

FACTOR AFFECTING PROFITABILITY OF MICROFINANCE COMPANIES IN NEPAL

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

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June, 2024

CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “**Factor Affecting Profitability of Microfinance Companies in Nepal**”. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes.

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

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REPORT OF RESEARCH COMMITTEE

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APPROVAL SHEET

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ACKNOWLEDGEMENTS

This study entitled **“Factor Affecting Profitability of Microfinance Companies in Nepal”** has been prepared in partial fulfillment for the Degree of Master of Business Studies (MBS) under the Faculty of Management, Tribhuvan University is based on research models involving the use of quantitative aspect of factor affecting profitability of microfinance companies in Nepal.

I have great satisfaction and pleasure to express my appreciation and sincerity to my thesis supervisors Dr. Dhan Raj Chalise and Tulsi Ram Pandey of Shanker Dev Campus, TU for their excellent and effective guidance and supervision. I will remain thankful for their valuable direction useful suggestion and comments during the course of preparing this thesis without their help this work would not have come in this form. I also would like to extend my debt of gratitude Asso. Prof. Dr. Sajeeb Kumar Shrestha, Head of Research Department and I owe a deep debt of gratitude to Asso. Dr. Prof. Krishna Prasad Acharya, Campus Chief of Shanker Dev Campus who provided me an opportunity to undertake this research work.

I highly appreciate to all the staffs of sample microfinance companies, NRB Library, Shanker Dev Campus Library and TU Central Library for their valuable advices and support in collecting and presenting the necessary data. I would also like to express my thankfulness to my friends, my family members as well as all known people who supported as well as inspired me directly or indirectly to complete this thesis. With help and support, I have been able to complete this work. I would like to take the responsibility of any possible mistakes that may have occurred in the report. I would be delighted to welcome readers for their suggestion and recommendation to improve the report.

Saroj K.C.

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ABBREVIATIONS

CAR	:	Capital Adequacy Ratio
CBBL	:	Chhimek Laghubitta Bikas Bank Limited
GDPR	:	GDP Growth Rate
IT	:	Information Technology
JSLBB	:	Janutthan Samudayic Laghubitta Bikas Bank Limited
LIQ	:	Liquidity Ratio
LSIZE	:	Natural Logarithm of Total Assets
NMBMF	:	NMB Laghubitta Bitiya Sanstha Limited
NPLR	:	Non – Performing Loan Ratio
NRB	:	Nepal Rastra Bank
NUBL	:	Nirdhan Utthan Laghubitta Bitiya Sanstha Limited
OER	:	Operating Efficiency Ratio
ROA	:	Return on Assets
ROE	:	Return on Equity
SD	:	Standard Deviation
SIZE	:	Size or Total Assets of Companies
SWBBL	:	Swabalmaban Laghubitta Bittiya Sanstha Limited
TA	:	Total Assets
TU	:	Tribhuvan University

ABSTRACT

The main purpose of the study is to examine the impact of factor affecting profitability of microfinance companies in Nepal for ten year periods from 2012/13 to 2021/22. This study used descriptive, correlation and multiple regression analysis to analyze the data. This study shows that the NUBL has the strongest profitability position in terms of ROA and ROE. NUBL could manage their overall operations and the best or most effective management in earning profit among the sample companies. The correlation analysis shows that liquidity ratio and capital adequacy ratio have significant negative relationship with profitability (ROA and ROE). At the meantime, non-performing loan and operating efficiency ratio have insignificant negative relationship with ROA and significant negative relationship with ROE. Moreover, size of companies has significant positive relationship with profitability (ROA and ROE) of microfinance companies in Nepal. The multiple regression analysis reveals that liquidity ratio has significant negative impact on ROA and insignificant negative impact on ROE. However, capital adequacy ratio has insignificant positive impact on ROA and significant positive impact on ROE. At the same time, non-performing loan and operating efficiency ratio have significant negative impact on profitability (ROA and ROE) of the microfinance companies. Moreover, size of companies has significant positive impact on profitability of the microfinance companies. Therefore, this study concluded that liquidity, non-performing loan, operating efficiency ratio and size of companies are the key factors of profitability of microfinance companies in Nepal.

Keywords: Return on assets, return on equity, capital adequacy ratio, non-performing loan ratio and operating efficiency ratio.

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

The financial sector plays a major role in the economic development of any country, and Nepal is no exception. Microfinance companies are essential to economic growth because they allow resources to move from the surplus to the deficit sectors. These microfinance companies function as a channel for economic activity, either directly or indirectly. A prosperous microfinance enterprise has the potential to surmount obstacles and bolster the stability of the country's financial system. Furthermore, the financial system of a country is heavily dependent on its financial sector, making the profitability of that sector crucial. The majority of firms view the financial industry as a significant source of funding. Because of this, microfinance organizations' profitability, which is influenced by a number of internal and external factors as well as firm-specific and macroeconomic variables, is extremely essential (Tehulu, 2013).

The profitability of microfinance companies is defined as the difference between the amount of profit realized from assets and the cost of liabilities. The capacity of a microfinance organization to generate adequate revenue or to reduce operating costs, so assuming more efficiency, is what drives its profitability. It is determined by using ratios to summarize vast amounts of financial data and draw qualitative conclusions about the firm's profitability, such as the firm's returns on equity, net interest margin, and returns on asset (Ngumo et al., 2017). The literature refers to the profitability of microfinance companies as a result of both macro- and micro-level factors. Accounts in the income statement and balance sheet that are under management's control are known as micro variables.

Microfinance companies are seen as a means by which developing countries might lessen poverty, in addition to being a vital component of the financial system (Katuka & Mavhungu, 2016). Thanks to microfinance institutions (MFIs), a greater percentage of the world's population may now access financing, enabling the funding of projects that assist small businesses. Rich and poor live on the same planet, according to study published in Microfinance Bulletin.

Microfinance institutions (MFIs) are organizations whose main business is to provide microfinance services. Their objectives are to become sustainable and to expand their microfinance business. Microfinance is the term used to describe the provision of loans, savings accounts, money transfers, insurance, and other financial services to people with low incomes. Customers who lack access to regular businesses or other official financial service providers receive these services from MFIs, which encompass a wide range of these providers. Their goals, governing frameworks, and methods of functioning are different. Organizations that provide microfinance offer low-income (Kingawa & Ashenafi, 2018).

Microfinance is a top priority for public policy since it may significantly improve the lives of the impoverished by offering financial services. Other institutions, including the World Bank, national governments, the United Nations, and other nonprofit non-governmental organizations (NGOs), strongly support these kinds of initiatives. The MFI's objectives are to help the underprivileged manage risk and take advantage of possibilities that yield modest income by employing bank profit-making strategies among the impoverished (Ahlin & Jiang, 2008).

Katuka and Mavhungu (2016) argued that money is moving at exceptionally high rates from the west to emerging economies in quest of greater returns, which will probably lead to increased economic expansion in the recipient countries. But in the process, this hasn't been the case until recently. Most loans in the world's poorest countries are controlled by local loan sharks who charge astronomical interest rates and short maturity durations. Because of this, we observe that many emerging countries struggle to create opportunities for company owners and entrepreneurs due to low capital intensity and credit limits.

MFIs need to solve the aforementioned issue in order to turn a profit. MFIs have to put in a lot of effort to accomplish this component if they want to reach their desired outcome. Right now, the main concern is how this sustainability may be organically reached. And among academics, it is the contentious concern. Certain scholars argue that the main objective of MFIs ought to be poverty reduction via helping the poor get financial services that regular banks won't give them. Therefore, monetary gain cannot be their aim. They contend that reducing poverty ought to come first and be

more important than turning a profit. According to this perspective, MFIs require subsidies in order to accomplish their intended goals (Muriu, 2012).

While some contend that MFIs aim to combat poverty by providing loans and other financial services to the economically engaged poor, others counter that because they charge higher interest rates to cover the costs associated with providing these services and because they should strengthen their own financial position, their primary goal is to make a profit. This allows them to remain sustainable and improve services to the poor through innovation and technology, which calls for more funding. In any case, achieving profitability is essential to achieving the social objective. Long-term sustainability is crucial, and it cannot be achieved by accruing losses or increasing donor funding (Jorgensen, 2012).

Both at the micro and macro levels of the economy, the significance of the variables influencing the profitability of microfinance institutions may be evaluated. Profit is the most affordable source of funding and a necessary condition for a competitive financial organization on a micro level. Not only is it a consequence, but in an era of intensifying competition on the financial markets, it is a prerequisite for successful banking. Because making a profit is a prerequisite for operating any business, this is the primary goal of microfinance management (Bobakova, 2003). Macro economically speaking, a strong and successful financial sector can better resist adverse shocks and support the stability of the financial system. The significance of microfinance institutions' (MFIs') profitability at the micro and macro levels has sparked a great deal of interest in the variables influencing MFI profitability among academics, researchers, managers, and regulatory bodies (Athanasoglou et al., 2005).

Microfinance institutions are regarded as one of the tools for policy in order to end poverty and motivate various communities by giving small businesses their first funding. They must routinely investigate and review the key factors influencing profitability if they are to continue making such a significant contribution to the most underprivileged and emerging segments of society in the current dynamic macroeconomic climate. Thus, the study's goal is to pinpoint the variables that genuinely affect Nepalese microfinance organizations' profitability.

1.2 Problem Statement

Microfinance companies lower poverty by providing sustainably financed small business startup loans to individuals in need. Less than 15% of individuals in underdeveloped countries have access to financial services, according to research. The purpose of MFIs is to reduce this gap. The principal objective of Africa's development plan, which encompasses Rwanda, is the eradication of poverty. The inability of the impoverished to access credit has been cited as one of the factors that contributes to poverty (Tehulu, 2013). Without profitability, sustainability cannot be considered. Put another way, without MFI profitability, the poor cannot continuously receive financial services. San and Heng (2013) found that return on assets was the most consistent indicator of profitability. It is observed that all bank-specific characteristics have a significant impact on bank profitability that was projected. However, there was no evidence that the macroeconomic variables had an impact on profitability.

Saeed (2014) concluded that bank size, capital ratio, loans, deposits, liquidity, and interest rate had positive effects on ROA and ROE, but GDP and inflation rate had a negative effect. Ngumo, Collins, and David (2017) found a statistically significant and positive relationship between the operational effectiveness, capital adequacy, and company size of Kenyan microfinance banks and their financial success. Kawshala and Panditharathna (2017) discovered that size, capital ratio, and deposit ratio were significant bank-specific indicators of bank profitability in Sri Lanka. There was a favorable correlation between these factors and bank profitability. Liquidity was not a major factor and had a negative correlation. Adhikary and Papachristou (2017) found that industry concentration and liquidity were the only factors that significantly affected MFI profitability, whereas macroeconomic factors had no effect at all.

Mohanty (2017) found that a number of factors, including bank size, managerial effectiveness, credit risk, and macroeconomic variables like GDP level and annual inflation rate, had a substantial impact on the profitability of banks. Pradhan (2018) stated that while non-performing loans, liquidity, and inflation were all bad, the credit to deposit ratio, market share, GDP, and inflation were all positive. Kingawa and Ashenafi (2018) discovered that the funding structure and age of microfinance organizations had a positive and statistically significant effect on their profitability. While operational efficiency and size had a negative and statistically insignificant

influence, the gross domestic product (GDP) showed a positive coefficient but was statistically inconsequential. Neupane (2019) concluded that operational expenditure to operational income and non-interest income to total assets had an impact on return on assets. However, the ROA and NIM of Nepalese commercial banks have been significantly impacted by size.

Bhattarai (2019) asserts that whilst liquidity had a negative but significant influence on profitability, the inflation rate had a positive but insignificant effect. Abate and Mesfin (2019) have shown a statistically significant and positive relationship between capital adequacy, leverage, ownership, and profitability of banks. On the other hand, a statistically significant inverse relationship was found between bank profitability and GDP, interest rates, inflation, and operational efficiency. Gwachha (2019) found that asset size and deposit to asset ratios had a favorable and significant influence on bank profitability. Conversely, the loans portfolio had a large and adverse effect on bank profitability. Dissanayake (2020) asserted that the cost per borrower dictated operational self-sufficiency and return on equity. The profit margin, return on equity, and return on assets were also calculated using the write-off ratios and operating expense ratios.

Budhathoki and Rai (2020) indicated that bank profitability was significantly impacted by three predictor variables: capital adequacy ratio, operational efficiency, and asset quality. Mishra, Kandel, and Aithal (2021) found that there was a negative association between ROA and ROE and the loan, deposit, and capital ratios, and a positive correlation between bank size and inflation. As per Anggraeni, Basuki, and Setiawan (2022), there is no significant effect of liquidity on profitability. OER and FBIR have a big influence on profitability. Shrestha (2023) found that the weighted average interest rate spread, deposit ratio, management effectiveness, and asset quality had a substantial positive influence on the financial performance of Nepalese MFIs, whereas the latter three factors had a large negative impact.

There are numerous internal and external factors that impact the profitability of microfinance companies in Nepal. These include the company's size, age, liquidity, underwriting risk, reliance on reinsurance, market share, and macro factors like the GDP growth rate and inflation rate. The lack of empirical study on the profitability of

microfinance firms was examined, along with the factors that drive research to make contributions to other areas. Ultimately, the aforementioned concerns spurred the investigation of the variables influencing the profitability of microfinance firms in Nepal. This study attempts to investigate company-specific elements that impact profitability in Nepalese financial institutions, while acknowledging the significance of the problem of factors impacting the microfinance company's profitability. The following problems are addressed in the study:

- i. What is the profitability position of microfinance companies in Nepal?
- ii. Whether there is relationship between specific factors and profitability of microfinance companies in Nepal?
- iii. Do the different factors like liquidity, capital adequacy ratio, operating efficiency ratio, non-performing loan ratio and bank size effect on profitability of microfinance companies in Nepal?

1.3 Objectives of the Study

The main purpose of the study is to evaluate the factors affecting profitability of microfinance companies in Nepal. The other specific objectives are as follows:

- i. To assess the profitability position of microfinance companies in Nepal.
- ii. To examine the relationship between specific factors and profitability of microfinance companies in Nepal.
- iii. To analyze the impact of specific factors like liquidity, capital adequacy ratio, operating efficiency ratio, non-performing loan ratio and bank size on profitability of microfinance companies in Nepal.

1.4 Hypothesis of the Study

The aforementioned study questions were divided into the following hypotheses. As a result, the purpose of this study was to evaluate the following theories regarding Nepalese microfinance companies.

1. H₁: Liquidity ratio has significant impact on profitability of microfinance companies in Nepal.
2. H₂: Capital adequacy ratio has significant impact on profitability of microfinance companies in Nepal.
3. H₃: Operating efficiency ratio has significant impact on profitability of microfinance companies in Nepal.

4. H₄: Non-performing loan ratio has significant impact on profitability of microfinance companies in Nepal.
5. H₅: Size of companies has significant impact on profitability of microfinance companies in Nepal.

1.5 Rationale of the Study

Numerous studies on the factors influencing profitability have been carried out, and a range of empirical findings on the elements have been noted. In this sense, it was anticipated that the study's findings will offer more insightful data on the profitability analysis of Nepali microfinance firms and how it affects stakeholders. Company managers will benefit from this research since it will enable them to focus on improving the precise elements that contribute to their profitability and, in turn, guarantee that their profitability analysis continues to improve. This study also serves as a guide for Treasury and corporate policy makers as they develop measures that would guarantee favorable macroeconomic indicators, hence promoting growth and profitability in this industry. This study will serve as a helpful manual for academics and researchers working in the fields of banking, economics, and finance as they conduct additional research in the sector.

1.6 Limitations of the Study

The limitations of the study are as follows:

1. This study is concentrated on factors affecting profitability of microfinance companies in Nepal.
2. Out of 55 microfinance companies, only five microfinance companies Chhimek Laghubitta Bikas Bank Limited, Janutthan Samudayic Laghubitta Bikas Bank Limited, NMB Laghubitta Bitiya Sanstha Limited, Swabalmaban Laghubitta Bittiya Sanstha Limited and Nirdhan Utthan Laghubitta Bitiya Sanstha Limited are taken in this study.
3. This study is based on secondary data such as financial annual reports, books, journals and articles etc.
4. The study only includes up to 2021/22 due to unavailable data of 2022/23.
5. Statistical tools are used in this study but ignore the financial tools.

CHAPTER-II

LITERATURE REVIEW

The review of the literature is a crucial component of the study. In order to understand all previous studies, their conclusions, and their shortcomings and to enable the execution of more research, research studies of other pertinent propositions in related fields of study are reviewed. Numerous books, dissertations, reports, handouts, and articles from newspapers and magazines are reviewed for this. There are two sections to this chapter:

- Theoretical Review
- Empirical Review

2.1 Theoretical Review

2.1.1 Theories of Profitability

The theories that are reviewed in this study are: the efficiency structure theory, the balance portfolio theory, cost theory and market power theory and risk return trade of theory.

2.1.1.1 Efficiency Structure Theory

On the other hand, the efficient structure the theory contends that banks' increased efficiency allows them to generate substantial profits. The X-efficiency and Scale-efficiency hypotheses are two more innovative ideas that are part of the Efficient Structure (ES). The X-efficiency idea states that companies with lower overhead make more money. These businesses are more likely to increase their market shares, which might lead to a more concentrated market; nevertheless, there is no proof that concentration and profitability are related (Athanasoglouetal et al., 2008). Economies of scale are prioritized by the scale approach over variations in manufacturing technology or management. Through economies of scale, larger businesses can achieve lower unit costs and bigger profits. Large companies are able to obtain market shares as a result, which may lead to greater concentration and ultimately profitability. Conversely, the efficiency structure, like the Portfolio theory, makes the significant assumption that managerial choices and internal efficiencies have an impact on bank performance.

2.1.1.2 The Balanced Portfolio Theory

According to Olweny and Shipo (2011), the portfolio theory method is the most pertinent and significant in research on the performance of companies. The optimal holding of each asset in a wealth holder's portfolio is a function of policy decisions determined by a number of factors, including the size of the portfolio, the vector of risks associated with owning each financial asset, and the vector of rates of return on all assets held in the portfolio, according to the Portfolio Balance Model of Asset Diversification. It suggests that actions made by business management are what lead to portfolio diversification and the intended portfolio composition of commercial enterprises. Additionally, the management's determination of a workable set of assets and liabilities as well as the unit expenses incurred by the business in creating each asset component affect the potential to generate maximum profits (Olweny & Shipo, 2011).

2.1.1.3 Cost Theory

Aremu, Ekpo, and Mustapha (2013) suggested that "Cost Theory" explains why capital adequacy and profitability are positively correlated. In order to lower the projected value of their costs and prevent financial distress, corporations may need to hold more equity and boost their capital ratio if their costs are unexpectedly high as a result of environmental changes.

2.1.1.4 The Market Power Theories

Based on Tregenna (2009), the market power hypothesis, when applied to businesses, asserts that an industry's market structure affects a company's success. The Structure-Conduct Performance (SCP) and Relative Market Power (RMP) hypotheses are two different ways that make up the market power hypothesis. The SCP method states that enterprises have the potential to gain market dominance due to the degree of market concentration in the financial industry, which could increase their profitability. Regardless of their efficiency, companies operating in more concentrated markets are more likely to make abnormal profits due to their ability to charge higher loan rates and lower deposit rates for monopolistic or collusive reasons than are companies in less concentrated markets (Tregenna 2009).

2.1.1.5 Risk Return Trade of Theory

According to the risk-return in place principle, businesses tend to make more money when they take on more risk through more leverage (debt over equity). Signaling theory proposed by Berger (1995) states that a high equity ratio (equity over debt) results in high profit and high cost of bankruptcy. According to the concept, banks build up more equity capital to avoid financial difficulties when they anticipate that the costs of bankruptcy would be substantial.

Olweny and Shipho (2011) argued that the "Risk-Return Hypothesis" explained the unfavorable correlation between profitability and capital adequacy. A bank will increase leverage or debt in order to increase profitability when it chooses to take on greater risk in order to obtain higher expected returns. This implies that a bank would have to lower its equity-to-asset ratio (capital) in order to raise leverage. This hypothesis therefore illustrated how a bank's preference for using leverage over equity can have a detrimental impact on capital sufficiency and bank profitability.

2.1.2 Profitability of Microfinance Companies

In addition to seeking to reassure government regulators about the stability of the businesses' loan investments and policies, today's microfinance organizations are under tremendous pressure to meet the demands of its depositors, staff, investors, and borrowing clients. Like any other type of business, microfinance institutions are driven by profit. The main objective of development banks is to boost their profitability (Shrestha, 2004).

Microfinance companies invest public deposits in businesses that provide the best income or asset returns. Therefore, their profit margin has a big impact on whether they decide to invest or offer a loan or advance. The interest rate charged by development banks, the volume and length of loans given, and the kind of investments made in different assets all have an impact on the profit margins of microfinance enterprises.

Microfinance companies' aspirations for profit seem reasonable given that the development bank must pay for all costs, including interest to depositors and other

administrative expenses. They should also set aside money for provisions and reserves and pay dividends to shareholders who contributed to the bank's capitalization. The microfinance firms do this by calculating the cost of funds and expected return; if the spread is sufficient to cover the investment's risk and meet its liquidity obligations, they will proceed with the deal (Besley, 2004).

A microfinance business that is successful invests the majority of its capital in various revenue-generating assets while safeguarding against liquidity issues, i.e., maintaining a cash reserve to cover depositors' daily needs. Ultimately, a microfinance company is merely an enterprise established to optimize the value of the capital invested by its owners at a manageable risk level. To sum up, the primary goal of Nepalese microfinance organizations is to maximize profits among all other goals. The company's earnings serve as the primary financial indication of a commercial enterprise (Saunders & Cornett, 2008).

2.1.3 Main Purpose of Profitability Analysis

The financial statements and other financial data must be understandable to all parties engaged in a firm. Profitability ratio analysis therefore becomes a crucial instrument for financial analysis and management. Let's look at some of the objectives that ratio analysis satisfies (Glautier & Underdown, 2001).

Measure of Profitability

Every organization's primary objective is to make a profit. How would you decide whether a profit of Rs.5 lakhs made by ABC firm last year is a good or bad statistic, then? Ratio analysis provides the necessary context, which is needed to measure profitability. A firm's profitability can be determined by looking at its gross profit ratio, net profit ratio, expense ratio, etc. These ratios can be used by management to identify problem areas and make improvements.

Evaluation of Operational Efficiency

A number of measures show how effectively a corporation manages its resources, especially its assets. Effective asset and financial resource management is essential to reducing unnecessary spending. Any mishandling of assets will be brought to light by efficiency and turnover rates.

Ensure Suitable Liquidity

Every company has to make sure that part of its assets are liquid in case it needs money right now. As a result, ratios like the current ratio and quick ratio are used to assess a company's liquidity. These assist a company in keeping up the necessary degree of short-term solvency.

Overall Financial Strength

A number of ratios are useful in assessing the long-term solvency of the company. They assist in determining whether a company's assets are being stressed or whether it is overly leveraged. To prevent future liquidation, the management will need to make the necessary corrections as soon as possible. These measures include leverage ratios and debt-to-equity ratios, among others.

Comparison

To obtain a more comprehensive picture of the organization's financial health and fiscal situation, it is necessary to compare its ratios to the industry norms. If the firm is not meeting market criteria, the management has the authority to take remedial action. To gauge the company's success, the ratios may also be compared to those from prior years. We call this trend analysis.

2.1.4 Profitability Indicators

The primary objective of insurance firms is profit. The ultimate goal of all the tactics created and actions taken in this regard is to achieve this lofty goal. This does not imply, however, that microfinance institutions have no other objectives. Microfinance institutions may also have other economic and social objectives. Nonetheless, this study's goal is connected to the primary goal of profitability. A number of ratios are used to assess the profitability of microfinance organizations, the most important ones being return on equity, return on asset, and net interest income (Garrinson & Norren, 2005).

A financial ratio called return on equity (ROE) measures a company's profit margin in relation to the total amount of invested or balance sheet shareholder equity. The return on equity (ROE) is what investors seek for after making an investment. An

organization that can generate funds internally is more likely to have a high return on equity. Therefore, the better the corporation is at generating profits, the greater the ROE. Net revenue after taxes divided by total equity capital is known as return on equity (ROE). It shows the rate of return that investors in microfinance enterprises receive on their capital. ROE is a measure of a company's management's efficiency in allocating shareholders' cash. Therefore, the previously stated statement implies that management is more efficient in using shareholders' cash if the ROE is higher (Garrinson & Norren, 2005).

ROA is a significant metric that indicates the profitability of an insurance company. It's the ratio of income to total assets. It evaluates how successfully the company's management team can use its resources to produce a profit. To put it another way, it shows how well the organization uses its resources to generate income. It also demonstrates how effectively management of a business makes use of all available resources to generate net revenue. A greater return on assets (ROA) suggests that the company is making better use of its resources.

Additionally, net profit after taxes is divided by the entire amount of paid-in capital to determine return on investment. It assesses how well the company uses the capital that has been invested. Put another way, this ratio illustrates the company's capacity to produce the necessary return (anticipated return) based on how shareholders use and manage their invested resources (Glautier & Underdown, 2001).

2.2 Empirical Review

San and Heng (2013) examined factors affecting the profitability of Malaysian commercial banks. The objective of this study was to investigate into how macroeconomic factors and bank-specific traits affected the financial performance of Malaysian commercial banks between 2003 and 2009. Regression models are used in this study to link bank profitability ratios to a range of explanatory factors. Return on equity (ROE), net non-interest margin (NIM), and return on assets (ROA) are the three ratios that indicate profitability metrics. The conventional banking literature provides seven variables as stand-ins for macroeconomic and bank-specific variables. The study's findings showed that ROA was the most effective metric for gauging profitability. The predicted strong impact of all bank-specific factors on bank

profitability is seen. Nevertheless, there was no proof that the macroeconomic factors affected profitability.

Saeed (2014) investigated bank-related, industry-related and macroeconomic factors affecting bank profitability: a case of the United Kingdom. This study examined at how macroeconomic, industry-specific, and bank-specific factors affected bank profitability before to, during, and following the 2008 financial crisis. 73 UK commercial banks are chosen for this purpose based on the availability of the necessary data. Bank scope and data-stream databases are the sources of the empirical data for these banks, which were gathered between 2006 and 2012. After doing regression and correlation studies on the data, it was shown that while GDP and inflation rate had a negative impact on ROA and ROE, bank size, capital ratio, loans, deposits, liquidity, and interest rate had a favorable impact. The results of this study may help in decision-making and enhance the performance of financial institutions going forward for UK banks, the government, investors, policymakers, and shareholders.

Ngumo, Collins and David (2017) examined the determinants of financial performance of microfinance banks in Kenya. The main objective of the study was to analyze the variables that affect the financial performance of microfinance companies. Regression analysis and correlation were employed to scrutinize the collected information. The study found that the operational effectiveness, capital sufficiency, and company size of Kenyan microfinance banks were positively correlated with their financial performance. Nonetheless, a small inverse relationship between credit risk, liquidity risk, and the financial performance of Kenyan microfinance institutions was found by the study. The study discovered a strong relationship between the operational effectiveness, capital sufficiency, and business size of Kenyan microfinance banks and their financial performance.

Kawshala and Panditharathna (2017) analyzed the factors effecting on bank profitability. This study explored at how profitability in Sri Lankan domestic banks was affected by factors unique to each banks. This study used the sample frame annual reports of Sri Lanka's domestic banks and was conducted using a comprehensive panel data set. A robustly balanced panel data set including 60

observations from 12 local banks in Sri Lanka between 2011 and 2015 serves as the foundation for a regression analysis. Profitability has been determined to be the dependent variable, and bank size, capital, deposits, and liquidity as independent factors. The profitability, size logarithm of all assets, equity ratio, capital, deposit ratio, and liquidity ratio were all determined in this study using return on assets. With the use of the STATA Statistical Software Package, regression models were examined. Size (0.001), capital ratio (0.000), and deposit ratio (0.027) are important bank-specific drivers of bank profitability in Sri Lanka, according to regression analysis. These elements and bank profitability have a favorable correlation. Liquidity (0.188) has a negative connection and is a negligible factor.

Adhikary and Papachristou (2017) examined determinants of profitability in South Asian microfinance institutions. This study investigated at the institutional, sectoral, and national variables that affect the profitability of microfinance institutions (MFIs) in South Asia. To this end, panel regression models, both static and dynamic, are used to analyze a panel of 114 MFIs from 2003 to 2011. Our findings demonstrated that the main factor influencing profitability is cost-efficiency. Additionally, there is a favorable correlation between MFI profitability and high capitalization, liquidity, and industry concentration. However, credit risk lowers it, with macroeconomic considerations having no discernible impact. These results hold up well under different interpretations of profitability.

Mohanty (2017) examined factors affecting bank profitability of bank of Ethiopia: an econometric analysis. The aim of this research was to examine the factors that influence banks' profitability in the CBE by utilizing time series data covering the CBE from 1983 to 2012. The study employed a quantitative research methodology, and several linear regression models are utilized to examine secondary financial data in order to determine the bank profitability metrics, such as return on asset (ROA). The main measure of bank profitability, or ROA, was examined independently for the effects of bank size, management effectiveness, liquidity, credit risk, real GDP growth rate, and annual inflation rate using the OLS method. The empirical findings showed that the profitability of banks is significantly impacted by both macroeconomic factors, such as the GDP level and annual inflation rate, and bank-specific characteristics, such as bank size, management effectiveness, credit risk, and credit

risk. With the exception of GDP and inflation rate, the empirical analysis demonstrates that all of the explanatory factors in this study have a negative impact on the profitability metric. Furthermore, every explanatory variable is statistically significant in the absence of liquidity.

Pradhan (2018) examined bank specific and macroeconomic determinants of bank profitability: a case of Nepal. Finding the variables influencing Nepalese banks' profitability was the aim of this study. It takes into account both macroeconomic and bank-specific variables. The study's foundation is a pooled cross-sectional analysis of 22 banks' 154 observations of secondary data from 2005–06 to 2011–12. This study makes the initial approximation to the theory, which holds that a number of firm-specific and macroeconomic variables, including the credit deposit ratio, market share, GDP, inflation, liquidity, and non-performing loans, affect the profitability of the banks. According to the survey, the average return on assets was 14.42 percent, and the average return on equity was 16.18 percent. The average ratio of non-performing loan to total loans was observed to be 4.23 percent. The beta coefficients for inflation, liquidity, and non-performing loans were negative, while they were positive for credit to deposit ratio, market share and GDP. However, the coefficients were significant for credit deposit ratio and liquidity only at 5 percent level of significance. Thus, this study concludes that credit to total deposit ratio and liquidity are the major determinants of profitability of Nepalese banks.

Ashenafi and Kingawa (2018) investigated factors affecting profitability of microfinance institutions: a study of MFIs in Southern nation nationalities peoples regional state. This study examined the factors that affected the profitability of microfinance institutions in the Southern Nations Nationalities People's Regional State (SNNPRS) from 2009 to 2013. The factors examined included both external and internal factors. The study employed a quantitative research methodology that was mainly concerned with the examination of secondary documents and financial statements in order to achieve this. In order to calculate profitability and return on asset (ROA), it also used multiple linear regression modeling, an excel sheet for three MFIS data analyses, and descriptive statistics. A linear regression model was used to investigate the impact of size, age, GDP, operating efficiency (OPE), finance structure (FAS), and operating efficiency (OPE) on major MFI profitability. The results of the

research show that the funding arrangements and ages of microfinance companies positively and statistically significantly affect their profitability. Furthermore, whether the learning effect may predict the profitability of SNNPRS MFIs was tested using the age of MFIs. GDP showed a positive coefficient but was statistically negligible, whereas operating efficiency, size, and GDP all had negative and statistically insignificant effects. These findings imply that the profitability of SNNPRS MFIs was unaffected by the improvement in the economy as shown by GDP growth. The result showed a statistically significant positive coefficient, indicating that MFIs get more profitable as they grow. Consequently, MFIs would become more profitable as they get older.

Neupane (2019) administered factors influencing profitability in Nepalese commercial banks. For the analysis, eight commercial banks from the years 2011 to 2017 were used. Using regression analysis, the dependent variables for measuring bank profitability were Return on Assets and Net Interest Margin; the bank-specific variables were Capital Adequacy Ratio, Size, Credit to Deposit Ratio, Operational Expense to Operational Income, Non-Performing Loan to Total Loan, and Non-Interest Income to Total Assets; the macro variables for determining the impact of these independent variables on bank profitability were GDP and Inflation. The findings indicated that the ratios of credit to deposit and operational expense to operational income, as well as non-interest income to total assets, had a substantial impact on net interest margin and return on assets. Nonetheless, size has had a notable impact on Nepalese commercial banks' ROA and NIM.

Bhattarai (2019) examined bank specific variables (CD, MS, CRR and NPL) and macroeconomic variables (GDP and INF) that effects on profitability of Nepalese banking cases. For the study, secondary data from eleven sample banks totaling seventy-seven observations from 2011 to 2017 was obtained. The GDP and market share prices have a substantial and positive correlation with return on assets. The outcome demonstrates how the gross domestic product affected the profitability of Nepalese banks. It is a sign of expanding economic activity. Profitability is significantly and negatively impacted by the liquidity (CRR). Profitability falls if liquidity rises, and vice versa. Lastly, profitability is positively but marginally impacted by the rate of inflation. Therefore, the study concluded to the conclusion

that the three main elements influencing the profitability of Nepalese banks are market share, liquidity, and gross domestic product. As a result, bankers should pay close attention to these aspects in order to maximize profitability. In this sense, authorities also pay attention to monitors.

Abate and Mesfin (2019) investigated factors affecting profitability of commercial banks in Ethiopia. This study investigated at the macroeconomic, industry-specific, and bank-specific variables that affected the profitability of nine Ethiopian commercial banks between 2007 and 2016. In order to achieve this, the study uses a quantitative research methodology, and nine sample commercial banks—out of the eighteen banks that operate in Ethiopia—were specifically chosen. In order to assess the raw data obtained from audited financial statements, a random effect regression model was performed. The study's conclusions demonstrate that the profitability of banks is positively and statistically significantly correlated with capital adequacy, leverage, liquidity, and ownership. Conversely, operational effectiveness Bank profitability is negatively and statistically significantly correlated with GDP, inflation, and interest rates. Statistical analysis reveals that the correlation between bank size and branch count is negligible. Ethiopian commercial banks must thus consider both internal and macroeconomic factors simultaneously when developing strategies to improve their performance, rather than focusing just on internal structures and regulations.

Gwachha (2019) analyzed bank-specific and macroeconomic determinants of the profitability in the Nepalese banking sector over the time period from 2004 to 2013. 510 observations from a sample of 51 Nepalese banks registered on NEPSE until mid-April 2013 are used in the study. Return on equity (ROE) and return on assets (ROA), which depend on macroeconomic and bank-specific factors, are used to calculate a bank's profitability. The results demonstrate that asset size and deposit to asset ratio have a positive and significant impact on bank profitability using a balanced panel data set. Nonetheless, bank profitability is adversely and significantly impacted by the loans portfolio. Only the stock market capitalization and real interest rate have a beneficial impact on banks' performance when it comes to macroeconomic variables. These findings imply that banks can raise non-interest revenue and bank size while lowering the credit-to-asset ratio in order to increase profitability. Moreover, rising

stock market capitalization and real interest rates may result in increased bank profitability.

Dissanayake (2020) examined the determinants of microfinance profitability: Evidences from Sri Lankan microfinance institutions. The purpose of this study was to identify the key factors that significantly influence the profitability of microlending in Sri Lankan microfinance organizations. Eleven microfinance institutions in Sri Lanka that were active in microfinance between 2005 and 2010 served as the basis for this study. The primary goal of this study is to use multiple regression models to examine the data. Ultimately, this study discovered that operational self-sufficiency and return on equity were determined by the cost per borrower. In addition, the write-off ratios and operating expense ratios determined the profit margin, return on equity, and return on assets. The study's observations on the debt/equity variable suggest a causal relationship between the models' respective determinants, operational self-sufficiency and return on assets.

Budhathoki and Rai (2020) analyzed the effect of specific factors on bank profitability: evidence from Nepalese banks. The objective of this research was to investigate how banks' profitability is impacted by operating efficiency, asset diversification, capital adequacy ratio, and asset quality. The bank scope data from eight commercial banks during 2002–2003 and 2016–2017 is used in this study. In total, 96 observations are included in the study. To examine the data, the ordinary least squares model is employed. The findings show that the capital adequacy ratio, operating efficiency, and asset quality are the three predictor variables that have the greatest impact on bank profitability. However, there is no discernible impact of the predictor variable diversification on banks' profitability. The study's findings assist bankers and legislators in making wise decisions that will increase banks' profitability.

Mishra, Kandel and Aithal (2021) analyzed profitability in commercial bank: a case from Nepal. The purpose of this study was to evaluate the effect, contribution, and correlation between capital, loans and deposits, size, inflation, and other factors, and bank profitability. In addition to the poll, secondary data from seven commercial banks between 2013 and 2019 were gathered as primary data. The utilization of

regression analysis, correlation, and ratio analysis has ensured a contributing relationship between return on equity (ROE), net interest margin (NIM), and return on assets (ROA). Bank sizes are often growing. The standard deviation's declining trend indicated that as the year goes on, there is less fluctuation in the use of total assets by Nepalese commercial banks of a certain size. ROA and ROE have a negative association with loan, deposit, and capital ratios; however, they have a positive relationship with bank size and inflation. On the other hand, bank size, loan ratio, deposit ratio, and inflation all exhibit positive associations with NIM, whereas the capital ratio has an adverse relationship with it.

Anggraeni, Basuki and Setiawan (2022) analyzed factors influencing on bank capital and profitability: evidence of government banks in Indonesia. The aim of this study was to investigate the potential effects of liquidity, non-performing assets, sensitivity, and efficiency on the capital and profitability of state-owned banks in Indonesia. In this study, a random sample of public banks was employed. From the first quarter of 2014 until the fourth quarter of 2019, data was gathered. The sample strategy employed was purposeful sampling. The study's conclusions indicate that while liquidity (LDR) had no discernible impact on profitability, it significantly increased capital. Based on the ACA and NPL ratios, there was no correlation identified between profitability, capital, and productive asset quality. The behavior of the sensitivity ratio, which was symbolized by the NOP to IRR ratio, varied. While NOP greatly improved capital but not profitability, sensitivity had no discernible effect on either. OER and FBIR both have a substantial influence on capital and profitability in terms of efficiency, but in different ways. OER has a very negative impact on capital and profitability. Fee-based income (FBIR) significantly improved capital while having a detrimental effect on profitability.

Shrestha (2023) investigated impact of firm-specific factors on the financial performance of Nepalese microfinance institutions. The purpose of this study was to examine how firm-specific factors affected Nepalese Microfinance Institutions' (MFIs) financial performance. The data in this study were analyzed using a multivariate regression model. This study found that the financial performance of Nepalese MFIs was significantly impacted negatively by asset quality and significantly positively by deposit ratio, managerial effectiveness, and weighted

average interest rate spread. Thus, the study came to the conclusion that Nepalese MFIs' financial performance was significantly impacted by firm-specific characteristics.

Table 1

Summary of Empirical Review

S. N.	Author/Date	Title	Objective	Methodology	Findings
1	San, O. T., & Heng, T. B. (2013).	Factors affecting the profitability of Malaysian commercial banks.	This study intended to investigate the impact of bank-specific characteristics and macroeconomic conditions on Malaysian commercial banks financial performance	This study employed regression models that relate bank profitability ratios to various explanatory variables.	The study showed that ROA was the most effective metric for gauging profitability. The predicted strong impact of all bank-specific factors on bank profitability is seen. Nevertheless, there was no proof that the macroeconomic factors affected profitability.
2	Saeed, M. S. (2014).	Bank-related, industry-related and macroeconomic factors affecting bank profitability: A case of the United Kingdom.	This study investigated the impact of bank-specific, industry-specific, and macroeconomic variables on bank profitability	The regression and correlation analyses are performed to analyze the data.	This study found that bank size, capital ratio, loan, deposits, liquidity, and interest rate had positive impact on ROA and ROE while GDP and inflation rate had negative impact.
3	Ngumo, K. S., Collins, K. W., & David, S. H. (2017).	Determinants of financial performance of microfinance banks in Kenya.	The main objective of the study was to analyze the determinants of financial performance of microfinance companies.	The data collected was analyzed using correlation and regression analysis.	The study found that the operational effectiveness, capital sufficiency, and company size of Kenyan microfinance banks were positively correlated with their financial performance. Nonetheless, a small inverse relationship between credit risk, liquidity risk, and the financial performance of Kenyan microfinance institutions was found by the study.
4	Kawshala, H., & Panditharathna, K. (2017).	The factors effecting on bank profitability.	. This study examined the effect of bank specific factors of profitability	Regression model were analyzed by using STATA Statistical	This study revealed that size, capital ratio and deposit ratio were significant bank specific determinants of bank

			in Sri Lankan domestic commercial banks.	Software Package.	profitability in Sri Lanka. There was a positive relationship between those factors and bank profitability. Liquidity was an insignificant determinant and it has a negative relationship.
5	Adhikary, S., & Papachristou, G. (2017).	Determinants of profitability in South Asian microfinance institutions.	This study investigated the institution, industry and country specific factors that influence the microfinance institutions (MFIs) profitability in South Asia.	To this, a panel of 114 MFIs from 2003 to 2011 is examined using descriptive static and dynamic panel regression models.	This study found that the main factor influencing profitability is cost-efficiency. Additionally, there is a favorable correlation between MFI profitability and high capitalization, liquidity, and industry concentration. However, credit risk lowers it, with macroeconomic considerations having no discernible impact.
6	Mohanty, A. K. (2017)	Factors affecting bank profitability of commercial bank of Ethiopia: an econometric analysis.	The purpose of this study was to investigate determinants of banks profitability in CBE by using time series data of CBE from year 1983 to 2012.	The study used quantitative research approach and secondary financial data are analyzed by using multiple linear regression models.	The empirical findings showed that the profitability of banks is significantly impacted by both macroeconomic factors, such as the GDP level and annual inflation rate, and bank-specific characteristics, such as bank size, management effectiveness, credit risk, and credit risk.
7	Pradhan, R. S. (2018)	Bank specific and macroeconomic determinants of bank profitability: A case of Nepal.	The objective of this study was to determine the factors affecting profitability of Nepalese banks.	The study is based on pooled cross-sectional analysis of secondary data of 22 banks with 154 observations for the period 2005/06 to 2011/12.	The beta coefficients for inflation, liquidity, and non-performing loans were negative, while they were positive for credit to deposit ratio, market share and GDP. However, the coefficients were significant for credit deposit ratio and liquidity only at 5 percent level of significance.
8	Kingawa, C. D., & Ashenafi, D. S. (2018).	Factors affecting profitability of microfinance institutions: A study of MFIs in Southern nation nationalities	This study examined internal and external factors affecting profitability of microfinance institutions of southern	The study used multiple linear Regression model, descriptive statistics and excel sheet for three MFIS	The results of the research showed that the funding arrangements and ages of microfinance companies positively and statistically significantly affect their profitability. Furthermore, whether the learning effect may predict the profitability

		peoples regional state.	nations nationalities people's regional state (SNNPRS) covering the period of 2009-2013.	data analysis to measure profitability	of SNNPRS MFIs was tested using the age of MFIs. GDP showed a positive coefficient but was statistically negligible, whereas operating efficiency, size, and GDP all had negative and statistically insignificant effects.
9	Neupane, G. (2019).	Factors influencing profitability in Nepalese Commercial Banks.	The object of this research is to examine factors influencing profitability in Nepalese Commercial Banks. Eight commercial banks over the time period from 2011 to 2017 were taken for analysis.	Linear regression is a statistical tool used to determine the factor influencing profitability.	The findings indicated that the ratios of credit to deposit and operational expense to operational income, as well as non-interest income to total assets, had a substantial impact on net interest margin and return on assets. Nonetheless, size has had a notable impact on Nepalese commercial banks' ROA and NIM.
10	Bhattarai, B. P. (2019).	The determinants of profitability of commercial banks in Nepal.	To examine bank specific variables (CD, MS, CRR and NPL) and macroeconomic variables (GDP and INF) that effects on profitability of Nepalese commercial baking cases.	The secondary data of eleven sample commercial bank with seventy-seven observations for the period of 2011 to 2017 has been taken for the study.	The coefficient of market share prices and gross domestic product have significant and positive with return on assets. The liquidity (CRR) has negative but significant impact on profitability. If the liquidity increases profitability decreases and vice versa. Finally, the inflation rate has positive but insignificant effect on profitability.
11	Abate, T. W., & Mesfin, E. A. (2019)	Factors affecting profitability of commercial banks in Ethiopia.	This study examined the bank-specific, industry-specific and macro-economic factors that affect bank profitability of nine commercial banks in Ethiopia	Random effect regression model was run to analyze the raw data collected through audited financial statements.	This study found that the profitability of banks is positively and statistically significantly correlated with capital adequacy, leverage, liquidity, and ownership. Conversely, operational effectiveness Bank profitability is negatively and statistically significantly correlated with GDP, inflation, and interest rates. Statistical analysis reveals that the correlation between bank

12	Gwachha, K. P. (2019).	Bank specific and macroeconomic determinants of banking profitability in Nepal	To analyze the bank-specific and macroeconomic determinants of the profitability in the Nepalese banking sector over the time period from 2004 to 2013.	The study uses data from a sample of 51 Nepalese banks listed on NEPSE till mid-April 2013 with 510 observations for the study period. The data collected was analyzed using correlation and regression analysis.	size and branch count is negligible. The results demonstrated that asset size and deposit to asset ratio have a positive and significant impact on bank profitability using a balanced panel data set. Nonetheless, bank profitability is adversely and significantly impacted by the loans portfolio. Only the stock market capitalization and real interest rate have a beneficial impact on banks' performance when it comes to macroeconomic variables.
13	Dissanayake, D. M. N. S. W. (2020).	The determinants of microfinance profitability: Evidences from Sri Lankan microfinance institutions.	This study was undertaken with the objective of asserting the significant determinants of microfinance profitability in Sri Lankan microfinance institutions.	Mainly, this study intends to analyze the data by means of employing multiple regression models.	This study found that operational self-sufficiency and return on equity were determined by the cost per borrower. In addition, the write-off ratios and operating expense ratios determined the profit margin, return on equity, and return on assets. The study's observations on the debt/equity variable suggest a causal relationship between the models' respective determinants, operational self-sufficiency and return on assets.
14	Budhathoki, P. B., & Rai, C. K. (2020).	The Effect of Specific Factors on Bank Profitability: Evidence from Nepalese Banks.	The purpose of the study was to examine the impact of assets quality, capital adequacy ratio, assets diversification and operating efficiency on banks' profitability.	The ordinary least squares model is used to analyze the data.	The results indicate that three predictor variables assets quality, operating efficiency, and capital adequacy ratio significantly affect bank profitability. But the predictor variable diversification does not affect banks' profitability significantly.
15	Mishra, A. K., Kandel, D. R.,	Profitability in commercial	This study aimed to assess	The correlation	This study found that there is a positive correlation

	& Aithal, P. S. (2021).	bank: A case from Nepal	the impact, contribution and relationship of size, loans and deposit, inflation and capital on the profitability of the banks.	and regression along with ratio analysis have been used to assure a contributory association among return on assets (ROA), return on equity (ROE) and net interest margin (NIM).	between bank size and inflation and ROA and ROE, but a negative correlation with loan, deposit, and capital ratios. In contrast, the capital ratio has a negative association with NIM, whereas bank size, loan ratio, deposit ratio, and inflation all show positive relationships with NIM.
16	Anggraeni, A., Basuki, B., & Setiawan, R. (2022).	Factors influencing on bank capital and profitability: Evidence of government banks in Indonesia.	The purpose of this research was to see if liquidity, non-performing assets, sensitivity, and efficiency have an impact on the profitability and capital of Indonesian state-owned banks.	The data was processed using SPSS software with multiple regressions.	The study found that while liquidity (LDR) had no discernible impact on profitability, it significantly increased capital. Based on the ACA and NPL ratios, there was no correlation identified between profitability, capital, and productive asset quality.
17	Shrestha, P. M. (2023).	Impact of firm-specific factors on the financial performance of Nepalese microfinance institutions.	This study aimed to analyze the impact of firm specific factors on the financial performance of Nepalese Microfinance Institutions (MFIs).	This study used multivariate regression model to analyze the data.	This study found that the weighted average interest rate spread, deposit ratio, managerial effectiveness, and asset quality had a substantial beneficial impact on the financial performance of Nepalese MFIs, whereas the asset quality had a large negative impact.

2.3 Research Gap

It refers to the knowledge gap left by earlier research. The objective of this research project differs greatly from that of other investigations. First off, research on the variables influencing profitability was conducted at various times. They had researched bank profitability analyses from earlier eras. It became vital to conduct fresh investigation on the profitability analysis of the most recent times up to 2021/22. Similarly, prior research did not have access to the element influencing the profitability of microfinance companies. They focused only on studying insurance

businesses or commercial banks. In order to address this shortcoming, a fresh investigation was needed to assess the variables influencing microfinance companies. Moreover, this study used descriptive, correlation analysis and multiple regression analysis which were not analyzed in the previous studies. That's why, this study is quite different from the previous studies.

CHAPTER–III

RESEARCH METHODOLOGY

The term "research methodology" describes the different sequential processes that a researcher would take while examining a subject with specific goals in mind. Stated differently, research methodology encompasses the diverse approaches and procedures utilized by the investigator across every facet of the investigation. Additionally, research methodology offers a methodical approach to resolving the research issue. It explains the procedures, instruments, methods, and approaches employed in the report's preparation and data analysis.

3.1 Research Design

The objectives of the study are taken into account when planning the research. A certain research design is required to accomplish the goals of the investigation. Descriptive and causal research has been done on the factors influencing the profitability of microfinance companies in Nepal in order to meet the specific goal of the study. While the causal research method is used to quantify the influence of factors on the profitability of microfinance enterprises in Nepal, the descriptive research design is used to analyze the status and pattern of factors and profitability.

3.2 Population and Sample, and Sampling Design

At present, there are 55 microfinance companies operating in Nepal (NRB, 2023). They constitute the population. Therefore, all microfinance companies are the population of study. Among them five microfinance companies i.e. Chhimek Laghubitta Bikas Bank Limited (CBBL), Janutthan Samudayic Laghubitta Bikas Bank Limited, (JSLBB), NMB Laghubitta Bitiya Sanstha Limited (NMBMF), Swabalmaban Laghubitta Bittiya Sanstha Limited (SWBBL) and Nirdhan Utthan Laghubitta Bitiya Sanstha Limited (NUBL) are taken as sample on the basis of purposive sampling method because these microfinance companies are top five in profitability at the present context as well as availability of data of ten years up to 2021/22. So, the researcher has chosen these five companies in this study.

3.3 Nature and Sources of Data, and Instruments of Data Collection

The secondary data is used by the research to achieve its goals. Secondary data are those that have previously been gathered or utilized by another party and are made public through published statistics found in journals, newspapers, magazines, annual reports, and other publications. The primary source of secondary data for this study is the annual reports of the relevant microfinance institutions. Aside from the yearly reports, a number of additional data sources, including newspaper, magazine, economic journals, Nepal Rastra Bank reports, and study plan papers, have also been used.

3.4 Method of Analysis

The researcher employs the following categories of analytical instruments in order to increase the study's specificity and dependability:

Arithmetic mean

A collection of observations' arithmetic mean is calculated by dividing their total by the total number of observations. All of the components are equally vital in this situation. In this investigation, the simple arithmetic mean is employed based on the analytical requirements.

$$\text{Mean } (\bar{X}) = \frac{X_1 + X_2 + X_3 + \dots + X_n}{n} = \frac{\sum X}{n}$$

Where,

$\sum X$ = sum of all values of the variable 'x'

n = number of observations

X = variables involved

Standard deviation

A measure of a random variable's unpredictable nature, calculated as the positive square root of the variance and represented as the average departure of a collection of data from its arithmetic mean. It is regarded as the most significant and helpful measure of dispersion, having all the necessary characteristics of variance and the benefit of being calculated in the same units as the original data.

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

Co-efficient of Variation (CV)

The coefficient of variation, or the ratio of the standard deviation to the mean, is a useful statistic for determining the degree of variation between two data series, even in situations when their means are widely different from one another. The CV is not suited for comparing two sets of variables since it may compare two sets of variables independently according on how variable each set is. It is calculated as under:

$$\text{Coefficient of Variation (CV)} = \frac{\text{S. D.}}{\bar{X}} \times 100$$

Correlation coefficient (r)

The correlation coefficient shows how one independent variable and another independent variable are related. It is a method for determining the relationship between these two variables. When there is a substantial correlation between the two variables that is, when changes in the value of the independent variable also have an impact on the value of the dependent variable there is a correlation coefficient.

$$\text{Correlation Coefficient (r)} = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}}$$

Where,

r = coefficient of correlation

$\sum XY$ = Sum of product of two series.

$\sum X^2$ = Sum of squared in X series

$\sum Y^2$ = Sum of squared in Y series

n = number of years

The value of this coefficient can never be more than + 1 or less than -1. Thus, + 1 and -1 are the limit of this coefficient. The value of r = + 1 implies the correlation between variables is positive and vice- versa. And zero denoted no correlation.

Multiple Regression Analysis

Regression analysis is a collection of statistical procedures used in statistical modeling to estimate the relationships between variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable (ROA and ROE) and independent variable (i.e. liquidity ratio, non-performing loan ratio, capital adequacy ratio, operating efficiency ratio and size of the companies). More specifically, regression analysis helps one understand

how the typical value of the dependent variable (or 'criterion variable') changes when any one of the independent variables is varied, while the other independent variables are held fixed. Therefore, the following model has been employed for the study of relationship and effect of the study variables.

$$\text{Model 1: } ROA_{it} = \beta_0 + \beta_1 LIQ_{it} + \beta_2 CAR_{it} + \beta_3 NPLR_{it} + \beta_4 OER_{it} + \beta_5 SIZE_{it} + e_{it} \quad (1)$$

$$\text{Model 2: } ROE_{it} = \beta_0 + \beta_1 LIQ_{it} + \beta_2 CAR_{it} + \beta_3 NPLR_{it} + \beta_4 OER_{it} + \beta_5 SIZE_{it} + e_{it} \quad (2)$$

Where:

ROA_{it} = Return on assets of microfinance company i^{th} for the time period t

ROE_{it} = Return on equity of microfinance company i^{th} for the time period t

LIQ_{it} = Liquidity ratio of microfinance company i^{th} for the time period t

CAR_{it} = Capital adequacy ratio of microfinance company i^{th} for the time period t

$NPLR_{it}$ = Non-performing ratio of microfinance company i^{th} for the time period t

OER_{it} = Operating efficiency ratio of microfinance company i^{th} for time period t

$SIZE_{it}$ = Size of companies i^{th} for the time period t

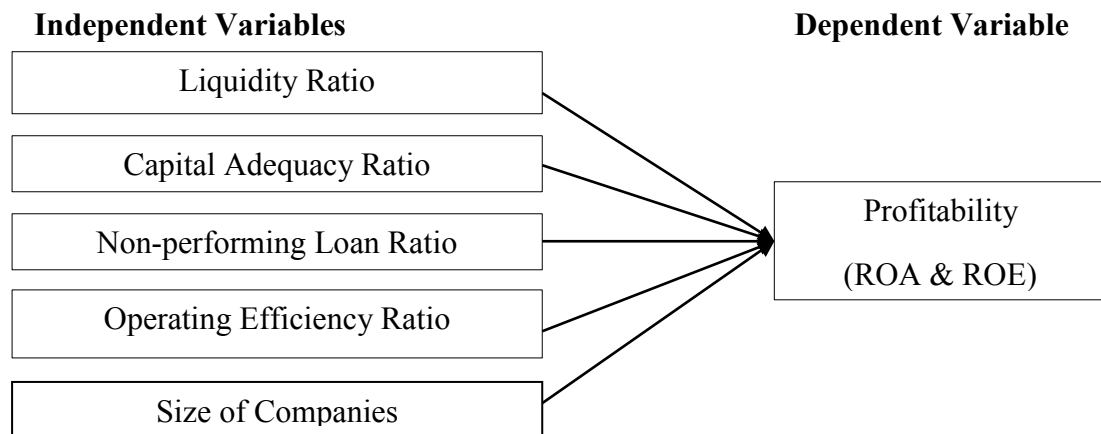
β_0 = The intercept (constant)

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression coefficient of independent variables.

e = error component.

3.5 Research Framework and Definition of the Variables

From the theoretical and empirical literature reviews, the following research framework of the study is developed by the researcher.



Source: Adhikary and Papachristou (2017); Mohanty (2017); Ashenafi and Kingawa (2018); Abate and Mesfin (2019); Ranabhat (2019) and Neupane (2019)

Dependent Variables

Return on Assets (ROA)

A financial measure called return on assets (ROA) indicates how much profit (or percentage of return) a business is making relative to its total resources. The net income for the year divided by the total assets—typically the average value during the year is the return on assets, or ROA. The ROA is a measure of a bank's management team's capacity to turn a profit on the assets the bank uses in its operations. Given that it shows the profits produced by the assets a bank has, this ratio is most likely the most crucial when assessing the effectiveness and operational success of microfinance businesses. It demonstrates how well assets are managed to produce profits. Neupane (2019) found that the ratio of net income to total assets measures the return on total assets (ROA) after interest and taxes. This ratio is calculated as net profit after tax divided by the total assets.

Return on Equity (ROE)

The most widely used internal performance metric for shareholder value is the ratio of return on equity (ROE). The return to shareholders on their equity is known as return on equity. According to Ranabhat (2019), return on equity (ROE) is a metric used to assess a company's profitability that indicates how much profit it makes using the capital that shareholders have invested. the percentage of stockholder equity that represents the amount of net income returned. The net income for the entire fiscal year is calculated after distributions to preferred shares and before dividends paid to common stockholders. Net profit after taxes is divided by the average total shareholder equity fund to arrive at this percentage.

Independent Variables

Liquidity Ratio (LIQ)

The liquidity ratio is computed by dividing liquid assets by total assets. Short-term deposits in financial institutions, cash and equivalents, the central bank's cash reserve, and other securities backed by the government and private sector make up liquid assets as a percentage of total assets. To get the liquid ratio, divide the acid liquid ratio by the total assets. Liquidity risk is one type of risk that businesses encounter; when they have fewer liquid assets on hand, microfinance enterprises are more vulnerable to large deposit withdrawals. Liquidity risk is therefore calculated using

the ratios of liquid assets to deposits and liquid assets to total assets. Ranabhat (2019) observed liquidity had significant negative impact on financial performance. Pradhan (2018) found a negative relationship between liquidity and profitability.

Capital Adequacy Ratio (CAR)

Capital is the quantity of money on hand that can keep a business going and act as a safety net in case something goes wrong stated as a proportion of the risk-weighted credit exposures of a business. One of the company-specific elements influencing the profitability of microfinance organizations is capital. The amount of cash on hand that can sustain a business and serve as a safety net in the event of a bad event is known as capital. Ashenafi and Kingawa (2018) mentioned that the effect of CAR or financial structure had significant positive. Likewise, Adhikary and Papachristou (2017) found significant positive effect of capital adequacy ratio on profitability of microfinance companies. Capital adequacy ratio is calculated dividing capital fund by total assets.

Non-performing Loan Ratio (NPLR)

The non-performing loan ratio (NPLR) is one of the most important indicators of credit risk and financial stability. A rise in NPLR is thought to indicate that microfinance companies' credit policies have failed, that their earnings have decreased, and that the financial crisis is largely to blame (Mohanty, 2017). Considering that NPLR shows the percentage of nonperforming loans in the overall loan portfolio, it is also seen as a gauge of how financial institutions handle their credit evaluation process. If the borrower is still making payments on the loan, the term "nonperforming loan" is more commonly used to describe late payments than default. Pradhan (2018) concluded that non-performing loans had significant negative effect on profitability. Ngumo, Collins and David (2017) found negative relationship between credit risk and financial performance of microfinance banks.

Operating Efficiency Ratio

Effective cost control should guarantee a more efficient use of MFIs' loanable resources, which might increase profitability. Higher operational cost to gross loan portfolio ratios indicate inefficient management. It serves as a gauge of management's capacity for cost containment and is predicted to have a negative relationship with earnings as better control over these outlays would boost productivity, which will

boost earnings. It is also one of the main factors that determine profitability that is looked at. Ashenafi and Kingawa (2018) found that the effect of operating efficiency ratio had significant positive of microfinance companies. At the same time, Adhikary and Papachristou (2017) concluded that the effect of operating efficiency ratio had also significant positive of microfinance companies.

Size of Companies

This variable is included to account for economies and diseconomies associated to size. Most academic research concurs that economies of scale and synergies only manifest to a certain extent. When financial institutions grow too complicated to manage, diseconomies of scale occur. Therefore, size might not have a linear effect. (Neupane, 2019). As a stand-in for size, the natural logarithm of MFIs' total assets is employed. The study will propose that it would be acceptable to log total assets prior to include them in the model, since the dependent variable (ROA) in the model can be deflated by total assets. Given that the size effect's projected indication on profitability is uncertain. Mohanty (2017) concluded that the effect of size of companies had positive.

CHAPTER - IV

RESULTS AND DISCUSSION

This chapter discusses and compares pertinent facts and information on the factors influencing the profitability of Nepalese microfinance enterprises while keeping the purpose of the research in thought. First, an examination of the microfinance firms' profitability characteristics is conducted. Using the statistical methods discussed in the chapter, the influence of particular parameters on lending and the profitability's link to other important variables is analyzed in the second half of the chapter. The third section contains a hypothetical analysis.

4.1 Results

In this section, analysis of the factor affecting profitability of micro finance companies is carried out using the statistical analytical tools such as descriptive statistic, correlations analysis and multiple regression analysis.

4.1.1 Position and Structure of Variables

It determines a microfinance company's profitability is its capacity to produce sufficient income or, supposing greater efficiency, lower operating expenses. However, there are different factors of profitability of microfinance companies but this study only depends on liquidity ratio, capital adequacy ratio, non-performing loan ratio, operating efficiency ratio, size of the company, return on assets and return on equity etc.

4.1.1.1 Liquidity Ratio

The ratio of liquid assets to total assets is determined by this ratio. As a percentage of the total assets of microfinance organizations, liquid assets comprise cash and equivalents, cash reserve at the central bank, short-term deposits in microfinance companies, and other government and nongovernment backed securities. The acid liquid ratio can be divided by the total assets to get the liquid ratio. One kind of risk that microfinance organizations face is liquidity risk; if they have fewer liquid assets, they are more susceptible to significant withdrawals of deposits. As a result, the ratio

of liquid assets to deposits and liquid assets to total assets is used to measure liquidity risk.

Table 2

Liquidity Ratio

(In percent)

Year	SWBBL	CBBL	NMBMF	JSLBB	NUBL
2012/13	10.21	23.07	70.84	25.21	13.66
2013/14	12.56	18.64	22.36	5.43	12.73
2014/15	11.58	12.91	21.37	20.15	9.40
2015/16	10.32	21.36	19.90	12.28	7.91
2016/17	12.87	18.06	15.37	10.36	11.06
2017/18	6.33	14.45	17.65	10.56	8.77
2018/19	3.74	16.51	8.79	7.20	7.22
2019/20	3.82	12.61	19.85	11.97	11.14
2020/21	1.82	6.01	6.98	14.84	4.00
2021/22	5.96	4.07	4.64	3.76	4.31
Mean	7.92	14.77	20.77	12.18	9.02
SD	4.06	6.15	18.69	6.56	3.26
CV (%)	51.25	41.66	89.96	53.90	36.19

Source: Appendix –I

Table 2 shows that the liquidity ratio of microfinance companies in Nepal. NMBMF reached a highest liquidity ratio of 70.84 percent during the fiscal year 2012/13. For the fiscal year 2018/19, SWBBL's lowest liquidity ratio is 3.74 percent. With an average liquidity ratio of 20.77 percent, the NMBMF has the highest ratio. With a 7.92 average liquidity ratio, the SWBBL has the lowest. It demonstrates that NMBMF's activities have been risk-free and that it has maintained to maintain a more liquid fund in relation to its total assets. NUBL has the lowest standard deviation among the sample's microfinance institutions, suggesting the lowest degree of risk. Based on the coefficient of variation of the ratios, NUBL has demonstrated the highest level of consistency, having the lowest CV of 36.19 percent.

4.1.1.2 Capital Adequacy Ratio

Capital ratios show how resilient financial organizations are to shocks. These ratios show which issues are now present. Problems with capital sufficiency and increased risk exposure might result from negative developments in these ratios. The equity/total assets ratio, or CAR, was employed in this study to gauge capital adequacy. Stated differently, the ratio of equity to total assets indicates the solvency

or capital strength of the organization. A higher ratio indicates improved performance, stability, and efficiency of the business, all of which have a favorable impact on loans.

Table 3

Capital Adequacy Ratio

(In percent)

Year	SWBBL	CBBL	NMBMF	JSLBB	NUBL
2012/13	10.01	7.61	33.08	23.27	7.94
2013/14	9.53	7.32	10.92	12.59	8.89
2014/15	10.83	8.57	8.42	11.54	9.31
2015/16	11.66	9.68	9.11	11.05	9.28
2016/17	10.80	9.77	10.10	8.80	9.64
2017/18	11.37	13.91	9.30	6.97	9.59
2018/19	11.39	15.02	8.95	8.36	11.10
2019/20	12.42	15.05	15.65	10.14	12.49
2020/21	14.24	14.79	16.47	9.35	14.51
2021/22	13.29	15.20	16.82	10.73	15.62
Mean	11.56	11.69	13.88	11.28	10.84
SD	1.44	3.37	7.51	4.52	2.56
CV (%)	12.46	28.85	54.11	40.11	23.66

Source: Appendix –I

Table 3 represents that the capital adequacy ratio of micro finance companies in Nepal. The highest capital adequacy ratio for NMBMF was 33.08 percent in the fiscal year 2012/13, while the lowest ratio for JSLBB was 6.97 percent in the fiscal year 2017/18. The highest average capital adequacy ratio for NMBMF is 13.88 percent. The lowest average capital adequacy ratio is 10.84 percent of NUBL. A greater proportion denotes better financial results as well as more consistency and effectiveness from the microfinance companies. As a result, NMBMF provides depositors with the highest degree of financial security together with the highest levels of operational efficiency and stability in microfinance firms. SWBBL has the lowest standard deviation and lowest risk of all of them. Based on the coefficient of variation of the ratios, SWBBL has demonstrated the highest level of consistency, having the lowest CV of 12.46 percent.

4.1.1.3 Non-Performing Loans Ratio

The percentage of non-performing loans in total loans is measured by this ratio. Among non-performing loans are subpar, dubious, and problematic loans. The riskier the investments, the higher the percentage of non-performing assets. A high

percentage of non-performing loans also raises loan loss provisions, which has a detrimental effect on profitability. This ratio evaluates the entire administration and monitoring of loan performance of microfinance firms. The NRB has mandated that all microfinance institutions set up loan loss provisions to guard against questionable and bad loans. This ratio aids in credit control and reduces the amount of non-performing loans.

Table 4

Non-performing Loan Ratio

(In percent)

Year	SWBBL	CBBL	NMBMF	JSLBB	NUBL
2012/13	1.21	0.05	2.94	0.72	0.95
2013/14	0.50	0.03	0.25	0.09	0.59
2014/15	1.73	0.02	0.18	1.38	0.22
2015/16	1.20	0.10	1.17	2.26	0.40
2016/17	0.73	0.09	0.99	1.04	0.32
2017/18	1.04	0.11	2.66	1.69	0.93
2018/19	0.80	0.28	2.08	2.29	1.19
2019/20	2.07	0.46	2.40	3.73	1.83
2020/21	4.56	0.64	3.24	4.47	4.11
2021/22	6.33	0.83	3.18	3.80	5.30
Mean	2.02	0.26	1.91	2.15	1.58
SD	1.91	0.29	1.17	1.45	1.74
CV (%)	94.82	109.47	61.44	67.59	109.56

Source: Appendix –I

Table 4 depicts that the non-performing loan ratio of micro finance companies in Nepal. The ratio of non-performing loans varies from 0.02 percent of CBBL in fiscal year 2014/15 to 6.33 percent of SWBBL in fiscal year 2021/22. 2.15 percent is the highest average ratio of JSLBB. At 0.26 percent of CBBL, the average non-performing loan ratio is the lowest. It is intended to indicate that CBBL has the lowest credit risk among them as it is operating the best or keeping its NPLs the best out of all of them. It is clear that CBBL monitors and follows up on loan utilization on a regular basis. SBI has the lowest risk of all the sample companies because its CBBL standard deviation is the lowest. NMBMF has been the most constant in the ratios, with the lowest coefficient of variation (CV) of 61.44 percent among them, according to the ratios.

4.1.1.4 Operating Efficiency Ratio

A performance metric called operating efficiency indicates how successfully MFIs are optimizing their processes and accounting for input and/or output costs. Effective cost control should guarantee a more efficient use of MFIs' loanable resources, potentially increasing MFI profitability. Greater operational cost to gross loan portfolio ratios indicates inefficient management. Another aspect of management quality is operational efficiency in controlling operating expenses. Subjective assessments of organizational discipline, control systems, personnel quality, management systems, and other areas are common ways for managers to convey their performance on a qualitative level.

Table 5

Operating Efficiency Ratio

(In percent)

Year	SWBBL	CBBL	NMBMF	JSLBB	NUBL
2012/13	14.31	4.82	6.04	10.31	7.24
2013/14	10.33	4.29	9.18	9.35	6.73
2014/15	10.48	3.80	8.99	4.59	7.10
2015/16	9.23	3.27	8.69	6.00	6.66
2016/17	10.60	3.05	10.15	5.02	5.90
2017/18	11.17	10.98	16.29	5.97	4.52
2018/19	10.94	11.75	6.01	6.46	4.58
2019/20	14.08	11.84	11.86	5.30	4.18
2020/21	9.27	8.52	5.02	4.11	4.08
2021/22	13.00	9.31	5.38	4.90	3.66
Mean	11.34	7.16	8.76	6.20	5.47
SD	1.84	3.67	3.48	2.05	1.40
CV (%)	16.18	51.20	39.70	33.06	25.55

Source: Appendix –I

Table 5 represents that the operating efficiency ratio of sample companies in Nepal. The NMBMF ratio is highest in the fiscal year 2017/18 at 16.29 percent. 3.05 percent is the lowest CBBL ratio for the fiscal year 2016/17. At 8.76 percent, NMBMF has the greatest average operational efficiency ratio. 5.47 percent is NUBL's lowest average operational efficiency ratio. It suggests that NUBL is using MFIs' loanable resources more wisely, which might increase MFIs' profitability. In addition, the management of the organization is more effective. NUBL is the least risky of the sample companies, with the lowest standard deviation. Based on the coefficient of

variation of the ratios, SWBBL has demonstrated the best degree of consistency among the variables, with the lowest coefficient of variation (16.18 percent).

4.1.1.5 Size of Companies

The natural logarithm of total assets is the size of the company. Because it affects the size of the companies' performance, the size of the companies has been considered a specific internal independent variable in this study. Performance has a good or negative relationship. If this is the case, managing a larger company will be more challenging. On the other hand, because of the economies of scale that come with size, it can be said that larger businesses can raise capital more cheaply. For this reason, it is one of the crucial determinants of the companies' profitability.

Table 6

Size of Companies (Total Assets)

(Rs. in thousand)					
Year	SWBBL	CBBL	NMBMF	JSLBB	NUBL
2012/13	3336801	4554069	39479	48920	4635186
2013/14	4830225	6211358	240166	111174	6153801
2014/15	6152957	9145280	591115	263728	8336037
2015/16	7628991	12524323	1176946	388703	11837775
2016/17	10018371	15509468	2149054	661385	15340083
2017/18	11711599	19549572	2674593	1072035	17967921
2018/19	15931443	24060301	3419402	1511056	22143425
2019/20	16979345	27259254	4525095	1752210	23615202
2020/21	18963611	34286755	5452710	2397833	26540523
2021/22	21889722	38255894	6104682	2401705	29621044
Mean	11744306.50	19135627.40	2637324.20	1060874.90	16619099.70
SD	6408806.09	11651811.19	2190355.93	909141.78	8787686.30
CV (%)	54.57	60.89	83.05	85.70	52.88

Source: Appendix –I

Table 6 represents that the size of companies of micro finance companies in Nepal. The highest average size of firms in CBBL is 19135627.40 thousand. 2637324.20 thousand is the smallest average firm size in the NMBMF. It demonstrates that Nepal had the greatest average size of CBBL firms during the research period. The firms can reduce costs as a result of the economies of scale that arise from this. Bigger businesses might be able to raise money more affordably. JSLBB has the lowest standard deviation of all the sample firms, meaning that it is the least risky. Based on

the coefficient of variation of the ratios, NUBL has demonstrated the highest level of consistency, having the lowest CV of 52.88 percent.

4.1.1.6 Return on Assets (ROA)

Return on assets (ROA) was an important indicator to consider when evaluating the financial success of microfinance institutions. Return on assets (ROA) is a financial metric that shows how profitable (or what proportion of profit) a company is producing in relation to all of its resources. The return on assets, or ROA, is calculated by dividing the net income for the year by the total assets, which is usually the average value for the year. The ROA demonstrates the ability of a company's management to generate revenue from the assets that the business employs to carry out its activities.

Table 7

Return on Assets

	(In percent)				
Year	SWBBL	CBBL	NMBMF	JSLBB	NUBL
2012/13	1.90	2.38	-2.05	1.70	1.98
2013/14	3.73	2.08	0.13	2.35	3.37
2014/15	3.83	3.15	1.82	2.98	3.35
2015/16	4.24	3.76	2.54	3.21	3.41
2016/17	2.64	3.71	2.11	2.31	3.73
2017/18	2.93	3.41	1.22	1.21	3.02
2018/19	2.66	3.10	1.76	1.62	3.22
2019/20	1.88	2.46	1.34	1.35	1.76
2020/21	3.62	3.83	3.62	2.07	4.48
2021/22	1.33	2.48	2.10	1.61	2.53
Mean	2.87	3.04	1.46	2.04	3.08
SD	0.97	0.65	1.53	0.67	0.81
CV (%)	33.78	21.35	104.91	32.99	26.30

Source: Appendix –I

Table 7 shows that the return on assets of microfinance companies in Nepal. NUBL has the highest average return on assets, at 3.08 percent. The lowest average return on assets for NMBMF is 1.46 percent. It implies that NUBL could control their complete operation because they had the highest ratio among them. Stated differently, NUBL optimizes the return on its assets by utilizing the asset that contributes most to the overall mean of ROA. CBBL has the lowest standard deviation of all the sample firms, meaning it is the least risky. Based on the coefficient of variation of the ratios,

CBBL has demonstrated the highest degree of consistency, having the lowest CV of 21.35 percent.

4.1.1.7 Return on Equity (ROE)

The other measure used to assess profitability performance is return on equity. The most often used internal performance indicator of shareholder value is return on equity, or ROE. The amount paid to shareholders on their equity is known as return on equity. Return on equity is a metric used to assess a company's profitability that indicates how much profit it makes using the capital that shareholders have invested in it. the net income yielded expressed as a proportion of shareholders' equity.

Table 8

Return on Equity

	(In percent)				
Year	SWBBL	CBBL	NMBMF	JSLBB	NUBL
2012/13	18.97	31.22	-6.20	7.32	24.87
2013/14	39.13	28.39	1.18	18.66	37.92
2014/15	35.35	36.71	21.57	25.84	35.94
2015/16	36.33	38.89	27.86	29.08	36.71
2016/17	24.40	38.00	20.91	26.27	38.67
2017/18	25.77	24.52	13.15	17.36	31.51
2018/19	23.37	20.66	19.61	19.33	29.04
2019/20	15.13	16.34	8.56	13.33	14.10
2020/21	25.41	25.91	22.01	22.10	30.86
2021/22	9.98	16.29	12.46	14.99	16.21
Mean	25.38	27.69	14.11	19.43	29.58
SD	9.41	8.48	10.53	6.64	8.75
CV (%)	37.07	30.63	74.62	34.17	29.59

Source: Appendix –I

Table 8 reveals that the return on equity of microfinance companies in Nepal. NUBL has the highest average return on equity, at 29.58 percent. NMBMF has the lowest average return on equity, at 14.11 percent. The idea is that the NUBL has the best or most efficient management in terms of turning a profit out of all of them, based on return on equity. Furthermore, NUBL is performing in a progressive manner.

JSLBB has the lowest standard deviation of all the sample firms, meaning that it is the least risky. With the lowest coefficient of variation (CV) of 29.59 percent, NUBL has shown the best degree of consistency among the ratios.

4.1.2 Descriptive Statistics

Table 9 presents the descriptive statistics for the variables utilized in the investigation. The outcome demonstrates the minimum and maximum performance measures for profitability indicators, such as ROA and ROE, as well as other independent variables for Nepali microfinance companies, such as liquidity ratio, capital adequacy ratio, non-performing loan ratio, operating efficiency ratio, and size of companies.

Table 9

Descriptive Statistics of Variables of Microfinance Companies

Variables	N	Minimum	Maximum	Mean	Std. Deviation
LIQ	50	1.82	70.84	12.9322	10.27729
CAR	50	6.97	33.08	11.8490	4.35254
NPLR	50	.02	6.33	1.5836	1.53642
OER	50	3.05	16.29	7.7862	3.30232
LSIZE	50	4.60	7.58	6.6500	.73836
ROA	50	-2.05	4.48	2.4994	1.14225
ROE	50	-6.20	39.13	23.2398	10.25553

Source: Appendix –II

Table 9 shows the descriptive statistics of dependent and independent variables used in the study. The liquidity ratio for the first independent variable reveals that it ranges from 1.82 percent to 70.84 percent, with an average of 12.9322 percent and a standard deviation of 10.27729. The CAR mean, which ranges from 6.97 to 33.08 percent, is 11.8490 percent, although the deviation is small, at 4.35254 percent. Similarly, the non-performing loan has a standard deviation of 1.53642, a mean of 1.5836, and a range of 0.02 to 6.33. Similarly, the operating efficiency ratio for the fourth independent variable reveals that it ranges from 3.05 percent to 16.29 percent, with an average of 7.7862 percent and a standard deviation of 3.30232. With a minimum and maximum range of 4.60 to 7.58 percent, the fifth independent variable, size of companies (SIZE), has an average of 6.6500 percent and a standard deviation of 0.73836.

The ROA summary indicates that throughout the research period, the average return on assets was 2.4994 percent with a standard deviation of 1.14225 percent, with the highest return on assets being 4.48 percent and the lowest being -2.05 percent. The return on assets measures how well microfinance companies are using their assets to generate profit. It is calculated by dividing the profit before interest and taxes by the total amount of assets. The ROE mean is 23.2398 percent, with a minimum of -6.20 and a maximum of 39.13 percent. This is unsatisfactory because it seems low overall. Likewise, the standard deviation of the ROE, 10.25553, is low.

4.1.3 Correlation Analysis

A correlation matrix is a table that shows the correlation coefficients between variables. Each table cell shows the correlation between two matched variables. A correlation matrix is one way to summarize data. This provides us with a brief summary of the variables that exhibit varying degrees of importance and correlation. The absence of a linear relationship between the two variables is indicated by a correlation value of 0. A perfect positive relationship is represented by a correlation coefficient of +1, and a perfect negative relationship is represented by a correlation coefficient of -1. The correlation matrix is shown as follows in Table 10.

Table 10

Pearson Correlation Coefficients of Study Variables

	LIQ	CAR	NPLR	OER	LSIZE	ROA	ROE
LIQ	1						
CAR	.513** (0.000)	1					
NPLR	-.153 (0.289)	.276 (0.052)	1				
OER	-.059 (0.685)	.114 (0.430)	-.056 (0.701)	1			
LSIZE	-.569** (0.000)	-.244 (0.088)	.050 (0.730)	.031 (0.831)	1		
ROA	-.572** (0.000)	-.363** (0.009)	-.234 (0.102)	-.150 (0.299)	.567** (0.000)	1	
ROE	-.337* (0.017)	-.583** (0.000)	-.412** (0.003)	-.301* (0.034)	.415** (0.003)	.851** (0.000)	1

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

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

Source: Appendix-V

Table 10 reveals the correlation test between both dependent and independent variables using correlation coefficient matrix. The correlation analysis reveals that liquidity ratio (LIQ) has significant negative relation with ROA at 1 percent level of significance. Then, it has also significant negative relation with ROE at 5 percent level of significance. Likewise, there is significant negative correlation of CAR with ROA and also significant negative relationship with ROE. Then, NPLR has insignificant negative relationship with ROA and significant negative relationship with ROE. At the same time, operating efficiency ratio has insignificant negative correlations with ROA and it has significant negative relationship with ROE. Finally, size of companies has significant positive relationship with ROA and ROE of the microfinance companies.

4.1.4 Results of Regression Analysis

It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between dependent variables (ROA and ROE) and independent variables (liquidity ratio, capital adequacy ratio, non-performing loan ratio, operating efficiency ratio and size of the companies). Ordinary least square regression (OLS) of panel data analysis is used as a major tool of analysis.

4.1.4.1 Regression Analysis on ROA

ROA is the dependent variable and independent variables are liquidity ratio, capital adequacy ratio, non-performing loan ratio, operating efficiency ratio and size of the companies are to analyze the factor affecting profitability of microfinance companies.

Table 11

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.747 ^a	.558	.508	.80111

a. Predictors: (Constant), LSIZE, OER, NPLR, CAR, LIQ

Source: Appendix-VI

The coefficient of determination (R^2) in multiple regressions is a summary statistic that shows how well the sample regression line fits the data. The R square is 0.558. It indicates the model fits (accounts) for 55.80 percent of the variance in the dependent

variable (ROA) is explained by independent variables (LSIZE, OER, NPLR, CAR, LIQ). The strength of variables relationship (multiple correlation coefficients) is based on the value of R statistic which is 0.747, indicated that there is a high degree of relationship between study variables. This implies that the ROA was highly influenced by its independent variables. Standard error of estimate is flawlessly associated with regression analysis.

Table 12

Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.694	5	7.139	11.124	.000 ^b
	Residual	28.238	44	.642		
	Total	63.932	49			

a. Dependent Variable: ROA, ($\alpha = 0.005$)

b. Predictors: (Constant), LSIZE, OER, NPLR, CAR, LIQ

Source: Appendix-VI

An analysis using ANOVA (F-value) suggests that the influence of dependent variables may be explained by the greatest number of potential combinations of predictor variables. Findings indicate that the ROA indicator has a major influence. The F-values of 11.124 ($p = 0.000 < 0.05$) for the ROA proxy variables LSIZE, OER, NPLR, CAR, and LIQ unambiguously demonstrate a substantial linear association between the independent variables and the dependent variable (ROA).

Table 13

Regression Coefficient of Independent Variables with ROA

Variables	Coefficients	t-statistics	Sig.-value
(Constant)	.566	.401	.691
LIQ	-.057	-3.408	.001
CAR	.028	.794	.432
NPLR	-.275	-3.262	.002
OER	-.077	-2.157	.036
LSIZE	.507	2.673	.011

Source: Appendix-VI, ($\alpha = 0.005$)

Table 13 presents the regression coefficient of independent variables liquidity ratio, capital adequacy ratio, non-performing loan ratio, operating efficiency ratio and size of the companies on one of proxy of profitability, ROA.

The liquidity ratio (LIQ) and return on assets (ROA) are negatively correlated, as indicated by the coefficient estimate of -0.057. This shows that the ROA of the microfinance enterprises drops by -0.057 percent when the liquidity ratio (LIQ) increases by one percent while maintaining the same values for the other independent variables. At the five percent significance level, the rise is statistically significant, according to the LIQ's p value of 0.001. Thus, liquidity ratio has significant negative effect on the ROA of the microfinance companies.

The capital adequacy ratio (CAR), with a coefficient estimate of 0.028, indicates a positive association between it and ROA based on the results of the regression analysis. This indicates that when the capital adequacy ratio (CAR) increases by one percent while keeping other independent variables constant, the ROA of the microfinance companies increases by 0.028 percent. The CAR's p value of 0.432 indicates that it is statistically insignificant at the five percent significance level. Consequently, the capital adequacy ratio (CAR) positively affects microfinance enterprises' return on assets (ROA) in a statistically insignificant way.

The non-performing loan ratio (NPLR) and ROA have a negative association, according to the regression model's results, with a coefficient estimate of -0.275. This means that when the non-performing loan ratio (NPLR) increases by one percent while keeping other independent variables constant, the microfinance companies' return on assets (ROA) decreases by -0.275 percent. The NPLR's p value of 0.002 indicates that it is statistically significant at the five percent significance level. Hence, this is significant negative effect of non-performing loan ratio (NPLR) on ROA.

The findings of the regression model indicated that there is a negative association between ROA and operational efficiency ratio (OER), with a coefficient estimate of -0.077. This shows that a one percent rise in the operational efficiency ratio (OER) causes a -0.077 percent fall in the return on assets (ROA) of microfinance firms when all other independent variables are maintained constant. Furthermore, at the five percent significance level, OER's p value of 0.036 shows that it has a statistically significant effect on ROA.

The size of the companies (SIZE) has a positive correlation with ROA, according to the regression result, with a coefficient estimate of 0.507. This indicates that when other independent variables are held constant, a one percent increase in company size (SIZE) results in a 0.507 percent increase in ROA for microfinance companies. The size of company (SIZE) p value of 0.011 indicates that this increase is statistically significant at the five percent significance level. It indicates that size of companies (SIZE) has statistically significant positive effect on ROA of microfinance companies.

4.1.4.2 Regression Analysis on ROE

ROE is the dependent variable and independent variables are liquidity ratio, capital adequacy ratio, non-performing loan ratio, operating efficiency ratio and size of the companies are to analyze the factor affecting profitability of microfinance companies.

Table 14

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768 ^a	.590	.543	6.93235

a. Predictors: (Constant), LSIZE, OER, NPLR, CAR, LIQ

Source: Appendix-VII

The coefficient of determination (R²) in multiple regressions is a summary statistic that shows how well the sample regression line fits the data. The R square value is 0.590 which indicates the model fits (accounts) for 59.00 percent of the variance in the dependent variable, ROE. The strength of variables relationship (multiple correlation coefficients) is based on the value of R statistic. In this study, the R statistic is 0.768, indicated that there is a high relationship between study variables. This implies that the ROE was highly influenced by its independent variables. Standard error of estimate is flawlessly associated with regression analysis.

Table 15

Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3039.094	5	607.819	12.648	.000 ^b
	Residual	2114.526	44	48.057		
	Total	5153.620	49			

a. Dependent Variable: ROE, ($\alpha = 0.005$)

b. Predictors: (Constant), LSIZE, OER, NPLR, CAR, LIQ

Source: Appendix-VII

An analysis using ANOVA (F-value) suggests that the influence of dependent variables may be explained by the greatest number of potential combinations of predictor variables. Findings indicate that the ROE indicator has a major influence. With respect to LSIZE, OER, NPLR, CAR, and LIQ as ROE proxy, the F-values of 12.648 ($p = 0.000 < 0.05$) indicate a strong linear association between the dependent variable (ROE) and the independent variables.

Table 16

Regression Coefficient of Independent Variables with ROE

Variables	Coefficients	t-statistics	p-value
(Constant)	13.408	1.096	.279
LIQ	-.037	-.261	.795
CAR	-.826	-2.749	.009
NPLR	-2.362	-3.239	.002
OER	-.910	-2.949	.005
LSIZE	4.651	2.833	.007

Source: Appendix-VII, ($\alpha = 0.005$)

Table 16 presents the regression results of the effect of liquidity ratio, capital adequacy ratio, non-performing loan ratio, operating efficiency ratio and size of the companies on one of proxy of profitability, ROE.

The liquidity ratio (LIQ) and return on equity (ROE) are negatively correlated, as indicated by the coefficient estimate of -0.037. This shows that the ROE of the microfinance enterprises drops by -0.037 percent when the liquidity ratio (LIQ) increases by one percent while maintaining the same values for the other independent variables. At the five percent significance level, the LIQ is statistically significant, as indicated by its p value of 0.795. This indicates that liquidity ratio (LIQ) has insignificant negative effect on ROE of sample microfinance companies.

The capital adequacy ratio (CAR) and ROE have a negative association, according to the regression result, with a coefficient estimate of -0.826. This indicates that when the capital adequacy ratio (CAR) increases by one percent while keeping other independent variables constant, the ROE of the microfinance companies decreases by -0.826 percent. The CAR's p value of 0.009 indicates that it is statistically significant at the five percent significance level. Therefore, capital adequacy ratio (CAR) has statistically significant negative effect on ROE of microfinance companies.

The non-performing loan ratio (NPLR) and ROE have a negative association, according to the regression model's results, with a coefficient estimate of -2.362. This indicates that when the non-performing loan ratio (NPLR) increases by one percent while keeping other independent variables constant, the microfinance companies' return on equity (ROE) decreases by -2.362 percent. The NPLR's p value of 0.002 indicates that it is statistically significant at the five percent significance level. Hence, this is significant negative effect of non-performing loan ratio (NPLR) on ROE.

The findings of the regression model indicated that there is a negative association between ROE and operational efficiency ratio (OER), with a coefficient estimate of -0.910. This indicates that a one percent increase in operational efficiency ratio (OER) causes a -0.910 percent fall in the return on equity (ROE) of microfinance enterprises when all other independent variables are maintained constant. At the five percent significance level, this impact is statistically significant, according to the p value of OER, which is 0.005.

The size of the companies (SIZE) has a positive correlation with ROE, according to the regression result, with a coefficient estimate of 4.651. This indicates that when other independent variables are held constant, a one percent increase in company size (SIZE) results in a 4.651 percent increase in ROE for microfinance companies. The size of company (SIZE) p value of 0.007 indicates that this relationship is statistically significant at the five percent significance level. It indicates that size of companies (SIZE) has statistically significant positive effect on ROE of microfinance companies.

4.2 Discussion

The main purpose of the study is to examine the factor affecting of profitability of microfinance companies in Nepal. Liquidity ratio, capital adequacy ratio, non-performing loan ratio, operating efficiency ratio and size of the companies have a direct impact on return on assets and returns on equity, the two main parameters for measuring profitability of the microfinance companies. This correlation analysis shows that liquidity ratio (LIQ) has significant negative relation with ROA. A negative relationship between LATA and ROA is consistent with the findings of Pradhan (2018). However, it contradicts with the prior study of Gwachha (2019). Similarly, liquidity ratio has also significant negative relation with ROE which is similar with the finding of Pradhan (2018) but opposite to the finding of Gwachha (2019). At the meantime, CAR has significant negative relationship with ROA which is consistent with the findings of Ngumo, Collins and David (2017); Budhathoki and Rai (2020); Shrestha (2023) but this is not consistent with the findings of Gwachha (2019) and Budhathoki et al. (2020) and also significant negative relationship with ROE which is consistent with the findings of Mishra, Kandel and Aithal (2021); Gwachha (2019) concluded that negative relationship between capital adequacy ratio and ROE.

At the meantime, NPLR has insignificant negative relationship with ROA which is consistent with the finding of Ngumo, Collins and David (2017); Bhattarai (2019); Shrestha (2023) but opposite to the finding of Neupane (2019) and it has significant negative relationship with ROE which is consistent with the finding of Pradhan (2018). Likewise, operating efficiency ratio has insignificant negative correlations with ROA and it has significant negative relationship with ROE. This is consistent with the finding of Mohanty (2017); Neupane (2019). However, it contradicts with the finding of Ngumo, Collins and David (2017); Shrestha (2023). Moreover size of companies has significant positive correlation with profitability (ROA and ROE) at 5 percent level of significance. A positive and significant relationship between size of company and ROA is consistent with the findings of Ngumo, Collins and David (2017); Mohanty (2017) but it is not consistent with the finding Neupane (2019).

The multiple regression analysis shows that liquidity ratio (LIQ) has significant negative effect on ROA of banks. This is consistent with the findings of Ranabhat (2019); Pradhan (2018). However, it contradicts with the findings of San and Heng (2013); Abate and Mesfin (2019); Gwachha (2019). The capital adequacy ratio (CAR) has insignificant positive impact on ROA of the microfinance companies. This is consistent with the findings of San and Heng (2013); Saeed (2014); Ngumo, Collins and David (2017); Kawshala and Panditharathna (2017); Adhikary and Papachristou (2017); Ashenafi and Kingawa (2018) Neupane (2019); Abate and Mesfin (2019); Gwachha (2019); Shrestha (2023). Non-performing loan ratio has significant negative impact on ROA of the microfinance companies in Nepal. This is consistent with the finding of Bhattarai (2019); Shrestha (2023). However, contradicts with the finding of Ngumo, Collins and David (2017); Pradhan (2018); Neupane (2019). Likewise, operating efficiency ratio has significant negative impact on ROA of the microfinance companies in Nepal. This is consistent with the finding of Ashenafi and Kingawa (2018); Neupane (2019); Abate and Mesfin (2019); Dissanayake (2020) but opposite to the finding of Ngumo, Collins and David (2017); Adhikary and Papachristou (2017); Mohanty (2017); Shrestha (2023). The result of regression reveals that the size of companies has significant positive impact on ROA of sample banks. This is consistent with the findings of San and Heng (2013); Saeed (2014); Ngumo, Collins and David (2017); Adhikary and Papachristou (2017) but opposite to the findings of Ashenafi and Kingawa (2018) Neupane (2019); Abate and Mesfin (2019); Gwachha (2019).

The multiple regression analysis also shows that liquidity ratio (LIQ) has insignificant negative effect on ROE of banks. This result is consistent with the results identified by Pradhan (2018) but opposite to findings of San and Heng (2013); Gwachha (2019). Capital adequacy ratio (CAR) has a negative and statistically significant effect on ROE of banks. This is consistent with the findings of San and Heng (2013); Kawshala and Panditharathna (2017) Gwachha (2019) but opposite to findings of Saeed (2014); Adhikary and Papachristou (2017). Non-performing loan ratio has significant negative impact on ROE of the microfinance companies in Nepal. This is consistent with the finding of Pradhan (2018). Likewise, operating efficiency ratio has significant negative impact on ROE of the microfinance companies in Nepal. This finding is similar with the previous study of Adhikary and Papachristou (2017); Dissanayake

(2020) which observed that operating efficiency ratio had negative impact on ROE. The effect of size of companies has significant positive impact on ROE of sample microfinance companies. This is consistent with the findings of San and Heng (2013) Saeed (2014); Gwachha (2019) concluded that size of companies had positive effect on ROE. However, it contradicts with the findings of Ranabhat (2019).

CHAPTER - V

SUMMARY AND CONCLUSION

5.1 Summary

MFIs have to determine out how to solve the above mentioned issue in order to turn a profit. MFIs need to put in a lot of effort to finish this component if they hope to get the desired outcome. Right now, the main concern is how this sustainability may be achieved naturally. And that's the contentious concern among academics. It is determined using ratios that provide a qualitative assessment of the firm's profitability by summarizing vast amounts of financial data, such as the firm's returns on equity, net interest margin, and returns on assets. It is stated that both local and global issues affect a company's profitability. Micro variables are those accounts in the balance sheet and income statement that are managed by the management team. They are also known as firm-specific variables as a result. Conversely, macro factors are not connected to internal operations and are not under the control of a firm, yet they nonetheless have a significant influence on profitability. The non-performing loan ratio, operating efficiency ratio, liquidity ratio, capital adequacy ratio, and company size are some of the aspects that affect the study's findings.

The main purpose of the study is to evaluate the factors affecting profitability of microfinance companies in Nepal. The other specific objectives are to assess the profitability position of microfinance companies in Nepal, to examine the relationship between specific factors and profitability of microfinance companies in Nepal and to analyze the impact of specific factors like liquidity, capital adequacy ratio, operating efficiency ratio, non-performing loan ratio and bank size on profitability of microfinance companies in Nepal. Descriptive and causal research has been done on the factors influencing the profitability of microfinance organizations in Nepal in order to meet the specific goal of the study. While the causal research method is used to quantify the influence of factors on the profitability of microfinance enterprises in Nepal, the descriptive research design is used to analyze the status and pattern of factors and profitability.

Currently, there are 57 microfinance companies operating in Nepal (As of July, 2023). They constitute the population. Among them five microfinance companies i.e. Chhimek Laghubitta Bikas Bank Limited (CBBL), Janutthan Samudayic Laghubitta Bikas Bank Limited, (JSLBB), NMB Laghubitta Bitiya Sanstha Limited (NMBMF), Swabalmaban Laghubitta Bittiya Sanstha Limited (SWBBL) and Nirdhan Utthan Laghubitta Bitiya Sanstha Limited (NUBL) are taken as sample on the basis of purposive sampling method because these microfinance companies are top five in profitability at the present context as well as due to the availability of data. Annual reports and other publications from the basis of secondary data are used. The secondary data has been collected mainly through the annual reports of the microfinance companies, covering ten years periods, i.e. from the fiscal year 2012/13 to 2021/22. This study used descriptive analysis, correlation analysis and multiple regression analysis to analyze the data.

This study found that the NUBL has the strongest profitability position in terms of ROA and ROE. NUBL could manage their overall operations and the best or most effective management in earning profit among the sample companies. The correlation analysis shows that liquidity ratio and capital adequacy ratio have significant negative relationship with profitability (ROA and ROE). At the meantime, non-performing loan and operating efficiency ratio have insignificant negative relationship with ROA and significant negative relationship with ROE. Moreover, size of companies has significant positive relationship with profitability (ROA and ROE) of microfinance companies in Nepal. The multiple regression analysis reveals that liquidity ratio has significant negative impact on ROA and insignificant negative impact on ROE. However, capital adequacy ratio has insignificant positive impact on ROA and significant positive impact on ROE. At the same time, non-performing loan and operating efficiency ratio have significant negative impact on profitability (ROA and ROE) of the microfinance companies. Moreover, size of companies has significant positive impact on profitability of the microfinance companies. Therefore, this study concluded that liquidity, non-performing loan, operating efficiency ratio and size of companies are the key factors of profitability of microfinance companies in Nepal.

5.2 Conclusion

This study showed that the NMBMF has a strong liquidity position since it has the highest liquidity ratio among the sample firms. The NMBMF provides the highest degree of depositor protection, along with the most efficiency and stability in the functioning of microfinance organizations, based on capital adequacy ratio. Nevertheless, because of its excellent performance or faultless NPL management, CBBL has the lowest credit risk of any of them. Nevertheless, by utilizing its loanable resources more effectively, NUBL which has the lowest operational efficiency ratio may be able to boost MFIs' profitability. The research period coincided with the highest of CBBL in Nepal. The firms can reduce costs as a result of the economies of scale that arise from this. Bigger businesses might be able to raise money more affordably. Among them, NUBL had the highest ratio, which allowed them to run their whole business in terms of ROA-measured profitability. Stated otherwise, NUBL optimizes its return on assets by maximizing the utilization of the one that has the greatest influence on the average ROA. In a similar spirit, the NUBL's return on equity is indicative of the best or most profitable management.

The correlation analysis concluded that there is significant negative relationship between liquidity ratio and profitability (ROA and ROE). Similarly, capital adequacy ratio has significant negative relationship with profitability (ROA and ROE) of the microfinance companies. Then, non-performing loan and operating efficiency ratio have insignificant negative relationship with ROA and significant negative relationship with ROE. Moreover, size of companies has significant positive relationship with profitability (ROA and ROE) of microfinance companies in Nepal.

The multiple regression analysis concluded that liquidity ratio has significant negative impact on ROA and insignificant negative impact on ROE. However, capital adequacy ratio has insignificant positive impact on ROA and significant positive impact on ROE. At the same time, non-performing loan and operating efficiency ratio have significant negative impact on profitability (ROA and ROE) of the microfinance companies. Finally, size of companies has significant positive impact on profitability of the microfinance companies. Therefore, liquidity, non-performing loan, operating efficiency ratio and size of companies are the key factors of profitability of microfinance companies in Nepal.

5.3 Implications

This study has the following implications;

- This study found that liquidity ratio has significant negative impact on ROA and insignificant negative impact on ROE. However, capital adequacy ratio has insignificant positive impact on ROA and significant positive impact on ROE. At the meantime, non-performing loan, operating efficiency ratio and size of companies have significant impact on profitability of microfinance companies in Nepal. Therefore, by highlighting areas of weakness, this data and analysis signals policy makers and the management of microfinance organizations to make better decisions and increase profitability. These insights into the factors that influence profit margins in Nepalese microfinance firms generally raise the awareness of policy makers.
- The research also forces Nepalese microfinance company management to evaluate their own previous performance and provides guidance for future plans and initiatives. This study can provide some of the most recent information and statistics about factors that impact profitability, as well as some current challenges. Therefore, regulators, investors, managers, and clients will find value in this study.
- According to the study, an effective management of microfinance firms' profitability would benefit not only the companies themselves but also individuals, businesses, and the economy as a whole. This is because different factors affect the profitability of microfinance companies in different ways. Consequently, this enhances the welfare of the financial industry within the economy and the community at large.
- In addition, the study served as a reference for other academicians and researchers working in relevant fields as well as an academic experience for the researcher.

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APPENDICES

APPENDIX – I

Data of Sample Microfinance Companies

Co.	Year	LIQ	CAR	NPLR	SIZE	OER	ROA	ROE
SWBBL	2012/13	10.21	10.01	1.21	3336801	14.31	1.90	18.97
	2013/14	12.56	9.53	0.50	4830225	10.33	3.73	39.13
	2014/15	11.58	10.83	1.73	6152957	10.48	3.83	35.35
	2015/16	10.32	11.66	1.20	7628991	9.23	4.24	36.33
	2016/17	12.87	10.80	0.73	10018371	10.60	2.64	24.40
	2017/18	6.33	11.37	1.04	11711599	11.17	2.93	25.77
	2018/19	3.74	11.39	0.80	15931443	10.94	2.66	23.37
	2019/20	3.82	12.42	2.07	16979345	14.08	1.88	15.13
	2020/21	1.82	14.24	4.56	18963611	9.27	3.62	25.41
	2021/22	5.96	13.29	6.33	21889722	13.00	1.33	9.98
CBBL	2012/13	23.07	7.61	0.05	4554069	4.82	2.38	31.22
	2013/14	18.64	7.32	0.03	6211358	4.29	2.08	28.39
	2014/15	12.91	8.57	0.02	9145280	3.80	3.15	36.71
	2015/16	21.36	9.68	0.10	12524323	3.27	3.76	38.89
	2016/17	18.06	9.77	0.09	15509468	3.05	3.71	38.00
	2017/18	14.45	13.91	0.11	19549572	10.98	3.41	24.52
	2018/19	16.51	15.02	0.28	24060301	11.75	3.10	20.66
	2019/20	12.61	15.05	0.46	27259254	11.84	2.46	16.34
	2020/21	6.01	14.79	0.64	34286755	8.52	3.83	25.91
	2021/22	4.07	15.20	0.83	38255894	9.31	2.48	16.29
NMBMF	2012/13	70.84	33.08	2.94	39479	6.04	-2.05	-6.20
	2013/14	22.36	10.92	0.25	240166	9.18	0.13	1.18
	2014/15	21.37	8.42	0.18	591115	8.99	1.82	21.57
	2015/16	19.90	9.11	1.17	1176946	8.69	2.54	27.86
	2016/17	15.37	10.10	0.99	2149054	10.15	2.11	20.91
	2017/18	17.65	9.30	2.66	2674593	16.29	1.22	13.15
	2018/19	8.79	8.95	2.08	3419402	6.01	1.76	19.61
	2019/20	19.85	15.65	2.40	4525095	11.86	1.34	8.56
	2020/21	6.98	16.47	3.24	5452710	5.02	3.62	22.01
	2021/22	4.64	16.82	3.18	6104682	5.38	2.10	12.46
JSLBB	2012/13	25.21	23.27	0.72	48920	10.31	1.70	7.32
	2013/14	5.43	12.59	0.09	111174	9.35	2.35	18.66
	2014/15	20.15	11.54	1.38	263728	4.59	2.98	25.84
	2015/16	12.28	11.05	2.26	388703	6.00	3.21	29.08
	2016/17	10.36	8.80	1.04	661385	5.02	2.31	26.27
	2017/18	10.56	6.97	1.69	1072035	5.97	1.21	17.36
	2018/19	7.20	8.36	2.29	1511056	6.46	1.62	19.33
	2019/20	11.97	10.14	3.73	1752210	5.30	1.35	13.33
	2020/21	14.84	9.35	4.47	2397833	4.11	2.07	22.10
	2021/22	3.76	10.73	3.80	2401705	4.90	1.61	14.99
NUBL	2012/13	13.66	7.94	0.95	4635186	7.24	1.98	24.87
	2013/14	12.73	8.89	0.59	6153801	6.73	3.37	37.92
	2014/15	9.40	9.31	0.22	8336037	7.10	3.35	35.94
	2015/16	7.91	9.28	0.40	11837775	6.66	3.41	36.71
	2016/17	11.06	9.64	0.32	15340083	5.90	3.73	38.67
	2017/18	8.77	9.59	0.93	17967921	4.52	3.02	31.51
	2018/19	7.22	11.10	1.19	22143425	4.58	3.22	29.04
	2019/20	11.14	12.49	1.83	23615202	4.18	1.76	14.10
	2020/21	4.00	14.51	4.11	26540523	4.08	4.48	30.86
	2021/22	4.31	15.62	5.30	29621044	3.66	2.53	16.21

Source: Annual Report of Sample Companies

APPENDIX -II

Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
LIQ	50	1.82	70.84	12.9322	10.27729
CAR	50	6.97	33.08	11.8490	4.35254
NPLR	50	.02	6.33	1.5836	1.53642
OER	50	3.05	16.29	7.7862	3.30232
LSIZE	50	4.60	7.58	6.6500	.73836
ROA	50	-2.05	4.48	2.4994	1.14225
ROE	50	-6.20	39.13	23.2398	10.25553
Valid N (listwise)	50				

Source: SPSS version 26

APPENDIX -III

Pearson Correlation Coefficients

		LIQ	CAR	NPLR	OER	LSIZE	ROA	ROE
LIQ	Pearson Correlation	1	.513**	-.153	-.059	-.569**	-.572**	-.337*
	Sig. (2-tailed)		.000	.289	.685	.000	.000	.017
	N	50	50	50	50	50	50	50
CAR	Pearson Correlation	.513**	1	.276	.114	-.244	-.363**	-.583**
	Sig. (2-tailed)	.000		.052	.430	.088	.009	.000
	N	50	50	50	50	50	50	50
NPLR	Pearson Correlation	-.153	.276	1	-.056	.050	-.234	-.412**
	Sig. (2-tailed)	.289	.052		.701	.730	.102	.003
	N	50	50	50	50	50	50	50
OER	Pearson Correlation	-.059	.114	-.056	1	.031	-.150	-.301*
	Sig. (2-tailed)	.685	.430	.701		.831	.299	.034
	N	50	50	50	50	50	50	50
LSIZE	Pearson Correlation	-.569**	-.244	.050	.031	1	.567**	.415**
	Sig. (2-tailed)	.000	.088	.730	.831		.000	.003
	N	50	50	50	50	50	50	50
ROA	Pearson Correlation	-.572**	-.363**	-.234	-.150	.567**	1	.851**
	Sig. (2-tailed)	.000	.009	.102	.299	.000		.000
	N	50	50	50	50	50	50	50
ROE	Pearson Correlation	-.337*	-.583**	-.412**	-.301*	.415**	.851**	1
	Sig. (2-tailed)	.017	.000	.003	.034	.003	.000	
	N	50	50	50	50	50	50	50

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

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

Source: SPSS version 26

APPENDIX -IV

Multiple Regression Analysis of Sample Companies (On ROA)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.747 ^a	.558	.508	.80111

a. Predictors: (Constant), LSIZE, OER, NPLR, CAR, LIQ

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.694	5	7.139	11.124	.000 ^b
	Residual	28.238	44	.642		
	Total	63.932	49			

a. Dependent Variable: ROA

b. Predictors: (Constant), LSIZE, OER, NPLR, CAR, LIQ

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.566	1.413		.401	.691		
	LIQ	-.057	.017	-.509	-3.408	.001	.450	2.221
	CAR	.028	.035	.105	.794	.432	.574	1.743
	NPLR	-.275	.084	-.370	-3.262	.002	.781	1.280
	OER	-.077	.036	-.222	-2.157	.036	.945	1.058
	LSIZE	.507	.190	.328	2.673	.011	.667	1.498

a. Dependent Variable: ROA

Source: SPSS version 26

APPENDIX -IV

Multiple Regression Analysis of Sample Companies (On ROE)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768 ^a	.590	.543	6.93235

a. Predictors: (Constant), LSIZE, OER, NPLR, CAR, LIQ

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3039.094	5	607.819	12.648	.000 ^b
	Residual	2114.526	44	48.057		
	Total	5153.620	49			

a. Dependent Variable: ROE

b. Predictors: (Constant), LSIZE, OER, NPLR, CAR, LIQ

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	13.408	12.231		1.096	.279		
	LIQ	-.037	.144	-.038	-.261	.795	.450	2.221
	CAR	-.826	.300	-.351	- 2.749	.009	.574	1.743
	NPLR	-2.362	.729	-.354	- 3.239	.002	.781	1.280
	OER	-.910	.308	-.293	- 2.949	.005	.945	1.058
	LSIZE	4.651	1.642	.335	2.833	.007	.667	1.498

a. Dependent Variable: ROE

Source: SPSS version 26

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ABSTRACT The main purpose of the study is to examine the impact of factor affecting profitability of microfinance companies in Nepal for ten year periods from 2012/13 to 2021/22. This study used descriptive, correlation and multiple regression analysis to analyze the data. This study shows that the NUBL has the strongest profitability position in terms of ROA and ROE. NUBL could manage their overall operations and

the best or most effective management in earning profit among the