratios thus serve as indicators of management efficiency, with higher profitability reflecting better management performance and vice versa.

1.2 Problem Statement

In Nepal, the microfinance sector operates under regulatory guidelines set by the relevant authorities, which standardize the financial products and services offered across various institutions. However, there have been significant fluctuations in the performance of microfinance institutions, with some facing severe financial difficulties and others considering mergers and acquisitions to strengthen their stability and reduce the risk of failure. Therefore, analyzing the factors that affect the financial performance of microfinance institutions is crucial in the current context.

One prevalent issue is the general lack of awareness among the population about microfinance services, which hampers the sector's growth. Many people remain unaware of the benefits of microfinance, leading to limited coverage and engagement primarily concentrated in urban areas. This limited access prevents a broader segment of the

population from utilizing microfinance services, and there is a need for a diversified portfolio to meet varied requirements. For instance, some microfinance institutions, like the hypothetical "Nirdhan Utthan Microfinance Company," have faced operational halts due to regulatory interventions affecting specific service portfolios. This disparity in performance where some portfolios are highly profitable while others struggle can significantly influence the overall profitability of these institutions.

The era of globalization and the modern free market economy have introduced new dynamics that impact the microfinance sector, including increased competition and larger transaction volumes. Consequently, microfinance institutions must efficiently manage their operations and financial performance. Stakeholders, including policymakers, regulators, and investors, need to be informed about the financial health of these institutions. Financial analysis, through various performance ratios, provides insights into their financial status and operational efficiency.

Evaluation of profitability on the banking sector is an effective measure and indicator to check the soundness of economic activities of a nation. The government owned banks in Nepal are almost running in loss. It is very difficult to say the private sector banks sound though they are earning profit since they may be exposed to aforesaid risk. Question is being raised over the validity of their balance sheet and profit and loss account. The ongoing economic recession has led to reduced investment across various sectors, including agriculture, manufacturing, industry, and finance. This decline has resulted in lower GDP growth and a rising foreign trade deficit. Microfinances are also feeling the effects of these economic challenges, struggling to extend loans and advances to viable sectors. As a consequence, only a few entrepreneurs are managing to sustain their businesses, while less competitive firms are exiting the market. In this environment, banks are opting to invest their surplus funds in lower-risk portfolios, such as treasury bills and government securities. While these options provide more safety, they yield lower returns compared to loans that could potentially offer higher profits (Giri, 2020).

A banking organization’s performance is typically considered stronger when it achieves higher profits while maintaining lower risk levels. However, in reality, higher profits often require taking on more risk. Banks face various types of risks, including credit risk,

interest rate risk, and liquidity risk. The cumulative impact of these risks can lead to bank failures, prompting heightened scrutiny from regulatory authorities. Several key factors influence banking performance today, including advancements in technology, increasingly sophisticated customers, the process of securitization, and deregulation. These elements play a significant role in shaping the current banking landscape (Bohara, 2019).

The era of globalization modern free market economy introduce a window of banking acidity that has huge impact on Nepalese trade and overall development. Now a day, the functioning area of bank not limited within same geographical limit of any country. Therefore bank has to manage large volume transaction. Industry related stakeholder need to know about financial performance of the bank. Financial analysis is the most logical way to show the bank financial position regarding ratios. The selected banks are the key commercial banks in Nepal. Its financial performance directly related with promoting industrial investment in the country. In this scenarios some issues are arise for the research study.

Understanding these factors is essential for improving the financial health of microfinance institutions and promoting their role in economic development.

i. How profitability of Nepalese microfinance companies determinants performed financially?
ii. What is the relationship between profitability performance (ROA, ROE) and financial indicators (BVPS, EPS, NPM, Capital Adequacy Ratio, P/E Ratio) in selected microfinance companies?
iii. What is the impact on BVPS, EPS, NPM, Capital Adequacy ratio, P/E ratio on profitability performance (ROA, ROE) of selected microfinance companies?

1.3 Objective of the Study

The general objective of the study is to analyze the determinants of profitability performance of microfinance companies in Nepal with reference Nirdhan Utthan Laghubitta Sanstha Limited, Chimmek Laghubitta Bittiya Sanstha Limited, Nadep Laghubitta Bittiya Sanstha Limited, Forward Microfinance Laghubitta Bittiya Sanstha

Limited and Sana Kisan Bikash Laghubitta Bittiya Sanstha Limited and other specific objectives are as follows.

i. To assess the current status of profitability ratios and others i.e. ROA, ROE, BVPS, EPS, NPM, Capital Adequacy ratio and P/E ratio.

ii. To analyze the relationship between ROA, ROE, BVPS, EPS, NPM, Capital Adequacy ratio and P/E ratio.

iii. To examine the impact of BVPS, EPS, NPM, Capital Adequacy ratio, P/E ratio on profitability performances (ROA and ROE).

1.4 Rationale of the Study

Microfinance companies are important financial institutions, which occupy quite an important place in the framework of every economy because they provide capital for the development of industry trade and business and other resources deflect sectors investing the saving collected as deposit, by playing active role have changed the economic structure of the world. The microfinance companies has to play developmental role to boost the economy by adopting the growth oriented investment policy and building up the financial structure for future economic development formulation of sound investment policies and planned effort pushed forward the force of economic growth.

The optimal performance of microfinance companies is crucial not only for enhancing the market value of individual firms but also for fostering sector-wide growth and overall economic success. These institutions play a key role in economic development by providing financial services to underserved populations, promoting financial inclusion, and efficiently channeling funds from surplus to deficit economic units. Evaluating the performance of microfinance companies is essential as they act as intermediaries that facilitate savings, manage risks, and support economic activities. Trends in loan disbursement, savings mobilization, and investment reflect the sector's health and its contribution to economic development. Insights into performance determinants are valuable for administrators, government officials, investors, customers, financial market analysts, and regulators. Understanding these factors enables administrators to enhance operational efficiency, helps the government implement supportive measures, guides

investors in making informed decisions, assures customers of financial stability, aids analysts in market evaluation, and informs regulators for better policy formulation. This research provides crucial insights into the profitability and financial performance of microfinance companies in Nepal, offering a solid foundation for future studies and contributing to a more robust and effective sector.

1.5 Limitations of the Study

- The study is based on secondary data; therefore, the accuracy of results and conclusions highly depends upon the reliability of these data.
- The evaluation is made through the analysis of financial statement published and presented by the companies.
- Study conducted only with limited internal characteristic variables without adequately considering the macroeconomic aspects, which may limit the effectiveness of the result of study.
- The sampled were selected out of 56 microfinance (As on September 2024) among 5 microfinance companies, all company may not represent the population of all adequately.
- Use of 2013/014 to 2022/023 year's data to represent the pattern of profitability.

CHAPTER-II

REVIEW OF LITERATURE

A review of the literature helps the researcher to develop a thorough understanding and insight into previous research work that relates to present study (Wolf & Pant, 2005). Thus, it provides with the knowledge of the status of the field of research. The purpose of the literature review is to find out what research studies have been conducted in one's chosen field of study, and what remains to be done. Generally, literature is reviewed by two ways for any research purpose.

2.1 Theoretical Review

Profitability is a key indicator of how effectively a firm utilizes its assets to generate revenue from its core business activities. It serves as a general measure of a company's financial health over a specified period and can be used to compare similar firms within the same industry or to analyze different sectors collectively. Profitability reflects the outcomes of a firm's policies and operations in monetary terms, often represented through metrics like return on investment (ROI), return on assets (ROA), and value added. There are various ways to assess financial performance, but it's important to consider all metrics in aggregate. Ultimately, profitability helps evaluate a firm's overall financial status and enables comparisons across similar companies or industries.

2.1.1 Structure Conducted Performance Theory

Significant advancements have been made in the theory of banking technology, particularly regarding banks' comparative advantages in producing information-intensive assets and financial services, as well as in managing various risks. Additionally, there have been important developments in understanding suboptimal managerial performance through agency theory, particularly in the banking context. Recent efforts to empirically model bank technology and measure performance have integrated these theoretical advancements, offering valuable insights into the distinctive role of banking in modern economies. This paper reviews two primary empirical methods for measuring bank performance and highlights their applications found in existing literature.

However, transferring theories between disciplines can lead to inappropriate or costly generalizations. This risk arises when a theory is rooted in the principles of one discipline and may rely on specific parameters, boundaries, or conditions that are not applicable in another field (White, 1986). This paper aims to explore the uncritical transfer of theories from industrial organization (IO) economics to strategic management, assessing whether this transfer has resulted in misguided generalizations.

It is suggested that the structure-conduct-performance (S-C-P) paradigm from traditional IO economics has been widely adopted in strategic management without sufficient consideration of alternative frameworks. This emphasis on industry structure may hinder strategy researchers and practitioners. For researchers, a focus on industry structure, particularly regarding entry and mobility barriers, may distract from core strategic issues such as performance measurement, the identification of core competencies, restructuring, entrepreneurship, globalization, and strategic intent (McWilliams & Smart, 1991). For practitioners, prioritizing industry structure over competitive processes could lead to suboptimal investments, diverting resources away from strategies that develop unique firm resources in favor of those aimed at optimizing industry structure.

Given the drawbacks associated with relying on the S-C-P paradigm in strategic management research and practice, this paper proposes an alternative framework, referred to as the efficiency paradigm, and discusses the implications of adopting this paradigm instead.

2.1.1.1 Structure-Conduct-Performance and Strategic Management

The S-C-P (Structure-Conduct-Performance) paradigm posits that the economic performance of an industry is influenced by the behaviors of buyers and sellers, which are in turn shaped by the industries structure (McGee, 1988). Economic performance is assessed through welfare maximization, which refers to the allocation of resources in a way that yields the highest-valued outputs. The conduct of participants in the market encompasses various activities, such as capacity utilization, pricing strategies, promotional efforts, research and development, and competitive behaviors.

Industry structure, which determines conduct, includes factors such as the number and size of firms, technological advancements, product differentiation, vertical integration,

and barriers to entry (Mason, 1999). The connection between industry structure and performance is based on the microeconomic model of perfectly competitive markets (McGee, 1988). In this static model, competition is understood through equilibrium conditions, where perfectly competitive markets ideally lead to optimal resource allocation in the long run. Any deviations from this ideal are evaluated against the outcomes achieved under perfect competition.

Key elements of industry structure, including buyer and seller concentration, product differentiation, and demand elasticity, significantly affect performance. One crucial but often less obvious element is barriers to entry. Bain popularized the concept of entry barriers, defining them as advantages that established firms hold over potential new entrants, allowing them to maintain prices above competitive levels without attracting new competitors (Bain, 1956). He identified various barriers, such as economies of scale, cost advantages, product differentiation, and capital requirements.

Entry barriers are vital in linking industry structure to performance, as they enable established firms to sustain above-normal profits in the long run. Without these barriers, new firms would enter the market, driving profits down to competitive levels. Therefore, the structural characteristics of an industry shape the potential for performance, but appropriate conduct is necessary to achieve that potential.

Jemison (1981) expanded this theory to include mobility barriers, which prevent existing firms from shifting between strategic groups within an industry. This helps explain differences in performance among firms operating within the same industry.

In summary, the S-C-P paradigm suggests that industry structural characteristics, particularly firm concentration and entry barriers, significantly impact firms' abilities to set prices above competitive levels. Consequently, these factors determine the performance potential of individual firms.

In a study by Pandian and Narendran (2021), the relationship between financial performance indicators and profitability was examined. Organizations commonly use financial data to allocate resources across departments, making it essential to analyze financial indicators to assess overall financial health. Financial analysts typically evaluate

aspects such as production performance, profitability, liquidity, working capital, fixed assets, fund flow, and social performance.

The current research focuses on analyzing the financial performance of garment companies to highlight how financial management contributes to growth within the framework of S-C-P theories. The efficiency paradigm retains the fundamental economic principles of marginal substitution but offers implications that are more relevant to strategic management than those presented by the S-C-P model.

2.1.2 Efficiency structure

This analysis indicates that when firms invest in industry-specific entry barriers, they can experience one of two outcomes: their competitive position may remain unchanged or it may worsen. The result hinges on the firm's effectiveness in either creating or enlarging these barriers.

If a firm's investments do not successfully increase industry barriers, its competitive standing will remain stable. For instance, if management opts to vertically integrate by acquiring a supplier to raise potential entrants' capital requirements (Porter, 1980), this move might simply reflect the supplier's standalone value in a competitive market. In this case, the firm would earn a normal return on its investment, resulting in no change to its competitive position.

Conversely, an investment aimed at enhancing entry barriers can sometimes lead to a disadvantage. For example, if a firm attempts to strengthen barriers through extensive brand advertising (Porter, 1980), it may inadvertently provide competitors with an opportunity to benefit from the increased barriers without bearing any associated costs. As a result, while the investing firm incurs the full expense of the campaign, its rivals gain advantages at no cost to themselves. This scenario can place the investing firm at a competitive disadvantage.

When competitors can capitalize on the barrier investments made by a single firm, the rationale for such investments diminishes. Essentially, if the costs of creating a barrier equal the benefits derived, the firm is left in a neutral position—neither better nor worse off. However, if the costs exceed the benefits, due to competitors free riding on the

investment, the firm may end up worse off. Therefore, strategies focused exclusively on raising entry barriers can prove to be costly for firms.

2.1.2.1 Efficiency and Strategic Management

There are alternative frameworks to the S-C-P paradigm, one of which is the efficiency paradigm, which views competition as a dynamic process that fosters efficient industry performance (Singleton, 1986). Unlike the S-C-P model, which assumes static markets and treats competition as a fixed state, the efficiency paradigm recognizes the fluid nature of markets and emphasizes longitudinal analysis.

In the S-C-P framework, sustained above-normal returns are contingent on the existence of entry barriers, making the analysis of industry structure critical for researchers and strategists. Here, performance is defined by the efficient allocation of resources and the maximization of social welfare. In contrast, the efficiency paradigm focuses on profit generation, suggesting that sustained above-normal returns do not necessarily rely on barriers to entry. Instead, this perspective prioritizes demand dynamics and firm-specific resources over rigid industry structures.

Conceptualizing competition as a process highlights the reality that above-average profits can arise even in competitive environments, as entry barriers are not essential for their realization. In static equilibrium, competition may assure that profits remain normal; however, in a more dynamic context, firms that effectively anticipate shifts in demand and technological advancements can achieve above-average profits (Kirzner, 1973).

Proponents of the efficiency paradigm view above-average returns as rewards for effective competition, not as indicators of monopolistic structures. These returns are seen as temporary conditions that occur as industries move toward equilibrium. Moreover, sustained above-average returns do not inherently imply the presence of entry barriers; rather, they may signify an industry still in development. As long as demand evolves or innovation persists, industries are unlikely to reach a static equilibrium, allowing for potential above-average profits.

Both the efficiency paradigm and the S-C-P framework acknowledge the significance of a firm's ability to leverage scale and scope economies, product differentiation, and

strategic focus. Activities that enable a firm to reduce costs or create price inelasticity through differentiation can lead to both short-term and long-term competitive advantages within the efficiency paradigm (Singh & Montgomery, 1987).

2.1.3 Meaning of Profitability

Profitability refers to the amount of capital available for investment, primarily sourced from credit funds today. This preference for borrowed money among large financial institutions is significant for understanding profitability as an indicator of corporate health and performance across all profit-driven ventures, including commercial banks (Eljelly, 2004).

These performance metrics are crucial for shareholders and depositors, who are key stakeholders in a bank. Profitability is often assessed using the Return on Assets (ROA), with higher ROA ratios indicating better profit generation. Studies focusing on frontier efficiency utilize accounting measures such as costs, outputs, inputs, revenues, and profits to evaluate efficiency relative to best practices within a given sample (Berger and Humphrey, 1997).

In this research, profitability performance will be measured using ROA. There are multiple ways to evaluate profitability, including metrics like Return on Equity (ROE) and profit margins (Rushdi and Tennant, 2003). Understanding financial performance indicators is vital for managing a growing business, particularly in the current economic climate. Both ROA and ROE serve as benchmarks for assessing managerial efficiency. ROA, which is calculated as operating profit divided by average total assets, indicates how effectively a company can convert its assets into net income. While ROA reflects management's ability to generate profits from assets, it may be influenced by off-balance-sheet activities.

In evaluating a bank's performance, considering both ROA and ROE provides valuable insights into profitability (Rushdi and Tennant, 2003). Profitability also encompasses the ease and cost-effectiveness of converting assets into cash, with cash being the most liquid asset. Conversely, assets that require lengthy searches for buyers are classified as illiquid.

Managing profitability involves accurately estimating financial needs and addressing them in a cost-effective manner. Profitability can stem from both sides of the balance sheet and off-balance-sheet activities. Managers who focus solely on the asset side may overlook less expensive sources of profitability, while those concentrating only on liabilities or relying too heavily on purchased wholesale funds may expose the bank to external market fluctuations. Effective profitability management involves a comprehensive approach, considering various sources when developing and executing profitability strategies (Khubchandani, 2002).

2.1.4 Profitability Management

The insurance sector is a crucial component of the financial services industry in both developed and developing nations. It contributes to economic growth, promotes efficient resource allocation, reduces transaction costs, enhances liquidity, facilitates economies of scale in investment, and helps distribute financial risks. By providing financial protection against unforeseen losses, the insurance industry significantly supports a country's economic development (Ismail, 2016). Additionally, the services offered by the insurance sector are increasingly being integrated into the broader financial industry, highlighting its importance in a service-oriented economy.

2.1.5 Importance of Profitability Management

Effective profitability management is crucial for meeting the demands of debtors and ensuring sufficient security to cover daily administrative expenses and various types of deposits.

2.2 Empirical Review

2.2.1 Review of international Articles/Journals

Jigeer and Koroleva (2023) explored the factors influencing profitability in city commercial banks in China. Their study employed a panel data regression model to analyze how both internal and external variables affect bank profitability. The sample included 16 publicly listed city commercial banks, utilizing an unbalanced dataset covering the period from 2008 to 2020. The research utilized various estimation methods, including fixed effects and random effects models, with the pooled OLS model serving as

a benchmark for comparison. Findings indicated that internal factors such as bank size, capital adequacy, credit quality, and operational efficiency significantly impact profitability, while external factors like provincial GDP and inflation also play a critical role. However, liquidity did not show a significant effect. This research contributes to existing literature by identifying key profitability determinants for city commercial banks, offering practical insights for bank management and regulators.

Yuan et al. (2022) investigated the determinants of profitability in the banking sector, focusing on commercial banks in Asian countries, specifically Bangladesh and India. The study analyzed data from 40 private commercial banks (20 from each country) over the period from 2010 to 2021. Using panel data methodology and ordinary least squares (OLS) regression, the research examined both bank-specific and macroeconomic factors. The findings revealed that Return on Assets (ROA) positively correlates with factors such as bank size and debt-to-asset ratio, while deposit-to-asset and loan-to-deposit ratios had negative associations. Furthermore, macroeconomic indicators like inflation and GDP growth were also positively linked to ROA, providing insights for regulators to enhance banking profitability.

Dahiyat et al. (2021) conducted a study on the interplay between profitability, solvency management, and financial performance among Jordanian manufacturing companies listed on the Amman Stock Exchange from 2010 to 2019. Using Return on Assets (ROA) and Earnings Per Share (EPS) to gauge financial performance, the study found that while profitability showed an insignificant reverse effect on performance, company size positively impacted financial outcomes. Conversely, solvency had a significant negative effect on performance. The authors recommend that companies focus on internal financing to enhance asset investments, especially for larger firms with lower leverage.

Jihadi et al. (2021) examined the effects of profitability, activity, and leverage on firm value in Indonesia. The study employed purposive sampling to analyze 22 companies listed on the LQ45 index between 2014 and 2019. Utilizing multiple linear regression analysis, results indicated that profitability, activity ratios, and leverage significantly influenced firm value. Additionally, Corporate Social Responsibility (CSR) emerged as a

moderating factor, emphasizing the importance of social performance alongside financial metrics in enhancing corporate value.

Kayzer et al. (2021) applied canonical variety analysis to evaluate financial profitability among various food industry companies. Their objective was to reconcile the dual goals of maximizing owner benefits while minimizing financial risks. The study highlighted the interconnectedness of profitability and financial sustainability, demonstrating how these factors influence companies across different sectors.

Leonard (2021) investigated the impact of the COVID-19 pandemic on the profitability of firms in Nigeria. The study aimed to assess how the pandemic affected financial performance, utilizing key proxy variables such as profitability ratios and Return on Equity (ROE). Employing statistical tests, the research provided insights into the pandemic's effects during different periods, revealing significant implications for corporate financial strategies in response to crisis conditions.

Teixeira et al. (2021) investigated the impact of government bonds on profitability risk and the overall profitability of banks in Cape Verde. Using an unbalanced panel dataset covering the years 2000 to 2017, the study analyzed all commercial banks operating by the end of 2017. The authors employed models with lagged variables, utilizing ordinary least squares for estimation. The findings revealed that while government debt securities do not significantly affect bank profitability risk, they positively influence profitability in the long term. However, when considering Consolidated Securities of Financial Mobilization, the impact shifts negatively for both short- and long-term profitability. The research concludes that banks adopting a strategy of holding conventional government debt as safe assets represent a sound approach to achieving sustainable profitability. This analysis sheds light on the comparatively low profitability rates of Cape Verde’s banks relative to other sub-Saharan African nations like Mauritius and Seychelles.

Abbas et al. (2019) explored the interplay between bank capital, credit risk, and profitability during the post-crisis period, comparing data from the United States and several Asian economies from 2011 to 2017. Their methodology employed Return on Assets (ROA) and Earnings Per Share (EPS) as measures of financial performance, while considering the current ratio and total debts relative to total assets as proxies for

profitability and solvency management. The results indicated that a 6% increase in capital correlates with a 1% increase in profit, and profitability levels also contribute significantly to profit growth. Notably, larger banks demonstrated a more favorable response to increases in liquid assets than their medium- and small-sized counterparts. Ultimately, the study found that while profitability and bank capital positively influence profit, credit risk has a detrimental effect.

Yameen et al. (2019) focused on the relationship between profitability and performance in Indian pharmaceutical companies listed on the Bombay Stock Exchange (BSE). Utilizing a balanced panel dataset of 82 firms spanning from 2008 to 2017, the study extracted data from the Prowess IQ database. The analysis revealed that both the current profitability ratio and the quick ratio significantly enhance profitability as measured by Return on Assets (ROA). Conversely, factors such as leverage, company size, and age negatively impacted profitability. This study not only fills a gap in the literature but also serves as a valuable resource for regulators and finance professionals regarding the importance of profitability.

Malik et al. (2018) examined the complex relationship between profitability and the financial performance of private banks in Pakistan. Analyzing data from 22 banks registered with the State Bank of Pakistan from 2009 to 2013, the study utilized the Ordinary Least Squares (OLS) technique across three specified models. Findings indicated a significant correlation between profitability measures and ROA, though relationships became statistically insignificant when other profitability proxies like Return on Equity (ROE) and Return on Investment (ROI) were applied. The authors suggest that banks should reevaluate and refine their strategies for managing profitability to enhance both shareholder equity and asset utilization.

Khasharmeh (2018) assessed the influence of profitability on the financial performance of Islamic banks in Bahrain from 2010 to 2015. The study utilized data from annual reports of six established Islamic banks and developed a profitability model encompassing various variables, including cash and due from banks relative to total assets and deposits. The analysis showed that certain profitability measures positively correlated with Return on Equity (ROE), although the overall model did not demonstrate

a significant relationship with ROE. The findings indicated specific variables had varying effects on other profitability indicators, emphasizing the complexity of these relationships in the banking sector.

Nimer et al. (2017) investigated the relationship between profitability and the financial performance of Jordanian banks, specifically focusing on Return on Assets (ROA). The profitability of a company is a critical concern for all stakeholders, including suppliers who assess profitability before extending credit, and employees who want assurance that the organization can meet its financial obligations, such as salaries and pensions. Therefore, maintaining sufficient profitability is crucial, as it directly affects the portion of profits distributed to shareholders. The study aimed to determine whether the quick ratio significantly impacts the profitability of Jordanian banks, as measured by ROA. Analyzing the financial reports of 15 banks listed on the Amman Stock Exchange from 2005 to 2011, the findings indicated a significant correlation between the quick ratio and ROA. This suggests that the profitability of Jordanian banks, as indicated by ROA, is substantially influenced by the quick ratio. Ultimately, profitability and financial performance are interrelated; as one improves, it can positively affect the other. A robust banking sector can better withstand financial challenges and contribute to the stability of the overall financial system.

Khidmat and Rehman (2016) explored the impact of profitability and solvency on the chemical sector in Pakistan. Effective profitability management is essential for organizations to meet their current obligations, including both operating and financial expenses, while managing long-term debt. The research focused on the applied and theoretical contributions to the field, emphasizing the development of a model to enhance profitability within companies. The study analyzed data from 10 publicly listed chemical companies in Pakistan over a nine-year period (2001-2009). The results revealed a significant negative relationship between solvency ratios and both ROA and Return on Equity (ROE), indicating that an increase in the debt-to-equity ratio can lead to decreased performance. Conversely, profitability had a strong positive effect on ROA; an increase in profitability rates corresponded with an increase in ROA. Stakeholders, including suppliers and investors, are also concerned with a company’s solvency, as it indicates the

level of risk involved. Overall, profitability, solvency, and financial performance are closely interconnected, with changes in one impacting the others.

Table 1

Review Matrix

Authors/Years	Title	Methodology	Findings
Jigeer and Koroleva (2023)	The determinants of profitability in the city of commercial banks.	A panel data regression method is utilized to investigate the factors that influence the profitability.	Bank size, credit quality, province GDP, and inflation significantly impact profitability. Liquidity has no significant effect.
Yuan, Gazi, Harymawan, Dhar and Hossain (2022)	Profitability determining factors of banking sector	The panel data research methodology was used and also the ordinary least squares regression model was used to scrutinize data.	Bank size and Debt to Assets Ratio positively affect ROA. Deposit to Assets Ratio and Loan to Deposit Ratio are negative and insignificant.
Gazi, Alam, Hossain, Islam, Rahman, Nahiduzzaman, Hossain (2021)	Determinants of profitability in banking sector	Panel data research methodology has been used. OLS regression model is used to analyze data.	Equity to Asset Ratio, Deposit to Asset Ratio, Debt to Equity Ratio, Loan to Deposit Ratio, and GDP growth rate significantly impact ROA and ROE.
Jihadi, Vilantika, Hashemi, Arifin, Bachtiar & Sholichah (2021)	The effect of profitability, leverage, and profitability on firm value: empirical evidence from Indonesia.	Multiple Linear Regression Analysis with SPSS 18	Profitability ratios, activity, leverage, and CSR are significant for firm value. Company size moderates the effect of financial ratios on firm value.
Krishna, Lingam, Mala and Sen (2021)	Determinants of Bank Profitability	Sata version 16 is used for multivariate econometric analysis and hypothesis testing	Bank size, risk, and exchange rate positively impact profitability. Management efficiency negatively affects profitability. Liquidity, economic growth, and inflation do not impact profitability.
Leonard (2021)	Impact of covid-19 panademic on profitability and	Ex Post Facto design with Wilcoxon	COVID-19 negatively affected the profitability of firms in

	profitability of firms in Nigeria.	statistical test	Nigeria due to disruptions in input access and trade.
Teixeira, Carlos and Paulo (2021)	The effects of government bonds on profitability risk and bank profitability in Cape Verde.	Models with lagged repressors estimated by OLS	Government debt securities negatively affect profitability risk and bank profitability.
Van Cong (2020)	The Determinants of Profitability in Listed Enterprises	Regression method used with ROA, ROE and ROS model	Firm size positively impacts ROA and ROS but negatively affects ROE. Adequacy ratio positively impacts ROA and ROS but negatively impacts ROE. Financial leverage negatively impacts ROE and ROS but positively impacts ROS.
Tarik Hoss (2020)	Determinants of profitability a study on manufacturing companies listed on the Dhaka stock Exchange	Pearson's correlation and ordinary Least sqd.	Liquidity, leverage, managerial efficiency, sales growth, and capital intensity are strong determinants of profitability.
Neupane (2020)	Profitability determinants of Nepalese Commercial Banks.	This study has adopted a panel data regression model.	GDP growth, inflation, and exchange rate significantly affect ROA. Internal factors like bank size and deposits are not significant.
Almaqtari, AI-Homaidi, Tabash and Farhan (2019)	The determinants of profitability of Indian Commercial Banks.	Random effect models and panel correction standard error are used in this study.	Bank size, number of branches, asset management ratio, operational efficiency, and leverage ratio are key determinants of profitability.
Malik, Awais & Khursheed (2018)	Impact of profitability on profitability: a comprehensive case of Pakistan's private banking sector.	OLS technique with three models specified	Significant relationship between bank profitability measures and return on assets. Relationship becomes insignificant with return on equity and return on investment.
Nimer, Warrad & Omari (2017)	The impact of profitability on	Hypotheses testing with research	Quick ratio significantly impacts

	Jordanian banks profitability through return on assets.	methodology and model specification	ROA in Jordanian banks, indicating profitability through ROA is influenced by the quick ratio.
Fareed, Ali, Shahzad, Nazir and Ullah (2016)	Determinants of profitability: Evidence from power and Energy sector.	Random effect model is used to detect the combination of variables.	Firm size, growth, and electricity crisis positively impact profitability. Firm age, financial leverage, and productivity negatively affect profitability.

2.2.2 Review of National Context

Karki (2023) examined the profitability of selected banks by evaluating metrics such as return on shareholder equity, total assets, and deposits. The study aimed to investigate the correlation between net profit and both cash and bank balances, as well as net profit and total liquid assets. Findings indicated that CBL was particularly effective in mobilizing loans and advances, as it generated the highest interest income from these activities. PBL demonstrated superior mobilization of shareholders' equity compared to other banks, while NABIL excelled in optimizing total assets, reflected in its highest average Return on Assets (ROA). Among the banks, NBL showed the greatest representation of cash and bank balances in relation to total deposits, whereas NABIL had the lowest.

Tiwari (2021) focused on the liquidity position and liquidity ratios of Himalayan Bank and EBL. The analysis revealed that the bank maintained adequate levels of cash, cash equivalents, bank balances, and investments in government securities to fulfill its daily cash requirements. The study concluded that EBL is capable of meeting its short-term obligations but suggested that it should reevaluate and reorganize its strategies for resource collection and mobilization. Comparatively, HBL outperformed EBL in return on investment, interest earned to total assets ratio, and commission earned relative to personnel expenses, while EBL had a higher return on shareholder equity and HBL exhibited a better interest income to interest expense ratio.

Malla (2020) examined the liquidity and profitability of Global IME Bank and NABIL Bank Ltd. The study found that both banks maintained high liquidity ratios. It evaluated their functions, objectives, and lending practices, revealing that EBL performed better in terms of earnings per share (EPS), while NABIL outperformed in net profit relative to

shareholders' equity. Although NABIL had a stronger overall liquidity ratio, it exhibited a lower capacity to withstand adverse liquidity situations due to interest-sensitive deposits. The asset management analysis showed that EBL had the highest ratio of total liabilities to total assets compared to NABIL.

Poudel (2019) investigated how deposit growth affects liquidity and lending practices, emphasizing the importance of lending efficiency in profitability. The study found a lack of standard rates for maintaining liquid assets among commercial banks, suggesting that management decisions regarding liquidity should be tailored to individual circumstances, fund sources, and statutory obligations.

Limbu (2018) conducted a comparative analysis of the financial strengths and weaknesses of selected banks, focusing on their liquidity and profitability over five years. The liquidity ratio indicated that NB Bank had a favorable liquidity position. Despite lower liquidity ratios, both NBL and SANIMA were still able to meet their current obligations. The analysis of capital structure revealed that NB Bank had the highest long-term debt to net worth ratio, while SANIMA had the lowest. Overall, banks exhibited high levels of leverage, with CBL showing the highest total debt to net worth and total asset ratios, while SANIMA displayed relatively lower leverage. Valuation ratios indicated that SANIMA had the highest price-to-earnings (P/E) ratio and dividend payout ratio (DPR), with CBL following closely. Conversely, CBL had the highest market value per share (MVPS) to book value per share (BVPS) ratio, while NB Bank had the lowest. Additionally, SANIMA's operating profit constituted 42.62% of its operating income, compared to CBL's 33.51% and NB Bank's 33.86%.

Table 2

Review Matrix

Authors/Years	Title	Methodology	Findings
Karki (2023)	Profitability Position of Commercial Banks of Nepal	Regression and correlation analysis applied.	CBL was efficient in mobilizing loans and advances with the highest interest income. PBL effectively mobilized shareholders' equity. NABIL had the

			highest average ROA. NBL had the highest cash and bank balance representation in deposits, while NABIL had the lowest.
Tiwari (2021)	Liquidity and Profitability of HBL, EBL, and SBL	Descriptive and causal research design was applied where regression and correlation analysis adopted.	The bank maintained sufficient liquidity to meet short-term obligations. EBL needs to reassess its resource collection and mobilization strategies. NB had higher ROI, interest earned to total assets, and commission earned ratios compared to SANIMA and CBL. CBL had higher ROE, and SANIMA had a higher interest income to interest expense ratio
Malla (2020)	Liquidity and Profitability of Commercial Banks with Special Reference to Himalayan & NABIL Bank Ltd.	Descriptive and analytical research design was applied.	EBL outperformed NABIL in EPS, while NABIL performed better in terms of net profit and shareholders' equity. NABIL had a better overall liquidity ratio but a lower capacity to survive adverse liquidity conditions. EBL had a higher total liability to total assets ratio.
Poudel (2019)	A Study on Liquidity and Profitability Position of Joint Venture Commercial Banks in Nepal	Regression and correlation analysis were applied.	No standard ratio for maintaining liquid assets exists; decisions are based on managerial

			judgment. Liquidity management should align with funding sources and statutory obligations.
Limbu (2018)	Liquidity and Profitability of the Selected Joint Venture Banks	Regression and correlation analysis was used.	NB had the best liquidity position, while NBL and SANIMA were able to meet obligations despite lower liquidity. NB had the highest long-term debt to net worth ratio; SANIMA had the lowest. CBL had the highest total debt to net worth and total asset ratios, with SANIMA having relatively lower leverage. SANIMA had the highest PE ratio and DPR, while CBL had the highest MVPS to BVPS ratio.

2.3 Research Gap

Numerous researchers have explored lending practices, credit policies, financial performance, and profitability within various commercial banks. In conducting these analyses, researchers have employed a range of ratio analyses, often focusing on microfinance institutions. However, the study highlights that many of these ratios may be limited in addressing underlying issues. Profitability is influenced by several factors that determine a company's financial position. This research systematically analyzes various ratios and presents general findings. Previous studies often overlooked the investment aspects related to fund mobilization and its effect on profitability. In contrast, this research categorizes all ratios according to their specific areas and characteristics, providing a clearer understanding of their implications.

CHAPTER III
RESEARCH METHODOLOGY

This chapter outlines the various methods and procedures employed in conducting this study. It covers the determination of the population, sources of data, investigative methods, and analytical techniques utilized. Additionally, this chapter serves as the foundation for Chapter Four, which focuses on the presentation and analysis of data collected from secondary sources.

3.1 Research Design

The data collected for this study are analyzed using a descriptive and causal-comparative research design. This framework outlines the phases of the research, the sources of data, and the methods of data collection. An effective research design focuses on the various steps necessary to gather data for analysis and to draw meaningful conclusions. In this case, the research design is both causal and descriptive.

3.2 Population, Sample and Sampling Techniques

As of the current date, there are 56 microfinance companies operating in Nepal (As of 2081/4/09). Due to limitations in time and resources, it is not feasible to study all of these institutions regarding the research topic. Therefore, a purposive sampling method has been employed for selecting the sample companies. The entire population consists of all microfinance institutions in Nepal, but for this study, five specific companies have been chosen: Nirdhan Utthan Laghubitta Sanstha Limited, Chimmek Laghubitta Bittiya Sanstha Limited, Nadep Laghubitta Bittiya Sanstha Limited, Forward Microfinance Laghubitta Bittiya Sanstha Limited, and Sana Kisan Bikash Laghubitta Bittiya Sanstha Limited. These companies were selected due to their significant growth in service provision and quality at the national level. The sampling technique used in this study is convenience sampling.

3.3 Sources of Data

Data for this study will be gathered from secondary sources. Given that the research focuses on the financial analysis of microfinance companies, only secondary data sources have been utilized.

3.3.1 Secondary Data

The secondary data sources include financial reports from the relevant microfinance companies, as well as books, newspapers, and journals. Key sources of secondary data consist of annual reports, newsletters, and bulletins from the selected companies, publications from the Nepal Rastra Bank (NRB), and various articles and journals related to the insurance sector.

3.4 Data collection technique

To achieve the specific objectives of the study, data were collected solely from secondary sources. These included the websites of the selected companies, annual reports, brochures, manuals, and other relevant publications.

3.5 Analysis of Data

In this study, several financial and statistical tools have been employed to meet the research objectives, including:

3.5.1 Financial Tools

To assess a company's financial health and performance, financial analysis relies on data. This often involves using ratios that compare two financial metrics to one another.

3.6 Data analysis tools and Techniques

The data analysis tools revealed the financial status of the selected companies.

A. Financial tools:

Profitability measurement tools:

1. Profitability performance: The primary tool for analyzing financial performance is profitability, which includes:
    i. Return on Assets (ROA)
    ii. Return on Equity (ROE)
    iii. Net profit Margin (NPM)
2. Marketability ratio:
    i. Earnings Per Share (EPS)

B. Statistical Tools

The research employs several statistical tools, which are described as follows:

a. Mean ($\overline{X}$)

The arithmetic mean, or average, is calculated by dividing the total sum of values by the number of observations in the sample. It serves as a representation of the dataset, typically falling between the highest and lowest values. Consequently, it is often considered a measure of central tendency. In this study, the arithmetic mean is applied to the dividend data of the sample companies across various years. It is computed as follows:

$$\text{Mean} = \frac{\text{Sum of Total Value}}{\text{No. of Values}}$$

$\overline{X} = \frac{\sum X}{n}$ Where,

$\overline{X}$ = Mean

N = Number of values

$\sum X$ = Sum of total value

ii. Standard Deviation σ (S.D)

Dispersion refers to the measurement of how spread out the values in a dataset are around an average. The standard deviation (S.D.) is a key measure of dispersion that addresses the limitations found in other methods. A high standard deviation indicates a greater level of dispersion, while a low standard deviation suggests a high degree of consistency among the observations. It is calculated for the chosen dependent and independent variables. The standard deviation is represented as the positive square root of the mean square deviation from the arithmetic mean and is denoted by 'σ'.

Formula: $\text{S.D} = \frac{\sqrt{\sum (X - \overline{X})}}{n}$

Where S.D = standard deviation

iii. Coefficient of variations (C. V.)

The coefficient of variation (C.V.) indicates the relationship between the standard deviation and the mean of a dataset. It serves as a relative measure of dispersion, calculated by taking the standard deviation and expressing it as a percentage of the mean. This allows for the comparison of variability between two distributions. If x represents the arithmetic mean and (sigma) denotes the standard deviation, the coefficient of variation is defined as:

$$C.V. = \frac{S.D.}{\bar{X}} \times 100$$

Where,

C.V. = coefficient of variations: Less the C.V. more will be the consistency and more the C.V. will be the less consistency.

iv Correlation Analysis

Correlation analysis is a statistical method used to assess the strength and direction of the relationship between two continuous variables. This analysis is particularly valuable for researchers seeking to identify potential connections between variables. It is important to note that correlation does not imply causation; other unmeasured variables may influence the observed relationship. When a correlation exists, it indicates that systematic changes in one variable are associated with systematic changes in another over time. The correlation coefficient can range from -1 to +1, reflecting either a positive or negative relationship depending on the numerical values involved.

v Regression Analysis

Regression analysis is a robust statistical technique used to explore the relationships between two or more variables. Among the various types of regression methods, this study employs the least squares method to analyze segmented independent and dependent variables.

Return on Equity (ROE) ($\ddot{Y}$) = $\beta 0 + \beta 1 * X1 + \beta 2 * X2 + \beta 3 * X3 + \beta 4 * X4 + \beta 5 * X5 + n$

Where

$\beta 0$ = Return on Equity

β1 = Capital Adequacy Ratio

β2 = Earnings Per Share

β3 = Book Value per share

β4= Net Profit margin ratio

β5= Price earning ratio

n = others

Return on Assets (ROA) (Ÿ1) = β0 + β1*X1 + β2*X2 + β3*X3+ β4 * X4+ β5*X5+n

Where

β0 = Return on Assets

β1 = Capital Adequacy Ratio

β2 = Earnings Per Share

β3 = Book Value per share

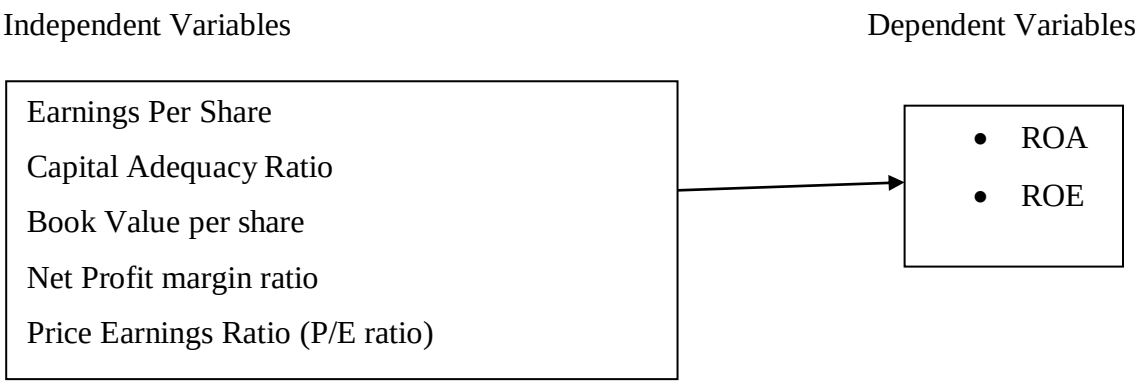
β4= Net Profit margin ratio

β5= Price earning ratio

n = others

3.7 Research Framework and Definition of the Variables

The research framework indicates that Return on Assets (ROA) and Return on Equity (ROE) are the dependent variables. The independent variables include Earnings Per Share, Capital Adequacy Ratio, Book Value Per Share, Net Profit Margin Ratio, and Price-Earnings Ratio. The framework is structured as follows:



(Source: Deli Yuan et al. 2022)

Figure 1: Research Framework

In this study, the dependent variables are Return on Assets (ROA) and Return on Equity (ROE). The independent variables include Earnings Per Share, Capital Adequacy Ratio, Book Value Per Share, Net Profit Margin Ratio, and Price-Earnings Ratio.

Return on Assets

Return on Assets (ROA) is a financial ratio that measures a company's profitability in relation to its total assets. This metric is valuable for corporate management, analysts, and investors to assess how effectively a company utilizes its assets to generate profit. ROA is typically expressed as a percentage, calculated using the company's net income divided by its average assets. A higher ROA indicates greater efficiency in managing the balance sheet to produce profits, while a lower ROA suggests potential areas for improvement.

Return on Equity

Return on Equity (ROE) is a key measure of financial performance, determined by dividing net income by shareholders' equity. Since shareholders' equity represents a company's assets minus its liabilities, ROE effectively reflects the return on net assets. This ratio serves as an indicator of a company's profitability and the efficiency of its management in generating income from equity financing. A higher ROE signifies greater effectiveness in creating profit and driving growth from the company's equity investments.

Earnings Per Share

Earnings per Share (EPS) is calculated by dividing a company's net profit by the number of outstanding shares of common stock. This figure serves as a measure of the company's profitability on a per-share basis. Companies often report EPS figures that are adjusted for extraordinary items and potential dilution from additional shares, providing a clearer picture of their financial performance.

Capital Adequacy Ratio (CAR)

The Capital Adequacy Ratio (CAR) is essential for evaluating the profitability of Nepalese microfinance companies, as it reflects their capacity to absorb losses and manage risks. A higher CAR indicates greater financial stability and adherence to

regulatory requirements, which can enhance profitability by lowering the risk of financial distress. However, maintaining a high CAR may incur higher capital costs, potentially affecting profit margins. Thus, CAR should be assessed in conjunction with other financial metrics and market conditions to provide a comprehensive view of a microfinance company's profitability and overall financial health.

Net Profit Margin Ratio

Net Profit Margin, often referred to as "Profit Margin" or "Net Profit Margin Ratio," is a financial metric that indicates the percentage of profit a company generates from its total revenue. This ratio assesses how much net profit is earned for each dollar of revenue. It is calculated by dividing net profit by total revenue and expressing the result as a percentage.

Book Value per share

Book Value Per Share (BVPS) is a financial metric that evaluates the equity value assigned to each outstanding share of a company's stock. It is determined by dividing the total shareholders' equity by the number of shares outstanding. While BVPS doesn't directly indicate profitability, it offers valuable insights into a company's financial health and equity value. Comparing BVPS to the market price of the stock can help assess whether the shares are undervalued or overvalued in relation to their book value.

Price Earnings Ratio (P/E ratio)

The price/earnings ratio, commonly known as the P/E ratio, helps investors assess a company's valuation. It is calculated by dividing the stock price by the earnings per share (EPS) over a specified period, typically the last 12 months. The P/E ratio indicates how much investors are willing to pay for each rupee of earnings, serving as a key indicator of profitability performance.

CHAPTER-IV

RESULTS AND DISCUSSION

These chapters analyze the various financial indicators and variables are presented. Therefore, this chapter is based on the presentation and analysis of the secondary data, which help to conclude and draw some recommendations.

4.1 Data Presentation

Profitability analysis is a component of enterprise resource planning (ERP) that allows administrators to forecast the profitability of a proposal or optimize the profitability of banks.

4.1.1 Return on Assets (ROA)

When a company's Return on Assets (ROA) is low, it often indicates challenges with profitability. ROA, calculated as net income divided by total assets, measures how efficiently assets generate profits.

Table 3

Return on Assets (ROA)

Year	Chhimek	Nadep	Nirdhan	Sanakishan	Forward
2013/014	2.08	0.01	3.84	1.74	3.76
2014/015	3.15	0.02	3.85	1.86	3.86
2015/016	3.76	0.02	4.00	2.25	3.98
2016/017	3.71	0.03	4.21	2.04	3.89
2017/018	3.41	0.01	3.26	2.24	3.15
2018/019	3.10	0.56	3.56	2.28	2.73
2019/020	2.46	0.04	1.12	2.11	1.56
2020/021	3.83	1.26	4.48	2.37	2.91
2021/022	2.48	0.58	2.53	2.30	1.90
2022/023	2.40	-0.21	0.61	2.03	1.52
Average	3.04	0.23	3.15	2.12	2.93
Std.	0.64	0.44	1.32	0.21	0.98
C.V	21.18	189.90	42.01	9.66	33.39

Source: Annual report of selected microfinance companies, 2013/014 to 2022/023

Table 3 shows that the Return on Assets (ROA) data for the microfinance institutions Chhimek, Nadep, Nirdhan, Sanakishan, and Forward from the fiscal years 2013/014 to

2022/023 illustrates varying degrees of asset management effectiveness. Chhimek microfinance consistently maintained a strong ROA, averaging 3.04% over the period. The institution experienced fluctuations, with its ROA peaking at 3.76% in 2015/016 and falling to 2.40% by 2022/023. The variability in its performance, indicated by a standard deviation of 0.64%, suggests a relatively stable but fluctuating efficiency in using its assets.

Nadep microfinance exhibited the lowest average ROA at 0.23%, with significant instability over the years. Despite a peak ROA of 1.26% in 2020/021, the institution's performance was highly variable, including a negative ROA of -0.21% in 2022/023. The high coefficient of variation (189.90%) underscores substantial instability and challenges in generating returns from its assets.

Nirdhan Utthan microfinance showed the highest average ROA of 3.15%, reflecting effective asset utilization. However, the ROA fluctuated significantly, from a high of 4.48% in 2020/021 to a low of 0.61% in 2022/023. With a high standard deviation of 1.32%, the institution's performance was robust but variable.

Sanakishan microfinance achieved a stable average ROA of 2.12%, with minor fluctuations in its performance. The ROA ranged from a high of 2.37% in 2020/021 to a low of 2.03% in 2022/023. The low standard deviation of 0.21% and a coefficient of variation of 9.66% suggest consistent and stable efficiency in asset management.

Forward microfinance had an average ROA of 2.93%, demonstrating generally strong performance with moderate variability. The ROA ranged from 1.52% in 2022/023 to 3.98% in 2015/016, reflecting a standard deviation of 0.98% and a coefficient of variation of 33.39%, indicating some fluctuations in efficiency over time.

It was concluded that Nirdhan Utthan exhibits the highest average ROA, indicating strong but variable asset management. Chhimek and Forward also show solid performance with moderate variability. Sanakishan's stable ROA suggests consistent asset management, while Nadep's low and unstable ROA highlights significant challenges in effective asset utilization.

4.1.2 Return on Equity (ROE)

Return on Equity (ROE) is a key financial metric that measures a company's ability to generate profits from its shareholders' equity. It is calculated by dividing net income by total shareholders' equity. A higher ROE indicates that a company is efficiently using its equity base to produce profits. Strong ROE reflects effective management and a solid business model, while a declining ROE might signal issues with profitability or asset management. Improving ROE often involves increasing net income, optimizing asset use, or managing equity levels effectively.

Table 4

Return on Equity (ROE)

Year	Chhimek	Nadep	Nirdhan	Sanakishan	Forward
2013/014	17.01	7.03	35.90	33.05	12.86
2014/015	18.37	9.12	35.94	32.02	13.45
2015/016	20.14	11.03	36.71	37.53	11.97
2016/017	21.09	10.78	38.67	36.01	11.45
2017/018	18.34	7.38	31.51	35.47	10.89
2018/019	19.49	13.45	32.73	33.87	10.34
2019/020	16.34	9.14	10.55	29.08	10.01
2020/021	25.91	19.98	30.86	28.03	10.38
2021/022	16.29	12.97	16.21	26.01	9.34
2022/023	15.19	-1.12	3.62	27.22	9.02
Average	18.82	9.98	27.27	31.83	10.97
Std.	3.11	5.40	12.43	4.03	1.46
C.V	16.53	54.17	45.58	12.66	13.27

Source: Annual report of selected microfinance companies, 2013/014 to 2022/023

The Return on Equity (ROE) data for the microfinance institutions Chhimek, Nadep, Nirdhan, Sanakishan, and Forward for fiscal years 2013/014 to 2022/023 provides insights into their financial performance and efficiency in generating profits from shareholders' equity.

Chhimek microfinance has shown a strong and relatively consistent ROE, with an average of 18.82%. The ROE increased from 17.01% in 2013/014 to a peak of 25.91% in 2020/021 before declining to 15.19% in 2022/023. The standard deviation of 3.11% and a coefficient of variation (C.V) of 16.53% indicate moderate variability in performance, suggesting Chhimek effectively utilizes shareholders' equity to generate returns, though with some fluctuations over time.

Nadep microfinance has exhibited more variability and lower overall performance compared to its peers, with an average ROE of 9.98%. The ROE increased from 7.03% in 2013/014 to a high of 19.98% in 2020/021, but dropped significantly to -1.12% in 2022/023. The high standard deviation of 5.40% and an exceptionally high C.V of 54.17% highlight significant instability and less consistent use of equity to generate returns.

Nirdhan microfinance has displayed the highest average ROE at 27.27%, indicating strong performance in leveraging equity. The ROE ranged from a high of 38.67% in 2016/017 to a low of 3.62% in 2022/023. With a standard deviation of 12.43% and a C.V of 45.58%, the institution’s ROE shows substantial variability but remains overall high, reflecting effective equity utilization despite significant fluctuations.

Sanakishan microfinance has maintained a relatively stable ROE with an average of 31.83%. The ROE peaked at 37.53% in 2015/016 and fluctuated to 27.22% in 2022/023. The standard deviation of 4.03% and a C.V of 12.66% suggest consistent performance with moderate variability, demonstrating Sanakishan's stable ability to generate returns on equity.

Forward microfinance has had a lower average ROE of 10.97%, showing less efficiency in equity utilization compared to its peers. The ROE ranged from a high of 13.45% in 2014/015 to a low of 9.02% in 2022/023. With a standard deviation of 1.46% and a C.V of 13.27%, Forward’s performance is relatively stable but lower than that of other institutions.

It was concluded that Nirdhan and Sanakishan lead with high average ROE, indicating effective use of equity with some variability. Chhimek shows strong performance but with moderate fluctuations. Forward's ROE is stable but comparatively lower, and Nadep

demonstrates significant variability and lower overall efficiency, indicating challenges in utilizing shareholders' equity effectively.

4.1.3 Earnings per share

Earnings per share (EPS) are one of the most important financial indicators, which measure the earning capacity of a firm or profit available to the ordinary shareholders on a per share basis.

Table 5

Earning Per Share (EPS)

Year	Chhimek	Nadep	Nirdhan	Sanakishan	Forward
2013/014	61.43	0.02	61.71	66.79	35.30
2014/015	101.46	6.71	55.77	44.04	34.54
2015/016	79.15	30.75	67.18	52.60	31.51
2016/017	69.04	62.76	57.14	50.01	31.89
2017/018	66.66	20.46	45.26	49.14	30.14
2018/019	63.28	6.01	47.57	44.49	28.91
2019/020	44.69	0.38	15.12	38.47	25.17
2020/021	71.80	15.01	70.14	36.09	27.80
2021/022	40.76	7.34	34.17	32.18	24.08
2022/023	35.15	-2.28	6.51	30.30	22.86
Average	63.34	14.72	46.06	44.41	29.22
Std.	19.65	19.73	21.48	10.93	4.27
C.V	31.02	134.06	46.64	24.61	14.60

Source: Annual report of selected microfinance companies, 2013/014 to 2022/023

Table 5 shows that the Earning Per Share (EPS) data for the microfinance institutions Chhimek, Nadep, Nirdhan, Sanakishan, and Forward for the fiscal years 2013/014 to 2022/023 provides insights into their profitability trends and financial performance.

Chhimek Microfinance shows a high average EPS of 63.34%, indicating strong profitability over the years. The EPS peaked at 101.46 in 2014/015 but dropped to 35.15 by 2022/023. The standard deviation of 19.65 and a coefficient of variation (C.V) of

31.02% suggest significant variability in EPS, reflecting fluctuating profitability while maintaining overall strong performance.

Nadep Microfinance has displayed considerable variability in its EPS, with an average of 14.72. The EPS increased to 62.76 in 2016/017 but fell sharply to -2.28 in 2022/023. The high standard deviation of 19.73 and an exceptionally high C.V of 134.06% highlight extreme fluctuations and instability in Nadep's profitability, suggesting significant challenges in achieving consistent earnings.

Nirdhan Microfinance presents a moderate average EPS of 46.06. The EPS ranged from a high of 67.18 in 2015/016 to a low of 6.51 in 2022/023. With a standard deviation of 21.48 and a C.V of 46.64%, Nirdhan's EPS shows substantial variability but remains higher compared to some of its peers, indicating moderate profitability with fluctuating performance.

Sanakishan Microfinance has achieved a stable average EPS of 44.41, indicating relatively consistent profitability. The EPS varied from 66.79 in 2013/014 to 30.30 in 2022/023. The standard deviation of 10.93 and a C.V of 24.61% point to a more stable EPS compared to others, suggesting steady financial performance.

Forward Microfinance has the lowest average EPS at 29.22, with the EPS ranging from 35.30 in 2013/014 to 22.86 in 2022/023. The standard deviation of 4.27 and a C.V of 14.60% indicate relatively low variability in EPS, reflecting a stable but less profitable performance compared to its peers.

It was concluded that Chhimek Microfinance shows the highest average EPS with significant fluctuations, indicating strong but variable profitability. Nadep Microfinance experiences extreme variability and instability in EPS. Nirdhan Microfinance demonstrates moderate profitability with notable fluctuations, while Sanakishan Microfinance maintains stable earnings. Forward Microfinance's lower average EPS reflects stable yet less profitable performance.

4.1.4 Capital Adequacy Ratio Analysis

The capital adequacy ratio represents the risk-weighted credit exposure of a bank. The ratio measures two kinds of capital: Tier 1 capital is ordinary share capital that can absorb losses without requiring the bank to cease operations. Tier 2 capital is subordinated debt, which can absorb losses in the event of a winding up of a bank.

Table 6

Capital Adequacy Ratio (CAR)

Year	Chhimek	Nadep	Nirdhan	Sanakishan	Forward
2013/014	9.46	8.21	10.71	9.75	10.43
2014/015	10.44	9.54	10.91	10.07	11.79
2015/016	12.96	10.47	10.78	10.15	12.00
2016/017	12.64	10.47	12.53	10.38	12.01
2017/018	12.12	10.06	12.15	10.60	12.33
2018/019	14.35	12.46	11.14	11.82	11.55
2019/020	14.84	12.46	11.87	11.13	11.72
2020/021	16.16	14.17	12.62	11.09	10.89
2021/022	14.45	12.06	13.63	10.87	10.01
2022/023	17.44	10.47	12.22	10.05	10.03
Average	13.49	11.04	11.86	10.59	11.28
Std.	2.46	1.73	0.96	0.64	0.86
C.V	18.27	15.71	8.09	6.00	7.67

Source: Annual report of selected microfinance companies, 2013/014 to 2022/023

Table 6 shows that the Capital Adequacy Ratio (CAR) data for the microfinance institutions Chhimek, Nadep, Nirdhan, Sanakishan, and Forward for the fiscal years 2013/014 to 2022/023 provides an overview of their financial stability and ability to absorb losses.

Chhimek Microfinance has demonstrated the highest average CAR at 13.49%. The CAR increased from 9.46 in 2013/014 to 17.44 in 2022/023, reflecting a strong upward trend in its capital adequacy. The standard deviation of 2.46 and a coefficient of variation (C.V)

of 18.27% indicate moderate variability in CAR, suggesting that Chhimek has maintained a relatively robust capital buffer with some fluctuations over time.

Nadep Microfinance shows an average CAR of 11.04%. The CAR rose from 8.21 in 2013/014 to 14.17 in 2020/021 but decreased to 10.47 by 2022/023. The standard deviation of 1.73 and a C.V of 15.71% reveal moderate variability, indicating that Nadep has managed to maintain a reasonably stable capital adequacy level with some degree of fluctuation.

Nirdhan Microfinance has an average CAR of 11.86%, with its CAR ranging from 10.71 in 2013/014 to 13.63 in 2021/022. The standard deviation of 0.96 and a C.V of 8.09% indicate low variability, reflecting a stable and consistent approach to maintaining capital adequacy throughout the period.

Sanakishan Microfinance has an average CAR of 10.59%, with values ranging from 9.75 in 2013/014 to 11.82 in 2018/019. The standard deviation of 0.64 and a C.V of 6.00% show low variability, suggesting that Sanakishan has consistently maintained its capital adequacy at a moderate level with minimal fluctuations.

Forward Microfinance has the lowest average CAR at 11.28%, with CAR values ranging from 10.03 in 2022/023 to 12.00 in 2015/016. The standard deviation of 0.86 and a C.V of 7.67% indicate relatively low variability, demonstrating a stable but lower level of capital adequacy compared to its peers.

It was concluded that Chhimek Microfinance exhibits the highest average CAR and a strong upward trend, indicating robust capital adequacy with some variability. Nadep shows moderate variability and overall stability in capital adequacy. Nirdhan maintains a stable and consistent CAR with low variability. Sanakishan's CAR is moderate and stable, while Forward’s CAR is the lowest but still shows stability with minimal fluctuations.

4.1.5 Book Value Per Share (BVPS)

Book Value Per Share (BVPS) is a financial measure that indicates the value of a company's equity available to common shareholders on a per-share basis. It is calculated by dividing the company's total shareholders' equity by the number of outstanding shares.

BVPS can provide insights into a company's profitability by reflecting the net asset value per share after liabilities are deducted. While BVPS itself doesn't measure profitability directly, it offers a snapshot of the company's financial health and can be used in conjunction with profitability metrics to assess overall performance and shareholder value.

Table 7

Book Value Per Share (BVPS)

Year	Chhimek	Nadep	Nirdhan	Sanakishan	Forward
2013/014	216.38	99.12	162.76	342.48	239.04
2014/015	276.38	105.83	155.17	258.05	227.97
2015/016	203.50	136.23	183.09	255.64	225.01
2016/017	181.66	199.16	147.81	250.70	226.99
2017/018	271.84	160.61	143.64	242.67	229.35
2018/019	324.65	153.33	163.80	235.36	252.79
2019/020	273.51	153.33	156.73	233.14	268.18
2020/021	271.11	209.36	227.25	231.05	265.37
2021/022	250.14	176.22	210.82	228.37	255.67
2022/023	237.95	171.88	179.62	207.38	248.59
Average	250.71	156.51	173.07	248.48	243.90
Std.	41.96	35.82	27.46	36.24	16.40
C.V	16.74	22.89	15.87	14.59	6.73

Source: Annual report of selected microfinance companies, 2013/014 to 2022/023

Table 7 shows that the The Book Value Per Share (BVPS) data for the microfinance institutions Chhimek, Nadep, Nirdhan, Sanakishan, and Forward for the fiscal years 2013/014 to 2022/023 provides insights into their financial strength and shareholder equity.

Chhimek Microfinance has an average BVPS of 250.71. The BVPS varied from a high of 324.65 in 2018/019 to a low of 181.66 in 2016/017. With a standard deviation of 41.96 and a coefficient of variation (C.V) of 16.74%, Chhimek shows significant variability in

its BVPS, indicating fluctuations in the book value per share over the years but maintaining a generally high value.

Nadep Microfinance has an average BVPS of 156.51. The BVPS increased from 99.12 in 2013/014 to 209.36 in 2020/021 before slightly declining to 171.88 in 2022/023. The standard deviation of 35.82 and a C.V of 22.89% suggest moderate variability, reflecting some fluctuations in shareholder equity but overall steady performance.

Nirdhan Microfinance displays an average BVPS of 173.07. The BVPS ranged from 183.09 in 2015/016 to 143.64 in 2017/018. With a standard deviation of 27.46 and a C.V of 15.87%, Nirdhan has experienced moderate variability in its BVPS, indicating some fluctuations in financial strength but generally maintaining stability.

Sanakishan Microfinance has an average BVPS of 248.48. The BVPS varied from 342.48 in 2013/014 to 207.38 in 2022/023. The standard deviation of 36.24 and a C.V of 14.59% highlight moderate variability, suggesting that Sanakishan has maintained a high book value per share with some fluctuations over time.

Forward Microfinance has the lowest average BVPS at 243.90. The BVPS ranged from 239.04 in 2013/014 to 268.18 in 2019/020. The standard deviation of 16.40 and a C.V of 6.73% reveal relatively low variability, indicating a stable book value per share with minimal fluctuations compared to its peers.

It was concluded that Chhimek Microfinance exhibits a high average BVPS with significant fluctuations, reflecting strong but variable shareholder equity. Nadep shows moderate variability with generally steady performance. Nirdhan maintains moderate variability in its book value per share, while Sanakishan has a high average BVPS with moderate fluctuations. Forward's BVPS is the lowest but remains stable, demonstrating consistent financial strength with minimal variability.

4.1.6 Net Profit Margin Ratio (NMPR)

The Net Profit Margin Ratio (NMPR) is a key indicator of a company's profitability, showing the percentage of revenue that remains as profit after all expenses are deducted. It is calculated by dividing net income by total revenue and then multiplying by 100 to get a percentage. A higher NMPR signifies a more profitable company, as it indicates that

a larger portion of revenue is being converted into profit. This ratio helps investors and management assess how effectively the company controls costs and generates profit relative to its sales.

Table 8

Net Profit Margin Ratio

Year	Chhimek	Nadep	Nirdhan	Sanakishan	Forward
2013/014	14.27	0.00	22.42	27.58	27.57
2014/015	20.57	16.10	22.47	29.50	24.81
2015/016	24.69	18.07	23.15	30.31	23.09
2016/017	23.25	18.07	23.45	24.47	24.18
2017/018	21.31	8.32	19.07	24.69	19.03
2018/019	18.73	4.07	20.04	24.55	17.22
2019/020	15.90	0.26	7.20	22.69	10.27
2020/021	27.24	8.47	28.06	21.89	19.71
2021/022	17.89	4.79	17.75	20.15	17.23
2022/023	16.77	-1.36	4.14	17.23	16.87
Average	20.06	7.68	18.78	24.31	20.00
Std.	4.12	7.49	7.49	4.08	5.04
C.V	20.56	97.55	39.90	16.78	25.19

Source: Annual report of selected microfinance companies, 2013/014 to 2022/023

Table 8 shows that the Net Profit Margin Ratio (NPMR) data for the microfinance institutions Chhimek, Nadep, Nirdhan, Sanakishan, and Forward for the fiscal years 2013/014 to 2022/023 highlights their profitability and operational efficiency.

Chhimek Microfinance has an average NPMR of 20.06%. The NPMR ranged from 14.27 in 2013/014 to 27.24 in 2020/021. The standard deviation of 4.12 and a coefficient of variation (C.V) of 20.56% indicate moderate variability in its net profit margin, reflecting fluctuations in profitability but overall strong performance.

Nadep Microfinance shows a significantly lower average NPMR of 7.68%. The ratio varied from 0.00 in 2013/014 to 16.10 in 2014/015, with a considerable drop to -1.36 in

2022/023. The high standard deviation of 7.49 and an extremely high C.V of 97.55% point to substantial variability, suggesting Nadep has experienced significant fluctuations and instability in its net profit margins.

Nirdhan Microfinance has an average NPMR of 18.78%. The NPMR fluctuated from 7.20 in 2019/020 to 28.06 in 2020/021. With a standard deviation of 7.49 and a C.V of 39.90%, Nirdhan shows considerable variability in its profitability, indicating significant changes in profit margins over the years.

Sanakishan Microfinance has an average NPMR of 24.31%. The NPMR ranged from 17.23 in 2022/023 to 30.31 in 2015/016. The standard deviation of 4.08 and a C.V of 16.78% indicate moderate variability, suggesting Sanakishan has maintained a relatively stable and high net profit margin with some fluctuations.

Forward Microfinance has an average NPMR of 20.00%. The ratio ranged from 10.27 in 2019/020 to 27.57 in 2013/014. The standard deviation of 5.04 and a C.V of 25.19% show moderate variability, reflecting a generally stable yet fluctuating profitability.

It was concluded that Chhimek Microfinance exhibits a high average NPMR with moderate variability, indicating strong and consistent profitability. Nadep has the lowest average NPMR with high variability, reflecting instability in profit margins. Nirdhan shows significant fluctuations in profitability with a moderate average NPMR. Sanakishan maintains a high average NPMR with moderate variability, suggesting stable and strong profitability. Forward displays a stable yet fluctuating profitability with a moderate average NPMR.

4.1.7 Price Earning Ratio (P/E)

The Price-to-Earnings (P/E) Ratio is a valuation metric that compares a company’s current share price to its earnings per share (EPS). It is calculated by dividing the market value per share by the EPS. This ratio provides insight into how much investors are willing to pay for each dollar of a company's earnings. While the P/E ratio itself doesn’t measure profitability directly, it reflects market expectations of a company's future profitability. A high P/E ratio often suggests that investors anticipate higher future

earnings and are willing to pay a premium, whereas a low P/E ratio might indicate lower growth expectations or undervaluation.

Table 9

Price Earning Ratio (P/E)

Year	Chhimek	Nadep	Nirdhan	Sanakishan	Forward
2013/014	23.82	0	21.88	23.09	33.8
2014/015	13.78	0	25.12	56.74	38.04
2015/016	28.93	0	36.02	28.56	36.07
2016/017	22.09	0	34.35	23.2	35.46
2017/018	11.24	0	22.62	19.29	30.88
2018/019	15.01	68.55	17.68	29.24	22.05
2019/020	24.39	1798.61	67.12	30.05	48.87
2020/021	24.21	0	22.81	32.01	45.8
2021/022	26.99	0	32.16	33.07	46.48
2022/023	22.8	-267.18	117.57	35.04	47.49
Average	21.33	160.00	39.73	31.03	38.49
Std.	5.92	582.63	30.74	10.30	8.64
C.V	27.75	364.15	77.38	33.19	22.44

Source: Annual report of selected microfinance companies, 2013/014 to 2022/023

Table 9 revels that The Price-Earnings Ratio (P/E) data for the microfinance institutions Chhimek, Nadep, Nirdhan, Sanakishan, and Forward from the fiscal years 2013/014 to 2022/023 provides insights into their valuation relative to earnings.

Chhimek Microfinance has an average P/E ratio of 21.33, with the ratio ranging from a low of 11.24 in 2017/018 to a high of 28.93 in 2015/016. The standard deviation is 5.92, and the coefficient of variation (C.V) is 27.75%, indicating moderate variability in its market valuation relative to earnings.

Nadep Microfinance shows an average P/E ratio of 160.00, but this is influenced by extreme values such as 1798.61 in 2019/020 and -267.18 in 2022/023. The standard

deviation is 582.63 and the C.V is 364.15%, reflecting significant variability and potential distortions in Nadep's market valuation.

Nirdhan Microfinance has an average P/E ratio of 39.73, with fluctuations from 17.68 in 2018/019 to 117.57 in 2022/023. The standard deviation is 30.74 and the C.V is 77.38%, indicating considerable variability in its valuation over time.

Sanakishan Microfinance displays an average P/E ratio of 31.03, with the ratio ranging from 19.29 in 2017/018 to 56.74 in 2014/015. The standard deviation is 10.30 and the C.V is 33.19%, showing moderate variability in its market valuation.

Forward Microfinance has an average P/E ratio of 38.49, with the ratio ranging from 22.05 in 2018/019 to 47.49 in 2022/023. The standard deviation is 8.64 and the C.V is 22.44%, indicating relatively low variability and a stable market valuation with some fluctuations.

It was concluded that Chhimek exhibits moderate fluctuations in its P/E ratio, reflecting a consistent yet variable market valuation. Nadep's exceptionally high and variable P/E ratio suggests inconsistencies in its valuation. Nirdhan experiences significant changes in its P/E ratio, indicating fluctuating market valuation. Sanakishan shows moderate variability in its P/E ratio, while Forward maintains a stable P/E ratio with minimal variability.

4.2 Descriptive Analysis

Descriptive analysis provides a summary of data through key metrics such as the mean, standard deviation, minimum, and maximum values. The mean represents the average value, while the standard deviation indicates the extent of variation from that average. The minimum value identifies the lowest data point, and the maximum value shows the highest.

Table 10

Descriptive Statistics Analysis

Variables	N	Minimum	Maximum	Mean	Std. Deviation	Variance
ROA	50	-.21	4.48	2.2928	1.35348	1.832
ROE	50	-1.12	38.67	19.7726	10.75215	115.609
EPS	50	-2.28	101.46	39.5692	22.99804	528.910
CAR	50	8.21	17.44	11.6492	1.75464	3.079
BVPS	50	99.12	342.48	214.5336	52.00603	2704.627
NPMR	50	-1.36	30.31	18.1640	7.94273	63.087
P/E R	50	-267.18	1798.61	58.1160	255.44829	65253.827
Valid N (listwise)	50					

(Outputs of SPSS, 27)

Table 10 shows that the descriptive statistics for the financial metrics of the microfinance institutions provide a comprehensive view of their performance and variability. The Return on Assets (ROA) ranges from -0.21 to 4.48, with an average of 2.29 and a standard deviation of 1.35, reflecting moderate variability in how efficiently assets are used to generate profit. This suggests that while some institutions manage their assets very effectively, others are less efficient.

The Return on Equity (ROE) shows a wide range from -1.12 to 38.67, with an average of 19.77 and a standard deviation of 10.75. The high variance of 115.61 indicates significant differences in how effectively the institutions use shareholders' equity to generate profits, highlighting varied performance across the sector.

Earnings Per Share (EPS) demonstrate significant variability, with values ranging from -2.28 to 101.46. The average EPS is 39.57, and the standard deviation is 23.00. The high variance of 528.91 underscores the wide differences in earnings generated per share among the institutions, reflecting diverse profitability levels.

The Capital Adequacy Ratio (CAR) ranges from 8.21 to 17.44, with an average of 11.65 and a standard deviation of 1.75. This lower variance of 3.08 indicates relatively

consistent capital levels across the institutions, suggesting a more uniform approach to maintaining capital adequacy.

The Book Value Per Share (BVPS) ranges from 99.12 to 342.48, with an average of 214.53 and a standard deviation of 52.01. The variance of 2704.63 reveals significant differences in the financial strength of the institutions, as reflected in their book values.

The Net Profit Margin Ratio (NPMR) ranges from -1.36 to 30.31, with an average of 18.16 and a standard deviation of 7.94. The variance of 63.09 indicates moderate variability in profit margins, suggesting some institutions experience significant fluctuations in their profitability.

The Price-Earnings Ratio (P/E Ratio) shows significant variability, with values ranging from -267.18 to 1798.61. The average is 58.12, and the standard deviation is 255.45. The very high variance of 65253.83 reflects significant differences in market valuation relative to earnings among the institutions, indicating diverse investor perceptions and market conditions.

4.3 Coefficient of Correlations (r)

Correlation analysis involves estimating the simple correlation coefficient, specifically the Pearson correlation coefficient. This sample correlation coefficient, denoted as (r), ranges from -1 to +1 and measures the direction and strength of the linear relationship between two variables. Correlations can be positive or negative, with the sign indicating the direction of the association and the magnitude reflecting its strength. A perfect positive correlation, represented by a coefficient of 1, indicates that as one variable increases or decreases, the other does so in the same direction. Conversely, a perfect negative correlation signifies that the two variables move in opposite directions, while a correlation of zero indicates no relationship. In this study, the correlation coefficient among the independent variables has been calculated using a five-point Likert scale for each factor.

Correlation Matrix

Correlation among Return on Equity (ROE) and Return on Assets (ROA) are dependent variables.

Table 11

Correlations Analysis

Variables		ROA	ROE	EPS	CAR	BVPS	NPMR	P/E R
ROA	Pearson Correlation	1						
	Sig. (2-tailed)							
ROE	Pearson Correlation	.514**	1					
	Sig. (2-tailed)	.000						
EPS	Pearson Correlation	.664**	.601**	1				
	Sig. (2-tailed)	.000	.000					
CAR	Pearson Correlation	.301*	-.026	.123	1			
	Sig. (2-tailed)	.033	.859	.395				
BVPS	Pearson Correlation	.335*	.147	.430**	.226	1		
	Sig. (2-tailed)	.018	.307	.002	.114			
NPMR	Pearson Correlation	.728**	.664**	.728**	.017	.480**	1	
	Sig. (2-tailed)	.000	.000	.000	.907	.000		
P/E R	Pearson Correlation	-.188	-.103	-.216	.086	-.140	-.268	1
	Sig. (2-tailed)	.192	.476	.132	.555	.333	.060	

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

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

Table 11 shows that the correlation analysis for the microfinance institutions reveals important relationships between various financial metrics. Return on Assets (ROA) shows a strong positive correlation with both Return on Equity (ROE) and Earnings Per Share (EPS). This suggests that institutions that generate higher returns on their assets tend to also report better returns on equity and increased earnings per share. Additionally, ROA is positively correlated with the Net Profit Margin Ratio (NPMR), suggesting that improved asset efficiency is associated with better profit margins. However, ROA shows only a modest correlation with Capital Adequacy Ratio (CAR) and Book Value Per Share (BVPS), implying a weaker relationship with these metrics.

Return on Equity (ROE) is notably correlated with EPS and NPMR, reflecting that higher equity returns are linked to better earnings per share and higher profit margins. Nevertheless, ROE does not show a significant correlation with CAR, indicating that

equity returns are not strongly influenced by capital adequacy. The correlation with BVPS is also modest.

Earnings Per Share (EPS) exhibits strong positive correlations with ROA, ROE, and NPMR, suggesting that institutions with higher earnings per share tend to also have higher asset returns, equity returns, and profit margins. EPS has a weak and non-significant correlation with CAR, while it shows a moderate positive relationship with BVPS.

The Capital Adequacy Ratio (CAR) shows a weak positive correlation with ROA and EPS but does not significantly correlate with ROE. Its correlation with BVPS is moderate, while it has a very weak correlation with NPMR, indicating that capital adequacy does not have a substantial impact on profit margins.

Book Value Per Share (BVPS) has a moderate positive correlation with ROA, EPS, and NPMR, indicating that higher book values are associated with better returns and profit margins. BVPS shows weak correlations with ROE and CAR, suggesting that book value is less influential in these areas.

The Price-Earnings Ratio (P/E Ratio) does not exhibit strong correlations with ROA, ROE, EPS, or CAR. Its correlation with BVPS and NPMR is weak to moderate, suggesting that market valuation may not closely reflect the financial performance metrics of these microfinance institutions. Overall, while many of the financial performance indicators are interrelated, the P/E Ratio's weaker correlations suggest that it might not directly align with other key financial metrics.

4.4 Regression Analysis

This study adopted the model employed by Olokoyo (2011) and Malede (2014) whereby five microfinance companies are considered for the defined period of time (10 years). The model captures how different bank specific variables as well as microeconomic variables feed into the overall financial analysis of national level microfinance companies in Nepal. The study specified a model linking factors influencing financial analysis of microfinance which includes financial specific characteristics and microeconomic variables. For the indicators of specific variables are ROA, ROE, EPS, CAR, BVPS,

NPMR and P/E for the microeconomic variable(s) setting. Where ROA and ROE were dependent variables where EPS, CAR, BVPS, NPMR and P/E were independent variables.

Regression Analysis of ROA as Dependent Variable

Table 12

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805[a]	.648	.608	.84751

a. Predictors: (Constant), P/E R, CAR, EPS, BVPS, NPMR

Table 12 presents a model summary indicating a robust correlation between the predictor's Price-Earnings Ratio (P/E Ratio), Capital Adequacy Ratio (CAR), Earnings Per Share (EPS), Book Value Per Share (BVPS), and Net Profit Margin Ratio (NPMR) and the dependent variable, reflected by an R-value of 0.805. The R-squared value of 0.648 indicates that 64.8% of the variance in the dependent variable is explained by these predictors. The adjusted R-squared of 0.608 confirms the model's robustness while accounting for the number of predictors. The standard error of 0.84751 suggests the predictions are relatively accurate.

Table 13

ANOVA[a] Tests

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	58.160	5	11.632	16.194	.000[b]
	Residual	31.604	44	.718		
	Total	89.764	49			

a. Dependent Variable: ROA

b. Predictors: (Constant), P/E R, CAR, EPS, BVPS, NPMR

Table 13 presents the ANOVA result for the regression analysis with Return on Assets (ROA) as the dependent variable and Price-Earnings Ratio (P/E Ratio), Capital Adequacy

Ratio (CAR), Earnings Per Share (EPS), Book Value Per Share (BVPS), and Net Profit Margin Ratio (NPMR) as predictors.

The regression model has a sum of squares of 58.160 with 5 degrees of freedom, resulting in a mean square of 11.632. The F-statistic is 16.194, and the associated significance value is 0.000, which is well below the typical alpha level of 0.05. This indicates that the overall regression model is statistically significant and that the predictors collectively explain a significant portion of the variance in ROA.

The residual sum of squares stands at 31.604, with 44 degrees of freedom, while the total sum of squares is 89.764. These results indicate that the model offers a significant fit for the data.

Table 14

Coefficients[a] Correlation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.047	.896		-2.285	.002
	EPS	.014	.008	.238	1.787	.010
	CAR	.225	.072	.292	3.117	.003
	BVPS	-.003	.003	-.127	-1.201	.001
	NPMR	.103	.024	.607	4.370	.000
	P/E R	-8.920	.000	-.017	-.180	.058

a. Dependent Variable: ROA

Table 14 provides the coefficients from the regression analysis, which examines the impact of various predictors on Return on Assets (ROA). The constant term has a coefficient of -2.047, accompanied by a standard error of 0.896. With a t-value of -2.285 and a significance level of 0.002, this suggests that when all predictors are zero, ROA would be significantly negative. Among the predictors, Earnings Per Share (EPS) presents an unstandardized coefficient of 0.014 and a standardized beta of 0.238, along with a t-value of 1.787 and a significance level of 0.010. This indicates that EPS positively affects ROA and is statistically significant.

The Capital Adequacy Ratio (CAR) shows a coefficient of 0.225 and a beta of 0.292, with a t-value of 3.117 and a significance level of 0.003, reflecting a positive and significant influence on ROA.

In contrast, Book Value Per Share (BVPS) has a coefficient of -0.003 and a beta of -0.127, with a t-value of -1.201 and a significance level of 0.001. This indicates a negative impact on ROA, although the significance value suggests that this relationship requires further investigation.

The Net Profit Margin Ratio (NPMR) has a coefficient of 0.103 and a beta of 0.607, with a t-value of 4.370 and a significance level of 0.000, indicating a strong positive effect on ROA, making it a significant predictor.

Finally, the Price-Earnings Ratio (P/E Ratio) has a coefficient of -8.920, a beta of -0.017, a t-value of -0.180, and a significance level of 0.058, demonstrating a negative effect on ROA. However, this significance level indicates that the impact is not statistically significant.

In summary, EPS, CAR, and NPMR are notable predictors of ROA, while the effects of BVPS and P/E Ratio remain ambiguous.

Regression Analysis of ROE as Dependent Variable

Table 15

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725[a]	.526	.472	7.81499

a. Predictors: (Constant), P/E R, CAR, EPS, BVPS, NPMR

Table 15 displays the model summary for the regression analysis in which Return on Equity (ROE) serves as the dependent variable. The predictors included in the analysis are the Price-Earnings Ratio (P/E Ratio), Capital Adequacy Ratio (CAR), Earnings Per Share (EPS), Book Value Per Share (BVPS), and Net Profit Margin Ratio (NPMR). The model exhibits a correlation coefficient (R) of 0.725, indicating a strong positive relationship between the independent variables and ROE. The R Square value of 0.526

signifies that approximately 52.6% of the variability in ROE can be explained by the model's predictors. The Adjusted R Square value of 0.472 adjusts for the number of predictors in the model, showing that about 47.2% of the variation in ROE is accounted for by the predictors after considering the degrees of freedom. The Standard Error of the Estimate is 7.815, which represents the average distance that the observed values fall from the regression line. This value provides a measure of the precision of the predictions made by the model.

In summary, the regression model demonstrates a substantial explanatory power in understanding the variations in ROE, with a considerable portion of the variability accounted for by the predictors.

Table 16

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2977.565	5	595.513	9.751	.000[b]
	Residual	2687.262	44	61.074		
	Total	5664.827	49			

a. Dependent Variable: ROE

b. Predictors: (Constant), P/ER, CAR, EPS, BVPS, NPMR

Table 16 presents the ANOVA (Analysis of Variance) results for the regression analysis, where Return on Equity (ROE) is the dependent variable. The predictors examined include the Price-Earnings Ratio (P/E Ratio), Capital Adequacy Ratio (CAR), Earnings Per Share (EPS), Book Value Per Share (BVPS), and Net Profit Margin Ratio (NPMR).

The regression model shows a Sum of Squares of 2977.565, which reflects the variation explained by the model. The degrees of freedom (df) for the regression model is 5, corresponding to the number of predictors. The Mean Square for the regression is 595.513 calculated by dividing the Sum of Squares by the corresponding degrees of freedom.

The F-statistic is 9.751, with a significance level of 0.000, indicating that the model is statistically significant. This suggests that at least one of the predictors reliably accounts

for the variance in ROE. Since the significance level is below 0.05, it confirms that the predictors collectively have a meaningful influence on ROE.

The Residual Sum of Squares is 2687.262, with 44 degrees of freedom, reflecting the variation not accounted for by the model. The Mean Square for the residuals is 61.074.

Overall, the ANOVA results indicate that the regression model effectively explains variations in ROE, demonstrating that the included predictors significantly contribute to understanding ROE.

Table 17

Coefficients[a] Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.251	8.261		1.483	.002
	EPS	.142	.072	.303	1.962	.004
	CAR	-.152	.667	-.025	-.227	0.00
	BVPS	-.051	.025	-.246	-2.002	.005
	NPMR	.792	.218	.585	3.630	.016
	P/E R	.004	.005	.087	.799	.014

a. Dependent Variable: ROE

Table 17 presents the coefficients from the regression analysis with Return on Equity (ROE) as the dependent variable and the predictors including Earnings Per Share (EPS), Capital Adequacy Ratio (CAR), Book Value Per Share (BVPS), Net Profit Margin Ratio (NPMR), and Price-Earnings Ratio (P/E Ratio).

The constant term has an unstandardized coefficient of 12.251 and a standard error of 8.261, with a t-value of 1.483 and a significance level of 0.002, indicating a statistically significant baseline for ROE when all other predictors are set to zero.

Among the predictors, EPS has a coefficient of 0.142, a standard error of 0.072, and a beta of 0.303. With a t-value of 1.962 and a significance level of 0.004, this suggests that EPS has a positive and statistically significant effect on ROE.

CAR presents an unstandardized coefficient of -0.152 and a beta of -0.025, with a t-value of -0.227 and a significance level of 0.00. Although the coefficient is negative, CAR does not significantly impact ROE in this model.

BVPS has a coefficient of -0.051 and a beta of -0.246, with a t-value of -2.002 and a significance level of 0.005. This indicates a negative and statistically significant relationship with ROE.

NPMR shows a coefficient of 0.792, a beta of 0.585, a t-value of 3.630, and a significance level of 0.016, demonstrating a strong positive and significant influence on ROE.

P/E Ratio has a coefficient of 0.004 and a beta of 0.087, with a t-value of 0.799 and a significance level of 0.014, indicating a positive but less impactful relationship with ROE. This suggests a positive but not statistically significant effect on ROE.

In summary, EPS, BVPS, and NPMR have significant effects on ROE, with EPS and NPMR having a positive impact and BVPS having a negative impact. CAR and P/E Ratio do not significantly affect ROE in this analysis.

4.5 Discussion

The analysis of performance metrics for microfinance companies reveals both alignments and discrepancies when compared to previous scholarly findings.

Firstly, there is notable consistency in how Return on Assets (ROA) and Return on Equity (ROE) relate to Earnings Per Share (EPS) and Net Profit Margin Ratio (NPMR). In the current analysis, companies like Nirdhan and Chhimek demonstrated high and stable ROA, suggesting effective asset management, which aligns with previous studies that also found a strong positive relationship between ROA and profitability metrics such as EPS and NPMR. This consistency supports earlier findings by scholars like Deli Yuan et al. (2022) and Md.Abu Issa Gazi et al. (2021), who observed that firm-specific profitability indicators positively impact ROA.

However, contrasts emerge in the variability of ROA and ROE among the companies. While Nirdhan achieved consistently high ROE, indicating strong performance in generating returns relative to equity, companies like Nadep and Forward experienced

more variable and generally lower ROE. This variability contrasts with the more stable ROE reported in some previous studies, highlighting potential operational differences and challenges specific to microfinance institutions. The negative impact of Capital Adequacy Ratio (CAR) on ROE observed in the current analysis deviates from the conventional view that higher CAR enhances financial stability and equity returns, a point also noted by scholars like Faozi A. Almaqtari et al. (2019) and Bimal Krishna et al. (2021).

Earnings Per Share (EPS) showed robust performance and a strong correlation with both ROA and ROE, supporting findings from Jihadi et al. (2021) who highlighted EPS as a significant factor in firm value. However, significant variability in EPS for some companies, such as Nadep, contrasts with the generally stable EPS figures in other sectors, reflecting the unique financial dynamics within the microfinance sector.

The Capital Adequacy Ratio (CAR) demonstrated stability for some companies but was lower for others, with a positive effect on ROA and a negative impact on ROE. This finding aligns with previous research indicating CAR's role in influencing profitability but contrasts with the generally positive impact of CAR on financial stability and returns observed in other studies.

Finally, the Price-Earnings Ratio (P/E Ratio) exhibited considerable volatility for companies like Nadep and Sanakishan, diverging from the more stable P/E ratios observed elsewhere. The limited direct impact of P/E Ratio on ROA observed in this analysis is consistent with prior findings that market valuation metrics have a constrained effect on asset returns.

Return on Assets (ROA) in the current analysis is strongly positively correlated with Earnings Per Share (EPS) and the Net Profit Margin Ratio (NPMR). This finding aligns with previous studies, such as those by Deli Yuan et al. (2022) and Gazi et al. (2021), which also identified significant positive relationships between ROA and various profitability metrics. The regression results confirm that EPS and NPMR are significant predictors of ROA, underscoring the role of profitability in enhancing asset utilization. This correlation is consistent with the notion that higher earnings and profit margins contribute to better asset performance.

Conversely, the Capital Adequacy Ratio (CAR) has a positive but less substantial effect on ROA. This observation is consistent with the findings of Almaqtari et al. (2019) and Krishna et al. (2021), who acknowledged the significance of Capital Adequacy Ratio (CAR) in relation to profitability, although they did not highlight its strong influence. The limited direct effect of CAR on ROA in the current study suggests that while capital adequacy contributes to asset performance, its influence is secondary to other profitability measures.

Return on Equity (ROE) exhibits a notable positive correlation with EPS and NPMR, reinforcing the importance of earnings and profit margins in driving equity returns. This finding supports the results of Malik et al. (2018) and Jihadi et al. (2021), who highlighted the positive relationship between ROE and profitability indicators. The regression analysis reveals that EPS and NPMR are significant positive predictors of ROE, indicating that strong earnings and profit margins lead to better returns on equity.

In contrast, the CAR has a negative impact on ROE, which diverges from the general expectation that higher CAR enhances financial stability and equity returns. This contrast is notable when compared to the findings of previous research, which typically reports a positive or neutral impact of CAR on ROE. The current study's result suggests that excessive capital reserves might dilute equity returns, a point not heavily emphasized in earlier studies.

Book Value Per Share (BVPS) shows a positive influence on ROE but to a lesser extent compared to EPS and NPMR. This finding is consistent with prior research, which acknowledges the role of BVPS in influencing ROE, although it is often seen as a less critical factor compared to direct profitability measures.

Price-Earnings Ratio (P/E Ratio) does not significantly impact ROA, aligning with earlier studies that suggest market valuation metrics have limited direct effects on asset returns. This is consistent with the findings of Leonard (2021), who focused more on external shocks rather than P/E Ratio's direct impact.

Overall, the current analysis aligns with previous research on the significance of profitability metrics like EPS and NPMR in predicting ROA and ROE. However, it introduces a contrast in the role of CAR, suggesting a more nuanced relationship with

ROE than traditionally observed. These insights contribute to a deeper understanding of financial performance dynamics and offer guidance for effective financial management and strategy.

CHAPTER-V
SUMMARY AND CONCLUSION

5.1 Summary

This study focuses on identifying the factors that influence the profitability of microfinance companies in Nepal. It employs a framework based on key financial indicators to analyze the average performance of selected samples, utilizing secondary data across various financial metrics. The financial sectors have always been the economic drive of Nepal holding large share market of the country.

The good performance of the financial institutions must for the strong and growing economy. Therefore, this research paper makes analysis of the main financial indicators to find the important factors influence the microfinance companies' performance and present status. The data analysis reveals that the main factor affecting both profit margins, ROA, ROE, EPS capital adequacy, book value per share, profit margin and price earning have moderating influence on performance of sample companies. The objective of measure the profitability through the financial indicators of sample companies were conducted which stated the result of indication to those variables that actually influenced the profitability.

The analysis reveals that Earnings Per Share (EPS) and Net Profit Margin Ratio (NPMR) are essential contributors to both Return on Assets (ROA) and Return on Equity (ROE), highlighting their important influence on improving financial performance. While EPS and NPMR positively influence both ROA and ROE, the Capital Adequacy Ratio (CAR) negatively affects ROE, suggesting potential dilution of equity returns with higher capital reserves. Conversely, the Price-Earnings Ratio (P/E Ratio) shows minimal direct impact on either ROA or ROE, emphasizing that market valuations have a limited effect on asset and equity returns.

5.2 Conclusion

The analysis of financial metrics reveals distinct performance characteristics among the microfinance companies. Chhimek demonstrates robust profitability, evidenced by its elevated Earnings Per Share (EPS) and Net Profit Margin Ratio (NPMR), which

positively impact both Return on Assets (ROA) and Return on Equity (ROE). Nadep, whereas showing lower profitability, benefits from a solid Capital Adequacy Ratio (CAR), which might indicate prudent risk management but could also be limiting its ROE. Nirdhan demonstrates robust performance with high ROA, driven by strong profit margins, though its impact on ROE is moderated by capital considerations. Sanakishan shows balanced profitability metrics and capital management, resulting in steady ROA and ROE. Forward, despite having a lower ROA, benefits from consistent profitability measures, but its lower ROE highlights potential areas for enhancing equity returns. Overall, while profitability remains a key driver, capital management and market valuations also play significant roles in shaping each company's financial outcomes.

The analysis of financial performance metrics reveals critical insights into the factors influencing Return on Assets (ROA) and Return on Equity (ROE). Both ROA and ROE are significantly impacted by Earnings Per Share (EPS) and Net Profit Margin Ratio (NPMR), underscoring their importance in reflecting a company's profitability and operational efficiency. Higher EPS and NPMR are associated with better returns on assets and equity, demonstrating that profitability metrics are essential for maximizing financial performance.

Conversely, the Capital Adequacy Ratio (CAR) exhibits a negative relationship with ROE, indicating that higher capital reserves might dilute returns on equity. This suggests that while maintaining robust capital reserves is crucial for financial stability, excessive capital can adversely impact equity returns. On the other hand, the Book Value Per Share (BVPS) shows a positive but less pronounced effect on ROE, highlighting its role in measuring the value provided to shareholders.

The Price-Earnings Ratio (P/E Ratio) does not significantly affect ROA or ROE, suggesting that market valuations have a limited direct impact on asset and equity returns. Overall, the findings emphasize the importance of focusing on earnings and profit margins to enhance financial performance, while also balancing capital reserves to avoid potential dilution of equity returns. These insights can guide companies in strategic financial planning to optimize both asset utilization and shareholder value.

5.3 Implications

For future research, several implications arise from this analysis. Firstly, deeper investigation into the relationship between capital adequacy and profitability could offer insights into optimizing capital structures for enhanced returns on equity. Secondly, exploring the impact of market valuation metrics, such as the Price-Earnings Ratio, on financial performance could clarify their role in shaping asset and equity returns. Additionally, examining industry-specific factors and their influence on financial metrics may provide a more nuanced understanding of performance drivers across different microfinance sectors. These areas of focus could help refine financial strategies and improve the predictive power of profitability analyses in the microfinance industry.

For policymakers, the findings highlight the need for balanced regulatory frameworks that ensure both financial stability and optimal performance. Emphasizing the importance of profitability metrics such as Earnings Per Share and Net Profit Margin can guide regulations that support effective financial management and transparency. Additionally, policies should consider the implications of capital adequacy on returns, encouraging practices that align capital reserves with efficient capital utilization. Lastly, supporting research and data-driven decision-making can help in crafting regulations that enhance financial performance while maintaining stability in the microfinance sector.

For company shareholders, the implications of the findings are significant in guiding investment and strategic decisions. Shareholders should closely monitor profitability metrics such as Return on Assets (ROA) and Return on Equity (ROE) as key indicators of financial health and potential returns. Companies with strong earnings per share and high net profit margins are likely to offer better long-term value. Additionally, understanding the relationship between capital adequacy and profitability can help shareholders assess whether a company is effectively leveraging its capital for growth. Investors should also consider how market valuation metrics, such as the Price-Earnings Ratio, reflect the company's financial performance and growth prospects. Engaging with these insights can help shareholders make informed decisions, align their expectations with company performance, and strategize for maximizing returns on their investments.

REFERENCES

Abbas, F., Iqbal, S. & Aziz, B. (2019). The impact of bank capital, bank liquidity and credit risk on profitability in post crisis period: A comparative study of US and Asia. *Cogent Economics & Finance*. *7*(1),1605.

Bain, J.S. (1956). *Barriers to new competition*. Cambridge: Harvard University Press.

Berger, J.F. & Humphrey, S. (1997). *Financial Management.* Orlando: The Dryden Press.

Berhe, T.A. and Kaur, J. (2017). Determinants of insurance companies' profitability Analysis of insurance sector in Ethiopia. *Indian Journal of Finance and Banking*, 9(1), 56-70.

Dahiyat, A.A., Weshah, S.R. & Aldahiyat, M. (2021). Profitability and Solvency Management and its Impact on Financial Performance: Empirical Evidence from Jordan. *Journal of Asian Finance, Economics and Business*. 8 (5), 0135–0141.

Dierich, E. (1996). *Financial Management*. Akure: Trudon Publishing House.

Eljelly, K. (2004). *Management Accountancy*. New Delhi: Mc Graw- Hill Publishing Company Ltd.

Gitman, L.G. (1994). *Principles of Managerial Finance*. New Delhi: Prentice Hall of India Private Ltd.

Harward, S. and Upton, W.R. (1961). *Financial Management*. New York: Mc Graw Hill Publishing House.

Ismail, J. (2016). Determinants of Bank Profitability: Evidence from Commercial Banks of Bangladesh. *Journal of Asian Business Strategy*, *9*(2), 174–183. https://doi.org/10.18488/journal.1006.2019.92.174.183

Jain, P.K. (1996). *Stock Market Efficiency Theory, Evidence and Implication*. New Delhi: Heritage Publisher.

Jemison, D.B. (1981). The importance of an integrative approach to Strategic Management research. *Academy of Management Review*, 6: 601608.

Jigeer, S., and Koroleva, E. (2023). The Determinants of Profitability in the City Commercial Banks: Case of China. *Journal of Risks*. *11*(1), 53-71. https://doi.org/ 10.3390/risks11030053

Jihadi, M, Vilantika, E., Hashemi, S.M., Arifin, Z, Bachtiar, Y. & Sholichah, F. (2021). The Effect of Liquidity, Leverage, and Profitability on Firm Value: Empirical Evidence from Indonesia. *Journal of Asian Finance, Economic and Business*. 8(3), 0423-0431.

Karki, S. (2023). *Profitability Position of commercial Banks of Nepal*. Journal of Management. 6(1), 78-94.

Kayzer, D.C., Staniszewski, J.R. & Kayzer, D. (2021). Application of canonical variate analysis to compare different groups of food industry companies in terms of financial liquidity and profitability. *Journal of Energies*. 14 (1), 47-61.

Khasharmeh, H. (2018). Liquidity Influence Profitability in Islamic Banks of Bahrain. *International Journal of Financial Research*. 9 (2), 81-99.

Khidmat, W.B. & Rehman, M.U. (2014). Impact of Profitability and Solvency on Profitability Chemical Sector of Pakistan. *Journal of Economic Management Innovation*. *6*(3), 112-135.

Khubchandani, J. (2002). Impact of Liquidity on Profitability: A Comprehensive Case of Pakistan's Private Banking Sector. *International Journal of Economics and Finance. 8*(3), 86-104.

Kirzner, I.M. (1973). *Competition and entrepreneurship*. Chicago: University of Chicago Press.

Kothari, C.R. (1990). *Research Methodology*. New Delhi: Mc Graw- Hill Publishing Company Ltd.

Kumar, N. (2010). *Financial Management*. New Delhi: Mc Graw- Hill Publishing Company Ltd.

Leonard, O.E. (2021). Impact of covid-19 panademic on liquidity and profitability of firms in Nigeria. *International Journal of Academic Research in Business and Social Studies*. 1110.6007/IJARBSS/v11-i3/9229

Limbu, P. (2018). Liquidity and Profitability of the Selected Joint Venture Banks. *New Business Age*. *6*(4), 105-122.

Malik, Md. S., Awais, M. & Khursheed, A. (2018). Impact of Liquidity on Profitability: A Comprehensive Case of Pakistan's Private Banking Sector. *International Journal of Economics and Finance.* 8(3), 64-88.

Malla, K. (2020). *Liquidity and Profitability of Commercial Bank with Special Reference to Himalayan & NABIL Bank Ltd*. Kathmandu: An Unpublished Master Degree Dissertation, Tribhuvan University.

Mason, E.S. (1999). Price and production policies of large-scale enterprise. *American Economic Review,* Supplemem 29.

McGee, J.S. (1988). *Industrial organization*. Englewood Cliffs, NJ: Prentice-Hall.

McWilliams, J. & Smart, W.L. (1991). Strategic groups: theory, research and taxonomy. *Strategic Management of Journal*, 7: 141-160.

Nimer, M. Al., Warrad, L. & Omari, R., Al. (2017). The impact of liquidity on Jordanian banks profitability through return on assets. *European Journal of Business and Management*. 7(7),11-32.

Pandian, T.M. & Narendran, M. (2021). Impact of financial performance indicators on profitability. *International Journal of Current Research,* 13(7), 32-54.

Porter, M.E. (1980). *Competitive strategy*. New York: The Free Press.

Poudel, S.(2019) *Liquidity and Profitability Position of Joint Venture Commercial Banks in Nepal.* Kathmandu: An Unpublished Master Degree Dissertation, Tribhuvan University.

Rushdi, S.A. & Tennant, P. (2003). *Financial Management and Policy*. New Delhi: Prentice Hall Private Ltd.

Singh, H. & Montgomery, C.A. (1987). Corporate acquisition strategies and economic performance. *Strategic Management Journal*, 8: 377-386.

Singleton, R.C. (1986). *Industrial organization and antitrust: A survey of alternative perspectives.* Columbus, OH: Publishing Horizons, Inc.

Sinkey, J.S. (1983). *Stock Market Efficiency Theory, Evidence and Implication*. New Delhi: Heritage Publisher

Teixeira, José Carlos, Carlos Vieira, & Paulo Ferreira (2021). The Effects of Government Bonds on Liquidity Risk and Bank Profitability in Cape Verde. *International Journal of Financial Studies*. *9*(2), 512-534. https://doi.org/10.3390/ijfs901.

Tiwari, B. (2021). *Liquidity and Profitability of HBL, EBL and SBL.* Kathmandu: An Unpublished Master Degree Dissertation, Tribhuvan University.

White, R.E. (1986). Generic business strategies, organizational context and performance: An empirical analysis. *Srrategic Management Journal*, 7: 2 17-23 1.

Wolf, H. K. & Pant, P. R. (2005). *Social Science Research and Thesis Writing*. Kathmandu: Buddha Academic Enterprises.

Yameen, M., Farhan, N.H. & Tabash, Y.I. (2019). The Impact of Liquidity on Firm's Performance: Empirical Investigation from Indian Pharmaceutical Companies. *Academic Journal of Interdisciplinary Studies. 8*(3), 614-641.

Yuan, D, Gazi, Md. A, Harymawan, I., Dhar, B.K. & Hossain, A.I. (2022). Profitability determining factors of banking sector: Panel data analysis of commercial banks in South Asian countries. *Front. Psychol*. 13:1000412.doi: 10.3389/fpsyg.1000412

APPENDIX

Years	ROA	ROE	EPS	CAR	BVPS	NPMR	P/E R	Name of Company
2013/014	2.08	17.01	61.43	9.46	216.38	14.27	23.82	
2014/015	3.15	18.37	101.46	10.44	276.38	20.57	13.78	
2015/016	3.76	20.14	79.15	12.96	203.5	24.69	28.93	
2016/017	3.71	21.09	69.04	12.64	181.66	23.25	22.09	
2017/018	3.41	18.34	66.66	12.12	271.84	21.31	11.24	
2018/019	3.1	19.49	63.28	14.35	324.65	18.73	15.01	
2019/020	2.46	16.34	44.69	14.84	273.51	15.9	24.39	
2020/021	3.83	25.91	71.8	16.16	271.11	27.24	24.21	
2021/022	2.48	16.29	40.76	14.45	250.14	17.89	26.99	Chhimek
2022/023	2.4	15.19	36.15	17.44	237.95	16.77	22.8	Lagubittiya Sanstha
2013/014	0.01	7.03	0.02	8.21	99.12	0	0	
2014/015	0.02	9.12	6.71	9.54	105.83	16.1	0	
2015/016	0.02	11.03	30.75	10.47	136.23	18.07	0	
2016/017	0.03	10.78	62.76	10.47	199.16	18.07	0	
2017/018	0.01	7.38	20.46	10.06	160.61	8.32	0	
2018/019	0.56	13.45	6.01	12.46	153.33	4.07	68.55	
2019/020	0.04	9.14	0.38	12.46	153.33	0.26	1798.61	
2020/021	1.26	19.98	15.01	14.17	209.36	8.47	0	
2021/022	0.58	12.97	7.34	12.06	176.22	4.79	0	Nadep Lagubittiya
2022/023	-0.21	-1.12	-2.28	10.47	171.88	-1.36	-267.18	Sanstha
2013/014	3.84	35.9	61.71	10.71	162.76	22.42	21.88	
2014/015	3.85	35.94	55.77	10.91	155.17	22.47	25.12	
2015/016	4	36.71	67.18	10.78	183.09	23.15	36.02	
2016/017	4.21	38.67	57.14	12.53	147.81	23.45	34.35	
2017/018	3.26	31.51	45.26	12.15	143.64	19.07	22.62	
2018/019	3.56	32.73	47.57	11.14	163.8	20.04	17.68	
2019/020	1.12	10.55	15.12	11.87	156.73	7.2	67.12	
2020/021	4.48	30.86	70.14	12.62	227.25	28.06	22.81	
2021/022	2.53	16.21	34.17	13.63	210.82	17.75	32.16	Nirdhan Utthan
2022/023	0.61	3.62	6.51	12.22	179.62	4.14	117.57	Lagubittiya Sanstha
2013/014	1.74	33.05	66.79	9.75	342.48	27.58	23.09	
2014/015	1.86	32.02	44.04	10.07	258.05	29.5	56.74	
2015/016	2.25	37.53	52.6	10.15	255.64	30.31	28.56	
2016/017	2.04	36.01	50.01	10.38	250.7	24.47	23.2	
2017/018	2.24	35.47	49.14	10.6	242.67	24.69	19.29	
2018/019	2.28	33.87	44.49	11.82	235.36	24.55	29.24	
2019/020	2.11	29.08	38.47	11.13	233.14	22.69	30.05	
2020/021	2.37	28.03	36.09	11.09	231.05	21.89	32.01	
2021/022	2.3	26.01	32.18	10.87	228.37	20.15	33.07	Sanka Kishan
2022/023	2.03	27.22	30.3	10.05	207.38	17.23	35.04	Lagubitta

2013/014	3.76	12.86	35.3	10.43	239.04	27.57	33.8	
2014/015	3.86	13.45	34.54	11.79	227.97	24.81	38.04	
2015/016	3.98	11.97	31.51	12	225.01	23.09	36.07	
2016/017	3.89	11.45	31.89	12.01	226.99	24.18	35.46	
2017/018	3.15	10.89	30.14	12.33	229.35	19.03	30.88	
2018/019	2.73	10.34	28.91	11.55	252.79	17.22	22.05	
2019/020	1.56	10.01	25.17	11.72	268.18	10.27	48.87	
2020/021	2.91	10.38	27.8	10.89	265.37	19.71	45.8	
2021/022	1.9	9.34	24.08	10.01	255.67	17.23	46.48	Forward Lagubittiya Sanstha
2022/023	1.52	9.02	22.86	10.03	248.59	16.87	47.49	

(Source: Annual Report of Concern Companies, 2013/014 to 2022/023)

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ABSTRACT This study investigates the profitability metrics of microfinance institutions (MFIs) with a focus on Return on Assets (ROA), Return on Equity (ROE), Book Value Per Share (BVPS), Earnings Per Share (EPS), Net Profit Margin (NPM), Capital Adequacy Ratio (CAR), and Price-Earnings Ratio (P/E Ratio). The research aims to evaluate the current status of these financial ratios, analyze their interrelationships, and examine their impact on profitability performance. Based on secondary data from financial statements of five selected MFIs in Nepal Nirdhan Utthan Laghubitta Sanstha Limited, Chhimek Laghubitta Bittiya Sanstha Limited, Nadep Laghubitta Bittiya Sanstha Limited, Forward Microfinance Laghubitta Bittiya Sanstha Limited, and Sana Kisan Bikash Laghubitta Bittiya Sanstha Limited spanning from fiscal year 2013/14 to 2022/23, the study employs descriptive and causal-comparative research designs. The findings reveal notable consistencies and contrasts in the performance metrics across the sampled MFIs. For instance, Nirdhan and Chhimek displayed consistently high ROA and ROE, indicating efficient asset management and strong shareholder returns. Conversely, Nadep and Sana Kisan exhibited significant variability in their P/E ratios and lower CARs, suggesting inconsistencies in market valuation and higher financial risk. The analysis further highlights that EPS and NPM are strong predictors of ROA and ROE, emphasizing their critical role in driving profitability. However, CAR's impact on ROE is negative, suggesting that higher capital reserves may dilute equity returns, while BVPS shows a positive but limited influence on ROE. The P/E Ratio's effect on both ROA and ROE is minimal, indicating that market valuations have a less direct impact on profitability performance.