

LOAN MANAGEMENT OF MICROFINANCE COMPANIES

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

By

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Certificate of Authorship

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

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

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Report of Research Committee

Mr. Prakash Pant has defended research proposal entitled “**Loan Management of Microfinance Companies**” successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Mrs. Binita Manandhar and submit the thesis for evaluation and viva voce examination.

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We, undersigned, have examined the thesis entitled “**Loan Management of Microfinance Companies**” presented by Sakul Khadka a candidate for the degree of Master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the dissertation is acceptable for the award of degree.

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It brings me great satisfaction to witness the positive impact of my creation, which contributes value to others. This thesis represents a step towards fulfilling the prerequisites for earning a Master of Business Studies (MBS) degree, and throughout the research process, I have acquired a substantial amount of knowledge. While I take pride in the self-driven effort and dedication I invested in this thesis, it's essential to acknowledge the invaluable support provided by my supervisor, without whom its completion would not have been possible.

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Abbreviations

ANOVA	Analysis of Variance
BL	Bank Leverage
CV	Coefficient of Variation
DER	Debt Equity Ratio
DMB	Deposit Money Banks
DR	Debt Ratio
EPS	Earnings Per Share
i.e.	That is
ICR	Interest Coverage Ratio
LDR	Loan to Deposit Ratio
LLP	Loan Loss Provision Ratio
LR	Liquidity Ratio
MPT	Modern Portfolio Theory
MR	Market Risk
NEPSE	Nepal Stock Exchange
NPL	Non - Performing Loan
NRB	Nepal Rastra Bank
OLS	Ordinary Least Square
ROA	Return on Assets
ROE	Return on Equity
SD	Standard Deviation
SME	Small and Medium Size Enterprises

Abstracts

The main objective of this study is to examining the loan management and profitability of microfinance company in Nepal. The descriptive and causal research design has been adopted for the study. The study used secondary data of five microfinance companies in Nepal of ten years i.e. 2070/2071 to 2079/2080 data has been analyzing by using different statistical tools. Data is received from the annual report of selected microfinance company's website. ROA and ROE are taken as indicator of profitability of microfinance companies whereas, loan to deposit ratio, debt equity ratio, debt ratio and interest coverage ratio are the key factors of debt management. The collected information and the numerical data have been analyzed by using excel software and historical trend, descriptive statistics, correlation, ANOVA and regression tools are used and tables, graphs are used to show the data and results clearly.

The results of the correlation analysis reveal certain relationships within the study. Firstly, there is a positive relationship of loan to deposit ratio with ROA and ROE. There is a positive correlation of the debt equity ratio, debt ratio and interest coverage ratio with return on assets and return on equity, while company size shows a negative association with return on assets and return on equity. These positive correlations indicate favourable conditions, suggesting that an increase in loan-to-deposit ratio, debt-equity ratio, debt ratio, or interest coverage ratio is associated with higher returns on assets and return on equity. However, an increase in company size is linked to a decrease in the performance of retail microfinance companies, as reflected in lower returns on assets and equity.

From the regression analysis, the loan-to-deposit ratio has a negative but not statistically significant impact on return on assets and a positive and insignificant impact on return on equity. The debt-equity ratio has a negative and insignificant impact on the return on assets but a positive and insignificant impact on the return on equity. The return on assets is positively and insignificantly influenced but the return on equity is positively and insignificantly influenced by the debt ratio. Interest coverage ratio has a positive and insignificant effect on profitability i.e. return on assets and returns on equity.

Keywords: Loan to Deposit Ratio, debt-equity ratio, debt ratio, interest coverage ratio, profitability, microfinance

CHAPTER – I

INTRODUCTION

1.1 Background of the Study

Effective loan management is critical to a business's profitability since it directly affects the health of its finances and cost structure. The effects of managing loans on profitability can have either positive or negative outcomes, depending on the tactics used. One benefit of good loan management is that it allows a business to make efficient use of its resources. When a business uses strategic debt to fund its operations, returns on equity are increased, which eventually boosts profitability. For example, a business can increase overall profitability by borrowing money to invest in high-return initiatives by taking advantage of cheap interest rates. A well-managed loan portfolio can also result in tax advantages, which improves a business's bottom line even more. On the other hand, poor debt management can lead to credit rating reductions because of high debt, which raises borrowing prices and puts pressure on profitability. The complex relationship between debt management and profitability depends on the choices and tactics used by an organization. Effective debt management can maximize capital structure, take advantage of tax benefits, and increase profitability as a result. Conversely, poor debt management might result in higher expenses and financial risks, which would hurt the bottom line of the business (Titman et al. 2017).

A country's economic progress is gauged by its economic indicators, and Nepal, like many other nations, has been prioritizing improving its economic position. A number of factors influence the path of economic growth, and financial institutions are recognized as key players in this process of development. A nation's ability to advance is largely dependent on its ability to generate capital and distribute it wisely, as well as on how well its resources are used. Regardless of their size or type—commercial banks, financial institutions, cooperative banks—all financial institutions are essential to a country's prosperity (K.C., 2013).

With careful debt servicing that includes timely repayments and smart refinancing, microfinance enterprises can improve their creditworthiness and reduce financial hardship. These businesses can utilize resources more efficiently, strengthen their financial position, and increase profitability because of their careful debt management. On the other hand,

insufficient debt management, characterized by high debt loads and high-interest rates, creates challenges by straining financial reserves, increasing default risks, and endangering financial stability. Under such circumstances, the negative impact on profitability could make it more difficult for microfinance organizations to successfully pursue their mission of advancing financial inclusion. Therefore, for these institutions to prosper while preserving strong financial health, managing the intricate link between debt management and profitability is essential (Oddy and Winsor, 1990). (Modigliani and Miller, 1963) revised their initial MM theory proposing that capital structure is relevant and that the relationship between debt and profitability is positive. According to the new perspective, companies that have greater access to debt are more advantageous since taking on more debt offers significant tax benefits that raise company value. However, this does not imply that businesses should want to maximize debt. According to Myers' (1984) trade-off theory, capital structure is designed to balance the advantages and disadvantages of employing debt and own capital while taking agent costs and bankruptcy into account.

A microfinance institution's ability to succeed largely depends on how well its loans are managed. Important factors that determine how strong it is include the loan portfolio's quality, the makeup of risky assets, and a strong credit administration framework. By offering different types of loans, such as overdrafts, cash credits, direct loans, and bill discounting, microfinance institutions contribute significantly to the nation's general economic well-being by helping to develop new enterprises. A microfinance institution's profitability is largely dependent on the interest revenue it receives from its loans and advances, which make up a sizable portion of its assets. Microfinance institutions must guarantee the efficient operation and liquidity of their loan assets in order to generate the intended returns. These institutions may carry out their crucial role in promoting economic growth and empowering underprivileged populations with the help of a well-designed loan management system. One important indicator of a business's long-term health and survival and a basic barometer of its performance is its profitability. A plethora of academic literature delves into corporate finance and looks at ways to make a company more profitable. It is imperative to acknowledge that there exists no universally applicable formula that can provide a thorough explanation for the variations in profitability found among various enterprises and industries (Milosev, 2021).

Because they serve as a middleman between lenders and borrowers, banks are essential to the smooth operation of any economy. To facilitate the flow of investments, these financial organizations are responsible for both accepting deposits from customers and lending money to those in need. Without question, banks play a major role in economic development by bringing together disparate financial resources and directing them toward industries with high potential for productivity. Their primary objective is to gather idle money and reinvest it in areas that promote economic expansion. Despite the various risks associated with the lending portfolios of banks, such as interest rate and liquidity risks, one of the most pivotal challenges they encounter is borrower risk – the potential of borrowers failing to repay their loans and advances (Dahal and Dahal, 2012).

Effective loan management has a significant impact on a company's profitability and overall financial health. When used wisely, debt can lead to growth and higher returns, but when it is not managed well, it can cause problems financially and reduce profitability. Finding a balance between using debt for expansion and keeping one's debt load moderate is essential to successful debt management. During boom periods, leveraging debt can increase returns on equity (ROE) since borrowed funds are used to produce profits that are greater than the cost of borrowing. On the other hand, too much debt can lead to high-interest costs that reduce profitability, especially during hard times. Profitability can be enhanced by a well-structured debt structure that includes a suitable ratio of long-term to short-term debt. This can offer financial flexibility and stability. Interest coverage ratios are another important consideration for thoughtful management, which makes sure the business makes enough operational profits to comfortably pay interest. A company's debt management procedures are usually examined by analysts and investors to determine the degree of financial risk and room for expansion. Research by Baker and Powell (2016) explores the relationship between debt management and profitability, highlighting the importance of maintaining an optimal debt-to-equity ratio. Their study provides valuable insights into the complex dynamics between debt and profitability, aiding businesses in making informed decisions regarding their financial structure. (Barkar & Powell 2016).

The financial stability of a corporation is contingent upon its capacity to consistently turn a profit during its entire operational life. The goal of increasing the company's profitability is directly linked to most managerial choices. Profitability is a statistic used to assess how well-run and managed the company is. Creditors have a strong interest in learning more

about the company's financial health in addition to managers and shareholders. Managers focus on assessing operational effectiveness, whereas owners try to understand projected returns or profitability. It is crucial to recognize that a higher potential for returns typically corresponds to a higher level of associated risk (Chechet & Olayiwola, 2014).

1.2 Problem Statement

Particularly in the case of developing nations, microfinance institutions are essential parts of the financial system and act as catalysts for a country's economic development. Microfinance institutions are primarily concerned with making profits and maximizing wealth, but they also must protect the interests of their stakeholders.

A corporation may have a competitive advantage over rival businesses if it has a sound capital structure with an appropriate ratio of debt to equity. Studies have shown that firms need to use debt and equity financing because it is advantageous. A company that relies entirely on stock financing may run into a number of issues, including inadequate governance, insufficient checks and balances, and increased taxation. However, a heavily leveraged company faces the issue that its creditors only care about their principal and interest and that all profit is divided among them (Badar & Saeed, 2013).

Numerous elements are impacting the company's profitability. A corporation must take into account external elements such as industrial structures, economic policies, and a nation's level of economic development. When investors concentrate on a particular industry, though, they are more worried about how to pick the most profitable one among several rivals. A company's capital structure has a significant impact on its profitability. The equity structure has an impact on the company's management and operational procedures. Although using equity financing is less hazardous, it does mean that current shareholders' power will be diluted. Control over the business can be shifted, and new shareholders may have different ideas about how to operate it. The capital structure could make it clear whether leverage financing makes sense. Furthermore, debt may have an impact on a company's profitability (Zhang et al., 2020).

The company's primary source of funding is banks because there isn't a recognized market for bonds, debentures, or notes. These are government-owned institutions that offer both short- and long-term financing. As a result, both the financial and non-financial sectors'

performance has been declining. Financial institutions lend money on a political basis without vetting the performance of the businesses they support, which lowers the performance of the financial and non-financial sectors. Debt financing is a global issue that affects both industrialized and developing nations. Since no previous research has been done on the connection between debt structure and performance, this study is crucial (Aziz & Abbas, 2019).

A crucial choice for each organization is determining the right capital structure based on how debt policies affect the profitability of the company. Continuous planning is necessary since the corporate environment is dynamic. Debt and equity are the two main sources of financing the long-term activities of a firm (Latifi et al, 2010). Managers strategically establish their target debt ratios by carefully weighing the advantages and costs associated with taking on debt, which primarily encompasses tax benefits and the potential costs of bankruptcy. Debt financing can offer a tax advantage, particularly for companies with elevated financial risk and susceptibility to bankruptcy. Therefore, one of the most important questions facing all firms is how to best balance debt and equity in order to take advantage of these trade-offs. Numerous research supports various theories of capital structure, each suited to a particular set of facts (Habib et al., 2016).

The degree to which a company uses debt and equity in its operations determines how profitable it is. The capital structure controversy has drawn a lot of attention from academic scholars and practitioners throughout the past 10 years. But a lot of attention is paid to developed nations. Equity money is particularly useful for businesses looking to grow by adding new products or venturing into untapped areas. The rationale is that companies have the option, based on their dividend policy, to allocate these resources—which are comparatively less expensive—to operational expansion rather than paying current dividends. Without a clear capital structure plan, businesses may struggle to finance their operations and may not be able to make the most effective use of the degree to which a company uses debt and equity in its operations determines how profitable it is. The capital structure controversy has drawn a lot of attention from academic scholars and practitioners throughout the past 10 years. But a lot of attention is paid to developed nations. Equity money is particularly useful for businesses looking to grow by adding new products or venturing into untapped areas. The rationale is that companies have the option, based on their dividend policy, to allocate these resources—which are comparatively less

expensive—to operational expansion rather than paying current dividends. Without a clear capital structure plan, businesses may struggle to finance their operations and may not be able to make the most effective use of it. Compared to equity, debt is thought to be a more affordable source of funding since it has the benefit of being tax deductible, which raises earnings and dividends per share (Adesina et al., 2015). At first, analysts of finance thought businesses should borrow less since using too much leverage could increase interest rates and possibly harm a company's profitability (Chowdhury and Chowdhury, 2010).

First preference should be given to internal funds in the form of retained earnings; debt issuance is only taken into consideration if they are depleted. New equity is the last option if debt is found to be insufficient to meet financing demands. It's important to remember that internal funds do not need the disclosure of extra confidential financial information or incur flotation fees, which could expose a business to stricter market restrictions and possibly result in the loss of important competitive advantages (Rasiah and Kim, 2011). Babalola (2014) carried out an investigation and concluded that corporate performance is a nonlinear function of capital structure in the selected Nigerian manufacturing enterprises.

In the field of corporate finance literature, the question of how businesses decide on their strategic combination of securities has generated a great deal of attention and debate. The primary reason for this emphasis is the realization that a firm's investment decisions are influenced by the cost and accessibility of capital, which is directly related to the composition of funds, also known as the leverage ratio. The importance of a company's strategic financial decisions on its valuation is one of the many subjects covered in this ongoing discussion. Managers must therefore look into ways to finance more investments. Overall, the decisions about a company's financing involve a broad spectrum of policy considerations (Salawu, 2007).

In conclusion, microfinance organizations play a significant role in the creation and application of capital in underdeveloped nations. By bridging the gaps left by conventional commercial banks and specialized institutions and encouraging financial inclusion and empowerment among underprivileged communities, they serve as catalysts for economic development.

- What is the existing position of capital structure and profitability of microfinance?
- What is the relationship between LDR, DER, DR Interest coverage ratio and profitability of microfinance institutions?

- What is the impact of loan management on the profitability of microfinance institutions?

1.3 Objective of the Study

This study focuses on analyzing the impact of debt on the profitability of microfinance institutions. The objectives are given below;

- To analyze the existing position of capital structure and profitability of microfinance.
- To examine the relationship between LDR, DER, DR Interest coverage ratio and profitability of microfinance institutions.
- To assess the impact of loan management on the profitability of microfinance institution

1.4 Rationale of the Study

Research itself is important because it aims to gain knowledge and to add new literature in existing fields. The primary contribution of this work is to close a research gap in the field of microfinance credit management. This research will make a substantial contribution to the problem-solving process in microfinance by developing strategies and policies to sustain loan activity. The primary purpose of the study is to help the researcher complete the coursework needed for a master's degree. However, the study is crucial for a variety of stakeholders, including the government, academics, investors, students, and microfinance. To sum up, anybody who wishes to research this topic more thoroughly and broadly will find this study to be beneficial. Lastly, it is expected that the study will be a drop of literature in the field of microfinance and loan management analysis.

As a business student, it is a golden opportunity to show skill in financial analysis; this report will show the intelligence and skill of the student. This report serves as a standard by which to assess the student's qualifications. Students will gain experience in financial analysis through this thesis. The student will learn about the operations of the business house from this thesis. For individuals who are interested in learning more about loan management in microfinance, this thesis may be helpful. For reference purposes, this thesis

might be helpful in the library so that any student wishing to write a report has some suggestions. This thesis can be used as a guideline while preparing a small project report.

1.5 Limitations of the Study

The following are the limitations of the study.

- This study is focused on loan management on the profitability of microfinance companies in Nepal.
- Chhimek, Deprosc, Swablamban, Nerude and Nirdhan Uthhan Laghubitta Bittiya Sanstha Limited are taken for the study.
- The study covers ten years of periods from fiscal year 2069/70 to 2078/79.
- The study is based on secondary data.
- This study has been carried out based on published financial documents such as balance sheets, profit and loss accounts, related journals, magazines and books. These published documents have their limitations.

CHAPTER – II

LITERATURE REVIEW

This chapter presents the efforts that have been made to examine and review some of the related books and articles published in different economic journals, bulletins, dissertation papers, magazines, newspapers, and websites. This chapter is a comprehensive study of the conceptual framework, a review of books, journals and various research regarding the impact of debt management on the profitability of microfinance companies. Review of Literature can be studied by dividing it into the following ways i.e. Theoretical Review, conceptual review and Empirical Review.

2.1 Conceptual Review

A review of the literature includes previous research on the topic and literature that already exists in order to determine what has been explored previously. The goal of examining the literature, according to Wolf and Pant, is to gain some competence in one's field and determine what fresh contributions can be offered to evaluate some ideas for creating research designs (Pant and Wolf, 1996). In order to make all previous studies, their results, and their shortcomings known and to enable the execution of more research, it evaluates research papers or other connected assertions in linked areas of the study. The primary motivation behind doing a comprehensive assessment of previous research is to ascertain the results of studies conducted in fields where analogous concepts and approaches have been effectively used.

As a type of financial institution, the commercial bank has a unique quality that makes it stand apart from all other financial organizations. Its unique feature of accepting deposits that can be withdrawn via checks is what sets it apart. Commercial banks have the power, subject to certain restrictions, to create and destroy money through the use of demand deposits and loans. By creating demand deposits, they enable lending, and by eliminating these deposits, they can retire debts. In this perspective, the creation and management of assets with inherent risks falls under the umbrella of credit administration. The lending process takes into account a multitude of factors, including the people and processes required to assess and approve loan requests, negotiate conditions, manage documentation, disburse funds, supervise current loans, and handle workout scenarios. It is crucial to comprehend this process and its advantages and disadvantages when setting goals and

targets for lending operations and assigning available money to different lending functions, such as a mortgage, installment, and commercial portfolios (Johnson, 2007).

2.1.1 Concept of credit

Credit is the amount of money, whether secured or unsecured, that a creditor extends to a borrower. Credit and advances have a major place as assets on the balance sheet of a commercial bank. One of the main sources of revenue for banks is interest from these credit and advance transactions. Maintaining a well-organized credit portfolio is essential since it affects a bank's total profitability as well as the amount of debt it has outstanding (Nwankwo, 2004).

A bank's corporate strategy and strategic plan must have at least three essential elements. They are the business plan, the risk management framework, the corporate control strategies, and the study by John et al. (2011). In line with the modern banking paradigm, which views risk as an essential component of the business to be measured, managed, and accepted, the strategic approach to banking that is currently in use also includes a thorough framework for risk management. Banks seek to maximize profitable risks while reducing or eliminating those that could undermine value in an effort to strike an appropriate balance between value generation and risk reduction. Commercial banks mainly use deposits to collect money from a variety of sources and then distribute it to other industries, including trade, manufacturing, transportation, construction, communication, and public utilities. Nonetheless, there are numerous hazards that these banking operations subject organizations to. Although there are many hazards in the banking sector, credit risk, market risk, and operational risk are the most well-known and commonly recognized. For example, credit risk refers to the possibility of suffering financial losses when clients don't follow loan or contract requirements to the letter. On the other hand, market risk includes trade and balance sheet risks as well as the possible effects of interest rate, liquidity, and foreign exchange rate variations on earnings and capital. Meanwhile, operational risk emerges from factors such as natural disasters, transaction processing errors, asset safeguarding, system failures, fraud, and forgery (John et al., 2011).

1. Loan to Total Deposit Ratio (LDR)

Banks and other financial institutions evaluate their lending policies and general financial health using the loan-to-total deposit ratio. It is computed by dividing the institution's total lending volume by the total amount of deposits it has. A greater ratio suggests that a larger

percentage of client deposits is being utilized to support loans, thereby increasing the institution's vulnerability to economic downturns or unforeseen withdrawal demands. This ratio offers insight into the bank's liquidity and risk exposure. On the other hand, a lower ratio denotes a more cautious lending strategy with a larger percentage of deposits held in reserve, which could increase stability but potentially reduce profitability. The market, regulatory constraints, and a bank's tolerance for risk all influence the LDR's normal objective. Higher LDR banks could be perceived as having more aggressive lending procedures, whereas lower LDR banks might be perceived as having more conservative lending policies. It's crucial to remember that the LDR might fluctuate over time and differ significantly between institutions. A high LDR may indicate that a bank is using more of its deposits for lending, which could lead to profitability through interest income but also carries higher risks if a significant portion of the loans turns bad (Ogunmakinju, 2022).

2. Debt Equity Ratio (DER)

A key financial indicator that shows a company's capital structure and financial leverage is the debt-to-equity ratio or D/E ratio. It contrasts the percentage of debt (such as bonds and long-term loans) to equity in a business (the ownership interest of shareholders). The D/E ratio sheds light on how a business finances its expansion and ongoing operations. A high debt-to-earnings ratio suggests that the business is more dependent on debt financing, which can boost returns but also raise financial risk because interest payments must be made regularly. On the other hand, a low D/E ratio indicates a cautious strategy that relies more on equity funding, which could limit expansion options but perhaps reduce financial risk. The debt-to-equity ratio establishes the maximum amount of money that a company can borrow for a given duration. Additionally, it discloses the firm's leverage. The firm is highly indebted if this ratio is extremely high. From the standpoint of creditors, this ratio is crucial since they want to be guaranteed both their principal and interest amount (Badar and Saeed, 2013).

The ideal D/E ratio varies according to the economy, industry, and size of the organization. Higher amounts of debt may be easily handled by industries with steady cash flows and little volatility, whereas industries with more erratic cash flows could choose a lower D/E ratio to reduce risk. This ratio is used by creditors and investors to evaluate the creditworthiness and financial health of a company. Businesses must manage their debt-to-equity ratio since having a debt-to-equity ratio that is too high or too low can have negative

effects on their capacity to expand and maintain financial stability (Sharma et al., 2018). The link between the portion of a company's total assets financed by creditors (debt) and owners is expressed by the debt-to-equity ratio (DER) (equity). As a result, this ratio illustrates how creditors and shareholders have different entitlements to the company's assets (Zelalem, 2020).

3. Debt Ratio (DR)

The debt ratio, sometimes referred to as the debt-to-assets ratio, is a financial indicator that shows how much of an organization's assets are funded by debt. It is computed by dividing the entire debt of an organization by its total assets. A company's debt ratio gives information about its leverage and financial risk; a greater ratio denotes a bigger percentage of debt in the capital structure. Given that a large amount of the company's assets are financed by borrowing, a high debt ratio may indicate increased financial risk and could result in higher interest costs and unstable finances. On the other hand, a smaller debt ratio denotes a more cautious attitude toward money, depending more on equity financing (Brigham and Houston, 2018).

the proportion of total assets to total debt. The debt-to-asset ratio is another name for the debt ratio. It calculates the proportion of the company's assets that are debt or credit-financed. The greater the protection provided to the creditors in the event of liquidation, the smaller the ratio. A low debt ratio is preferred by creditors because it suggests that their position is better protected. A larger debt ratio typically indicates that the company will have to pay a higher interest rate on its borrowing; eventually, the company won't be able to borrow money at all (Sharma et al., 2018). Total debt includes both short-term and long-term debt. It's the most common way to calculate the debt ratio, which indicates whether debt accounts for a large proportion (Zhang et al., 2020).

4. Interest Coverage Ratio (ICR)

A financial indicator called the interest coverage ratio is used to evaluate a company's capacity to pay interest on its outstanding debt. It is computed by taking the earnings before interest and taxes (EBIT) and dividing it by the interest expense. A company's ability to service its debt is shown by the interest coverage ratio, which calculates the number of times operating earnings can cover interest payments. Since it suggests a better ability to pay interest and a lower level of financial risk, a higher interest coverage ratio is typically regarded as favourable. On the other hand, a lower interest coverage ratio might be

interpreted as a warning sign for possible financial difficulty and may prompt questions about a company's ability to pay off its debt (Ross et al., 2019).

A debt and profitability measure called the interest coverage ratio is used to assess how easily a business can pay interest on its existing debt. A company's earnings before interest and taxes (EBIT) are divided by its interest expense for a specific period to get the interest coverage ratio. The ability of a company to pay interest on outstanding debt is gauged by the interest coverage ratio. A company's earnings before interest and taxes (EBIT) are divided by its interest expense for a specific period to get the interest coverage ratio. In certain variants of the algorithm, the ratio is calculated using EBITDA or EBIAT rather than EBIT. Though the optimal ratio may differ depending on the industry, in general, a larger coverage ratio is preferable. It gauges a company's capacity to cover its interest costs. This ratio shows the amount of accessible earnings before interest and tax (EBIT) that can be used to pay interest charges (Zelalem, 2020). An organization's ability to pay interest from earnings before interest and taxes is indicated by a better interest coverage ratio. This implies that even under challenging circumstances, the business can manage its interest costs.

2.1.2 Profitability of Microfinance

There are multiple ways to understand the concept of profit. Profit can also refer to the compensation that a business receives for its managerial work; generally speaking, profit is the bare minimum needed to keep the business operating. This is referred to as normal profit. From another angle, profit is seen as a validation of true entrepreneurial efforts and as compensation for taking on risks; this is known as supernormal profit. Profit can also refer to monopoly profit, which is earned by a business by abusing its dominant position in the market and has no obvious relationship to any particular value-added function. Profit from monopolies is not regarded as a useful incentive. Sometimes, as in an inflationary economic upturn, profit might take the form of windfall gains—unexpected benefits that a company occurs to receive by coincidence (Chand, 2019).

Determining whether a bank has effectively used its resources to fulfil its targeted profitability targets is the goal of evaluating profitability. These goals focus on the minimal profit that the company needs to make rather than the maximum profit that can be made. This minimum profit is the minimum rate of return that is necessary to meet the bank's particular investment objectives. It is essential that this profit creates new capital to balance

the costs of operating the firm and not merely pay for the capital previously invested in the enterprise (Dangol, 1999).

A profitable bank allocates the majority of its capital to a variety of income-producing assets that are shielded from the issue of liquidity, or the need to maintain cash reserves to cover depositors' daily needs. Ultimately, a commercial bank is only an enterprise structured to optimize the worth of the capital contributed by investors while maintaining a reasonable degree of risk. In conclusion, profit maximization is the ultimate goal of Nepalese commercial banks among all other goals; the company's profit is the primary financial indicator of a business enterprise (Robinson, 1951).

1. Return on Assets

The ratio known as return on assets (ROA) gauges how profitable a business is to its total assets. It is computed by dividing net income by the total assets of the business. ROA sheds light on how well a business uses its resources to turn a profit. A greater return on assets (ROA) suggests that the business is more efficient at generating profits from its asset investments. It is a critical indicator of a business's financial performance and operational effectiveness, and as such, it is useful to investors and management in determining how well the company can turn a profit given its resources. As a dependent variable, it is employed. A measure of a company's capacity to turn a profit relative to its total assets is called return on assets (ROA). It displays how effectively management has used its resources to produce profits (Habib et al., 2016). Investors can determine the effectiveness of a company's investment conversion process by looking at its return on assets (ROA) statistic. Better is a greater return on assets (ROA) ratio, which allows the business to make more money with a lower investment. Put simply, more asset efficiency is indicated by a higher ROA. The contribution of an asset to net income is indicated by its return on assets. The amount of money units earned from each asset contribution is computed. This ratio is also called the asset turnover ratio (Badar and Saeed, 2013).

2. Return on Equity

A ratio called return on equity (ROE) gauges a business's profitability about the equity held by its shareholders. It is computed by dividing net income by equity held by shareholders in the company. ROE sheds light on how well a business uses the money that its shareholders have contributed to generate profits. A greater return on equity (ROE) often indicates that the business is generating returns on shareholder equity effectively, which is

frequently a sign of strong financial performance. Investors and analysts often use return on equity (ROE) as a key performance indicator when evaluating a company's capacity to generate returns for their owners. the ratio of net income to common equity. It calculates the rate of return on investment for common stockholders. The management's goal is to maximize the return on the investment made by shareholders in the company. Hence, return on equity is the most effective way to assess if a company has achieved its objective. An increasing ratio is favourable for a company which shows the net profit is increasing (Sharma et al., 2018).

2.1.3 Relationship between loan management and profitability

A crucial component of financial management and performance assessment is the connection between a company's profitability and debt management. The profitability of a business can be significantly impacted by effective debt management. One way that a company may use debt is to finance expansion, engage in new ventures, and take advantage of commercial opportunities. On the other hand, high debt or bad debt management techniques can cause financial hardship and have a detrimental impact on profitability.

A 1995 investigation by Rajan and Zingales titled "What Does Capital Structure Knowledge Tell Us? A Few Indications from Global Data "discovered evidence of an inverse U-shaped association between the profitability and debt-to-equity ratio of a company. This implies that, at first, a company's profitability may rise as it takes on more debt because of the tax advantages linked to interest payments and the availability of cash for investments. Greater debt levels, however, can eventually cause financial hardship and higher interest costs, which will lower profitability.

Another aspect to consider is the cost of debt. Businesses must pay interest on their debt, and if interest rates are high or if the debt carries unfavourable terms, it can erode profitability. Additionally, creditworthiness and debt management practices can influence a company's ability to secure favourable lending terms. Firms with a strong record of debt management are often in a better position to negotiate lower interest rates and more favourable loan conditions.

Profitability and debt management have a dynamic and intricate relationship. By granting access to cash for expansion, efficient debt management can increase profitability; nevertheless, it must be balanced to prevent overleverage and financial hardship.

Maintaining profitability in a corporation also requires obtaining favourable credit conditions and effectively managing the cost of debt (Rajan and Zingales, 1995).

2.1.4 The Anticipated Income Theory

Prochnow developed a novel loan hypothesis in 1949 after conducting an extensive investigation, which he named the Anticipated Income Theory. Regardless of the borrower's business, the bank planned to liquidate term loans based on projected earnings in every case (Afriyie and Akotey, 2011). This method of liquidation differs from the traditional or commercial theories of liquidity in that it does not involve selling the borrower's assets or transferring the loan to another lender; instead, it involves projecting the borrower's income. This theory essentially holds that banks should lend money based on the borrower's expected income rather than present value. This theory's forward-thinking approach to bank loans and advances is one startling feature (Kolapo et al., 2018). Another common name for it is the cash flow approach to financing. When interpreted correctly, the sole theory this theory challenged was the commercial loan theory—not the shift ability hypothesis. It doesn't challenge the shift ability theory, which holds that a bank's secondary reserves are its primary source of liquidity. Instead, it once more brought attention to the kinds of loans that banks should provide, but it reached a very different result than those who supported the commercial lending idea (Moti et al., 2012).

The Anticipated Income Theory was first presented by H.V. Prochanow in 1944 as a reaction to the widespread practice of term loan extensions by US commercial banks. This new theory, which focuses mostly on long-term loans and advances, was developed as a result of Prochanow's comprehensive research on loans and bank assets in 1949. (Soyibo et al., 2004). According to research by Afriyie and Akotey (2011), In contrast to the commercial loans theory, which suggests selling or liquidating assets, the Anticipated Income Theory asserts that banks should rely on their projected revenues in order to recoup loans from borrowers. According to this notion, banks should base their lending decisions on the applicants' predicted revenue rather than the current valuations of their assets, regardless of the borrower's character or type of business. The Anticipated Income Theory is unique in that it emphasizes repayment or liquidity transfer through the cash flows or projected profits of the borrower's business and projects. This perspective on the future of loans and banking facilities is what makes it unique (Kolapo et al., 2012). The shift ability theory and the capacity theory are not in competition with the anticipated income theory,

in contrast to the commercial loan hypothesis. Rather, it focuses banks' and banking experts' attention on figuring out what kinds of loans are best for the bank, without questioning the idea that secondary or optional reserves are a bank's primary source of liquidity.

2.1.5 Loan and advance

The amount borrowed by one person from another is referred to as a "loan." Comparable to a loan, the amount denotes the total amount given to the borrower. Conversely, "advance" refers to a "credit facility" that the bank has provided. Most advances that banks give out are for temporary needs. A bank's loans and advances division is crucial since its business grows as a result of this division's performance. If this portion malfunctions, the bank can become insolvent. Traders, businesspeople, and industrialists are the primary recipients of bank advances and loans. The terms and conditions of the disbursement provision, security requirements, and other aspects may vary depending on the type of credit. Agrani Bank Limited collaborates closely with its clients, regulatory bodies, shareholders, other banks, and financial institutions to guarantee secure banking. Recently, this bank has accomplished many milestones compared to other banks. When loan documentation is handled by knowledgeable bankers, this bank's credit administration operates quite well. Reducing nonperforming loans (NPLs) is the management's current main priority because it's a significant step toward debt recovery. In addition to these, Agrani Bank Limited offers many value-added services and other services for the benefit of the populace. Nonetheless, loans and advances are a bank's most valuable assets and main revenue streams, both of which contribute to the bank's improved financial standing (Rahman, 2019).

2.1.6 Commercial Loan Theory

The real bills concept, also known as the commercial loan theory, is the oldest theory of banking. According to the commercial loan theory, banks should only make short-term, self-liquidating loans on commercial paper. The goal of the commercial loan theory is to persuade people to lend money to banks and engage in other economic activities. Manzura and Hosna (2009), If this theory is strictly applied, it will become clear that its expected function is to provide money for changes in overall economic activity. Deposit-Money Banks (DMBs) in Nigeria are fond of this ideology. Nigerian bankers feel that depositors' funds should be used appropriately in short-term loans because their resources are repayable quickly. According to (Kargi, 2011), if one takes into account the fact that there were few or no secondary reserve assets available at the time the theory was dominant—

assets that could have provided the bank with a liquidity buffer—then the strong relationship to this notion is very orthodox. Furthermore, the credit requirements of Nigeria's expanding economy are overlooked by this approach. It hasn't inspired banks to provide financing for the acquisition of real estate, machinery, plants, and homes. A theory's inability to acknowledge the relative stability of bank deposits is demonstrated by its insistence that all loans must be repaid in the regular course of business. Demand deposits are made on demand, although it's unlikely that every depositor will make a payment demand at the same moment. Therefore, a bank can extend money for a respectable amount of time without running the risk of illiquidity because of the stability of deposits. Despite its shortcomings, the real bills doctrine, often known as the commercial loan theory, has been a widely accepted banking theory. Its influence may still be seen in the way many bankers think, the way bank regulatory bodies are organized, and the way banks are examined. One cannot understand contemporary banking without an understanding of our banking history, and cannot understand banking history without an understanding of the commercial loan theory.

The oldest theory guiding the core operating functions of banks is the real bills doctrine, commonly referred to as the commercial loan's theory. This idea states that banks should offer their customers commercial papers and short-term, self-liquidating loans in the first place (Hosna & Manzura, 2009). Its goal is to provide banks with a rational and persuasive framework to adhere to when making loans and doing other economic operations. This theory's main principle, which emphasizes liquidity, aims to have an impact on a variety of economic activities. Given that customer deposits are retractable and have a short duration, some banks that primarily rely on them for liquidity believe that short-term loans are a better fit. However, this viewpoint could not be advantageous for banks that intend to promote rising economies by providing medium- and long-term financing, such as loans for real estate and industry, while also keeping substantial reserves. Economic development that depends on long-term funding for developing sectors may be hindered by this strategy. Many banks throughout the world use banking screening and activity evaluation processes and uphold the fundamental premise of short-term lending despite these disadvantages. Experts in banking and research stress how crucial it is to comprehend the historical background of banks, especially the commercial loan theory, in order to fully appreciate the actions and procedures that banks engage in today.

2.1.7 Trade-off Theory

A key idea in corporate finance, the trade-off theory discusses how strategically to balance a company's use of debt and equity funding. This theory states that when choosing their ideal capital structure, businesses must make trade-offs. One benefit of taking on debt is interest tax shielding, which can lower a company's tax burden and boost profitability. Higher debt, on the other hand, increases the risk of financial trouble and bankruptcy since it might make it difficult to pay off debt and other financial commitments, including interest. According to the trade-off principle, businesses should try to find a balance between debt and equity in order to maximize the company's overall worth (Modigliani and Miller, 1958).

2.1.8 Liquidity theory

The management of a company's liquidity position, with an emphasis on its capacity to satisfy short-term financial obligations and sustain sufficient cash flow, is at the centre of the finance theory known as liquidity. According to this notion, it's critical to have enough liquid assets on hand, such as cash and marketable securities, to pay off short-term debts, cover unforeseen costs, and take advantage of investment possibilities. It says that companies have to find a balance between using the money for profitable endeavours and preserving liquidity for stability. For businesses to weather economic downturns, abrupt market swings, and unanticipated financial difficulties, liquidity management is essential to maintaining their solvency and capacity to take advantage of lucrative possibilities (Baumol, 1952).

2.1.9 Shiftability theory

During times of liquidity constraint, a bank's assets can be moved to another bank with noticeably higher liquidity using the shiftability idea (Alshatti, 2014). By keeping transferable financial assets on the open market, like government securities, and preserving the self-liquidation status of the bonds linked to these asset-holding banks, it developed to diversify the assets of banks (Moti, Masinde, & Mugenda, 2012). This theory offers more thorough banking concepts rather than trying to displace or abolish the commercial loan theory. It introduces new categories of banking assets, so extending the idea of commercial loans. According to the shift ability theory, a bank's liquidity depends on its ability to easily sell or transfer some of its assets to others at predictable prices (Nwaezeaku, 2006). According to (Hosna & Manzura, 2009), the shiftability theory advises banks to diversify

their assets rather than merely depending on loans by acquiring convertible investments as a source of liquidity. As such, the principle of shiftability has had a substantial impact on banks' direction and banking operations. The commercial loans idea, according to proponents of the shiftability theory, excessively focuses on the liquidity of commercial loans (Kargi, 2011). It is crucial to remember that the shiftability hypothesis has a major drawback: although it implies that a bank may transfer its assets to meet its liquidity needs, not all banks may be able to use this strategy.

2.1.10 The Liability Management Theory

The liability management theory emphasizes the importance of the bank's asset structure in providing it with liquidity (Shafiq & Nasr, 2010). However, this theory has taken a different turn in terms of liquidity, suggesting that the bank can use its liabilities to provide appropriate liquidity to meet the demand for withdrawals and meet loan applications. This theory centres on the idea that traditional trends in debt and liquidity management at banks are of no importance given that money can be obtained through short-term debt instruments from the capital market whenever the need to fill the reserve deficit. Also, loans by themselves are not the only.

2.2 Empirical Review

Scholars write a review of the literature to ascertain the body of knowledge that addresses a given topic, encompassing significant discoveries as well as theoretical and methodological advancements. Thus, determining what research studies have been done on the topic of study of choice and what needs to be done is the fundamental goal of a literature review (Pant, 2012). This section briefly reviews the existing studies, related to the subject matter of the study as follows.

Adegbola et. al. (2023) conducted research entitled Credit Management Practices and Loan Default in Deposit Money Banks (DMBs) in Osun State, Nigeria. The major purpose of the study was to examine the effect of credit management practices on loan default in deposit money banks in Osun State. The researcher used descriptive statistics and multiple regression were statistical tools used to analyze the data. The study found that credit management has no significant effect on loan default, with both credit appraisal and credit monitoring exhibiting negative but non-significant effects on loan default, and credit collection policy exhibiting positive and significant effects on loans. The study concluded

that credit management practices have no significant effect on loan default. In other words, loan defaults experienced in the banks were not influenced by the loan management practices put in place. While the processes were in existence in the banks under investigation, they have not been able to affect the incidences of loan default.

Ogunmakinju (2022) conducted credit management effects and Performance of deposit money Banks in Nigeria. The main objective of the study was to investigate credit management effects and the performance of the Deposit Money Banks in Nigeria. The researcher used descriptive statistics and regression analysis were used to analyze the data. The findings reported that non-performing loans were insignificantly positive to influence profit after tax (PAT), loan to deposit ratio revealed a positive significant impact on PAT, and capital adequacy ratio exhibited a positive insignificant impact on PAT. The study concluded that no causal relationship between non-performing loan (NPL) and profit after tax (PAT), loan loss provision and profit after tax have no causal relationship, loan to deposit ratio (LDR) and profit after tax (PAT) revealed no uni or bi-directional relationship, and capital adequacy ratio (CAR) move free without any direction.

Rhee and Ha (2022) analyzed research entitled Does Public-Loan Management Matter for Sustainable Finance and Operation Risk and the main objective was to assess the effectiveness of closer inspection systems in the context of small loans. In particular, it compares before and after implementing propensity score matching (PSM) in terms of closer inspection and operational risk. The researcher found that the default rate with closer inspection is lower than without closer inspection. Furthermore, the default rate with operational risk is dramatically lower than that without operational risk. The PSM approach presented here thus illuminates opportunities and challenges in three strategic areas: management of public funds, effectiveness of both closer inspection and operational risk, and risk management for individual borrower types.

Ghimire (2022) analyzed the credit management of joint venture commercial Bank-Nepal Investment Bank and Bank of Kathmandu. The main objective was to see the credit practices of sample banks. To examine the efficiency of selected banks. To find out strengths and weaknesses in credit administration. The major findings were BOK has maintained higher credit and advances to total deposit. Fixed deposit is the main source of granting credit for both banks. Credit loss provisioning is in a decreasing trend so; it

indicates an efficient credit policy. Interest rate affects the amount of deposit, which in turn affects credit.

Çollaku and Aliu (2021) examined the Impact of Non-Performing Loans on a Bank's Profitability: Empirical Evidence from commercial banks in Kosovo. The main objective of the study was to examine the impact of non-performing loans on Kosovo banks' profitability. The researcher used Multi-variable regression analysis to analyze the data. The results showed that the effect of non-performing loans on profitability is statistically significant. The research could influence the credit risk protocols and strategies employed by banks. Additionally, it highlights the need for increased oversight by the Central Banks of Kosovo. The size of a bank plays a crucial role in attaining improved financial outcomes and can act as a cushion in the event of loan defaults.

Upreti (2021) analyzed the credit management of commercial banks with reference (to NIBL and NIL) Banks. The main objective was to analyze the functions, procedures and activities of commercial banks' credit policy. To analyze the credit and advances provided by commercial banks. To analyze the recovery status of credit disbursed. To find out the strengths and weaknesses of credit administration of commercial banks. The major findings were Average loan and advances ratio of NIBL and NIC is 0.71 and 0.78. NIC has maintained higher loan and advances to total deposit which shows that NIC seems to be strong enough to mobilize its total deposit as loan and advances. All banks are capable of using more than 50% of the deposits on loans and advances. If maintained, it helps to make consistency in the profitability of banks. The average interest income to loans and advances of NIB does not show a clear direction. The average interest income to loan and advances ratio of NIC in terms of the average ratio of NIB has the best performance. The correlation coefficient between non-performing loans and loans of NIB shows a moderate, negative correlation. It indicates that non-performing loans and loans were moderately, and negatively related to each other. That means decreasing performance in loan management helps to decrease the non-performing loans.

Nazir et al. (2021) conducted research entitled Debt Financing and Firm Performance: Empirical Evidence from the Pakistan Stock Exchange and the key aim of this study was to investigate the relationship between the listed firms' debt level and performance in the Pakistan Stock Exchange (PSX). The researcher used Pooled ordinary least squares regression and fixed and random effects models statistical tools to analyze the data. The

results indicate that both short- and long-term debt have negative and may lead to a high-debt policy, resulting in lower performance. However, both sales growth and firm size have positive effects on the profitability of non-financial sector companies. This study suggests that when debt financing significantly and negatively influences firm profitability, company owners and managers should focus on finding a satisfactory debt level. However, this study is limited to the automobile, cement and sugar sectors of Pakistan. Future studies could address other sectors, such as textiles, fertilizers and pharmaceuticals.

Milošev (2021) conducted research Impact of Debt Management on the Profitability of Large non-financial Firms in Serbia. The major purpose of the study was to find new empirical evidence on the influence of debt (debt ratio and debt to equity ratio) on firm profitability (ROA). The researcher used multiple ordinary least squares regression models to analyze the data. The finding of the study was after controlling for size, liquidity and tangibility of assets, the results found a statistically significant correlation and negative influence of debt ratio and capital structure on firm profitability. That implies that the level of leverage in the largest companies in Serbia, as well as the level of ratio debt to equity, is rising with lower profitability. A statistically significant relation was found between materiality and profitability and company size and profitability. However, there is no relationship between liquidity and profitability.

Alvarez et al. (2020) studied research entitled Working Capital Management and Profitability: Evidence from an Emergent Economy. The main purpose was the impact of working capital management on the profitability of Argentine manufacturing firms. The researcher used the Fixed effects regression model to find the result. The results highlighted a positive and statistically significant relationship between all components of working capital and profitability. Conversely, leverage has shown a statistically significant negative relationship to profitability, suggesting that an increase in debt hurts firm performance. It is recommended that empirical findings contribute to the existing literature, providing further evidence of the relationship between working capital management and profitability in the context of an emerging economy. The results can help business managers manage the various components of working capital more effectively and efficiently, by acting on the variables that can improve performance.

Anggari and Dana (2020) investigated the Effect of Capital Adequacy Ratio, third-party funds, Loan Deposit Ratio, and Bank Size on Profitability in Banking Companies on IDX.

The study aimed to analyze the effect of Capital Adequacy Ratio (CAR), Third Party Fund, Loan Deposit Ratio (LDR), and Bank Size on Profitability in banking companies listed on the Indonesia Stock Exchange. The multiple regression analysis was adopted to find out the effect of capital adequacy ratio, third-party funds, loan-to-deposit ratio, and bank size on profitability. The results of this study indicated that the Capital Adequacy Ratio, third-party fund, and Bank Size have a positive and significant effect on profitability. Meanwhile, the Loan Deposit Ratio had a positive and insignificant effect on the Profitability of Banking Companies in the Indonesia Stock Exchange. The study concluded effective bank management should prioritize maintaining a high Capital Adequacy Ratio (CAR) to enhance risk-bearing capacity, leading to increased profitability and improved financial performance. Efficiently managing sources of funds, such as through credit distribution, generates interest income and supports profitable asset investments, further boosting profitability. Banks of larger sizes should ensure sound asset management, as total assets correlate with increased profitability while adhering to standards set by Bank Indonesia is essential.

Nugraha et al. (2020) examined the influence of company size, asset structure, company growth, and Profitability on debt policy to determine the determinants of debt policy in the food and beverage industry sub-sector. The ordinary Least Square Method (OLS) method was adopted by the researchers to determine the determinates of debt policy. The results showed that two variables affect debt policy, including tangibility which has a positive influence on debt policy and company growth has a negative effect on debt policy. While company size and profitability do not affect debt policy.

Nurdani and Rahmawati (2020) examined the effect of firm sizes, profitability, dividend policy, asset structure, sales growth, and Free Cash Flow on Debt Policy (On Manufacturing Companies Listed on The Indonesia Stock Exchange). The main objective of the study was to examine the effect of company size, profitability, dividend policy, asset structure, company growth and free cash flow on debt policy. The researcher used a multiple regression model to analyse data. The analysis showed that the size of the company has a negative and not significant effect on debt policy, and profitability has a negative and significant effect on debt policy. Dividend policy variables and asset structure have a negative and significant effect on debt policy. While sales growth and free cash flow do not affect debt policy.

Wuave et al. (2020) studied the effect of liquidity management on the financial performance of banks in Nigeria. The key objective was to examine the effect of liquidity management on the financial performance of banks in Nigeria. The regression analysis was used to analyze the data. The study finds that liquidity ratio (LQR) has a positive and significant effect on the financial performance of DMB as measured by return on assets (ROA), return on equity (ROE), and net interest margin (NIM). It, therefore, recommends that banks in Nigeria should establish sound governance and risk management systems by developing strategies, and policies for liquidity management that are well integrated into its risk management practices as well as establish a contingency funding plan to address any liquidity shortfall during periods of stress or emergency while ensuring that active monitoring liquidity funding needs to avert any liquidity challenge that could trigger crisis in the banks is promptly addressed.

Zelalem (2020) analyzed research entitled *The Impact of Financial Leverage on the Performance of Commercial Banks: Evidence from Selected Commercial Banks in Ethiopia*. The major objective of this research was to investigate the effect of financial leverage on the financial performance of Ethiopian Commercial Banks. The researcher used descriptive statistics and a fixed effect model to analyze the data. The result of the study showed that Debt Ratio (DR) has a negative insignificant effect on Banks' performance measured by Return on Assets (ROA) and Return on Equity (ROE) while Debt Equity Ratio (DER) And Interest Coverage Ratio (ICR) have a significant positive effect on Banks' performance measured by Return on Assets (ROA) and Return on Equity (ROE). Based on the findings of the study the researcher recommends that, until its cost of capital does not exceed the actual return of a corporation better to use a debt source of finance for the sake of maximizing the ultimate goal of a firm, which is maximizing the wealth of shareholders and value of a corporation

Zhang et al. (2020) conducted the debt effects on profitability. The major purpose of the study was to better understand the impact of debt ratio on the profitability of all the companies of the S&P 500. The researcher used descriptive statistics, correlation analysis and regression analysis to analyze the data. The findings of the study corporate profitability is negatively correlated with debt ratio, tax ratio, and intangible assets. Asset growth is not related to corporate profitability. The conclusion of the study is the influence of debt ratio on profitability is not a simple linear relationship. Debt ratio is not only a strategic decision

of a company, sometimes it is influenced by passive factors, such as financial pressure, macro-level variables and capital liquidity. If we can take the presence of nonlinear effects of debt into consideration, our model might be improved. But overall, the debt ratio has a negative impact on profitability

Aziz and Abbas (2019) analyzed research entitled Effect of Debt Financing on Firm Performance: A Study on the Non-Financial Sector of Pakistan. The major purpose of the study was to examine the association of different debt financing on firms' performance in 14 sectors of Pakistan by using the panel least square model. The results of the study indicated that debt financing has a negative but significant impact on firm performance in Pakistan. This study's findings recommend that companies should more rely on their internal source of finance because it is the cheap and reliable source of finance in the Pakistani context.

Kajola et al. (2019) investigated the liquidity and profitability dynamics: evidence from the Nigerian banking sector. The main objective was to examine the effect of liquidity management on profitability in ten deposit money banks in Nigeria. The researcher used random effects generalized least squares as an estimation technique to find out the impact of liquidity management on profitability. The results reveal a positive and statistically significant relationship between two liquidity management proxies (current ratio and liquidity ratio) and return on asset. The study did not find empirical evidence in support of loan-to-deposit ratio and deposit-to-asset ratio as influencing the profitability of the selected banks, as results produced an insignificant relationship with profitability. The study recommends that for sustainable profitability to be achieved, the board of directors and top financial managers of banks should put in place a robust framework that will efficiently manage their banks' liquidity. Specifically, utmost attention should be taken to the management of the current ratio and liquidity ratio as well as the investment of excess liquidity in short-term assets such as treasury bills and certificates.

Dhamala (2018) conducted a study on a Study on Lending Practices of Finance Companies in Nepal. The study aims to analyze the performance of finance companies regarding lending quality and quantity and its contribution to profitability. This study is based on the secondary data of finance companies on loan flow and the income generated by loans i.e. interest earnings and how this interest-earning affects the overall profit of the company.

Ghimire (2018) analyzed the credit management of joint venture commercial Bank-Nepal Investment Bank and Bank of Kathmandu. To see the credit practices of sample banks. To examine the efficiency of selected banks. To find out the strengths and weaknesses in credit administration the major findings where BOK has maintained higher credit and advances to total deposit. Fixed deposit is the main source of granting credit for both banks. Credit loss provisioning is in a decreasing trend so; it indicates an efficient credit policy. Interest rate affects the amount of deposit, which in turn affects credit.

Ndubuisi et al. (2017) conducted research entitled Loan Management and Financial Performance of Quoted Deposit Money Banks in Nigeria. The main objective of the study was to determine the relationship between loan management and financial performance with a focus on deposit money banks. The researcher used Pearson coefficient correlation and multiple regression analysis to analyze the data. There is a positive and statistically significant relationship between loan management (Proxied by Non-Performing Loan & Deposit) and financial performance (ROA, EPS, DPS of quoted deposit money bank in Nigeria). This study recommended that the management of deposit money banks in Nigeria should enhance their skills in credit analysis and loan management.

Basit and Hassan (2017) analyzed the impact of capital structure on firms' performance: A Study on the Karachi Stock Exchange (KSE) Listed Firms in Pakistan and investigated Debt to Equity ratio to determine the firm performance of Pakistani companies listed in Chemical, Food and Care products, Cement, Pharmaceutical, Auto assembler and Textile sector. The researcher used descriptive statistics, the Pearson correlation coefficient and multiple linear regression to analyze the data. the findings show Earnings per share, return on Equity and Return on Assets are significantly correlated to the Debt-to-Equity ratio. While Debt to equity ratio has a significant impact on Size and Return on Assets. Furthermore, it is recommended that other firm-specific factors can also be used with a wider period like Dividends, Taxes etc. to gauge the impact and end with a more accurate outcome. This Study will eventually benefit the finance managers to define an optimal capital structure and also the research community by providing new knowledge regarding the impacts of capital structure. although, other major economies can also be examined with different other industries to check the deviation of capital structure formation.

Malla (2017) studied the loan portfolio management of Nepalese Commercial Banks as per the standard parameter of Nepal Rastra Bank (NRB) directives 2073; however, 96.41 per

cent of banks' lending is on a collateral basis which indicates that banks are conservative in lending. He suggested that Nepalese banks should increase their lending on priority sector and other various types of project-based lending to contribute to the development of the country. The major concern of risk management in banks today is managing credit risk and for better credit risk management, loan portfolio management is crucial. The bank's credit portfolio management can be determined by its credit operation. This study focuses on illustrating the status of loan portfolio management and techniques adopted by Joint Venture Commercial banks of Nepal. The present study focused on assessing sector-wise loan portfolio management of Joint Venture banks of Nepal in the year 2018-19 and examining the relationship between the sector-wise loan portfolio and the profitability of the banks.

Sharma (2017) conducted research on the comparative Study of Credit Management of Nepalese Commercial Banks (Concerning Nabil Bank Ltd., Nepal Credit and Commercial Bank Ltd. and Nepal Investment Bank Ltd.). The researcher tries to analyze the credit of commercial banks. The main objectives of the study are to evaluate the proposition of credit and the level of NPAs in total loans, total deposits and total assets in selected banks. This study reveals that banks' NPL has increased over the study period and the most responsible factors for NPA growth are weak monitoring, less focus on lending policy while making loans and mismanagement. Likewise, legal provision for recovery as a reason for increment in NPA in Nepalese Banks has been found the factor having the least impact on supervision and monitoring system has been identified as the average factor. At the same time, it has been identified that commercial banks give the highest priority to the trade sector for lending its resources. Then it is found that the service sector is not given much priority.

Habib et al. (2016) analyzed research entitled Impact of Debt on Profitability of Firms; Evidence from the non-financial sector of Pakistan. The major objective of the study was to find out the impact of debt on the profitability of firms in Pakistan. The researcher used a random regression model to analyze the data. Results indicate a significant but negative relationship between short-term debt, long-term debt, total debt, and return on assets. Results indicate a negative relationship between debt and profitability, i.e. increasing debt in capital structure will decrease profitability. Therefore, companies should prefer internal financing or other sources of financing on debt financing.

Pradhan and Khadka (2016) studied the effect of debt financing on the profitability of Nepalese commercial banks. The main objective of the study was to examine the effect of debt financing on the profitability of Nepalese commercial banks. The researcher used Regression model analysis to analyze the data. The result shows a positive relationship of banks' profitability with short-term debt to total assets, interest coverage ratio, and size of the banks. However, profitability is negatively related to long-term debt to total assets, total debt to total assets, and debt to equity ratio. The regression result shows that beta coefficients are positively significant for short-term debt to total assets, interest coverage ratio, and size of the banks with profitability. Whereas the beta coefficients are negatively significant for long-term debt to total assets, total debt to total assets, and debt to equity ratio with profitability. The study finds that in Nepalese commercial banks, long-term debt to total assets, total debt to total assets, debt to equity ratio, and interest coverage ratio significantly influence profitability. Additionally, bank size is also observed to have a significant impact on their profits.

Prempeh et al. (2016) conducted research entitled *The Effect of Debt Policy on Firms Performance: Empirical Evidence from Listed Manufacturing Companies on The Ghana Stock Exchange*. The main objective was to investigate the effect of Debt Policy (Short-Term Debt, Long-Term Debt, and Total Debt) on firms' performance. The researcher used the panel regression model to analyze the data. It was also found that debt (Short-Term Debt, Long-Term Debt and Total Debt) hurts firms' performance. It is recommended that listed manufacturing firms should increase the level of equity finance and exploit the advantages of leverage. The Ghanaian government should take concrete steps to develop the country's capital market to enable businesses to access long-term capital necessary for the financial performance of the firm in the long run.

Koirala (2016) conducted a study on a *Study on Credit Management in Nepalese Commercial Banks*. The study aims to find out about credit in selected commercial banks and the relationship between non-performing loans and loan provision in selected banks, to analyze the performance of commercial banks regarding lending quality and its contribution to profitability, to examine loan loss provision in commercial banks, to evaluation the proposition of loan and the level of loan in total assets and total deposits in the Nepalese commercial banks. This study concludes ineffective credit policy, political pressure to lend to unaccredited worthy borrowers, and overvaluation of collateral are the

major causes of mounting nonperforming assets in government-owned banks like NBL. Other factors leading to the accumulation of credit are weak loan sanctioning process, ineffective credit monitoring and supervision system, economic slowdown, borrower's misconduct etc. continual review and remedial action to counter deterioration in credit quality.

Tauseef et al. (2015) studied research entitled Effect of Debt Financing on Corporate Financial Performance: Evidence from Textile Firms in Pakistan. the main objective of this research was to examine the effect of debt financing on a firm's financial performance, measured as return on equity. The researcher used Regression analysis to analyze the data. Results show a nonlinear relationship between return on equity and debt-to-asset ratio. A firm's sales growth has a positive and significant impact on return on equity whereas the firm's size has no significant impact on it. These results recommend that the textile firms which are heavily trapped in debt have to bear huge interest costs which take a big portion out of the operating incomes of these firms, leaving little portion in the net income which belongs to the owners. We also find that a firm's sales growth has a positive and significant effect whereas the firm's size has no significant impact on its return on equity.

Table 1 Meta table of loan management and profitability

S.N.	Source	Topic	Objective	Methodology	Findings
1.	Adegbol a et al. (2023)	Credit Management Practices and Loan Default in Deposit Money Banks (DMBs) in Osun State, Nigeria	To examine the effect of credit management practices on loan default in deposit money banks in Osun State.	Descriptive Statistics, Regression Analysis	The study found that credit management has no significant effect on loan default, with both credit appraisal and credit monitoring exhibiting negative but non-significant effects on loan default, and credit collection policy exhibiting positive and significant effects on loan.
2.	Ogunma kinju (2022)	Credit management effects and	To investigate credit management	Descriptive, Regression Analysis	The findings reported that non-performing loans were insignificantly positive to

		Performance of deposit money Banks in Nigeria	of effects and the performance of the Deposit Money Banks in Nigeria.		influence profit after tax (PAT), loan to deposit ratio revealed a positive significant impact on PAT, and capital adequacy ratio exhibited a positive insignificant impact on PAT. loan to deposit ratio (LDR) and profit after tax (PAT) revealed no uni or bi-directional relationship, and capital adequacy ratio (CAR) moved free without any direction
3.	Rhee and Ha (2022)	Does Public-Loan Management Matter for Sustainable Finance and Operation Risk?	To assess the effectiveness of closer inspection systems in the context of small loans.	Propensity Score Matching (PSM)	The default rate with closer inspection is 5.5% lower than without closer inspection. Furthermore, the default rate with operational risk is dramatically lower (15.4%) than that without operational risk.
4.	Çollaku and Aliu (2021)	Impact of Non-Performing Loans on Bank's Profitability: Empirical Evidence from Commercial Banks in Kosovo	To examine the impact of non-performing loans on Kosovo banks' profitability	Multi-variable Linear Regression	The results showed that the effect of non-performing loans on profitability is statistically significant and shows that for each 1% increase in NPL, the Return of Assets decreases by 0.19%, holding other variables constant.
5.	Nazir et al. (2021)	Debt financing and firm performance: empirical	To investigate the relationship between the listed firms'	Pooled Ordinary Least Squares Regression,	The results indicate that both short- and long-term debt have negative and significant impacts on firm performance

		evidence from the Pakistan Stock Exchange	debt level and performance on the Pakistan Stock Exchange (PSX)	Fixed and Random Effect Models	in profitability. This suggests that agency issues may lead to a high-debt policy, resulting in lower performance. However, both sales growth and firm size have positive effects on the profitability of non-financial sector companies.
6.	Milošev (2021)	Impact of Debt Management on Profitability of Large non-financial firms in Serbia	To find new empirical evidence on the influence of debt (debt ratio and debt to equity ratio) on firm profitability (ROA)	Multiple Ordinary Least Square Regression Model	After controlling for size, liquidity and tangibility of assets, the results find a statistically significant correlation and negative influence of debt ratio and capital structure on firm profitability.
7.	Alvarez et al. (2020)	Working Capital Management and Profitability: Evidence from an Emergent Economy	To study the impact of working capital management on the profitability of Argentine manufacturing firm	Fixed Effect Regression Model	The results highlighted a positive and statistically significant relationship between all components of working capital and profitability. Conversely, leverage has shown a statistically significant negative relationship to profitability, suggesting that an increase in debt hurts firm performance.
8.	Anggari and Dana (2020)	The Effect of Capital Adequacy Ratio, Third Party	To analyze the effect of Capital Adequacy Ratio	Multiple Linear Regression	The results of this study indicate that the Capital Adequacy Ratio, Third Party

		Funds, Loan to Deposit Ratio, Bank Size on Profitability in Banking Companies on IDX	(CAR), Third Party Fund, Loan to Deposit Ratio (LDR), and Bank Size to Profitability in banking companies listed on the Indonesia Stock Exchange		Fund, and Bank Size have a positive and significant effect on profitability. Meanwhile, the Loan Deposit Ratio has a positive and insignificant effect on the Profitability of Banking Companies in the Indonesia Stock Exchange during the 2016–2018 period.
9.	Nugraha et al. (2020)	The influence of company size, asset structure, company growth, and Profitability on debt policy	To determine the determinants of debt policy in the food and beverage industry sub-sector	Ordinary Least Square Method (OLS)	The results showed that two variables affect debt policy, including tangibility which has a positive influence on debt policy and company growth has a negative effect on debt policy. While company size and profitability do not affect debt policy
10.	Nurdani and Rahmawati (2020)	The Effect of Firm Sizes, Profitability, Dividend Policy, Asset Structure, Sales Growth and Free Cash Flow on Debt Policy (On Manufacturing Companies Listed on The Indonesia	To examine the effect of company size, profitability, dividend policy, asset structure, company growth and free cash flow on debt policy	Multiple Regression Analysis	The analysis shows that the size of the company has a negative and not significant effect on debt policy, and profitability has a negative and significant effect on debt policy. Dividend policy variables and asset structure have a negative and significant effect on debt policy. While sales growth and free cash flow do not affect debt policy.

Stock Exchange
2015-2018)

11.	Wuave et al. (2020)	Effect of liquidity management on the financial performance of banks in Nigeria	To examine the effect of liquidity management on the financial performance of banks in Nigeria	Panel Regression Analysis	The study finds that liquidity ratio (LQR) has a positive and significant effect on the financial performance of DMB as measured by return on assets (ROA), return on equity (ROE) and net interest margin(NIM).
12.	Zelalem (2020)	The Impact of Financial Leverage on the Performance of Commercial Banks: Evidence from Selected Commercial Banks in Ethiopia	To investigate the effect of financial leverage on the financial performance of Ethiopian Commercial Banks	Descriptive Statistics, Fixed Effect Model	The result of the study showed that Debt Ratio (DR) has a negative insignificant effect on Banks' performance measured by Return on Assets (ROA) and Return on Equity (ROE) while Debt Equity Ratio (DER) And Interest Coverage Ratio (ICR) have a significant positive effect on Banks' performance measured by Return on Assets (ROA) and Return on Equity (ROE)
13.	Zhang et al. (2020)	Debt Effects on Profitability	To better understand the impact of debt ratio on the profitability of all the companies of the S&P 500	Descriptive Statistics, Correlation Analysis, Regression Model	Corporate profitability is negatively correlated with debt ratio, tax ratio, and intangible assets. Asset growth is not related to corporate profitability.
14.	Aziz and Abbas (2019)	Effect of Debt Financing on Firm	To examine the association of different debt	Panel Least Square	The results of the study indicated that debt financing has a negative but significant

		Performance: A Study on Non-Financial Sector of Pakistan	A financing on a firm's performance in 14 sectors of Pakistan.		impact on firm performance in Pakistan.
15.	Kajola et al., (2019)	Liquidity and Profitability Dynamics: Evidence from the Nigerian Banking Sector	To examine the effect of liquidity management on profitability in ten deposit money banks in Nigeria	Random Effects Generalized Least Squares	The results reveal a positive and statistically significant relationship between two liquidity management proxies (current ratio and liquidity ratio) and return on asset. The study did not find empirical evidence in support of loan-to-deposit ratio and deposit-to-asset ratio as influencing the profitability of the selected banks, as results produced an insignificant relationship with profitability
16.	Ndubuisi et al. (2017)	Loan management and financial performance of quoted deposit money banks in Nigeria	To determine the relation between loan management and financial performance with a focus on deposit money banks	Pearson coefficient of correlation, Multiple Regression Analysis	There is a positive and statistically significant relationship between loan management (Proxied by Non-Performing Loan & Deposit) and financial performance (ROA, EPS, DPS of quoted deposit money bank in Nigeria).
17.	Basit and Hassan (2017)	Impact of Capital Structure on Firms	To investigate Debt to Equity ratio to determine	Descriptive Statistics, Pearson Correlation	The findings show Earnings per share, return on Equity and Return on Assets are significantly correlated to

		Performance: A firm	Coefficient,	Debt-to-Equity ratio. While	
		Study on Karachi performance of	Multiple	Debt to equity ratio has a	
		Stock Pakistani	Linear	significant impact on Size and	
		Exchange (KSE) companies	Regression	Return on Assets.	
		Listed Firms in listed in			
		Pakistan Chemical, Food			
		and Care			
		products,			
		Cement,			
		Pharmaceutical,			
		Auto assembler			
		and Textile			
		sector			
18.	Habib et al. (2016)	Impact of debt on the profitability of firms; Evidence from non-financial sector of Pakistan	To find out the impact of debt on the profitability of firms in Pakistan	Random Effect Regression Analysis	Results indicate a significant but negative relationship between short-term debt, long-term debt, total debt, and return on assets
19.	Pradhan and Khadka (2016)	The Effect of debt financing on the profitability of Nepalese commercial Banks	To examine the effect of debt financing on the profitability of the Nepalese commercial banks	Regression model	The result shows a positive relationship of banks' profitability with short-term debt to total assets, interest coverage ratio and size of the banks. However, profitability is negatively related to long-term debt to total assets, total debt to total assets and debt to equity ratio. The regression result shows that beta coefficients are positively significant for short-term debt to total assets, interest

							coverage ratio and size of the banks with profitability. Whereas the beta coefficients are negatively significant for long-term debt to total assets, total debt to total assets and debt to equity ratio with profitability
20.	Prempeh et al. (2016)	The Effect of Debt Policy on Firms Performance: Empirical Evidence from Listed Manufacturing Companies on The Ghana Stock Exchange	To investigate the effect of Debt Policy (Short-Term Debt, Long-Term Debt, and Total Debt) on firms' performance.	Regression Analysis			It was also found that debt (Short-Term Debt, Long-Term Debt and Total Debt) hurts firms' performance.
21.	Tauseef et al. (2015)	Effect of debt financing on Corporate Financial Performance: Evidence from Textile firms in Pakistan	To examine the effect of debt financing on a firm's Financial performance, measured as return on equity	Regression Analysis			Results show a nonlinear relationship between return on equity and debt-to-asset ratio. A firm's sales growth has a positive and significant impact on return on equity whereas the firm's size has no significant impact on it.

2.3 Research Gap

Based on the review of previous research and studies, it has been identified that the increasing number of non-performing loans is a significant challenge faced by microfinance institutions in the current scenario. While some researchers have examined the implementation of regulatory directives by microfinance institutions, and others have focused on non-performing loans and loan loss provisioning, there is a lack of research on the impact of non-performing loans and loan loss provisions on the performance, required profitability, and capital adequacy of microfinance institutions by regulatory directives.

Moreover, the analysis of loans and advances in previous studies has been limited to simple comparisons using five-year data only. The research has not explained whether the loan classifications and provisioning of loans, as well as the investment in priority and deprived sectors, align with the loan investment regulations outlined in the regulatory directives for microfinance institutions. Hence, this research aims to address these research gaps by examining the microfinance institutions such as Chhimek, Deprosc, Swablamban, Nerude, and Nirdhan Utthan Laghubitta Bittiya Sanstha Limited as references. Some variables are introduced in this study which explain the relationship with the performance of microfinance companies. In this study, loan-to-deposit ratio, debt-to-equity ratio, debt ratio, and interest coverage ratio are taken as independent variables. Return on assets and return on equity are the indicators of microfinance companies' performance and also dependent variables. In this study, the relationship between loan management and profitability and the impact of independent variables on the performance of microfinance companies.

CHAPTER – III

RESEARCH METHODOLOGY

Research Methodology is a systematic way of solving the research problem. It describes the several processes that a researcher must take in order to explore a problem with certain goals in mind. Put differently, research methodology delineates the techniques and procedures employed throughout the entire study subject. It is a methodical approach to solving the research challenge. It can be viewed as a science that studies the methods used in major research projects. The approach is just as important to the researcher as the research methodologies and procedures. Researchers must be proficient in developing specific tests or indicators as well as in calculating the mean, mode, and other research approaches. They must also be aware of which of these methods and techniques are important and which are not, as well as what they would mean, indicate, and justify.

Research has two important aspects. First of all, it is wide enough to cover all kinds of research that need to find answers to issues. Secondly, it acknowledges clearly the systematic character of the research process, which involves the methodical collection, documentation, analysis, and interpretation of data. The current investigation was carried out using the following approach.

3.1 Research Design

Research design is an overall framework or plan for the collection and analysis of data that focuses on the data-collection methods, the research instruments utilized, and the sampling plan to be followed. The plan, framework, and approach of an inquiry developed to find answers to research questions and manage variance is known as research design. There is usage of a causal and descriptive study design. The fundamental components of a research design are the problem, the technique, the data collection, the data analysis, and the report authoring.

This study makes an effort to examine how the finance sector manages its debt. The loan proceeds procedures, the management scenario as it stands today, and the section's future planning are all followed in the research design. Mostly the analysis is based upon secondary data, i.e. of few years' financial statements of the sample firms, collected directly from those firms and their websites.

3.2 Population and Sample

The population for this study comprises all the finance banks of Nepal. According to NRB, 62 MFIs are operating in Nepal. The study deals with the debt management policy of microfinance and its impact on the long run of business activities. Five microfinance companies were selected as a sample for the study by using random sampling techniques. The sample size of the study is five among them: Chhimek, Deprosc, Swablamban, Nerude and Nirdhan Uthhan Laghubitta Bittiya Sanstha.

3.3 Nature and Sources of Data

The study is based on secondary data. The required data for analysis are directly collected from the balance sheet, and profit and loss accounts of concerned banks from the annual report provided. It has also taken the NRB research report for comparison to see whether the studied microfinance going as per the rules and regulations of the central bank or not. The main sources of data assessed under the study include Chhimek, Deprosc, Swablamban, Nerude and Nirdhan Uthhan Laghubitta Bittiya Sanstha.

3.4 Method of Data Analysis

Data analysis, in this study, is done according to the pattern of data available. In this study, particular statistical and financial tools are employed to illustrate the correlation between several study-related factors. In terms of presentation, the computed results are tabulated for readability under several headings, and the results are then interpreted by comparing them with one another. To investigate the relationship between the variables, mean, correlation analysis and regression are performed. The main components of the research project are the data analysis and presentation. In order to accomplish the research goal, the raw data are first systematically displayed in tabular form and then examined using a variety of statistical and financial methods. In addition, a few tables and graph charts have been included for analysis and interpretation of the research. Various Financial & statistical tools are used for data analysis.

3.5 Data Analysis Tools

Financial as well as statistical tools are used to make the analysis more convenient, reliable and authentic. Their ratio, percentage, mean, standard deviation and coefficients of

variations are then calculated and presented in the tables. To study the relationship between two or more variables, correlation coefficients & regression are also calculated. Likewise, trend analysis is also used to know the trend of various ratios. Following is a brief introduction to the financial and statistical tools used in this study.

A. Financial Tools

To evaluate the financial condition and performance of a company, the financial analyst needs a certain yardstick. An index ratio that compares two sets of financial data is a commonly used measure. Expert, knowledgeable analysts should be able to gain a deeper grasp of the company's financial performance and state through the examination and interpretation of different ratios than they would from a simple financial data analysis. The particular interests of the parties involved determine the sort of analysis that is used. Trade creditors are mostly concerned with a company's liquidity. Their claims are short-term, and the best way to assess a company's capacity to pay is through a careful examination of its liquidity. On the other hand, bondholders' claims are long-term. As a result, their main concern is the company's long-term capacity to service debt through cash flow. Bondholders can assess this capability through an examination of the company's capital structure, primary funding sources and uses, historical profitability, and projected profitability in the future.

1. Loan to total deposit ratio (LDR)

A financial statistic that banks and other financial institutions use to evaluate their lending policies and general financial health is the loan-to-total deposit ratio, or LTD ratio for short. It is computed by dividing the institution's total lending volume by the total amount of deposits it has. This ratio provides insight into the bank's liquidity and risk exposure, as a higher ratio indicates that a larger portion of customer deposits is being used to fund loans, potentially increasing the institution's vulnerability to economic downturns or unexpected withdrawal demands. Conversely, a lower ratio suggests a more conservative lending approach with a higher proportion of deposits held in reserve, which may offer greater stability but could also limit profitability. One important indicator of the percentage of loans and advances given to clients is the loan-to-deposit ratio. It is an essential indicator that illustrates the fine balance that banks must maintain between profitability and liquidity (Kajola et al., 2019). It is calculated as

$$\text{Loan to Total Deposit Ratio (LDR)} = \frac{\text{Total Loan and Advances}}{\text{Total Deposits}}$$

2. Debt Equity Ratio:

This metric, which is often referred to as the "debt-to-equity ratio," assesses the proportion of long-term debt to shareholders' equity in a corporation. This ratio shows how much of a company's funding is provided by debt as opposed to equity. A higher debt-to-equity ratio indicates that debt makes up a bigger share of the company's funding, which could raise financial risk because of increased obligations and interest payments. A smaller ratio suggests a higher dependence on equity funding. Describe the relationship between the entire assets of a company that are financed by its owners and its creditors (debt) (equity). Thus, this ratio reflects the relative claims of creditors and shareholders against the assets of the firm, *Zelalem (2020)*. The formula is:

$$\text{Debt Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

3. Debt Ratio:

By contrasting a company's entire debt to its total assets, the debt ratio, on the other hand, offers a more comprehensive picture of its financial leverage. It shows how much of an organization's assets are funded by debt. This ratio compares the overall assets of the company to all forms of debt, including both short- and long-term obligations. In the event of economic downturns or fluctuations, a larger debt ratio can signal a higher risk of financial hardship because it represents a higher level of debt relative to the company's total assets (*Sharma et al., 2018*).

The formula for the debt ratio is:

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

4. Interest Coverage Ratio

A financial measure called the "times interest earned ratio," or interest coverage ratio, is used to evaluate a company's capacity to pay interest costs out of earnings before interest and taxes (EBIT). Essentially, it uses operating results to gauge the company's capacity to pay interest on its outstanding debt. An organization is generally considered to be in better

financial condition when it can meet its interest payments from operational earnings, which is indicated by a higher interest coverage ratio. It implies that even in challenging circumstances, the business has a sufficient safety net to cover its interest costs. On the other hand, a lower interest coverage ratio suggests that the company may be more likely to fail on its loan due to a weaker ability to pay interest.

The formula for calculating the interest coverage ratio is:

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest Expenses}}$$

Where:

- EBIT (Earnings Before Interest and Taxes) represents a company's operating income before deducting interest and taxes.
- Interest Expenses refer to the total interest payments a company is required to make on its debt within a specific period.

5. Return on Assets (ROA):

A financial ratio called return on assets (ROA) gauges how well a business makes money out of all of its assets. It sheds light on how well a business is making use of its resources to produce profits. The ROA is given as a percentage. A greater return on assets (ROA) signifies that the business is making more money for every dollar of assets it owns, which is often a sign of efficiency. However, a lower ROA suggests that the company is not effectively utilizing its assets to generate profits.

The formula for calculating Return on Assets is:

$$\text{Return on Assets (ROA)} = \frac{\text{Net Income}}{\text{Total Assets}}$$

6. Return on Equity (ROE):

A financial statistic called return on equity (ROE) gauges how profitable a business is using the equity held by its owners. It gives information on how well a business is making money off of the equity that its investors have invested. The ROE is given as a percentage. Greater earnings from the equity invested by shareholders are indicated by a higher return on equity (ROE), which is typically a sign of strong financial success. However, a lower ROE suggests that the company is not effectively generating profits from its equity base.

The formula for calculating Return on Equity is:

$$\text{Return on Equity (ROE)} = \frac{\text{Net Income}}{\text{Shareholder's Equity}}$$

B. Statistical Tools

The loan management policies of the relevant institutions are examined and interpreted using a variety of statistical techniques that are described below. In a similar vein, statistical tools are useful for identifying patterns in the microfinance industry's financial standing and for examining the relationships between variables that support the bank's decision-making when it comes to loan management policies that optimize profits, deposit collection, fund utilization through loan and advance provision, and investment in other businesses. The financial data in this study have been analyzed and interpreted using statistical methods including trend analysis of significant factors and the coefficient of correlation between various variables. This basis of statistical analysis related to this study is discussed below: -

(i) Arithmetic Mean

The mean or average value is a single value within the range of the data that is used to represent all the values in the series. Since an average value is somewhere within the range of the data, it is also called a measure of central value. The average value is obtained by adding together all the terms and by dividing this total by the number of items. This formula is given below: -

$$\bar{X} = \frac{\sum X}{n}$$

Where, $\sum X = X_1 + X_2 + X_3 + \dots + X_n = \text{Sum of given set of observation}$

n = Number of items observed.

X= Variables

(ii) Standard Deviations

Karl Pearson first suggested standard deviation (SD) in 1893 as a measure of dispersion. It is usually denoted by sigma (σ). The measurement of the scatterness of the mass of figures in a series about an average is known as dispersion and standard deviation measures the absolute dispersion. The greater the amount of dispersion greater the standard deviation and vice versa. A small standard deviation means a high degree of uniformity of the

observation as well as homogeneity of a series. A large standard deviation refers to low uniformity and homogeneity of the series.

Symbolically,

$$SD (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{N}}$$

(iii) Coefficient of Variation

The relative measure of dispersion based on the standard deviation is known as the coefficient of standard deviation. The coefficient of dispersion based on standard deviation multiplied by 100 is known as the coefficient of variation (CV)

$$CV = \frac{SD}{Mean} \times 100\%$$

The coefficient of variation reflects the relationship between standard deviation and mean. Since C.V. is independent of the unit, two distributions can bitterly be compared with the help of it for their variability. Higher CV denotes higher variability, i.e., lesser uniformity and consistency and vice versa.

(iv) Correlation Coefficient

Correlation is defined as the "relationship" (of association) between (Among) the one dependent variable (or factor) and one (or more than one) independent variable (s) or factor (s). In other words, correlation is the relationship between (or among) two or more variables (i.e. only one variable dependent and one or more variable (s) independent).

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

Where,

n Number of pairs of observation.

X= Variable

Y = Variable

r = correlation of coefficient

(v) Regression Coefficient

Regression is a statistical analysis technique used to model the relationship between a dependent variable and one or more independent variables. It aims to find the best-fitting

line or curve that predicts the values of the dependent variable based on the values of the independent variables. Regression helps in understanding the correlation and quantifying the strength and direction of the relationship between variables, allowing for prediction and inference.

The equation of a linear regression line is given as $Y = a + bx$,

Where,

Y: This is the dependent variable

X: This is the independent variable

b: This is the coefficient or slope of the regression equation.

a: This is the intercept term or the constant term in the regression equation.

Multiple Regression Analysis

Multiple Regression Analysis is a statistical technique used to explore the relationship between a dependent variable and two or more independent variables. It builds upon simple linear regression, which examines the relationship between a dependent variable and a single independent variable. In multiple regression, the goal is to understand how the independent variables collectively impact the dependent variable while controlling for each other's effects.

The equation for a multiple regression model with 'p' independent variables is generally represented as:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = dependent variable.

X₁, X₂, ..., X₄ = independent variables.

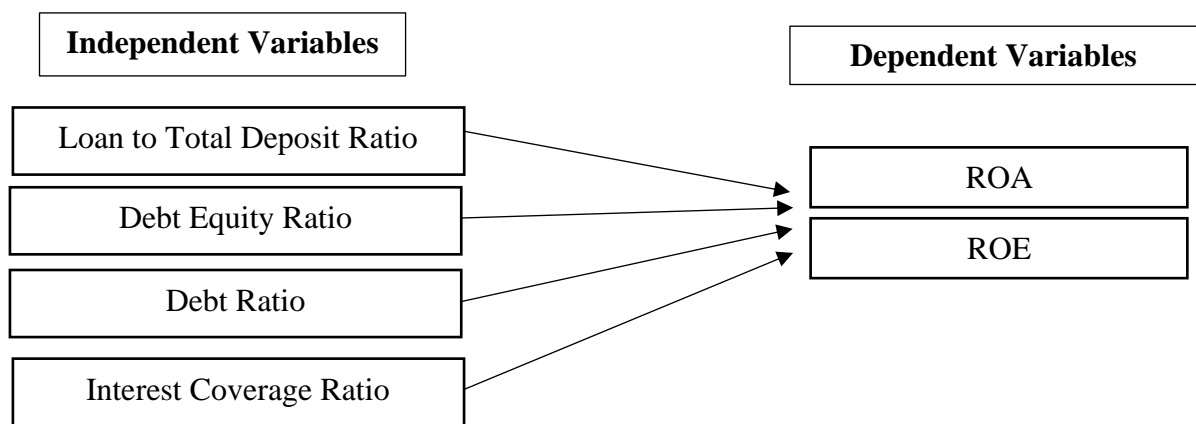
β_0 = Intercept.

$\beta_1, \beta_2, \dots, \beta_4$ = coefficients that represent the effect of each independent variable.

ε = Error term.

3.6 Research Framework and Define Variables

A conceptual framework is a research paradigm that is developed using the researcher's ideas and subject-matter expertise. The cornerstone of the theory's base is the theoretical framework. This hypothesis serves as the framework for the entire inquiry. Taking into account that the main objective of research is to create theories about problems and conduct investigations. To address the questions, a carefully constructed and articulated theoretical framework is required. A theoretical model may be represented visually to show the characteristics or variables selected for inclusion.



{Sources: Ogunmakinju, 2022; Zelalem, 2020; Pradhan, 2017}

Figure 1 Independent and Dependent variables

The independent and dependent variables of the study topic. If the independent variables increase or decrease, it will affect the dependent variables. The details definitions of both variables are given below:

Loan to Total Deposit Ratio (LDR)

Banks essentially play the role of middlemen, moving money from financially strong businesses to weaker ones. The foundation of their business is this financial intermediation procedure. One important indicator of the percentage of loans and advances given to clients is the loan-to-deposit ratio. It is an essential variable that illustrates the fine line that banks must draw between profitability and liquidity. More loan options are often offered to consumers by banks in an effort to increase revenues. However, banks prioritizing liquidity

tend to limit their lending, resulting in a lower loan-to-deposit ratio in such cases (Kajola et al., 2019).

Debt Equity Ratio

This ratio displays the percentage of a company's funding that originates from debt as opposed to equity and illustrates the relationship between a bank's total debt and its shareholder equity. A higher debt-to-equity ratio indicates that equity accounts for a larger share of bank funding, which may raise financial risk because of higher interest payments and other commitments, and vice versa. Describe the relationship between the entire assets of a company that are financed by its owners and its creditors (debt) (equity). Thus, this ratio reflects the relative claims of creditors and shareholders against the assets of the firm *Zelalem (2020)*.

Debt Ratio

By comparing a bank's entire debt to its total assets, this ratio offers a more comprehensive picture of its financial leverage. This ratio displays the proportion of debt that finances the bank's assets. In the event of economic downturns or fluctuations, a larger debt ratio can signal a higher risk of financial hardship because it represents a higher level of debt relative to the company's total assets (*Zeelam, 2020*).

Interest Coverage Ratio

This financial metric, also known as the time's interest earned ratio, is used to evaluate a bank's capacity to meet its interest costs out of its earnings before interest and taxes (EBIT). An organization is generally considered to be in better financial condition when it can meet its interest payments from operational earnings, which is indicated by a higher interest coverage ratio. It implies that even in challenging circumstances, the business has a sufficient safety net to cover its interest costs. On the other hand, a lower interest coverage ratio suggests that the corporation may be more likely to default on its debt commitments and that its ability to pay interest is weaker (*Zelalem, 2020*).

Return on Assets

A financial ratio called return on assets (ROA) gauges how well a business makes money out of all of its assets. It sheds light on how well a business is making use of its resources

to produce profits. A greater return on assets (ROA) signifies that the business is making more money for every asset it owns, which is often a sign of efficiency. However, a lower ROA indicates that the business isn't making the most of its resources to turn a profit (Sharma et al., 2018).

Return on Equity

A financial indicator known as return on equity (ROE) assesses how profitable a business is in relation to the equity that shareholders have contributed. It provides insight into how well a business converts the stock invested by shareholders into profits. Usually, ROE is shown as a percentage. Increased ROE is an indication of strong financial performance since it means the company is making more money than the equity investors have invested. On the other hand, a lower ROE suggests that the business isn't making enough money off of its equity base (Sharma et al., 2018, Zeelam, 2020).

CHAPTER – IV

RESULT AND DISCUSSION

4.1 Results

This chapter includes the collected data and their presentations. In this chapter, we are going to analyze the impact of debt management on the profitability of microfinance companies in Nepal. With the help of different tools and journals, articles, reports and thesis reviews in chapter two, the effort is made to analyze the loan management of microfinance companies. All the data are from secondary sources which helps us to analyze and present easily with the help of tables and figures.

4.1.1 Descriptive Analysis

The analysis of descriptive statistics, including minimum, maximum, mean, and standard deviation, for the sample's microfinance institutions in Nepal is presented in this paper. Descriptive statistics are used to provide a clear and simple summary of the main properties of a dataset, such as central tendency, variability, and distribution. The mean value reflects the arithmetic average value of the variable under supervision and expresses its essence. The data are represented by the mean value. The minimum and maximum value represents the lowest and highest point a variable can reach. The dataset diversification for each variable is displayed by the standard deviation. A lower value of the standard deviation suggests that the data point is closer to the mean, whereas a higher number suggests that the boundary distribution spans a greater range. The table that is presented lists the independent variables, which include the firm's debt-to-equity ratio, loan-to-deposit ratio, debt ratio, and interest coverage ratio, along with profitability indicators for microfinance organizations, such as returns on assets and returns on equity.

The given table reveals the descriptive statistics of dependent variables such as return on assets, return on equity and independent variables i.e. loan to deposit ratio, debt-equity ratio, debt ratio, and interest coverage ratio.

Table 2 Descriptive statistics analysis

	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard Deviation</i>
Loan to Deposit Ratio	0.2248	3.3771	2.0605	0.7439
Debt Equity Ratio	4.9513	12.6630	7.3380	1.6669
Debt Ratio	0.8320	0.9268	0.8757	0.0226
Interest Coverage Ratio	-0.6389	1.6394	0.7610	0.4699
Return on Assets	0.0046	0.0448	0.0288	0.0103
Return on Equity	0.0362	0.3913	0.2434	0.1012
Count (N) = 49				

(Sources: Data output from Excel analysis)

Table 2, shows the descriptive statistics of the past ten years' data of selected microfinance.

The minimum value of the variables such as loan-to-deposit ratio, debt-equity ratio, debt ratio, interest coverage ratio, return on assets and return on equity are 0.2248, 4.9513, 0.8320, -0.6389, 0.0046 and 0.0362 respectively. The debt-equity ratio has the highest minimum value which is 4.9513 but the interest coverage ratio has the lowest minimum value which is -0.6389. The highest maximum value of the equity ratio is 12.6630 and the lowest maximum value of return on assets accounted for 0.04448. the mean value of the loan-to-deposit ratio is 2.0605 and the debt-equity ratio, debt ratio, interest coverage ratio, return on assets and return on equity have mean values are 7.3380, 0.8757, 0.7610, 0.02888 and 0.2434 respectively. The average value offers a representative value within the data. The standard deviation illustrates the spread within each variable's dataset. The loan-to-deposit ratio has a 0.7439 standard deviation and the debt-equity ratio has a 1.6669 standard deviation value. The debt ratio, interest coverage ratio, return on assets and return on equity have 0.0226, 0.4699, 0.0103 and 0.1012 standard deviation values respectively. A higher standard deviation indicates a wider distribution over a wide range but a lower standard deviation shows the proximity of the data point to the average value.

4.1.2 Correlation analysis

The correlation coefficient defines the relationship between a dependent variable and one or more independent variables. The following table shows the relationship between dependent variables i.e. ROA, ROE and independent variables i.e. loan to deposit ratio, debt-equity ratio, debt ratio and interest coverage ratio.

Table 3 Correlation analysis

	<i>Loan to Deposit Ratio</i>	<i>Debt Equity Ratio</i>	<i>Debt Ratio</i>	<i>Interest Coverage Ratio</i>	<i>Return on Assets</i>	<i>Return on Equity</i>
Loan to Deposit Ratio	1					
Debt Equity Ratio	0.0874	1				
Debt Ratio	0.1753	0.9757	1			
Interest Coverage Ratio	0.2207	0.2577	0.2766	1		
Return on Assets	0.1465	0.1756	0.2028	0.8335	1	
Return on Equity	0.1459	0.6129	0.6265	0.7978	0.8740	1

a. Dependent Variables: Return on assets, Return on equity

b. Independent Variables: Loan to deposit ratio, debt equity ratio, debt ratio, interest coverage ratio

(Sources: output from Excel analysis)

Table 3, indicates the correlation among the dependent variables and independent variables. There is a positive relationship between loan to deposit ratio and return on assets which is 0.1465. these ratios have a positive correlation, which means there is a favourable relationship with loan to deposit ratio and return on assets. The positive relationship between debt equity ratio and return on assets that is 0.1756. There is a positive relationship between debt ratio and return on assets i.e. 0.2028, which means if the debt increases the value of return on assets also increases. The interest coverage ratio has positive relationship with return on assets the correlation value is 0.8335.

There is a positive relationship between loan to deposit ratio and return on equity i.e. 0.1459, which means that if the loan and deposit increases the value of return on equity also increases. The debt equity ratio has a favourable relationship with return on equity, the correlation value is 0.6129. the debt ratio has a positive relationship with return on equity i.e. 0.6265, which means that if the value of debt increase, the performance of microfinance

i.e. return on equity also increases. There is a positive relationship between interest coverage ratio and return on equity i.e. 0.7978. the positive correlation indicates favourable conditions while negative correlation indicates opposite relationship.

4.1.4 Regression analysis

An assortment of statistical instruments called regression analysis is employed to forecast the correlation between a dependent variable and one or more independent variables. The goal is to identify the line that best fits the data of the independent variable to forecast the value of the dependent variable. Regression enables prediction and inference by assisting in the understanding of correlation and quantifying the direction and degree of the relationship between variables.

4.1.4.1 Model Summary

Table 4 Model Summary

<i>Regression Statistics</i>		
	<i>ROA</i>	<i>ROE</i>
Multiple R	0.8381	0.9066
R Square	0.7024	0.8219
Adjusted R Square	0.6754	0.8057
Standard Error	0.0058	0.0446
Observations	49	49

(Sources: output from Excel analysis)

Table 4, indicates the model summary of regression analysis. Multiple R is the correlation coefficient which shows how strong the linear relationship is between the dependent and independent variables. From Table 4, the multiple R of return on assets (ROA) is 0.8381 and the return on equity (ROE) is 0.9066. The value of the R square of return on assets is 0.7024 which indicates that 70.24% of the systematic variation in return on assets can be explained by independent variables such as loan-to-deposit ratio, debt-debt-equity ratio, debt ratio, and interest coverage ratio. The remaining percentage is due to the effect of other factors. The value of the R square of return on equity is 0.8219 which indicates that 82.19% of systematic variation in ROE is explained by the given independent variables and the remaining is due to the effect of other factors. The standard error of return on assets (ROA) is 0.0058 and return on equity (ROE) is 0.0446, which reflects the deviation between the

actual value and the estimated value of dependent variables which is return on assets and return on equity. The number of observations in this study is 49.

4.1.4.2 ANOVA analysis

ANOVA (Analysis of Variance) in regression provides insights into the overall significance of the model and individual variables contributions. The following table shows the ANOVA analysis.

Table 5 ANOVA analysis

	<i>ROA</i>				<i>ROE</i>				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>		<i>Significance</i>		
					<i>F</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	4	0.0035	0.00089	25.9651	4.3198	0.4038	0.1009	50.7607	6.2457
Residual	44	0.0015	0.000034			0.0875	0.0020		
Total	48	0.0050				0.4913			

a. Dependent Variables: Return on assets, Return on equity
b. Independent Variables: Loan to-deposit ratio, Debt-equity ratio, Debt ratio, Interest coverage ratio

(Sources: output from Excel analysis)

Table 5, represents the ANOVA analysis which shows the significance F of return on assets (ROA) is 4.3198 and return on equity (ROE) is 6.2457, significance F value of return on assets is higher than the level of significance i.e. 0.05 it is concluded that there is an insignificant relationship between dependent variable i.e. return on assets and independent variables. However, the significance F value of return on equity is also higher than the level of significance so it has an insignificant relationship with independent variables. The value of F of return on assets is 25.9651 and the return on equity is 50.7607, which is a measure used in the analysis of variance (ANOVA) and regression analysis to assess the significance of the difference between group means or the significance of the overall regression model. The DF means the degree of freedom, SS means the sum of squares and MS means the mean of squares.

4.1.4.3 Regression analysis

By establishing an approximate functional relationship between the variables, regression is a statistical method for analyzing the relationship between the variables. When assessing the degree of correlation between two (simple regression) or more (multiple regression) variables, it is thought to be a helpful tool. By defining return on assets and return on equity

changes in terms of the management position of particular microfinance, the influence of the regression of profitability and debt management factors, i.e. loan deposit ratio, debt-equity ratio, debt ratio, and interest coverage ratio, has been examined. The equation for this regression module is given below;

$$ROA = \beta_0 + \beta_1 LDR + \beta_2 DER + \beta_3 DR + \beta_4 ICR \dots\dots\dots (i)$$

$$ROE = \beta_0 + \beta_1 LDR + \beta_2 DER + \beta_3 DR + \beta_4 ICR \dots\dots\dots (ii)$$

Where;

ROA: Return on Assets

ROE: Return on Equity

β_0 : Constant

LDR: Loan to Deposit Ratio

DER: Debt Equity Ratio

DR: Debt Ratio

ICR: Interest Coverage Ratio

$\beta_1, \beta_2, \dots, \beta_4$: coefficients that represent the effect of each independent variables

Table 6 Regression analysis

	ROA			ROE		
	Coefficients	Standard		Coefficients	Standard	
		Error	P-value		Error	P-value
Intercept	-0.1016	0.1445	0.4859	-1.3660	1.1034	0.2223
Loan to Deposit Ratio	-0.0009	0.0013	0.4612	-0.0108	0.0097	0.2696
Debt Equity Ratio	-0.0023	0.0025	0.3694	0.0043	0.0191	0.8231
Debt Ratio	0.1541	0.1868	0.4138	1.6978	1.4257	0.2401
Interest Coverage Ratio	0.0185	0.0019	1.3943	0.1490	0.0145	2.8614

(Sources: output from Excel analysis)

Table 6, the regression analysis of ROA on loan management shows that some of them have positive and some of them have negative coefficients. The constant value of the regression line with return assets is -0.1016 and the return on equity is -1.3660. The loan-to-deposit ratio has a negative coefficient i.e. -0.0009 and the p-value is 0.4612 with return on assets. Similarly, the coefficient of loan-to-deposit ratio is -0.0108 and the p-value is

0.2696, which means that there is a negative and insignificant relationship between loan-to-deposit ratio and return on assets and return on equity. The coefficient of debt equity ratio is -0.0023 and the p-value is 0.3694. These values show there is a negative and insignificant relationship between the debt-equity ratio and return on assets. The coefficient of debt-equity ratio is 0.0043 and the p-value is 0.8231, which is higher than the level of significance. The debt-equity ratio has a positive but statistically insignificant relationship with return on equity.

The debt ratio has a positive coefficient with a return on assets is 0.1541 and the p-value is more than the level of significance i.e. $0.05 < 0.4138$. There is a positive but not statistically significant relationship with return on assets. The coefficient of debt ratio with return on equity is 1.6978 and the p-value is 0.2401, which is more than the level of significance. The debt ratio and return on equity have a positive but not significant relationship.

The interest coverage ratio has a positive coefficient with a return on assets of 0.0185 and the p-value is higher than the level of significance i.e. $0.05 < 1.3943$, Interest coverage ratio has a positive coefficient with a return on equity i.e. 0.1490 and the p-value is 2.8614 which is more than the level of significance, which means interest coverage ratio has a positive but not significant impact on return on assets and return on equity.

The standard error shows the deviation between the actual value and the estimated value of dependent variables. The positive regression coefficient shows the positive relationship between dependent variables and independent variables which means if the value of independent variables increases the dependent variable value will also increase. However, the negative regression coefficient inverse relationship between dependent variables and independent variables.

4.2 Discussion

In this study, the loan management and the profitability of microfinance in Nepal were examined.

The result revealed that the loan-to-deposit ratio has a negative and insignificant impact on return on assets and return on equity. The result of this study is consistent with Anggari and Dana (2020), Ndubuisi (2017), Ogunmakinju (2022), and Kajola et al. (2019), which showed that the loan-to-deposit ratio has a positive and insignificant effect on the profitability of banking companies i.e. ROA and ROE.

The results of Wuave et al. (2020) and Çollaku and Aliu (2021) contradicted with the result of this study, which showed the impact of liquidity risk (loan/deposit) showed a negative relation but was not statistically significant on banks' profitability. The findings of Bassey and Moses (2015); and Salim and Bilal (2016) suggest that when LDR is used as a proxy for liquidity, liquidity management does not influence the profitability of Nigerian banks.

The result revealed that the debt-equity ratio has a negative and insignificant relationship with return on assets and a positive and insignificant impact on return on equity. The result of this study is consistent with Milosev (2021), Nazir et al. (2021) and Adebayo et al. (2011), which showed that the debt-equity ratio has a negative and significant impact on profitability. In the study of the relationship between capital structure and profitability of IT firms in India. Azhagaiah and Gavory, (2011) also identify a statistically significant and negative relationship between the debt-equity ratio and return on assets. It can be concluded that the results of the analysis of the relationship between managing debt and profitability selected firms in Serbia are mostly consistent with the results of studies in other countries. The result of this study is consistent with Zelalem (2020) which showed that debt-equity Ratio (DER) has a positive and significant effect on a bank's performance measured by return on assets (ROA) and return on equity (ROE).

Return on assets is negative but not statistically significantly influenced and return on equity has been positively and insignificantly influenced by the debt-equity ratio. The results of Basit and Hassan (2017) and Habib et al. (2016) contradicted with the result of this study, which showed that the earnings per share, return on equity, and return on assets are significantly correlated to the debt-to-equity ratio. While debt to equity ratio found a significant impact on size and return on assets and a significant but negative relationship between long-term debt and return on assets.

The result of this study is partially consistent with Pradhan and Khadka (2016) and Nazir et al. (2021), which showed that the debt-to-equity ratio has a negative and significant impact on the profitability of the banks and also short and long-term debt has negative and significant impacts on firm performance in profitability. The result of Zelalem (2020) contradicted with the result of this study, which showed that debt-equity Ratio (DER) has a positive and significant effect on a bank's performance measured by return on assets (ROA) and return on equity (ROE).

The debt ratio has a positive and insignificant impact on both return on assets and return on equity. The results of Habib et al., (2016), Milosev (2021), Zelalem (2020), and Tauseef et al. (2015) contradicted with the result of this study, which showed that the debt ratio has a negative and significant impact on the return on assets and return on equity respectively. The result of this study is consistent with Ndubusi et al. (2017), which showed that the loan management has a positive and statistically significant relationship with the ROA of quoted deposit money banks.

The return on assets and return on equity are positive and insignificantly affected by the debt ratio. The results of Zhang et al. (2020), Prempeh et al. (2016), Aziz and Abbas (2019), and Azhagaiah and Gavory (2011) contradicted with the results of this study, which showed that corporate profitability is negatively correlated with debt ratio and the debt (short-term debt, long-term debt, and total debt) hurts firms' performance, the negative sign for total debt to total assets indicates that the proportion of debt in capital structure plays a vital role in net earnings and increase in the use of debt funds in capital structure, which tends to significantly reduce the net earnings of this group of firms.

Interest coverage ratio has a positive and significant impact on return on assets and return on equity. The result of this study is consistent with Pradhan and Khadka (2016), and Zelalem (2020), which showed that the interest coverage ratio contributes a significant positive impact on all the proxies of profitability of Nepalese commercial banks i.e. ROA and ROE. Debt is the cheapest source of finance in the capital structure of a corporation business because of tax benefits than equity funds. The main source of profit for banks is the rate of interest charged which is greater than the rate of interest paid on deposits so financial leverage has no negative effect on banks that is why a positive significant effect is revealed in this study and consistent with a study conducted by Vintilla and Duce (2012), Nwanna and Ivie (2017), Njeri et al., (2013), Abdul et al., (2015) and Abubakar, (2015).

CHAPTER – V

SUMMARY AND CONCLUSION

This chapter is divided into these sections, The first is to provide all the information about the study in brief. The second section is about the conclusion of the study and the last section is about the implication.

5.1 Summary

Profit generation holds significant significance for all business entities, as it serves as the linchpin for an organization's long-term viability within the market. Consequently, financial managers must possess the ability to recognize the key factors that contribute to augmenting an organization's profitability. Neglecting the evaluation of these critical elements can result in managers grappling with a multitude of organizational challenges. As a result, achieving and sustaining profitability has emerged as a fundamental concern for every business establishment.

To deal with these financial issues and solve the financial problems, this study aimed to examine the relationship between loan management and the profitability of microfinance companies and also find out the impact of loan management on the profitability of microfinance companies. This study focused on the loan-to-deposit ratio, debt-equity ratio, debt ratio, and interest coverage ratio impact on the return on assets and return on equity of microfinance companies. While analyzing the loan management and the profitability of microfinance companies some brief articles, journal and thesis reviews were performed. To find out the relationship between loan management and profitability descriptive and causal research design was used. 62 microfinance companies are operating in Nepal out of them 5 companies are taken as a sample for this study. The secondary data are used which is available from microfinance companies' websites and their annual reports. This study covers only ten years of data from 2070/2071 to 2079/2080. The collected information and the numerical data have been analyzed by using Excel software and historical trends, descriptive statistics, correlation, ANOVA and regression tools are used and tables and graphs are used to show the data and results clearly.

The findings of the study from correlation analysis show that the loan-to-deposit ratio has a positive correlation with return on assets. Similarly, the debt-equity ratio has a positive

relationship with return on assets. The debt ratio has a positive relationship with return on assets. Interest coverage ratio has a positive impact on return on assets. The loan-to-deposit ratio and the debt-equity ratio have a favourable relationship with return on equity. The debt ratio and interest coverage ratio have a positive relationship with return on equity. The positive relationship shows that there is a favourable condition between both of them which means if the value of independent variables increases, the value of dependent variables also increases, and other things remain constant.

From the regression analysis, the loan-to-deposit ratio has a negative but not statistically significant relationship with return on assets and return on equity. The debt-equity ratio has a negative and insignificant impact on the return on assets but a positive and insignificant impact on the return on equity. The return on assets and return on equity are positively and insignificantly influenced by the debt ratio. The interest coverage ratio has a positive and insignificant effect on profitability i.e. return on assets and return on equity.

5.2 Conclusion

This study examined loan management and its relation and impact on the profitability of five microfinance companies for the period of ten years i.e. 2070/2071 to 2079/2080. Researchers analyzed the relationship between the loan-to-deposit ratio, debt-equity ratio, debt ratio, and interest coverage ratio variables against profitability variables such as return on assets and return on equity.

This study result reveals that the loan-to-deposit ratio has a negative and insignificant impact on return on assets and return on equity. Return on assets is negative but not statistically significantly influenced by the debt-equity ratio, and return on equity is positive and insignificantly influenced by the debt-equity ratio. A moderate amount of debt can improve a company's return on equity and possibly boost profitability. The debt-equity ratio has a major and delicate balance impact on profitability. This is so that the company can leverage its investments and increase shareholder returns by taking on debt. Nevertheless, a greater debt-to-equity ratio can raise financial risk since it makes interest payments more onerous and puts pressure on the company's cash flow. Therefore, in order to optimize their capital structure and ensure a mix that promotes growth and financial health without compromising profitability, microfinance organizations must strike the correct balance in the debt-to-equity ratio.

Debt ratio has a positive and insignificant effect on return on assets and return on equity. According to this research, a larger debt load is linked to lower profitability, which means that microfinance firms with more debt will be less profitable. Financial leverage increases default risk even while it offers tax benefits to the businesses. Overspending can result in financial hardship, which can impair a business's capacity to pay its debts and reduce profitability. Finding the ideal balance is essential because while prudent debt utilization can increase profitability, excessive leverage can cause financial instability and have a detrimental effect on a company's bottom line.

Interest coverage ratio has a positive and insignificant effect on return on assets and return on equity. which means a higher interest coverage ratio higher the profitability of the company. A strong interest coverage ratio gives creditors and investors' confidence because it is typically linked to stability and sound financial conditions. A company's ability to manage its debt commitments is called into question by a reduced interest coverage ratio, which could result in higher financing costs and a detrimental effect on profitability. As a result, a robust interest coverage ratio is essential for sustaining and growing profitability since it shows how well a business can handle its debt.

5.3 Implication

The researchers have viewed the implications of this study from the viewpoint of financial managers and future researchers. Therefore, the implications of this study from the perspective of financial managers and further researchers are given below;

- This study suggests that there is an insignificant and negative relationship between the loan-to-deposit ratio with ROA and ROE.
- The debt-equity ratio has a negative and insignificant impact on return on equity but a positive but not statistically significant impact on return on equity. The debt ratio has a positive and insignificant relationship between return on assets and return on equity. with the knowledge of this relationship, managers should go for increasing return on assets and return on equity by reducing the amount of debt making debt-equity ratio and debt ratio.
- Interest coverage ratio has a positive relationship between return on assets and return on equity. it suggests that the company has a comfortable buffer to handle its interest

expenses in adverse conditions. But sometimes it might be a higher risk of defaulting on its debt obligations.

- This study has shown that the return on assets is 70.24% affected by those independent variables and the return on equity is 82.19% also influenced by those independent variables. So, the financial manager should take the best action which increase the profitability of the company.
- This study was conducted in only 5 microfinance companies listed in NEPSE. now further researchers can conduct on the same topic by adding more or another sample size.
- Ten years of data is used in this research; further researchers can go for more periods of data.
- This study used these variables loan to deposit ratio, debt-equity ratio, debt ratio, and interest coverage ratio to find out the impact on return on assets and return on equity of selected microfinance companies. Further researchers can use these variables as a reference for the studies.

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APPENDICES

APPENDICES I

RAW DATA

<i>YEAR</i>	<i>DETAILS</i>	<i>Loan to Deposit Ratio</i>	<i>Debt Equity Ratio</i>	<i>Debt Ratio</i>	<i>Interest Coverage Ratio</i>	<i>Return on Assets</i>	<i>Return on Equity</i>
2070/2071	CHIMEK	1.3583	12.6630	0.9268	0.4848	0.0208	0.2839
2071/2072	CHIMEK	1.5205	10.6642	0.9143	0.7972	0.0315	0.3671
2072/2073	CHIMEK	1.3831	9.3309	0.9032	1.0662	0.0376	0.3889
2073/2074	CHIMEK	1.3654	9.2366	0.9023	0.7097	0.0371	0.3800
2074/2075	CHIMEK	1.3754	6.1916	0.8609	0.7894	0.0341	0.2452
2075/2076	CHIMEK	1.2686	5.6574	0.8498	0.7261	0.0310	0.2066
2076/2077	CHIMEK	1.0137	5.6442	0.8495	0.5253	0.0243	0.1614
2077/2078	CHIMEK	1.1092	5.7612	0.8521	0.9527	0.0383	0.2591
2078/2079	CHIMEK	1.2241	5.5804	0.8480	0.5975	0.0248	0.1629
2079/2080	CHIMEK	1.0498	5.3308	0.8420	0.5014	0.0240	0.1519
2070/2071	DEPROSC	3.2557	7.9486	0.8883	0.9634	0.0298	0.2671
2071/2072	DEPROSC	3.3643	6.9909	0.8749	1.6394	0.0424	0.3387
2072/2073	DEPROSC	3.3771	7.1268	0.8769	1.5000	0.0426	0.3464
2073/2074	DEPROSC	3.2546	5.1392	0.8371	1.2106	0.0422	0.2594
2074/2075	DEPROSC	3.2170	6.5452	0.8675	0.5403	0.0264	0.1994
2075/2076	DEPROSC	3.0948	6.9661	0.8745	0.4113	0.0339	0.2704
2076/2077	DEPROSC	2.3411	6.6253	0.8689	-0.6389	0.0212	0.1619
2077/2078	DEPROSC	2.3289	6.1480	0.8601	0.9400	0.0409	0.2923
2078/2079	DEPROSC	0.2248	6.0044	0.8572	0.3822	0.0261	0.1826
2070/2071	SWALAMBAN	2.4181	9.4930	0.9047	1.2798	0.0373	0.3913
2071/2072	SWALAMBAN	2.2893	8.2369	0.8917	1.4518	0.0383	0.3535
2072/2073	SWALAMBAN	2.0706	7.5750	0.8834	1.5395	0.0424	0.3633
2073/2074	SWALAMBAN	1.9059	8.2562	0.8920	0.8102	0.0264	0.2440

2074/2075	SWALAMBAN	1.7618	7.7967	0.8863	0.6819	0.0293	0.2577
2075/2076	SWALAMBAN	1.9222	7.7778	0.8861	0.6496	0.0266	0.2337
2076/2077	SWALAMBAN	1.6371	7.0490	0.8758	0.3681	0.0188	0.1513
2077/2078	SWALAMBAN	1.6373	6.0207	0.8576	1.1289	0.0362	0.2541
2078/2079	SWALAMBAN	1.5561	6.5234	0.8671	0.3867	0.0133	0.0998
2079/2080	SWALAMBAN	1.4173	5.4620	0.8452	0.3146	0.0135	0.0875
2070/2071	NERUDE	2.4460	7.8925	0.8875	1.3062	0.0406	0.3608
2071/2072	NERUDE	2.4809	6.6137	0.8687	1.4256	0.0402	0.3062
2072/2073	NERUDE	2.5787	6.7031	0.8702	1.0272	0.0334	0.2572
2073/2074	NERUDE	2.6843	6.2940	0.8629	0.6315	0.0254	0.1854
2074/2075	NERUDE	2.4985	7.2085	0.8782	0.2690	0.0125	0.1022
2075/2076	NERUDE	2.5547	5.9239	0.8556	0.4172	0.0220	0.1525
2076/2077	NERUDE	2.4500	6.1547	0.8602	0.1046	0.0078	0.0559
2077/2078	NERUDE	2.9536	7.1801	0.8778	0.3816	0.0228	0.1864
2078/2079	NERUDE	3.0693	7.8034	0.8864	0.2157	0.0183	0.1608
2079/2080	NERUDE	2.9047	7.2344	0.8786	0.1021	0.0046	0.0383
2070/2071	NIRDHAN	2.5833	10.2525	0.9111	1.1415	0.0337	0.3792
2071/2072	NIRDHAN	2.4694	9.7441	0.9069	1.4035	0.0335	0.3594
2072/2073	NIRDHAN	2.3653	9.7799	0.9072	1.3732	0.0341	0.3671
2073/2074	NIRDHAN	1.9550	9.3783	0.9036	1.1267	0.0373	0.3867
2074/2075	NIRDHAN	1.7763	9.4238	0.9041	0.6618	0.0302	0.3151
2075/2076	NIRDHAN	1.7450	8.0123	0.8890	0.7702	0.0322	0.2904
2076/2077	NIRDHAN	1.4427	7.9763	0.8886	0.3340	0.0174	0.1565
2077/2078	NIRDHAN	1.5005	5.8904	0.8549	1.1815	0.0448	0.3086
2078/2079	NIRDHAN	1.4942	5.4009	0.8438	0.5824	0.0253	0.1621
2079/2080	NIRDHAN	1.2720	4.9513	0.8320	0.1218	0.0061	0.0362

APPENDICES II
DESCRIPTIVE STATISTICS

	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard Deviation</i>
Loan to Deposit Ratio	0.2248	3.3771	2.0605	0.7439
Debt Equity Ratio	4.9513	12.6630	7.3380	1.6669
Debt Ratio	0.8320	0.9268	0.8757	0.0226
Interest Coverage Ratio	-0.6389	1.6394	0.7610	0.4699
Return on Assets	0.0046	0.0448	0.0288	0.0103
Return on Equity	0.0362	0.3913	0.2434	0.1012
Count (N) = 49				

APPENDICES III
CORRELATION ANALYSIS

	<i>Loan to Deposit Ratio</i>	<i>Debt Equity Ratio</i>	<i>Debt Ratio</i>	<i>Interest Coverage Ratio</i>	<i>Return on Assets</i>	<i>Return on Equity</i>
Loan to Deposit Ratio	1					
Debt Equity Ratio	0.0874	1				
Debt Ratio	0.1753	0.9757	1			
Interest Coverage Ratio	0.2207	0.2577	0.2766	1		
Return on Assets	0.1465	0.1756	0.2028	0.8335	1	
Return on Equity	0.1459	0.6129	0.6265	0.7978	0.8740	1

**APPENDICES IV
MODEL SUMMARY**

<i>Regression Statistics</i>		
	<i>ROA</i>	<i>ROE</i>
Multiple R	0.8381	0.9066
R Square	0.7024	0.8219
Adjusted R Square	0.6754	0.8057
Standard Error	0.0058	0.0446
Observations	49	49

**APPENDICES V
ANOVA ANALYSIS**

ANOVA

	<i>ROA</i>				<i>ROE</i>				
					<i>Significance</i>				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>
Regression	4	0.0035	0.00089	25.9651	4.3198	0.4038	0.1009	50.7607	6.2
Residual	44	0.0015	0.000034			0.0875	0.0020		
Total	48	0.0050				0.4913			

APPENDICES VI
REGRESSION ANALYSIS

	<i>ROA</i>			<i>ROE</i>		
	<i>Coefficients</i>	<i>Error</i>	<i>P-value</i>	<i>Coefficients</i>	<i>Error</i>	<i>P-value</i>
Intercept	-0.1016	0.1445	0.4859	-1.3660	1.1034	0.2223
Loan to Deposit Ratio	-0.0009	0.0013	0.4612	-0.0108	0.0097	0.2696
Debt Equity Ratio	-0.0023	0.0025	0.3694	0.0043	0.0191	0.8231
Debt Ratio	0.1541	0.1868	0.4138	1.6978	1.4257	0.2401
Interest Coverage Ratio	0.0185	0.0019	1.3943	0.1490	0.0145	2.8614

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