CAPITAL STRUCTURE DECISION AND PROFITABILITY: A STUDY OF NEPALESE MANUFACTURING 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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Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **"Capital Structure Decision and Profitability: A Study of Nepalese Manufacturing Companies"**. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purposes.

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

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Table of Contents

Certification of Authorship ..... *ii*
Report of Research Committee ..... *iii*
Approval Sheet ..... *iv*
Acknowledgements ..... *v*
Table of Contents ..... *vi*
List of Tables ..... *viii*
List of Figures ..... *ix*
Abbreviations ..... *x*
Abstract xi
CHAPTER I 1
INTRODUCTION 1
1.1 Background of the Study 1
1.2 Problem Statement 3
1.3 Objectives of the Study 5
1.4 Research Hypotheses 5
1.5 Rationale of the Study 6
1.6 Limitations of the Study 6
CHAPTER II 8
LITERATURE REVIEW 8
2.1 Theoretical Review 8
2.1.1 Capital Structure and Profitability Nexus in Manufacturing Companies 8
2.1.2 Irrelevant and Relevant Theory 10
2.1.3 Agency Cost Theory 11
2.1.4 Trade-off Theory 12
2.1.5 Pecking Order Theory 13
2.2 Empirical Review 14
2.3 Research Gap 30
CHAPTER III 32
RESEARCH METHODOLOGY 32
3.1 Research Design 32
3.2 Population and Sample, and Sampling Design 32
3.3 Nature and Sources of Data 32

3.4 Data Collection Procedures 33
3.5 Method of Analysis 33
3.5.1 Descriptive Analysis 33
3.5.2 Correlation Analysis 34
3.5.3 Regression Analysis 34
3.6 Research Framework and Definition of Variables 35
3.6.1 Return on Equity 35
3.6.2 Return on Assets 36
3.6.3 Net Profit Margin 36
3.6.4 Operating Profit Ratio 36
3.6.5 Debt Ratio 37
3.6.6 Debt to Equity Ratio 37
3.6.7 Firm size 37
3.6.8 Fixed Assets 38
3.6.9 Liquidity Ratio 38
CHAPTER IV 39
RESULTS AND DISCUSSION 39
4.1 Results 39
4.1.1 Descriptive Analysis 39
4.1.2 Correlation Analysis 41
4.1.3 Regression Analysis 44
4.1.3.1 Regression Analysis with Dependent Variable Return on Equity 44
4.1.3.2 Regression Analysis with Dependent Variable Return on Assets 46
4.1.3.3 Regression Analysis with Dependent Variable Net Profit Margin 48
4.1.3.4 Regression Analysis with Dependent Variable Operating Profit Ratio 50
4.1.4 Hypothesis Testing 52
4.2 Discussions 54
CHAPTER V 57
SUMMARY AND CONCLUSION 57
5.1 Summary 57
5.2 Conclusion 59
5.3 Implications 60
References .....
Appendices .....

List of Tables

Table 1 Summary of Literature Review.....22
Table 2 Descriptive Analysis.....40
Table 3 Correlation Analysis.....42
Table 4 Regression Results with Dependent Variable Return on Equity.....45
Table 5 Regression Results with Dependent Variable Return on Assets.....46
Table 6 Regression Results with Dependent Variable Net Profit Margin.....48
Table 7 Regression Results with Dependent Variable Operating Profit Ratio.....50
Table 8 Hypothesis Testing Results.....53

List of Figures

Figure 1 Research Framework 35

Abbreviations

BNL	Bottlers Nepal Limited
BNTL	Bottlers Nepal Limited (Terai)
DER	Debt- Equity Ratio
DR	Debt Ratio
EBIT	Earnings before Interest and Tax
EPS	Earnings per Share
HDL	Himalayan Distillery Limited
NEPSE	Nepal Stock Exchange
NLO	Nepal Lube Oil Limited
NPR	Net Profit Ratio
OPR	Operating Profit Ratio
ROA	Return on Assets
ROE	Return on Equity
SPSS	Statistical Package for Social Science
UNL	Unilever Nepal Limited
WACC	Weighted Average Cost of Capital

Abstract

This research focuses on the relationship between capital structure and the profitability of manufacturing businesses listed on the Nepal Stock Exchange (NEPSE). This research focuses on five regularly traded companies, examining how various capital structure and control factors like debt ratio, debt-to-equity ratio, firm size, fixed assets and liquidity ratio influence profitability indicators like return on equity (ROE), return on assets (ROA), net profit margin (NPM), and operating profit ratio (OPR). To evaluate these connections, the research employs descriptive, correlational, and regression analyses using secondary data derived from audited financial accounts over a 10-year period. The research demonstrates that while a higher debt ratio positively correlates with ROE, indicating that increased leverage can enhance equity returns, it does not have a uniform impact on ROA, NPM, and OPR. Conversely, a high debt-to-equity ratio negatively affects ROA, NPM, and OPR, suggesting that excessive leverage can reduce overall profitability. The study also finds that firm size and fixed assets negatively influence ROE, indicating potential inefficiencies or increased capital costs associated with larger scale and substantial asset investments. In contrast, liquidity positively correlates with ROA, NPM, and OPR, underscoring its importance in maintaining financial stability and operational efficiency. The research underscores the importance of establishing a balanced capital structure to optimize profitability, providing practical insights for financial managers, legislators, and academics. By addressing a research gap in the Nepalese context and providing a complete study of capital structure dynamics in manufacturing enterprises, the findings provide a contribution to the current body of literature.

Keywords: *Capital structure, profitability, debt ratio, debt-to-equity ratio, return on equity, return on assets, net profit margin, operating profit ratio*

CHAPTER- I
INTRODUCTION

1.1 Background of the Study

It is possible for businesses to finance their assets using only debt or equity capital; however, the most effective strategy often requires a combination of the two. This decision pertains to the capital structure, a crucial strategic financial choice that directly impacts the firm's profitability. According to Shubita and Alsawalhah (2012), the phrase "capital structure" describes the combination of long-term sources of capital, which may include long-term debt, preferred stock, and common equity. The appropriate capital structure, by striking a balance between risk and return, may have an impact on a company's profitability and financial stability. Therefore, in order for businesses to make educated decisions about their finances, it is necessary for them to conduct a comprehensive examination of the link between changes in capital structure and profitability.

When it comes to finding the ideal ratio of debt to equity, financial managers encounter a number of important issues. Financial managers often recommend using a well-balanced combination of debt and equity to efficiently finance assets. Shubita and Alsawalhah (2012) asserted that the balance between short-term debt, long-term debt, and equity constitutes the financial structure. The capital structure is a component of the financial structure. Because they affect the company's ability to generate profits and manage financial risk, capital structure choices are of the utmost importance.

Profitability, a measure of a company's ability to generate gains over time, is a crucial factor for management actions aimed at enhancing financial performance. Chechet and Olayiwola (2014) highlighted the fact that profitability metrics not only represent operational efficiency but also influence the firm's financial stability, which impacts owners, managers, and creditors alike. Given the correlation between higher profitability and increased hazards, it is crucial to explore how capital structure decisions influence both profitability and risk.

Capital structure greatly impacts both returns and the associated risks. A suitable capital structure helps to strike a balance between risks and returns, increasing the company's value while simultaneously reducing its total capital cost. They remark that increasing leverage may lead to higher returns and risk, while decreasing borrowing decreases both of these

factors (Sultan & Adam, 2015). In order to maximize profits and keep their finances stable, companies must be cautious with their leverage management. Taking this into consideration highlights how important it is to investigate the connection between capital structure and profitability in order to arrive at profitable financial choices.

When making choices about capital structure, the size of the company is a significant factor. Wardani and Subowo (2020) revealed that larger companies often have more access to external finance, potentially enhancing their capital structure. This suggests that the size of a company might have an effect on its capacity to strike a balance between debt and equity, which in turn leads to judgments on overall financial performance and capital structure.

Because of the extensive connections that exist between capital structure and other financial factors, it is one of the most difficult aspects of making financial decisions. Nimalathasan (2010) defined a company's capital structure as the combination of debt and equity utilized to finance its assets. Because the interaction between capital structure and other financial decisions has an effect on the company's overall financial health, businesses must thoroughly assess the choices they make regarding their capital structure.

Local enterprises in Nepal exhibit significant levels of leverage, even with a relatively low long-term debt ratio (Baral, 2004), making capital structure decisions particularly crucial in the country. According to Modigliani and Miller (1963), the use of debt in capital structures often results in favorable tax consequences. This is because interest payments are tax-deductible, which reduces the actual cost of capital after taxes. However, excessive debt may result in increased costs associated with bankruptcy and dangers associated with default, which is why it is critical to establish a balanced strategy.

Changes in interest rates have an impact on capital structures, adding another layer of complexity to the process of making financial decisions. Frank and Goyal (2003) point out that a rise in interest rates may lead to an increase in leverage by making equity more costly in comparison to debt, which may impact the general stability of the financial system. According to Velnamphy and Aloy (2012), businesses that make and manage their financial choices in a responsible manner are able to earn greater profits and obtain a competitive edge.

It is essential for businesses that are operating in Nepal to have a solid grasp of the influence that capital structure has on profitability. Given the one-of-a-kind financial climate and the

difficulties that Nepalese businesses must contend with, the purpose of this research is to shed light on the ways in which choices regarding capital structure impact profitability. The study will give useful information to managers and academics who are looking to improve the financial performance and stability of manufacturing enterprises in Nepal. This will be accomplished by giving insights into optimum capital structure practices.

1.2 Problem Statement

In today's increasingly competitive and complex business landscape, the concept of sustainability has taken center stage. It is widely acknowledged that sustainability is directly linked to profitability, which, in turn, is influenced by the optimal combination of debt and equity (Nimalathasan, 2010). The ability to generate profits holds utmost importance for every business organization, as it ultimately determines its long-term viability in the market. Consequently, financial managers play a crucial role in identifying the key factors that drive profitability and enable the organization to thrive.

In Nepal, the relationship between capital structure and financial performance remains a critical yet complex issue for firms across various sectors. Despite growing research on capital structure's impact on profitability and firm value, significant gaps persist in understanding how different components of capital structure, such as leverage, debt-equity ratios, and firm size, affect financial outcomes in the Nepalese context. Nepalese firms, particularly in sectors like manufacturing, hydropower, and insurance, face unique challenges related to capital structure decisions. Recent studies indicate that high leverage can negatively impact efficiency and profitability, while the choice between debt and equity financing can significantly influence firm performance. The capital structure decisions made by Nepalese companies are further complicated by varying industry dynamics, economic conditions, and regulatory environments.

A review of several studies reveals diverse impacts of capital structure decisions across different industries and regions. Al-Nsour and Al-Muhtadi (2019) found that debt-to-equity ratio (DER) positively influences market value, while return on assets (ROA) negatively affects it. However, using Tobin’s Q, they found no significant impact, indicating that firm value measures can alter observed relationships between capital structure and profitability. Rahman et al. (2019) revealed that while debt and equity ratios significantly affect return on assets (ROA), the debt-to-equity ratio negatively impacts profitability metrics. Their study underscores the importance of balancing capital structure to maximize shareholder

wealth. Bhatt (2020) found that in Nepalese commercial banks, capital structure significantly impacts profitability, with bank size being a major determinant. The study concluded that optimizing capital structure and bank size can enhance shareholder returns. Bhattarai (2020) discovered that equity, leverage, and asset tangibility significantly impact the financial performance of Nepalese insurance companies. Optimizing these factors is crucial for improving financial outcomes.

Similarly, Mensah (2021) highlighted that both short-term and long-term debt impact profitability, but excessive leverage should be avoided. Managers should aim to maintain an optimal capital structure to maximize firm value and profitability. Marpaung et al. (2021) identified that capital structure, working capital turnover, and inventory turnover significantly affect profitability. The study emphasizes optimizing these factors for enhanced profitability in manufacturing firms. Chalise and Adhikari (2022) found that capital structure negatively affects financial performance in Nepalese commercial banks, while firm size has a positive impact. Increasing equity capital and leveraging size are recommended to improve financial performance. Essel (2023) found that high leverage is associated with lower firm performance in Ghana, recommending a focus on equity financing and improved profitability strategies. Shrestha (2023) found minimal effects of capital structure on profitability in Dabur Nepal Private Limited, suggesting that other factors beyond capital structure may need exploration for profitability enhancement.

Given these complexities, there is a pressing need to investigate how capital structure decisions specifically affect Nepalese firms. This research aims to bridge the gap by exploring the effects of capital structure on profitability and financial performance across different sectors in Nepal. It seeks to provide actionable insights for managers and policymakers to optimize capital structure strategies, enhance financial outcomes, and navigate the challenges unique to the Nepalese market. Mainly the following research questions are addressed:

- What is the existing scenario of debt ratio, debt to equity ratio, firm size, fixed assets, liquidity and return on equity, return on assets, net profit margin and operation profit ratio in manufacturing firms in Nepal?
- Is there any relationship between debt ratio, debt to equity ratio, firm size, fixed assets, liquidity and return on equity, return on assets, net profit margin and operation profit ratio in manufacturing firms in Nepal?

- How debt ratio, debt to equity ratio, firm size, fixed assets, liquidity impact the return on equity, return on assets, net profit margin and operation profit ratio in manufacturing firms in Nepal?

1.3 Objectives of the Study

The general objective of the study is to examine capital structure and profitability of manufacturing firms in Nepal. However, the specific objectives of the study are as follows:

- To assess the current status of debt ratio, debt to equity ratio, firm size, fixed assets, liquidity as well as profitability indicators return on equity, return on assets, net profit margin, and operating profit ratio, in manufacturing firms in Nepal.
- To examine the presence of any relationship between debt ratio, debt to equity ratio, firm size, fixed assets, liquidity and return on equity, return on assets, net profit margin, and operating profit ratio in manufacturing firms in Nepal.
- To analyze the impact of debt ratio, debt to equity ratio, firm size, fixed assets, liquidity on return on equity, return on assets, net profit margin, and operating profit ratio in manufacturing firms operating in Nepal.

1.4 Research Hypotheses

The hypotheses were developed as per the conceptual framework and the past literatures. Nimalathasan (2010) examined capital structure and its impact on profitability. The analysis of listed manufacturing companies shows that debt-equity ratio is positively and strongly associated to all profitability ratios. Debt ratio is positively and strongly associated to all profitability ratios. The findings of Sultan & Adam (2015) suggested that capital structure positively influence, in a significant way, on the profitability of listed firms in Iraq. Therefore, following hypotheses were set for this study.

$H_0$1: Debt ratio have a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.

$H_0$2: Debt-to-equity ratio have a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.

$H_0$3: Firm size has a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.

$H_0$4: Fixed assets have a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.

$H_0$5: Liquidity has a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.

1.5 Rationale of the Study

This study aims to examine the importance of capital structure decision-making and its impact on the profitability of manufacturing firms in Nepal. Despite the growth of industrial enterprises in Nepal, many face challenges in effectively managing their capital structure and often overlook its significance. The decision regarding capital structure involves identifying the current and desired financing mix, which significantly influences firm performance and cost of capital. Determining the optimal financing mix is a complex task that requires careful consideration, taking into account factors such as managerial attitudes towards risk, asset structure, lender attitudes, and taxes. The appropriate financing mix not only maximizes firm value and shareholder wealth but also reduces the weighted average cost of capital, enabling the firm to undertake new wealth-creating investments. This study will provide valuable insights for companies to evaluate their capital structure decisions, analyze their impact on profitability, and develop strategies to enhance their financial performance. Additionally, it will help decision-makers, financial specialists, managers, stakeholders, and investors understand the significance of capital structure and make informed choices to optimize firm profitability and shareholder wealth.

1.6 Limitations of the Study

Each and every research contains some limitations. This study was completed within certain boundaries, which provide scope for future researcher. The limitation of this study are as follows:

- The study only considers data from 2013/14 to 2022/23, which may restrict the analysis of long-term trends and patterns.
- The study utilizes descriptive, correlation, and regression analysis, which may limit the depth of statistical analysis and exploration of more advanced techniques.
- The study is based on a descriptive and causal research design, which may restrict the ability to establish causality and explore other research designs such as experimental or longitudinal studies.
- The study focuses on five manufacturing companies (BNL, BNTL, UNL, NLO, and HDL), which may not provide a comprehensive representation of the entire manufacturing sector in Nepal.

- The findings of the study may have limited generalizability beyond the specific manufacturing firms and time period studied.
- The study relies on the availability and accuracy of the data collected, which may be subject to errors or limitations in data collection methods.
- The study does not consider external factors such as changes in the economic or regulatory environment, which may influence the relationship between capital structure and profitability.
- The study focuses on the impact of capital structure on profitability and does not explore other factors that may influence firm performance, such as market conditions or management strategies.
- The study is limited to the use of specific statistical models, which may not capture the full complexity of the relationship between capital structure and profitability.
- The study is conducted within a specific timeframe, which may limit the ability to capture long-term changes or fluctuations in capital structure and profitability.

CHAPTER- II
LITERATURE REVIEW

The literature review on manufacturing company capital structure and profitability has three main sections: theoretical, empirical and research gap. Theory and models that explain capital structure and profitability are examined in the theoretical review. It allows analysis of how capital structure theories explain manufacturing business profitability. The empirical review analyzes capital structure and profitability research from various regions and industries. This section covers empirical findings and study-related trends and patterns. The research gap section reveals gaps in the literature, suggesting more study. This literature study integrates these parts to give a thorough picture of how capital structure affects profitability and to address unsolved concerns in the area.

2.1 Theoretical Review

The theoretical overview examines numerous hypotheses on capital structure and profitability's complex connection. capital structure and profitability nexus in manufacturing companies the basics are explained and how capital structure choices affect manufacturing profitability. Similarly, irrelevant and relevant theory differentiates between theories that are irrelevant to manufacturing enterprises and those that are useful. Agency cost theory discusses how management-shareholder disputes impact capital structure and profitability. Trade-off theory debt financing's perks and costs, like tax shields and bankruptcy risks, are weighed against profitability. Finally, pecking order theory investigates how internal finance ranks above external financing and affects capital structure and profitability. These sections give a solid theoretical basis for understanding how capital structure theories affect manufacturing business profitability.

2.1.1 Capital Structure and Profitability Nexus in Manufacturing Companies

The capital structure of manufacturing companies is a significant factor in determining their financial performance and overall profitability. Businesses utilize a combination of debt and equity in this capital structure to fund their operations. Modigliani and Miller's 1958 theory states that if there are no taxes, bankruptcy costs, or asymmetric knowledge in the world, the capital structure of a company has no bearing on its value. Taxes, bankruptcy fees, and agency charges affect manufacturing companies' capital structure decisions, which affects their profitability. These choices are very important because they have an

impact on the company's cost of capital and financial risk, which ultimately affects the extent to which it is able to make profits.

Tax concerns significantly influence the capital structures of manufacturing companies, playing a vital role in the process. Interest payments on debt provide a tax shield, potentially leading to increased profitability. According to Myers (1984), businesses that have a significant amount of taxable income are one of the most likely to gain from debt financing because of the tax shield effect. As a result, industrial companies frequently use debt financing to maximize their profits after taxes. On the other hand, an excessive dependence on debt may result in financial trouble and higher expenses associated with filing for bankruptcy, which can potentially nullify the advantages of the tax shield and have a negative impact on profitability.

In order to determine the optimal capital structure, businesses should weigh the advantages of debt financing, such as tax shelters, against the disadvantages of financial hardship, according to the trade-off theory of capital structure. Kraus and Litzenberger (1973) claimed that companies decide their best capital structure by considering the elements that are in opposition to one another. Manufacturing companies must carefully consider the trade-off theory because of the nature of their operations, which often include major fixed assets and significant investments in machinery and equipment. Manufacturing companies are required to give thorough thought to this theory. Manufacturing companies to preserve their financial flexibility and avoid the dangers associated with excessive leverage by maintaining an appropriate balance between debt and equity financing. This may allow the manufacturing companies to sustain profitability.

Agency fees also influence the capital structure decisions made by manufacturing companies. Jensen and Meckling (1976) proposed that conflicts of interest between managers and shareholders, as well as between debt holders and equity holders, could influence capital structure decisions. It is possible for manufacturing companies to issue debt in order to reduce agency expenses, manufacturing companies can issue debt. Enforcing stronger financial discipline on managers can accomplish this, thereby reducing the likelihood of overinvestment in unprofitable initiatives. On the other hand, excessive levels of debt may make agency issues worse by increasing the possibility of underinvestment as a result of the need to satisfy debt commitments, which can eventually have a negative impact on profitability.

As far as the link between capital structure and profitability in manufacturing companies is concerned, empirical research has produced contradictory data. Titman and Wessels (1988) found a correlation between a higher level of leverage and a lower level of profitability. This suggests that the costs of financial hardship exceed the advantages of the tax shield. Rajan and Zingales (1995) found that there is a positive association between leverage and profitability. This suggests that prosperous businesses are more inclined to employ debt financing during times of high profitability. The fact that these results are contradictory highlights the complexity of choices regarding capital structure and the need for manufacturing companies to customize their financing strategies to their particular conditions in order to maximize their opportunities for profit.

2.1.2 Irrelevant and Relevant Theory

Modigliani and Miller first proposed the Irrelevance Theory in 1958. This theory proposes that in a perfect market, where there are no taxes, bankruptcy costs, or asymmetric information, a company's capital structure is irrelevant to its value. This view posits that the operational revenue a company generates, not its funding method, determines its value. Modigliani and Miller assert in their theorem that the overall value of a company remains constant, irrespective of whether it receives funding from debt or equity. This is because the cost of equity rises as debt levels rise, negating the benefits of cheaper debt financing.

However, considering market imperfections highlights the importance of capital structure. Taxes increase the appeal of debt financing by allowing the deduction of interest payments from taxable income. This results in a tax shield that improves the value of the company under consideration. Graham (2000) supports this viewpoint, revealing that businesses facing higher tax rates are more likely to utilize debt financing to benefit from the tax shield. One component of the theory acknowledges that a company's capital structure may, in fact, have an impact on its value as well as its profitability in real-world situations.

Another element that contributes to the significance of the capital structure is the fee associated with filing for bankruptcy. Companies with high levels of debt are more likely to experience financial trouble and bankruptcy, both of which can have a negative impact on the company's value. Warner (1977) presented actual data demonstrating that the immediate consequences of bankruptcy may be high, which in turn influences businesses to reduce the amount of debt they put on their balance sheets. However, this feature implies that while debt might give tax advantages, it also raises the danger of financial trouble,

which is something that businesses need to strike a balance between in order to optimize their capital structure.

The presence of asymmetric knowledge further reinforces the significance of capital structure. Myers and Majluf's (1984) research revealed that managers often have a deeper understanding of the company's value than outside investors, potentially leading to adverse selection issues during stock issuance. This knowledge asymmetry may lead businesses to opt for debt instead of stock to prevent market undervaluation. Several empirical investigations, such as the ones conducted by Leary and Roberts (2010), provide support for this viewpoint by demonstrating that asymmetric knowledge has a major impact on the financing decisions made by businesses.

Modigliani and Miller theorem presented the idea that capital structure is irrelevant in a perfect market. However, imperfections in the real world, such as taxes, bankruptcy costs, and asymmetric information, demonstrate that capital structure is indeed relevant and can have a significant impact on a company's value and profitability.

2.1.3 Agency Cost Theory

Jensen and Meckling (1976) presented the agency cost theory, which investigates the conflicts of interest that might arise between managers and shareholders (also known as the principal-agent dilemma) as well as between debt holders and equity holders. The fact that managers, who are in charge of the company's resources, may not always behave in the best interests of shareholders is the root cause of these conflicts, which in turn lead to agency expenses. Managers may seek personal rewards, overinvest in unfavorable initiatives, or avoid taking advantageous risks, all of which may result in a decrease in the company's value and profitability.

The imposition of financial discipline on managers is one way that debt financing may assist in reducing agency expenses. The need for managers to make regular interest payments limits the amount of free cash flow that is available for management discretion, which in turn brings the activities of managers into closer alignment with the interests of shareholders. Stulz (1990) demonstrated that companies with higher levels of debt tend to have better performance as a result of decreased agency costs.

On the other hand, excessive amounts of debt may also lead to disagreements between those who hold debt and those who have equity. A heavily leveraged company may incentivize

stockholders to pursue riskier initiatives. This is due to the fact that stockholders receive the rewards, while debt holders bear the risks. Thus, equity holders may be more likely to take risks. Myers (1977) pointed out, this risk-shifting dilemma may result in judgments on investments that are less than ideal and higher expenses for the respective agency. Billett, King, and Mauer (2007) found empirical evidence that organizations with more debt are more likely to participate in risk-shifting activity. The study's findings confirmed this observation.

Furthermore, monitoring expenditures are an additional component of the organization's fees. Debt holders frequently demand the implementation of covenants and other monitoring systems as a means of safeguarding their interests, which may result in extra expenses for the company. Despite the fact that these monitoring operations are essential, they have the potential to raise the total cost of debt financing. Smith and Warner (1979) indicated a positive correlation between the presence of monitoring systems and covenants and increased agency expenses.

The agency cost theory, in its entirety, places an emphasis on the need to maintain a balance between debt and equity in order to avoid agency costs and conflicts of interest. Businesses have the capacity to reduce the negative consequences of agency difficulties, as well as increase their value and profitability, by properly arranging their capital arrangements.

2.1.4 Trade-off Theory

According to the theory of capital structure, businesses should strive to strike a balance between the advantages of debt financing, such as tax shelters, and the disadvantages of financial difficulties and potential bankruptcy. Kraus and Litzenberger (1973) were among the first to formally establish this idea. They proposed that there is an optimum capital structure that arises when the marginal benefit of the tax shield is equal to the marginal cost of financial hardship during the optimal capital structure. Businesses can optimize their value by finding an acceptable balance between equity financing and loan financing using this trade-off.

Empirical data supports the trade-off theory, indicating that businesses actively manage their capital structures to achieve optimal balance and maximize profits. Graham (2000) discovered that businesses that are subject to high tax rates are more inclined to make use of debt in order to benefit from tax shields, but companies that are subject to greater

possible bankruptcy costs seek to restrict their use of debt. Based on this information, it seems that companies take into account both the advantages and the costs of debt financing when making choices about their capital structure.

Furthermore, the trade-off theory elucidates the variations in capital structures observed in various sectors and companies. For instance, manufacturing companies often possess a higher number of fixed assets that can serve as collateral for loans. As a result, manufacturing companies are more likely to employ debt financing in comparison to companies operating in sectors that have a lower number of tangible assets. Rajan and Zingales (1995) provided empirical support for this approach by demonstrating that the industry's characteristics and asset structures influence capital structure decisions.

It is also important to highlight that the trade-off theory has a dynamic component. Over the course of time, businesses make adjustments to their capital structures in order to accommodate changes in their operational environment, tax rates, and financial situations. Leary and Roberts (2005) proved that companies actively rebalance their capital structures in order to maintain an optimum mix of debt and equity. This finding provides further evidence for the trade-off theory's significance in the management of capital structures in the working world.

The trade-off theory offers a complete framework for understanding how businesses strike a balance between the advantages and costs of debt financing in order to find the appropriate capital structures for their operations. Empirical research supports this theory, demonstrating that a variety of circumstances impact the choices companies make about their capital structure. These elements include tax concerns, the risk of bankruptcy, the business features, and the dynamic financial conditions.

2.1.5 Pecking Order Theory

Myers and Majluf (1984) introduced the pecking order theory, which suggests that businesses prefer to obtain finance internally rather than from external sources, due to the knowledge imbalance between management and outside investors. In accordance with this approach, businesses adhere to a hierarchy of financing strategies: first, they rely on their retained profits, then they take on debt, and ultimately, as a last choice, they issue stock. This preference emerges due to the fact that internal funding does not include any

information asymmetry, while debt and equity offerings may indicate unfavorable information to the market.

Shyam-Sunder and Myers (1999) demonstrated businesses with greater profitability are less likely to issue capital from outside sources and are more likely to depend on their retained profits. Consequently, this behavior aligns with the theory's prediction that productive businesses generate sufficient internal cash, thereby reducing their reliance on external funding and avoiding potential negative consequences associated with debt or stock issuance.

Furthermore, the theory provides an explanation for why businesses that have less information asymmetry, such as those that have improved transparency in their financial reporting, are more inclined to issue stock. Frank and Goyal (2003) provided the empirical support, demonstrating that companies with higher levels of information openness tend to issue more stock compared to those with more information asymmetry. This discovery is significant because it highlights the influence of knowledge asymmetry on financing choices and the preference for internal capital over external capital.

Furthermore, the pecking order theory elucidates the capital structure patterns observed in small and medium-sized businesses (SMEs). Due to their frequent information asymmetry and limited access to capital markets, small and medium-sized businesses (SMEs) tend to rely more on their internal cash and bank loans instead of issuing shares. Watson and Wilson (2002) confirmed this tendency, revealing a high preference for internal finance and short-term loans among small and medium-sized enterprises (SMEs) over stock ownership opportunities.

Pecking order theory provides valuable insights into business financing behavior, specifically highlighting the impact of asymmetric knowledge on capital structure decisions. Empirical data supports the theory's predictions, showing that businesses opt for internal financing and follow a hierarchical order in their financing decisions to mitigate the impact of unwanted signals and information asymmetry.

2.2 Empirical Review

Al-Nsour and Al-Muhtadi (2019) examined the effect of capital structure and profitability on firm value among 41 manufacturing companies listed on the Amman Stock Exchange from 2014 to 2018. Utilizing data from the ASE database and annual reports, they measured

capital structure with leverage and debt-to-equity ratio (DER) and profitability with return on assets (ROA) and return on equity (ROE). Firm value was assessed using market value and Tobin's Q as dependent variables. Employing multiple regression analysis, the study revealed that DER positively and significantly affects market value, while ROA has a significant negative impact on market value. However, using Tobin's Q as a measure, no significant effect was found between the independent variables (capital structure and profitability) and firm value. The study concluded that the choice of firm value measure impacts the observed relationships, suggesting that DER can enhance market value, whereas ROA might decrease it. The implication is that firms should consider how different measures of value might affect their assessment of capital structure and profitability impacts.

Jaishi and Poudel (2019) investigated the relationship between leverage and efficiency among non-financial firms in Nepal, a relatively unexplored area in the Nepalese context. Utilizing a descriptive and causal research design, they analyzed secondary data from the annual reports of 15 non-financial firms listed on the Nepal Stock Exchange, with 60 observations spanning two to 14 years. The sample included firms from trading, hotels, manufacturing, and hydropower sectors, selected through stratified purposive sampling. Key variables such as size, tangibility, growth, profitability, leverage, and efficiency were examined using descriptive statistics and regression analysis. The study found that Nepalese non-financial firms typically use both debt and equity in their capital structure. High leverage was associated with lower efficiency, while more efficient firms tended to use lower leverage. Additionally, increased investment in tangible assets positively correlated with firm efficiency, while growth in sales positively impacted firm growth. However, the effects of size, tangibility, profitability, and growth on leverage varied across different industries.

Rahman et al. (2019) examined the impact of capital structure on the profitability of publicly traded manufacturing firms in Bangladesh. Utilizing fixed effect regression analysis, they assessed the relationship between independent variables (debt ratio, equity ratio, and debt to equity ratio) and dependent variables (return on assets, return on equity, and earnings per share) using a sample of 50 observations from 10 manufacturing companies listed on the Dhaka Stock Exchange over the period of 2013 to 2017. The study found that both the debt ratio and equity ratio had a significant positive impact on ROA,

while the debt-to-equity ratio had a significant negative impact. For ROE, the equity ratio had a significant positive impact, but the debt-to-equity ratio showed a significant negative impact. Additionally, both the debt ratio and equity ratio negatively affected EPS. The research concluded that the capital structure significantly influences profitability, suggesting that listed manufacturing companies should aim for an optimal capital structure to maximize shareholder wealth. The findings imply that careful management of debt and equity ratios is crucial for enhancing profitability in manufacturing firms.

Bedada (2020) explored the effect of capital structure on the profitability of EFFORT manufacturing companies in Ethiopia. The study utilized secondary data from audited financial statements, including balance sheets and income statements, of eight manufacturing companies over a ten-year period (2008-2017). These companies were selected based on their operation longevity of at least ten years. The research employed panel data regression with random effects to analyze the relationship between capital structure variables (total debt to total assets, total debt to equity, and long-term debt to total assets) and profitability, measured by return on assets, while controlling for firm size, sales growth rate, and tangibility. The findings revealed that total debt to assets (TDA) and long-term debt to total assets (LTDA) had a significant negative impact on profitability, while total debt to equity (TDE) had a significant positive impact. The study concluded that most EFFORT manufacturing firms rely heavily on debt financing, and it recommended that managers should consider equity financing as a more profitable option than debt financing.

Bhatt (2020) assessed the relationship between capital structure and profitability in Nepalese commercial banks. The study analyzed financial data from 18 commercial banks over the period of 2010-2019, sourced from NRB BI Statistics and the Bank Supervision Report. Return on equity (ROE) was used to measure profitability, while short-term debt, long-term debt, deposits, and total debt to assets ratio were proxies for capital structure. Control variables included bank size and asset growth. The findings indicated that over 40% of bank profitability, as measured by ROE, could be explained by the capital structure variables. The study revealed that ROE was insignificantly positively related to long-term debt and deposits, and insignificantly negatively related to short-term debt and total debt. However, bank size was significantly positively related to profitability, indicating that larger banks tend to provide higher returns to shareholders. The conclusion drawn was that capital structure has a notable impact on profitability, and optimizing bank size can enhance

shareholder returns. The implication is that bank managers should focus on strategic growth to improve profitability.

Bhattarai (2020) examined the effects of capital structure on the financial performance of insurance companies in Nepal. The study utilized panel data from 14 Nepalese insurance companies, covering the period from 2007/08 to 2015/16, resulting in 126 observations. Data were sourced from the annual reports available on the respective insurance companies' websites. The analysis employed pooled OLS, random effect, and fixed effect models. The dependent variable was return on assets (ROA), while the independent variables included total debt ratio, equity to total assets, leverage, firm size, liquidity ratio, and assets tangibility. The results indicated that equity to total assets, leverage, and assets tangibility significantly affected the financial performance of Nepalese insurance companies. The study concluded that these factors play a crucial role in shaping the financial outcomes of insurance firms. The implication is that insurance companies should optimize their capital structure to enhance financial performance.

Sovaniski (2020) determined the effects of capital structure on the financial performance of manufacturing firms in Kurdistan. The study employed multiple linear regression analysis, using return on equity as the dependent variable and capital structure, liquidity, size, and growth as independent variables. This analysis sought to establish whether capital structure decisions impact the profitability of these firms. The results revealed a negative relationship between total debt, size, and financial performance, indicating that higher debt levels and larger size are associated with decreased financial performance. Conversely, financial performance improved with increased liquidity and sales growth. The study concluded that Kurdistan manufacturing firms should consider minimizing debt and using internal funds more efficiently to enhance financial performance. The implication is that firms should focus on maintaining optimal liquidity and sales growth while minimizing reliance on external debt.

Lamichhane and Shrestha (2021) investigated the relationship between capital structure and financial performance of hydropower companies listed on the Nepal Stock Exchange (NEPSE) from 2005/06 to 2019/20. Utilizing a descriptive and causal research design, the study analyzed financial performance using Return on Equity (ROE) and assessed capital structure with short-term debt to capital (SDC), long-term debt to capital (LDC), total debt to capital (TDC), and debt to assets (DR) ratios. The findings revealed that SDC, LDC, and

TDC positively influence financial performance, while DR has a negative impact. The study concluded that hydropower companies should increase their short-term, long-term, and total debt ratios, while reducing their debt to assets ratio to enhance financial performance. The implication of the study is that hydropower companies in Nepal should design capital structure policies to optimize their financial performance.

Mensah (2021) evaluated how different capital structure choices impact profitability in the manufacturing sector by reviewing literature on various capital structure theories, including trade-off theory, pecking order theory, agency theory, Modigliani & Miller, and market timing theory. The study underscores the importance of understanding a firm's life cycle stage to select the optimal capital structure and develop a financial strategy that maximizes firm value and profitability. It was found that while both short-term and long-term debt can influence manufacturing performance, excessive leverage should be avoided in favor of utilizing retained earnings. The conclusion emphasizes the need for managers to carefully determine and maintain an optimal capital structure to enhance profitability. The implication of the study is that managers should aim to find and sustain the best capital structure to maximize their firm's profit potential.

Marpaung et al. (2021) analyzed the impact of capital structure, working capital turnover, inventory turnover, accounts receivable turnover, and asset growth on profitability in various industrial sector companies. Using a sample of 12 companies selected through purposive sampling and applying multiple linear regression, the study found that capital structure, working capital turnover, and inventory turnover significantly affect profitability. However, asset growth and accounts receivable turnover did not influence profitability, nor did they stimulate profitability. The study concluded that only capital structure, inventory turnover, and working capital turnover are significant determinants of profitability in manufacturing firms. The implication is that firms should focus on optimizing these factors to enhance their profitability.

Aidoo et al. (2022) explored the relationship between capital structure and profitability in listed manufacturing companies in Ghana over the period from 2005 to 2019. Utilizing both descriptive and causal research designs, the study aims to determine how different proportions of debt and equity influence company profitability. The findings indicate a significant inverse relationship between capital structure and profitability, with higher levels of debt negatively impacting profitability. This suggests that manufacturing

companies may achieve better financial outcomes by reducing their reliance on debt and focusing more on equity financing. The study concludes that an optimal balance between debt and equity is crucial for enhancing profitability. Consequently, it implies that companies in the manufacturing sector should strategically manage their capital structure to boost economic performance and competitiveness.

Chalise and Adhikari (2022) examined how capital structure and firm size impact the financial performance of Nepalese commercial banks, analyzing data from 14 banks government-owned, joint venture, and private over the period 2013/2014 to 2018/2019. Utilizing secondary data and employing regression analysis to evaluate the relationship between return on assets (ROA) and earnings per share (EPS) with capital structure (debt/equity) and firm size (total assets), the study finds a negative association between ROA, EPS, and capital structure, indicating that higher debt levels detract from financial performance. Conversely, it reveals a positive relationship between ROA, EPS, and firm size, suggesting that larger banks tend to perform better financially. The authors conclude that a higher equity capital ratio is beneficial for enhancing financial performance in Nepalese commercial banks. The study implies that banks should focus on increasing equity capital and leveraging size to improve financial outcomes.

Firaz et al. (2022) analyzed the effects of capital structure (Debt-to-Equity Ratio, DER) and profitability (return on assets, ROA) on firm value (price-to-book value, PBV) in manufacturing companies listed on the Indonesia Stock Exchange within the consumer goods and pharmaceutical sectors from 2015 to 2020. Using purposive sampling to select companies that consistently reported financial and annual reports, the study applies descriptive analysis and path analysis, an extension of multiple regression, using IBM SPSS software. The findings reveal that capital structure negatively impacts both profitability and firm value, while profitability positively affects firm value. However, profitability does not mediate the relationship between capital structure and firm value. The study concludes that while profitability enhances firm value, managing capital structure effectively remains crucial, as it directly influences both profitability and firm value. The implication is that firms should focus on improving profitability to enhance their value, but must also address the negative impact of high debt levels.

Salinger (2022) examined the first-order determinants of capital structure in listed manufacturing companies in the USA, focusing on how firms can achieve an optimal

capital structure amidst various financial pressures. Utilizing a literature-based study methodology, the research identifies key determinants including financial situation, growth opportunities, firm size, product uniqueness, business risk, tax shields, and dividend policy. The study finds that asset liquidity and the presence of fixed assets influence debt capacity, with high asset liquidity enabling increased debt capacity under certain conditions, such as bond covenants. Conversely, companies with high fixed costs and declining sales are at risk of bankruptcy due to insufficient funds for debt repayment. The study concludes that managing capital structure effectively is crucial for financial stability, especially in the context of high asset liquidity and financial risk. The implication is that manufacturing firms must carefully balance internal and external financing to navigate financial challenges and optimize capital structure.

Essel (2023) analyzed the impact of capital structure on firm performance within the Ghana Stock Exchange (GSE), focusing on firms from an emerging market perspective. Analyzing financial data from 36 listed firms over the period 2010–2020, the study employs a robust dynamic panel System of Generalized Method of Moments (GMM) to explore the relationship between capital structure and firm performance. The results indicate that higher ratios of total debt to total equity, total debt to total assets, and long-term debt, along with increased financial risk, are negatively associated with firm performance. Conversely, higher ratios of total equity to total assets, short-term debt, cash conversion cycle, total assets turnover, tangibility, sales growth, firm size, and firm age positively influence performance. The study concludes that firms with high leverage are at greater risk of insolvency due to elevated debt costs and macroeconomic instability. The study recommends policymakers enhance Ghana's capital market to foster equity investment and encourages firms to improve profitability and utilize retained earnings to reduce debt financing costs.

Kim et al. (2023) investigated how capital structure factors such as leverage, liquidity, and firm size impact firm value (FV) in the Information and Communication Technology (ICT) industry, focusing on profitability efficiency. Using data envelopment analysis to assess profitability and applying Tobit regression and Kruskal-Wallis one-way ANOVA to analyze the effects of capital structure variables, the study finds three key results: small and medium ICT companies exhibit better profitability efficiency compared to larger firms; the current ratio positively impacts profitability efficiency only for small and medium ICT

manufacturing companies; and the debt-equity ratio positively affects profitability efficiency only for mid-sized ICT service companies. The study concludes that capital structure significantly influences profitability efficiency and firm value in the ICT sector, with varying effects depending on company size and sector. The implication is that ICT companies should tailor their capital structures to their specific size and sector to enhance profitability and firm value.

Noriska et al. (2023) explored the relationship between capital structure, stock ownership structure, and business value, focusing on manufacturing firms listed on the Indonesia Stock Exchange from 2014 to 2016, with a specific emphasis on the food and beverage subsector. The study employs descriptive analysis and Partial Least Squares (PLS) data analysis, incorporating both outer and inner measurement models to examine how capital structure and stock ownership affect profitability and business value. The findings reveal that profitability is significantly influenced by both capital structure and stock ownership, and there is a connection between profitability and business value. However, stock ownership structure does not affect the capital structure or business value directly. The study concludes that while capital structure and stock ownership are crucial for determining profitability, the stock ownership structure does not have a direct impact on business value or capital structure. The implication is that firms should focus on optimizing their capital structure to enhance profitability and business value, as stock ownership structure alone does not influence these factors.

Shrestha (2023) analyzed the impact of capital structure on the profitability of Dabur Nepal Private Limited, focusing on various ratios including debt-equity ratio (DER), debt to capital ratio (DCR), debt to total assets ratio (DTAR), equity to total assets ratio (ETAR), and short-term liability to total assets ratio (SLTAR) in relation to Return on Assets (ROA). Utilizing descriptive statistics, Pearson correlation, regression analysis, and t-tests, the study analyzes secondary data from 2013 to 2022 for a sample of one out of ten private multinational manufacturing companies in Nepal. The findings indicate an R-squared value of 0.537, suggesting that 53.7% of the variation in profitability is explained by the capital structure variables, with the remaining 46.3% attributed to other factors. However, the study reveals an insignificant impact of the capital structure ratios on the Return on Equity (ROE) of Dabur Nepal Pvt. Ltd. The conclusion is that the examined capital structure

variables have minimal effect on profitability, implying that Dabur Nepal may need to explore other factors beyond capital structure to enhance profitability.

Fachri and Aira (2024) investigated the effects of capital structure, firm size, and inventory turnover on profit growth in coal mining companies listed on the Indonesia Stock Exchange for the period 2021–2023. Employing a quantitative approach, the study uses purposive sampling to select 13 companies from a population of 28, resulting in 39 annual reports analyzed through panel data regression with Eviews. The study finds that all three factors capital structure, firm size, and inventory turnover significantly influence profit growth. The adjusted R-squared value of 0.7808 indicates that these variables explain 78.08% of the variation in profit growth, while the remaining 21.92% is attributed to other unmeasured factors. The conclusion is that capital structure, firm size, and inventory turnover collectively play a crucial role in determining profit growth. The implication is that coal mining companies should optimize these factors to enhance their profitability.

Omokore et al. (2024) examined the impact of capital structure on the financial performance of healthcare companies listed on the Nigerian Stock Exchange (NSE) from 2012 to 2021. The study, focusing on eight selected healthcare firms, analyzes financial data including short-term and long-term debts, equity, return on equity, and company size through annual reports. Utilizing correlation and regression analyses, the study finds that short-term debt, long-term debt, and equity negatively affect return on equity, while company size positively influences return on equity. The study concludes that healthcare firms might benefit from using more long-term debt to extend repayment periods and improve profitability. The implication is that optimizing debt maturity and firm size can enhance financial performance in the healthcare sector.

Table 1

Summary of Literature Review

S.N.	Author(s)	Objective	Methodologies	Major Findings
1	Al-Nsour and Al-Muhtadi (2019)	To empirically examine the effect of capital structure	Sample: 41 manufacturing companies listed on ASE from 2014-2018. Data from	Using market value as the measure of firm's value: DER has a significant positive effect on market value, while ROA has a

		and profitability on firm's value.	ASE database and annual reports. Multiple regression analysis.	significant negative effect. Using Tobin's Q as the measure of firm's value: no significant effect from capital structure and profitability variables.
2	Jaishi and Poudel (2019)	To examine the relationship between leverage and efficiency of non-financial firms in Nepal.	Sample: 15 non-financial companies listed on NEPSE. Stratified cum purposive sampling. Descriptive and regression analysis.	High leverage is associated with lower efficiency, while more efficient firms use lower leverage. Increase in size, investment in tangible assets, and profitability does not necessarily increase efficiency. Efficiency is positively related to tangibility. Positive relationship between size and growth rate. Size, tangibility, profitability, and growth significantly impact efficiency and leverage.
3	Rahman et al. (2019)	To explore the impact of capital structure on profitability of publicly traded manufacturing firms in Bangladesh.	Sample: 10 manufacturing companies listed on Dhaka Stock Exchange from 2013-2017. Fixed effect regression analysis.	Debt ratio and equity ratio positively impact ROA, but debt to equity ratio negatively impacts ROA. Equity ratio positively impacts ROE, but debt to equity ratio negatively impacts ROE. Debt and equity ratio negatively impact EPS. Findings suggest maintaining an

				optimal capital structure to maximize stockholder wealth.
4	Bedada (2020)	To assess the effect of capital structure on profitability of EFFORT manufacturing companies.	Sample: 8 manufacturing companies from 2008-2017. Secondary data (audited financial statements). Descriptive statistics, correlation analysis, and random effects regression.	Total debt to assets (TDA) and long-term debt to total assets (LTDA) negatively affect profitability. Total debt to equity (TDE) positively affects profitability. EFFORT manufacturing firms predominantly use debt financing. Recommends equity financing as more profitable than debt financing.
5	Bhatt (2020)	To examine the relationship between capital structure and profitability of commercial banks in Nepal.	Sample: 18 commercial banks from 2010-2019. Data from NRB BI Statistics and Bank Supervision Report. Regression analysis.	More than 40% of bank profitability (ROE) is predicted by capital structure variables. ROE is positively related to long-term debt and deposits but negatively related to short-term debt and total debt. Bank size positively impacts profitability, indicating larger banks have higher returns for shareholders.
6	Bhattarai (2020)	To examine the effects of capital structure on financial	Sample: 14 insurance companies from 2007/08 to 2015/16. Panel data	Equity to total assets, leverage, and asset tangibility significantly affect financial performance

		performance of insurance companies in Nepal.	analyzed using pooled OLS, random effect, and fixed effect models.	(ROA). Findings suggest capital structure decisions impact the financial performance of insurance companies.
7	Sovaniski (2020)	To establish the effects of capital structure on the performance of Kurdistan manufacturing firms.	Multiple linear regression with return on equity as the dependent variable and capital structure, liquidity, size, and growth as independent variables.	Total debt and size negatively affect financial performance, indicating more debt or larger assets decrease performance. Financial performance improves with increased liquidity and sales growth. Recommends companies borrow less and use internal funds efficiently.
8	Lamichhane and Shrestha (2021)	To investigate the nexus between capital structure and financial performance of hydropower companies in Nepal.	Sample: Hydropower companies listed on NEPSE until mid-July 2020. Data from 2005/06 to 2019/20. Descriptive and causal research design. Regression analysis.	Short-term debt to capital ratio positively impacts financial performance. Long-term debt to capital and total debt to capital significantly positively impact financial performance. Debt to asset ratio negatively impacts financial performance. Suggests increasing short-term, long-term, and total debt to capital ratios and decreasing debt to assets for better financial performance.

9	Mensah (2021)	To assess the influence of capital structure on profitability in manufacturing companies.	Literature review on capital structure theories (trade-off, pecking order, agency theory, Modigliani & Miller, market timing theory).	Increased short-term and long-term debt affect manufacturing companies' performance. Managers should use retained earnings before resorting to leverage and maintain optimal capital structure to maximize profitability.
10	Marpaung et al. (2021)	To see the effect of capital structure, working capital turnover, inventory turnover, accounts receivable turnover, and asset growth on profitability.	Sample: 12 industrial sector companies. Purposive sampling. Multiple linear regression analysis.	Capital structure, working capital turnover, and inventory turnover positively affect profitability. Asset growth and accounts receivable turnover have no effect on profitability. Combined variables account for 42.2% of profitability, suggesting other variables also play a role.
11	Aidoo et al. (2022)	To assess the impact of capital structure on profitability of listed manufacturing companies in Ghana.	Sample: Listed manufacturing companies from 2005-2019. Descriptive and causal research designs.	Significant inverse relationship between capital structure and profitability. Suggests minimizing debt to increase profitability. Emphasizes importance of optimal capital structure decisions for business competitiveness and profitability.

12	Chalise and Adhikari (2022)	To examine the impact of capital structure and firm size on financial performance of Nepalese commercial banks.	Sample: 14 commercial banks from 2013/2014 to 2018/2019. Regression analysis.	Negative relationship between ROA and EPS with capital structure (Debt/Equity). Positive relationship between ROA and EPS with firm size (total assets). High-level equity capital in capital structure positively influences financial performance.
13	Firaz et al. (2022)	To examine how capital structure and profitability affect firm value in manufacturing companies in Indonesia.	Sample: Manufacturing companies in the consumer goods industry sector, with the pharmaceutical sub-sector listed on IDX from 2015-2020. Descriptive analysis and path analysis.	Capital structure negatively impacts profitability and firm value. Profitability positively affects firm value. Profitability does not mediate the effect of capital structure on firm value. Suggests optimal capital structure decisions to enhance firm value and profitability.
14	Salinger (2022)	To assess the first-order determinants of capital structure among listed manufacturing companies in the USA.	Literature-based study methodology.	Key determinants of capital structure include financial situation, growth opportunities, size, product uniqueness, business risk, tax shields, dividend policy, tangibility, non-debt tax shield, bankruptcy risk, profitability, and risk. Firms with high asset liquidity may increase debt capacity. Fixed

				assets serve as guarantees for creditors in financial distress scenarios.
15	Essel (2023)	To empirically investigate the impact of capital structure on firm performance from the perspective of the Ghana Stock Exchange (GSE).	Sample: 36 listed firms on GSE from 2010-2020. Dynamic panel system of GMM.	Total debt to total equity ratio, total debt to total assets ratio, long-term debt ratio, and financial risk negatively affect firm performance. Total equity to total assets ratio, short-term debt ratio, cash conversion cycle, total assets turnover, tangibility, sales growth, firm size, and firm age positively affect firm performance. Recommends reducing debt and using retained earnings to minimize interest costs.
16	Kim et al. (2023)	To evaluate the firm value of ICT companies in terms of profitability efficiency.	Data envelopment analysis, Tobit regression, and Kruskal-Wallis one-way ANOVA.	Small and medium ICT companies have better profitability efficiency. Current ratio positively impacts profitability efficiency in small and medium ICT manufacturing companies. Debt-equity ratio positively impacts profitability efficiency in mid-sized service companies. Suggests policy and practical implications for

				improving firm value in ICT companies.
17	Noriska et al. (2023)	To examine the link between capital structure and profitability, and their impact on firm value.	Sample: Manufacturing firms in the food and beverage subsector listed on IDX from 2014-2016. Descriptive analysis and partial least squares (PLS) data analysis.	Ownership structure of stocks and capital structure significantly influence profitability. Profitability is connected to firm value, but stock ownership structure does not affect business value or capital structure. Suggests focusing on optimal capital structure and stock ownership to enhance profitability and firm value.
18	Shrestha (2023)	To investigate the impact of capital structure on profitability of Dabur Nepal Private Limited.	Sample: Dabur Nepal Pvt. Ltd. data from 2013-2022. Descriptive statistics, Pearson correlation, regression analysis, and t-test.	DER, DCR, DTA, ETA, and SLTA have an insignificant impact on ROE. Lower positive correlation between dependent and independent variables. Suggests capital structure variables do not strongly influence profitability in this case. Recommends further research with larger datasets and longer time periods to understand the capital structure-profitability relationship in similar firms.

19	Fachri and Aira (2024)	To determine the effect of capital structure, firm size, and inventory turnover on profit growth.	Sample: Coal mining companies listed on Indonesia Stock Exchange from 2021-2023. Panel data regression.	Capital structure, firm size, and inventory turnover significantly influence profit growth. Suggests a balanced approach to managing capital structure, optimizing firm size, and improving inventory turnover to achieve sustainable profit growth. Recommends strategic financial planning to enhance overall profitability and firm growth.
20	Omokore et al. (2024)	To explore the effect of capital structure on financial performance of healthcare companies listed on Nigerian Stock Exchange.	Sample: 8 healthcare firms listed on NSE from 2012-2021. Correlation and regression analysis.	Short-term debt, long-term debt, and equity negatively impact return on equity (ROE), indicating higher leverage decreases performance. Company size positively impacts ROE, suggesting larger firms perform better financially. Recommends focusing on optimizing capital structure and leveraging company size to enhance financial performance in the healthcare sector.

2.3 Research Gap

This study aims to address the existing research gap regarding the contradictory views of different researchers on increasing profitability. Financial managers worldwide face the

challenge of determining which variables to consider in order to enhance profitability, given the various theories and perspectives on capital structure and profitability. Moreover, in the context of Nepal, there is a dearth of research on profitability, particularly in the manufacturing sector. Previous studies in this area have predominantly focused on data up to 2017, with limited consideration for post-2017 data. Therefore, this study seeks to bridge the research gap by examining the relationship between capital structure and profitability, taking into account the Nepalese manufacturing companies and extending the analysis to include more recent data.

CHAPTER- III
RESEARCH METHODOLOGY

This chapter describes the procedures for data collection and analysis used in this research. It outlines the research design, population, sample, data sources, data collection procedure, data processing, and data analysis method. The objective of the study is to determine the impact of capital structure decision on the profitability of manufacturing companies in Nepal.

3.1 Research Design

In this study, a combination of descriptive and causal comparative research designs has been adopted to fulfill the research objectives. The descriptive research design is used to provide a comprehensive description of the positions of capital structure and profitability within manufacturing companies in Nepal, while the causal comparative research design aims to examine the causal relationship between capital structure decisions and profitability. Descriptive statistics are used to summarize and present the positions, while causal comparative analysis is employed to compare the differences in profitability based on different capital structure decisions. By employing these research designs, the study aims to gain a deeper understanding of the impact of capital structure decisions on the profitability of manufacturing companies in Nepal.

3.2 Population and Sample, and Sampling Design

The population for this study consists of manufacturing enterprises listed on the Nepal Stock Exchange (NEPSE). Specifically, the entire 7 manufacturing companies listed on the NEPSE as on July, 2024 are considered as the population. However, for the purpose of this study, a sample of 5 manufacturing enterprises that have been regularly traded in accordance with NEPSE regulations has been selected. This sample was chosen using purposive sampling technique. The selected manufacturing companies include Bottler Nepal Limited, Unilever Nepal Limited, Himalayan Distillery Limited, Bottler Nepal Limited (Terai), and Nepal Lube Oil Limited. The purposive sampling allows for a focused and targeted companies that meet the criteria for regular trading on the NEPSE.

3.3 Nature and Sources of Data

The data used in this study were sourced from secondary sources, including the internet and annual published reports obtained by visiting the websites of the relevant organizations.

The study focused on five manufacturing companies in Nepal, and data were collected for ten consecutive years. The income statements of the sampled companies provided data on sales, operating profit, and net profit, while the balance sheets provided data on total debt, total equity, total assets, fixed assets, liquidity ratio. Excel sheets were used to calculate metrics such as debt ratio, debt-equity ratio, return on equity, return on assets, net profit ratio, and operating profit ratio. By utilizing secondary data from these sources, the study aimed to analyze the relationship between capital structure and profitability in the selected manufacturing companies.

3.4 Data Collection Procedures

The data used in this study were primarily sourced from secondary sources, including financial and government databases. The audited financial statements of manufacturing companies in Nepal served as a significant source of data. Additionally, information and data were collected from the websites of the relevant firms and regulatory bodies. The annual reports of the companies were particularly relied upon as they undergo external auditing, ensuring their reliability. The study focused on five manufacturing companies and collected data for ten consecutive years. The income statements provided data on sales, operating profit, and net profit, while the balance sheets offered information on total debt, total equity, total assets, fixed assets, liquidity. Excel sheets were utilized to calculate various financial ratios such as debt ratio, debt to equity ratio, firm size, fixed assets, liquidity, return on equity, return on assets, net profit ratio, and operating profit ratio. By extensively utilizing secondary data from these sources, the study aimed to analyze the relationship between capital structure and profitability in the selected manufacturing companies.

3.5 Method of Analysis

The collected raw data are first cleaned up and organized for the processing. Once the data are cleaned up, they are put in the Statistical Package for Social Science (SPSS) 25.0 computer software as inputs. Then, the data inputted to the computer are processed and outputs are calculated for interpretation. The main tools to analyze the data are descriptive analysis, correlation analysis and regression analysis which are as follows:

3.5.1 Descriptive Analysis

Under the descriptive statistic, mean, maximum, minimum and standard deviation have been calculated. Mean has been calculated to describe the position of debt ratio, debt to

equity ratio, firm size, fixed assets, liquidity, return on equity, and return on assets, net profit margin and operating profit ratio. Similarly, minimum and maximum have been calculated to identify the two extreme levels of independent and dependent variables. Standard deviation has been calculated to see the deviation of sample mean from its population mean.

3.5.2 Correlation Analysis

Under the correlation analysis, Pearson correlation coefficient and regression analysis have been used. Pearson's 'r' has been calculated to test significance of the relationship between capital structure and profitability.

3.5.3 Regression Analysis

In this study, regression analysis is utilized to examine the relationship between independent variables (debt ratio, debt to equity ratio, firm size, fixed assets, liquidity) and financial performance variables (return on equity, return on assets, net profit ratio, and operating profit ratio) in the selected manufacturing companies in Nepal. The regression model allows for the assessment of the impact of independent variables debt ratio and debt to equity ratio on the dependent variables return on equity, return on assets, net profit ratio, and operating profit ratio. The regression model utilized in this study are:

$$ROE = \beta_0 + \beta_1 DR + \beta_2 DER + \beta_3 SIZE + \beta_4 FA + \beta_5 LIQ + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots (i)$$

$$ROA = \beta_0 + \beta_1 DR + \beta_2 DER + \beta_3 SIZE + \beta_4 FA + \beta_5 LIQ + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

$$NPM = \beta_0 + \beta_1 DR + \beta_2 DER + \beta_3 SIZE + \beta_4 FA + \beta_5 LIQ + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots (iii)$$

$$OPR = \beta_0 + \beta_1 DR + \beta_2 DER + \beta_3 SIZE + \beta_4 FA + \beta_5 LIQ + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots (iv)$$

Where,

β_0 = the Intercept

ROE = Return on Equity

ROA = Return on Assets

NPM = Net Profit Margin

OPR = Operating Profit Ratio

DR = Debt Ratio

DER = Debt to Equity Ratio

SIZE = Firm size

FA = Fixed Assets

LIQ = Liquidity Ratio

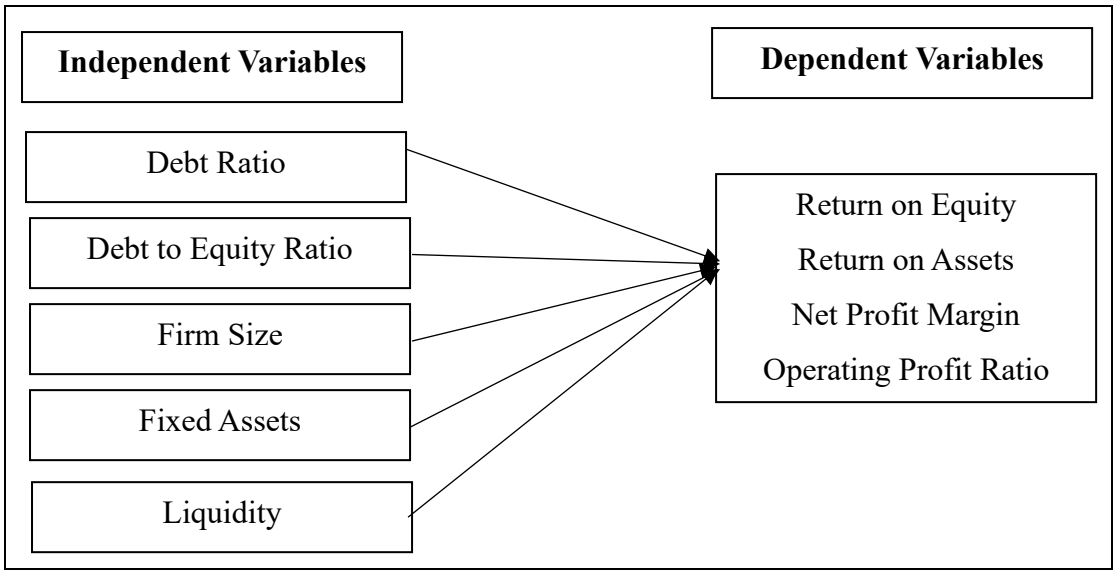
β1 and β2= the coefficients for the independent variables respectively,

ε = the error term

3.6 Research Framework and Definition of Variables

The research framework in this study is derived from the empirical studies conducted by Essel (2023) and Shrestha (2023). These studies serve as important references for identifying and selecting the variables to be examined in the current research. The variables, including the debt ratio, debt to equity ratio, firm size, fixed assets, liquidity ratio, return on equity, return on assets, net profit ratio, and operating profit ratio, are based on the findings and insights provided by Essel (2023) and Shrestha (2023). By adopting and building upon the knowledge gained from these prior studies, the research framework aims to investigate the relationship between capital structure variables and financial performance in the context of the selected manufacturing companies in Nepal. The framework of the study is presented in Figure 1.

Figure 1 *Research Framework*



Source: Essel (2023); Shrestha (2023)

3.6.1 Return on Equity

Return on equity (ROE) is a financial performance indicator that assesses a company's capacity to create profit from its shareholders' equity. It is computed by dividing the company's net income by the average shareholders' equity. This reflects the extent to which management effectively utilizes equity capital to produce profits. Investors should pay close attention to the return on equity (ROE), since it demonstrates the return on their

investment in the firm. Bhatt (2020) examined the return on equity (ROE) of Nepalese commercial banks and discovered that several capital structure factors significantly influenced it. These variables included short-term and long-term debt, deposits, and total debt-to-assets ratios. This fact highlights the significance of return on equity (ROE) in determining how well banks utilize their capital to create returns for shareholders.

3.6.2 Return on Assets

A business uses return on assets (ROA) as a metric to assess how well it can generate profits from its assets. It is determined by dividing the net income by the total assets of the organization. One can determine how well a company manages its assets to make money using this ratio. ROA is a key metric for assessing the efficiency of operations and asset management. Bhattarai (2020) used ROA to analyze the financial performance of Nepalese insurance businesses. The results of this analysis revealed the usefulness of ROA in gaining an understanding of how effectively these companies are using their assets in order to attain profitability. Because ROA accurately reflects operational efficiency, it serves as a crucial metric for performance assessments in various sectors.

3.6.3 Net Profit Margin

The net profit margin (NPM) is the percentage ratio of a company's net income to its total sales. Once all expenses are considered, the net profit margin (NPM) shows the percentage of each revenue dollar retained as overall profit. A larger net profit margin demonstrates the ability to effectively manage costs and boost profitability. Although Sovaniski (2020) explored this aspect of the topic, the study's emphasis on profitability, which includes the effect of capital structure, indirectly refers to the manner in which financial choices may impact NPM. The net profit margin (NPM) is an essential metric for evaluating the overall profitability and operational efficiency of a business. It highlights the extent to which a firm is able to turn sales into real profit.

3.6.4 Operating Profit Ratio

After subtracting operating expenditures, the operating profit ratio (OPM) represents the remaining portion of revenue. It is determined by dividing operating income by total sales. This ratio focuses on a company's core business activities, taking into account the efficiency of those operations while removing non-operating expenditures such as interest and taxes. Rahman et al. (2019) used OPR measurements in their investigation of how capital structure affects profitability. This demonstrates the significance of OPR in determining

how well a firm conducts its main operations in order to create profits. The operating profit ratio (OPR) offers valuable insights into the efficiency of operational management and cost control.

3.6.5 Debt Ratio

In order to determine the extent to which a firm's assets are funded by debt, the debt ratio is computed by dividing the total liabilities of the company by the total assets of the company. Because a higher debt ratio implies a greater dependence on debt financing, this ratio is necessary for understanding a firm's leverage and financial risk. Bedada (2020) conducted research to determine the impact that different debt ratios have on the profitability of manufacturing companies. The findings of this study illustrate the importance that debt ratios have in assessing financial risk and leverage. The debt ratio, which provides insight into the extent to which a company uses debt to fund its assets, can impact a firm's entire financial stability and risk profile.

3.6.6 Debt to Equity Ratio

The debt-to-equity ratio (DER) measures financial leverage and risk by comparing a firm's total debt to its shareholders' or owners' equity. DER is a measure that represents the percentage of debt employed relative to equity in the process of financing the firm's assets. It is calculated by dividing the total liabilities by the total equity. According to Kim et al. (2023), who conducted an analysis of the effect that DER has on profitability within the information and communications technology industry, it is essential to comprehend how choices regarding capital structure influence financial performance. A higher debt-to-equity ratio (DER) implies a larger financial risk owing to rising debt, while a lower DER indicates a more prudent approach to financing. DER is an important element to consider when evaluating the equilibrium between debt and equity financing, as well as the influence that this equilibrium has on overall financial stability and performance.

3.6.7 Firm size

The firm size measured by its total assets, is a key variable that reflects its scale of operations and market position. Larger firms generally benefit from economies of scale, which can enhance their operational efficiency and financial performance (Jaishi & Poudel, 2019). Bhatt (2020) found that firm size significantly affects profitability, with larger firms demonstrating higher returns on equity (ROE) due to their extensive resource base and operational capabilities. This is further supported by research from Kim et al. (2023), which

highlights that firm size influences profitability efficiency in the Information and Communication Technology (ICT) sector, indicating that larger firms can leverage their size for better financial outcomes. The size of a firm plays a crucial role in determining its financial stability and market influence, impacting both its profitability and competitive edge.

3.6.8 Fixed Assets

Fixed assets refer to long-term tangible assets such as property, plant, and equipment, used in a company's operations to generate revenue. These assets are integral to a firm's operational capacity and long-term financial stability (Al-Nsour & Al-Muhtadi, 2019). Bedada (2020) found that fixed assets, through their role in production and operations, significantly impact profitability, with investments in such assets affecting financial performance. Similarly, Salinger (2022) noted that high levels of fixed assets can influence a firm’s capacity to manage debt, thereby affecting its overall financial stability. Effective management of fixed assets is essential for maintaining operational efficiency and achieving long-term growth, as these assets represent a substantial portion of a company's capital investment.

3.6.9 Liquidity Ratio

The liquidity ratio assesses a company's ability to meet its short-term obligations with its most liquid assets. This metric is crucial for evaluating a firm's financial health and operational efficiency. Aidoo et al. (2022) found that liquidity ratios are vital for understanding how firms can manage short-term liabilities and maintain financial stability. Similarly, Firaz et al. (2022) highlighted that effective liquidity management can positively impact firm value by ensuring that firms can cover their immediate obligations without jeopardizing long-term financial health. The study by Omokore et al. (2024) also emphasized that liquidity plays a significant role in financial performance, particularly in sectors like healthcare, where managing short-term liabilities is crucial for operational stability. Thus, maintaining an optimal liquidity ratio is essential for sustaining financial flexibility and supporting growth.

CHAPTER- IV
RESULTS AND DISCUSSION

This chapter mainly incorporates data presentation, analysis and interpretation. Presented data are analyzed and interpreted by using statistical tools like mean, maximum, minimum, standard deviation, correlation, regression coefficient, so as to achieve the results. This chapter is organized into two different sections as results and discussions. In first section the results are presented where individual companies ratios are analyzed, descriptive statistics of panel data are analyzed, the correlation analysis is presented and the regression analysis was presented while in second section the results are compare with previous empirical studies and made a discussion of the results.

4.1 Results

The results are presented focusing on the panel data from five manufacturing companies' ratios. Descriptive statistics of panel data are analyzed, providing a broader perspective on the overall trends and patterns observed. The correlation analysis is presented, highlighting the relationships between different variables, which aids in understanding the interdependencies within the data. Lastly, the regression analysis is presented, offering insights into the impact of various factors on the companies' ratios. Collectively, these analyses provide a comprehensive understanding of the data and shed light on the dynamics at play within the dataset.

4.1.1 Descriptive Analysis

Descriptive analysis involves summarizing and explaining the main features of a dataset in a quantitative way. This research employs descriptive analysis to paint a picture of the financial characteristics of manufacturing companies. These variables include important performance indicators such as return on equity (ROE), return on assets (ROA), net profit margin (NPM), and operating profit ratio (OPR), as well as capital structure measures such as the debt ratio, the debt-to-equity ratio, firm size, fixed assets, and liquidity ratio. The results of this study provide a basis for future statistical analysis by assisting in the identification of patterns and trends within the data itself. In manufacturing companies, descriptive analysis helps to find correlations between capital structure and profitability by giving a complete overview of the data. Table 2 presents the descriptive analysis results of sample manufacturing companies with 50 observations in total as panel dataset.

Table 2

Descriptive Analysis

Variables	N	Min	Max	Mean	S.D.
Return on Equity (%)	50	-2.00	152.00	49.40	37.27
Return on Assets (%)	50	-1.00	55.26	17.43	14.32
Net Profit Margin (%)	50	-0.89	29.89	13.11	8.63
Operating Profit Ratio (%)	50	2.90	40.00	18.17	10.60
Debt Ratio (%)	50	7.13	77.59	37.30	18.70
Debt to Equity Ratio (Times)	50	0.00	1.62	0.59	0.36
Firm size (In LN)	50	17.21	23.32	21.6868	1.21492
Fixed Assets (In LN)	50	16.89	22.76	20.6046	1.70790
Liquidity (In Times)	50	.40	10.83	1.6528	1.90599

Table 2 presents a descriptive analysis of nine financial variables across 50 observations. The ROE values range from a minimum of -2.00% to a maximum of 152.00%, with a mean of 49.40% and a standard deviation of 37.27. The high variability in ROE, as indicated by the large standard deviation relative to the mean, suggests significant differences in profitability across the companies. This variability could be due to varying levels of efficiency in generating profit from shareholders' equity.

The ROA ranges from -1.00% to 55.26%, with an average of 17.43% and a standard deviation of 14.32. The relatively large standard deviation compared to the mean indicates that there is considerable variation in how effectively companies use their assets to generate profit. While some companies achieve high returns on assets, others struggle to generate positive returns, reflecting differences in operational efficiency and asset utilization.

NPM values range from -0.89% to 29.89%, with a mean of 13.11% and a standard deviation of 8.63. The standard deviation indicates moderate variability around the mean, suggesting that while most companies maintain a positive net profit margin, there are notable differences in profitability. This variability reflects how effectively companies manage their expenses relative to their revenue.

The OPR ranges from 2.90% to 40.00%, with an average of 18.17% and a standard deviation of 10.60. The standard deviation is relatively high compared to the mean, indicating substantial variability in the operating profitability of the companies. This

variability suggests differences in operational efficiency, with some companies performing exceptionally well in managing their core operations while others perform less efficiently.

The Debt Ratio varies from a minimum of 7.13% to a maximum of 77.59%, with a mean of 37.30% and a standard deviation of 18.70. The high standard deviation relative to the mean indicates significant differences in the proportion of assets financed by debt across the companies.

The DER ranges from 0.00 to 1.62 times, with an average of 0.59 and a standard deviation of 0.36. The standard deviation shows considerable variability in the use of debt relative to equity. A higher DER indicates greater financial leverage, which can amplify returns but also increases financial risk. The variability suggests that companies adopt different levels of leverage, affecting their overall financial strategy and risk profile.

The firm size, measured in natural logarithm (LN), ranges from 17.21 to 23.32, with a mean of 21.6868 and a standard deviation of 1.21492. This relatively small standard deviation compared to the mean indicates that there is less variability in the firm sizes within the sample, suggesting that the sample consists of firms of relatively similar size.

Fixed assets, also measured in LN, range from 16.89 to 22.76, with an average of 20.6046 and a standard deviation of 1.70790. The standard deviation shows moderate variability, indicating differences in the scale of fixed assets held by the companies, which can affect their long-term investment and operational capacity.

Liquidity, measured in times, ranges from 0.40 to 10.83, with a mean of 1.6528 and a standard deviation of 1.90599. The high standard deviation relative to the mean suggests significant variability in liquidity levels across the companies, indicating that while some companies maintain high liquidity, others operate with much lower liquidity levels, which can impact their ability to meet short-term obligations and financial flexibility.

4.1.2 Correlation Analysis

This research employs correlation analysis to examine the relationships between several capital structure indicators, including the debt ratio and the debt-to-equity ratio, firm size, fixed assets, and liquidity ratio and various profitability measures, including return on equity, return on assets, net profit margin and operating profit ratio in manufacturing companies. Through the examination of these correlations, the purpose of the research is to

get an understanding of the degree to which choices regarding capital structure are influencing the profitability and financial health of manufacturing companies. This serves as a foundation for a more in-depth regression comparison. Table 3 shows the relationship between dependent and independent variables under the study.

Table 3

Correlation Analysis

		ROA	ROE	NPM	OPR	DR	DER	SIZE	FA	LIQ
ROA	Pearson Correlation	1								
	Sig. (2-tailed)									
ROE	Pearson Correlation	.031	1							
	Sig. (2-tailed)	.829								
NPM	Pearson Correlation	.898**	-.113	1						
	Sig. (2-tailed)	.000	.436							
OPR	Pearson Correlation	.917**	-.011	.933**	1					
	Sig. (2-tailed)	.000	.937	.000						
DR	Pearson Correlation	.082	.826**	-.131	.046	1				
	Sig. (2-tailed)	.571	.000	.364	.750					
DER	Pearson Correlation	-.524**	.431**	-.607**	-.583**	.424**	1			
	Sig. (2-tailed)	.000	.002	.000	.000	.002				
SIZE	Pearson Correlation	-.090	-.767**	.094	-.040	-.859**	-.358*	1		
	Sig. (2-tailed)	.533	.000	.514	.781	.000	.011			
FA	Pearson Correlation	-.117	-.861**	.033	-.111	-.914**	-.352*	.921**	1	
	Sig. (2-tailed)	.417	.000	.818	.442	.000	.012	.000		
LIQ	Pearson Correlation	.391**	.048	.463**	.556**	.159	-.434**	-.052	-.180	1
	Sig. (2-tailed)	.005	.739	.001	.000	.269	.002	.720	.211	

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

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

Table 3 shows the correlation analysis focusing on the relationships between various independent variables (debt ratio (DR), debt-to-equity ratio (DER), size, fixed assets, liquidity) and four key profitability metrics (return on equity (ROE), return on assets (ROA), net profit margin (NPM), and operating profit ratio (OPR)).

Debt ratio (DR) has a strong positive correlation with ROE (0.826, $p < 0.01$), indicating that companies with higher debt ratios tend to achieve higher returns on equity. This suggests that leveraging through debt can enhance profitability for equity holders, likely due to the amplification of returns when the cost of debt is lower than the returns generated by the assets. However, the correlation between DR and ROA is weak (0.082) and not statistically significant ($p = 0.571$), indicating no meaningful relationship between the debt ratio and return on assets. Similarly, the relationship between DR and NPM is weak and negative (-0.131, $p = 0.364$), as is the relationship between DR and OPR (0.046, $p = 0.750$), suggesting that debt ratio does not significantly influence net profit margins or operating profit ratios.

For the debt-to-equity ratio (DER), there is a moderate positive correlation with ROE (0.431, $p < 0.01$), implying that higher debt-to-equity ratios are associated with higher returns on equity. This relationship supports the notion that leveraging can enhance returns for equity holders. However, DER has a moderate negative correlation with ROA (-0.524, $p < 0.01$), indicating that higher leverage is associated with lower returns on assets, possibly due to the increased financial burden of debt reducing overall asset efficiency. Additionally, there is a moderate negative correlation between DER and NPM (-0.607, $p < 0.01$), suggesting that higher leverage leads to lower net profit margins, likely as a result of higher interest expenses diminishing net profitability. The relationship between DER and OPR is also moderately negative (-0.583, $p < 0.01$), indicating that higher debt-to-equity ratios are associated with lower operating profit ratios, reflecting the impact of increased financial costs on operating profitability.

The firm size shows a strong negative correlation with ROE (-0.767, $p < 0.01$), indicating that larger firms tend to have lower returns on equity. However, the correlation between size and ROA is weak and not statistically significant (-0.090, $p = 0.533$), indicating no meaningful relationship. Similarly, the correlations between size and NPM (0.094, $p = 0.514$) and size and OPR (-0.040, $p = 0.781$) are weak and not statistically significant, suggesting no significant impact of size on these profitability metrics.

Fixed assets show a strong negative correlation with ROE (-0.861, $p < 0.01$), indicating that higher fixed assets are associated with lower returns on equity. The correlation between fixed assets and ROA is weak and not statistically significant (-0.117, $p = 0.417$), suggesting no significant impact. The correlations between fixed assets and NPM (0.033, $p = 0.818$)

and fixed assets and OPR (-0.111, p = 0.442) are also weak and not statistically significant, indicating no significant influence on these profitability metrics.

Liquidity shows a weak and not statistically significant correlation with ROE (0.048, p = 0.739), indicating no meaningful relationship. However, liquidity has a moderate positive correlation with ROA (0.391, p < 0.01), indicating that higher liquidity is associated with higher returns on assets. Similarly, liquidity has a moderate positive correlation with NPM (0.463, p < 0.01), suggesting that higher liquidity leads to higher net profit margins. The correlation between liquidity and OPR is also moderate and positive (0.556, p < 0.01), indicating that higher liquidity is associated with higher operating profit ratios.

The analysis reveals that while leveraging through debt (higher DR and DER) can enhance equity returns (ROE), it may negatively impact asset efficiency (ROA) and profitability (NPM and OPR) due to increased financial costs. Size and fixed assets negatively impact ROE, while liquidity positively influences ROA, NPM, and OPR.

4.1.3 Regression Analysis

The purpose of this research is to investigate the relationship between the variables of capital structure debt ratio, debt-to-equity ratio, firm size, fixed assets, and liquidity ratio and the various profitability metrics ROE, ROA, NPM, and OPR in manufacturing companies. Regression analysis is used to make this determination. The research's objective is to determine the ideal capital structure that optimizes financial performance and quantify the influence that financial leverage has on profitability. This is accomplished via the construction of regression models. The results of this research give a comprehensive comprehension of the causal connections that exist between capital structure and profitability.

4.1.3.1 Regression Analysis with Dependent Variable Return on Equity

This section focuses on the regression analysis uses return on equity (ROE) as the dependent variable. Determining the extent to which the independent variables, debt ratio, debt-to-equity ratio, firm size, fixed assets, and liquidity ratio have an impact on manufacturing companies return on equity. The purpose of this research is to provide insights into the influence that choices regarding capital structure have on shareholder returns by analyzing the regression findings. Table 4 presents the regression analysis results with dependent variable return on equity.

Table 4

Regression Results with Dependent Variable Return on Equity

Variables	Beta	t	Sig.	Tolerance	VIF
(Constant)	253.423	2.366	.022	-	-
Debt Ratio	.442	1.189	.241	.145	6.875
Debt to Equity Ratio	7.325	.742	.462	.552	1.812
Firm size	8.759	1.474	.148	.135	7.416
Fixed Assets	-19.966	-3.800	.000	.087	9.450
Liquidity	-2.074	-1.156	.254	.601	1.663
R^2			0.777 (77.7%)		
F Value	30.702			0.000	

a. Dependent Variable: ROE

Source: Appendix ii

The regression analysis presented in Table 4 assesses the impact of various independent variables on the return on equity (ROE). The constant term is 253.423, with a t-value of 2.366 and a significance level of 0.022. This suggests that when all the independent variables are zero, the return on equity is expected to be 253.423, which is statistically significant at the 0.05 level. The Beta coefficient for the debt ratio is 0.442, with a t-value of 1.189 and a significance level of 0.241. This indicates that the debt ratio does not have a statistically significant impact on ROE, as the p-value is greater than 0.05. The Beta coefficient for the debt-to-equity ratio is 7.325, with a t-value of 0.742 and a significance level of 0.462. This suggests that the debt-to-equity ratio does not have a significant impact on ROE in this model.

The Beta coefficient for the firm size is 8.759, with a t-value of 1.474 and a significance level of 0.148. This indicates that the firm size does not show a statistically significant impact on ROE, as the p-value is greater than 0.05. The Beta coefficient for fixed assets is -19.966, with a t-value of -3.800 and a significance level of 0.000. This suggests that fixed assets have a significant negative impact on ROE, as the p-value is less than 0.05. The Beta coefficient for liquidity is -2.074, with a t-value of -1.156 and a significance level of 0.254. This indicates that liquidity does not have a statistically significant impact on ROE.

The R^2 value is 0.777, which means that 77.7% of the variability in ROE can be explained by the independent variables in this model. This indicates a strong explanatory power of

the model. The F value is 30.702 with a significance level of 0.000, indicating that the overall model is statistically significant. The high F value shows that the model as a whole reliably predicts ROE, and the predictors included contribute significantly to explaining ROE variability. The Tolerance and Variance Inflation Factor (VIF) values suggest some multicollinearity among the independent variables, particularly for fixed assets and debt ratio, which have lower tolerance values and higher VIFs. However, the levels are not excessively high, suggesting that multicollinearity is not severely distorting the regression results. The regression analysis reveals that fixed assets have a statistically significant negative impact on return on equity, while the debt ratio, debt-to-equity ratio, firm size, and liquidity do not significantly affect ROE in this model. The model explains a substantial portion of the variability in ROE.

4.1.3.2 Regression Analysis with Dependent Variable Return on Assets

This section investigates the regression analysis using return on assets (ROA) as the dependent variable. The purpose of this study is to investigate the link between return on assets (ROA) and the independent variables which are the debt ratio, the debt-to-equity ratio, firm size, fixed assets, and liquidity ratio. The objective is to get an understanding of how these aspects of capital structure and other control variables influence the way in which manufacturing companies use their assets. Table 5 shows the regression analysis results with dependent variable return on assets.

Table 5

Regression Results with Dependent Variable Return on Assets

Variables	Beta	t	Sig.	Tolerance	VIF
(Constant)	48.454	.712	.480	-	-
Debt Ratio	.184	.780	.439	.145	6.875
Debt to Equity Ratio	-25.387	-4.051	.000	.552	1.812
Firm size	-.504	-.133	.894	.135	7.416
Fixed Assets	-.614	-.184	.855	.087	9.450
Liquidity	.445	.391	.698	.601	1.663
R^2			0.391 (39.1%)		
F Value	5.660			0.000	

a. Dependent Variable: ROA

Source: Appendix iii

The regression analysis in Table 5 examines the influence of various independent variables on return on assets (ROA). The constant term is 48.454, with a t-value of 0.712 and a significance level of 0.480. This indicates that when all the independent variables are zero, the return on assets is expected to be 48.454, which is not statistically significant given the p-value is greater than 0.05.

The Beta coefficient for the debt ratio is 0.184, with a t-value of 0.780 and a significance level of 0.439. This suggests that the debt ratio does not have a statistically significant impact on ROA, as the p-value is greater than 0.05.

The Beta coefficient for the debt-to-equity ratio is -25.387, with a t-value of -4.051 and a significance level of 0.000. This indicates that the debt-to-equity ratio has a statistically significant negative impact on ROA, as the p-value is less than 0.05.

The Beta coefficient for the firm size is -0.504, with a t-value of -0.133 and a significance level of 0.894. This suggests that the firm size does not have a statistically significant impact on ROA, as the p-value is greater than 0.05.

The Beta coefficient for fixed assets is -0.614, with a t-value of -0.184 and a significance level of 0.855. This indicates that fixed assets do not have a statistically significant impact on ROA, as the p-value is greater than 0.05.

The Beta coefficient for liquidity is 0.445, with a t-value of 0.391 and a significance level of 0.698. This suggests that liquidity does not have a statistically significant impact on ROA, as the p-value is greater than 0.05.

The R^2 value is 0.391, meaning that 39.1% of the variability in return on assets is explained by the independent variables in this model. This indicates a moderate explanatory power of the model, suggesting that other factors not included in the model may also influence ROA. The F value is 5.660 with a significance level of 0.000, indicating that the overall model is statistically significant. This high F value suggests that the predictors collectively provide a significant explanation of ROA.

The Tolerance and Variance Inflation Factor (VIF) values suggest some multicollinearity among the independent variables, particularly for fixed assets and debt ratio, which have

lower tolerance values and higher VIFs. However, the levels are not excessively high, suggesting that multicollinearity is not severely distorting the regression results.

The regression analysis shows that the debt-to-equity ratio has a statistically significant negative impact on return on assets, indicating that higher leverage relative to equity reduces asset efficiency. In contrast, the debt ratio, firm size, fixed assets, and liquidity do not significantly affect ROA in this model. The model explains a moderate portion of the variability in ROA (39.1%), and multicollinearity among the predictors is low to moderate, ensuring the robustness of the regression results.

4.1.3.3 Regression Analysis with Dependent Variable Net Profit Margin

This section presents the regression analysis with the net profit margin (NPM) as the dependent variable. The purpose of this study is to investigate the relationship between the debt ratio, the debt-to-equity ratio, firm size, fixed assets, and liquidity ratio with the intention of shedding light on the effect that financial leverage has on overall profitability. The purpose of this research is to gain an understanding of how various degrees of debt and equity financing and other control variables influence profit through regression analysis. Table 6 shows the regression analysis results with dependent variable net profit margin.

Table 6

Regression Results with Dependent Variable Net Profit Margin

Variables	Beta	t	Sig.	Tolerance	VIF
(Constant)	53.920	1.377	.176	-	-
Debt Ratio	-.121	-.893	.377	.145	6.875
Debt to Equity Ratio	-12.733	-3.528	.001	.552	1.812
Firm size	.893	.411	.683	.135	7.416
Fixed Assets	-2.405	-1.252	.217	.087	9.450
Liquidity	.881	1.342	.186	.601	1.663
R^2			0.445 (44.5%)		
F Value	7.043			0.000	

a. Dependent Variable: NPM

Source: Appendix iv

Table 6 presents the results of the regression analysis where the dependent variable is Net Profit Margin (NPM). The analysis explores the influence of debt ratio (DR), debt to equity

ratio (DER), firm size, fixed assets, and liquidity on NPM. The constant term is 53.920, with a t-value of 1.377 and a significance level of 0.176. This indicates that when all the independent variables are zero, the net profit margin is expected to be 53.920, though this constant is not statistically significant given the p-value is greater than 0.05.

The Beta coefficient for the debt ratio is -0.121, with a t-value of -0.893 and a significance level of 0.377. This indicates a negative relationship between the debt ratio and net profit margin, but the effect is not statistically significant ($p = 0.377$). This suggests that changes in the debt ratio do not have a meaningful impact on NPM in this model, implying that the debt ratio does not significantly influence net profitability. Therefore, the fifth hypothesis of the study, H05: there is a significant effect of debt ratio on net profit margin of manufacturing firms in Nepal, is rejected.

The Beta coefficient for the debt-to-equity ratio is -12.733, with a t-value of -3.528 and a significance level of 0.001. This negative Beta indicates that for each one-unit increase in the debt-to-equity ratio, the net profit margin decreases by 12.733 units. The very low p-value (0.001) shows that this relationship is statistically significant, suggesting a strong negative impact of DER on NPM. This implies that higher leverage relative to equity significantly reduces net profit margins, likely due to increased financial costs associated with higher debt levels. Therefore, the sixth hypothesis of the study, H06: there is a significant effect of debt-to-equity ratio on net profit margin of manufacturing firms in Nepal, is accepted.

The Beta coefficient for the firm size is 0.893, with a t-value of 0.411 and a significance level of 0.683. This indicates that the firm size does not show a statistically significant impact on NPM, as the p-value is greater than 0.05. The Beta coefficient for fixed assets is -2.405, with a t-value of -1.252 and a significance level of 0.217. This indicates that fixed assets do not have a statistically significant impact on NPM, as the p-value is greater than 0.05. The Beta coefficient for liquidity is 0.881, with a t-value of 1.342 and a significance level of 0.186. This indicates that liquidity does not have a statistically significant impact on NPM, as the p-value is greater than 0.05.

The R^2 value is 0.445, meaning that 44.5% of the variability in Net Profit Margin can be explained by the debt ratio, debt to equity ratio, firm size, fixed assets, and liquidity. This indicates a moderate explanatory power of the model, suggesting that other factors not

included in the model may also influence NPM. The F value is 7.043 with a significance level of 0.000, indicating that the overall model is statistically significant. This high F value suggests that the predictors collectively provide a significant explanation of the Net Profit Margin.

The Tolerance and Variance Inflation Factor (VIF) values suggest some multicollinearity among the independent variables, particularly for fixed assets and debt ratio, which have lower tolerance values and higher VIFs. However, the levels are not excessively high, suggesting that multicollinearity is not severely distorting the regression results. The regression analysis indicates that while the debt ratio does not have a significant impact on net profit margin, the debt-to-equity ratio has a significant negative effect.

4.1.3.4 Regression Analysis with Dependent Variable Operating Profit Ratio

This section presents the regression analysis using the operating profit ratio (OPR) as the dependent variable. The purpose of this study is to determine the impact that the debt ratio, the debt-to-equity ratio, firm size, fixed assets, and liquidity ratio have on OPR with the goal of gaining an understanding of the ways in which these capital structure determinants have an effect on operational profitability. Table 7 shows the regression analysis results with dependent variable operating profit ratio.

Table 7

Regression Results with Dependent Variable Operating Profit Ratio

Variables	Beta	t	Sig.	Tolerance	VIF
(Constant)	48.355	1.064	.293	-	-
Debt Ratio	.018	.112	.912	.145	6.875
Debt to Equity Ratio	-16.608	-3.967	.000	.552	1.812
Firm size	.862	.342	.734	.135	7.416
Fixed Assets	-2.038	-.914	.366	.087	9.450
Liquidity	1.396	1.834	.073	.601	1.663
R^2			0.504 (50.4%)		
F Value	8.941			0.000	

a. Dependent Variable: OPR

Source: Appendix v

Table 7 presents the results of the regression analysis with the operating profit ratio (OPR) as the dependent variable. The analysis evaluates the impact of debt ratio (DR), debt to equity ratio (DER), firm size, fixed assets, and liquidity on OPR. The constant term is 48.355, with a t-value of 1.064 and a significance level of 0.293. This indicates that when all the independent variables are zero, the operating profit ratio is expected to be 48.355, though this constant is not statistically significant given the p-value is greater than 0.05.

The Beta coefficient for the debt ratio is 0.018, with a t-value of 0.112 and a significance level of 0.912. This indicates a positive relationship between the debt ratio and operating profit ratio, but the effect is not statistically significant ($p = 0.912$). This suggests that changes in the debt ratio do not have a meaningful impact on OPR in this model, implying that the debt ratio does not significantly influence operating profitability.

The Beta coefficient for the debt-to-equity ratio is -16.608, with a t-value of -3.967 and a significance level of 0.000. This negative Beta indicates that for each one-unit increase in the debt-to-equity ratio, the operating profit ratio decreases by 16.608 units. The very low p-value (0.000) shows that this relationship is statistically significant, suggesting a substantial negative impact of DER on OPR. Higher leverage relative to equity is associated with a significant decrease in operating profitability.

The Beta coefficient for the firm size is 0.862, with a t-value of 0.342 and a significance level of 0.734. This indicates that the firm size does not show a statistically significant impact on OPR, as the p-value is greater than 0.05.

The Beta coefficient for fixed assets is -2.038, with a t-value of -0.914 and a significance level of 0.366. This indicates that fixed assets do not have a statistically significant impact on OPR, as the p-value is greater than 0.05.

The Beta coefficient for liquidity is 1.396, with a t-value of 1.834 and a significance level of 0.073. This indicates a positive relationship between liquidity and operating profit ratio, but the effect is not statistically significant ($p = 0.073$), though it is close to the 0.05 threshold.

The R^2 value is 0.504, meaning that 50.4% of the variability in operating profit ratio is explained by the debt ratio, debt to equity ratio, firm size, fixed assets, and liquidity. This indicates a moderate explanatory power of the model, suggesting that other factors not

included in the model may also influence OPR. The F value is 8.941 with a significance level of 0.000, indicating that the overall model is statistically significant. This high F value suggests that the predictors collectively provide a significant explanation of the operating profit ratio.

The Tolerance and Variance Inflation Factor (VIF) values suggest some multicollinearity among the independent variables, particularly for fixed assets and debt ratio, which have lower tolerance values and higher VIFs. However, the levels are not excessively high, suggesting that multicollinearity is not severely distorting the regression results.

The regression analysis shows that the debt ratio does not have a significant impact on the operating profit ratio. However, the debt-to-equity ratio has a significant negative effect, indicating that higher leverage relative to equity significantly reduces operating profitability. The model explains a moderate portion of the variability in OPR (50.4%), and the multicollinearity among the predictors is low to moderate, ensuring the robustness of the results.

4.1.4 Hypothesis Testing

Various factors, including capital structure, firm size, asset management, and liquidity, are believed to influence profitability. Previous research has highlighted the importance of understanding these relationships to enhance financial decision-making and strategic planning within firms. This study aims to test hypotheses related to the impact of these variables on the overall profitability of manufacturing firms in Nepal, measured through key indicators such as return on equity (ROE), return on assets (ROA), net profit margin (NPM), and operating profit ratio (OPR). The results of hypotheses set in chapter one is presented in Table 8.

Table 8

Hypothesis Testing Results

Hypothesis	DV	IDV	Beta	Sig.	Result
$H_0$1	ROE	Debt Ratio	0.442	0.241	Not Supported
	ROA	Debt Ratio	0.184	0.439	Not Supported
	NPM	Debt Ratio	-0.121	0.377	Not Supported
	OPR	Debt Ratio	0.018	0.912	Not Supported
$H_0$2	ROE	DER	7.325	0.462	Not Supported
	ROA	DER	-25.387	0.000	Supported
	NPM	DER	-12.733	0.001	Supported
	OPR	DER	-16.608	0.000	Supported
$H_0$3	ROE	Firm Size	8.759	0.148	Not Supported
	ROA	Firm Size	-0.504	0.894	Not Supported
	NPM	Firm Size	0.893	0.683	Not Supported
	OPR	Firm Size	0.862	0.734	Not Supported
$H_0$4	ROE	Fixed Assets	-19.966	0.000	Supported
	ROA	Fixed Assets	-0.614	0.855	Not Supported
	NPM	Fixed Assets	-2.405	0.217	Not Supported
	OPR	Fixed Assets	-2.038	0.366	Not Supported
$H_0$5	ROE	Liquidity	-2.074	0.254	Not Supported
	ROA	Liquidity	0.445	0.698	Not Supported
	NPM	Liquidity	0.881	0.186	Not Supported
	OPR	Liquidity	1.396	0.073	Not Supported

$H_0$1: Debt ratio has a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.

This hypothesis is not supported. The debt ratio did not show a significant impact on any of the profitability measures (ROE, ROA, NPM, and OPR), indicating that changes in debt ratio alone may not substantially affect the profitability of manufacturing firms in Nepal.

$H_0$2: Debt-to-equity ratio has a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.

This hypothesis is supported. The debt-to-equity ratio significantly affects ROA, NPM, and OPR, demonstrating its crucial role in influencing profitability outcomes. However, it does not significantly impact ROE, suggesting that while debt-to-equity ratio is a key driver for some profitability metrics, its effect on ROE may be less pronounced.

$H_0$3: Firm size has a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.

This hypothesis is not supported. Firm size did not show a significant impact on any of the profitability measures, suggesting that variations in firm size alone do not substantially influence profitability in the context of Nepalese manufacturing firms.

$H_0$4: Fixed assets have a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.
This hypothesis is partially supported. Fixed assets significantly impact ROE, indicating their importance in enhancing shareholders' returns. However, fixed assets do not show a significant impact on ROA, NPM, or OPR, suggesting that their effect on profitability may be specific to shareholder returns rather than overall profitability metrics.

$H_0$5: Liquidity has a significant impact on the overall profitability (measured by ROE, ROA, NPM, and OPR) of manufacturing firms in Nepal.
This hypothesis is not supported. Liquidity did not show a significant impact on any of the profitability measures, indicating that managing liquidity alone does not significantly influence the profitability of manufacturing firms in Nepal.

4.2 Discussions

The primary objective of this research is to conduct an analysis of the current situation regarding the capital structure and profitability of manufacturing companies. In this study, it was used the debt ratio (DR), the debt-to-equity ratio (DER), firm size, fixed assets and liquidity ratio to illustrate a company's capital structure. Conversely, the profitability is assessed using the return on equity (ROE), return on assets (ROA), net profit margin (NPM), and operating profit ratio (OPR). An examination of capital structure reveals a substantial amount of diversity in debt ratios and debt-to-equity ratios across the investigated companies. The fact that certain companies have high degrees of leverage while others have lower levels demonstrates that they use a variety of different financial strategies. In a similar vein, the profitability metrics show significant variations among the companies.

The return on equity (ROE) varies greatly, with some companies demonstrating very high returns to shareholders while others have dividends that are far lower or even negative. The variation in the return on assets (ROA) reflects the diverse ways companies use their assets to generate profit. Both NPM and OPR provide additional evidence that businesses are quite different from one another in terms of their ability to turn sales into profits while

maintaining operational efficiency. Based on these findings, it seems that some businesses are highly lucrative and have a good handle on their debt, while others are having trouble making a profit. Probably because they use their assets less efficiently or have higher operating costs.

The study's findings provide several key insights, revealing both alignments and divergences with previous research on capital structure and profitability. A positive correlation was found between the debt ratio and return on equity (ROE), indicating that higher debt levels may enhance returns for shareholders. However, the debt ratio did not significantly impact return on assets (ROA), net profit margin (NPM), and operating profit ratio (OPR). This finding contrasts with Rahman et al. (2019), who identified a significant positive effect of the debt ratio on ROA and a negative effect on ROE. Additionally, Al-Nsour and Al-Muhtadi (2019) reported that leverage positively influenced market value, suggesting a positive effect on equity returns. These differences may be attributed to industry-specific dynamics and regional financial environments influencing capital structure's effectiveness.

Furthermore, the study revealed a significant negative impact of the debt-to-equity ratio (DER) on ROA, NPM, and OPR. This result is consistent with Rahman et al. (2019), who observed a negative effect of DER on ROA and ROE, as well as Bedada (2020), who found that long-term debt (a component of DER) negatively affects profitability. These findings suggest a general trend where high leverage adversely impacts profitability metrics, highlighting the importance of careful debt management.

In terms of firm size, the study found a negative correlation with ROE, which contrasts with Chalise and Adhikari (2022), who noted that larger firms tend to have higher ROE. This discrepancy could be due to sector-specific characteristics, as larger manufacturing firms might encounter diminishing returns, while firms in other sectors may benefit from economies of scale and enhanced market reach. The study also identified a negative correlation between fixed assets and ROE, in line with Shrestha (2023), who found that significant investments in fixed assets were associated with profitability challenges. This suggests that the high capital costs linked to fixed assets can dilute equity returns. However, Jaishi and Poudel (2019) observed a positive impact of tangible assets on efficiency, indicating that the role of fixed assets can vary depending on specific financial metrics and industry contexts.

Regarding liquidity, the study found a positive correlation with ROA, NPM, and OPR, supported by the findings of Sovaniski (2020) and Essel (2023). These studies suggest that higher liquidity levels can enhance profitability and financial performance, as firms with better liquidity are better equipped to manage financial obligations and capitalize on investment opportunities.

The study contributes to the understanding of how capital structure and financial variables influence profitability. While there are similarities with previous research, particularly concerning the adverse effects of high leverage and the benefits of liquidity, the study also provides unique insights regarding firm size and fixed asset investments. These comparative findings highlight the importance of contextual factors in financial performance and the necessity for tailored strategies in managing capital structure effectively.

CHAPTER- V
SUMMARY AND CONCLUSION

5.1 Summary

The capital structure of manufacturing companies is an essential factor in determining the profitability of such companies. The one-of-a-kind economic environment, which is defined by constantly shifting financial markets, regulatory frameworks, and prospects for expansion, confronts these companies with a variety of problems as well as opportunities. In order to maximize profits and ensure financial stability, it is vital to possess effective capital structure management, which involves striking a balance between debt and equity. Nepalese businesses are required to handle swings in interest rates, inflationary pressures, and fluctuating levels of market liquidity while simultaneously maintaining appropriate capital structures on their balance sheets. It is possible to increase profitability via the smart use of debt by taking advantage of tax benefits and leveraging development prospects; however, an excessive dependence on debt may lead to a financial crisis, particularly in an economy that is still emerging and is susceptible to shocks from the outside world.

This research is necessary because it is crucial to understand how choices regarding capital structure affect the profitability of manufacturing enterprises in Nepal. Despite their crucial role in the country's economy, there has been a dearth of empirical studies that focus on the financial performance of these companies in relation to their capital structure. The offering a complete analysis of the current picture of capital structure and profitability, investigating the correlations between different financial measures, and assessing the influence of debt ratios on company performance, the purpose of this research is to address this knowledge vacuum. The primary goal is to provide Nepalese manufacturing companies with actionable data that will help them optimize their capital structures in order to improve profitability and maintain growth in an environment that is both competitive and dynamic.

A combination of descriptive and causal comparative research designs was employed to achieve this objective. The population includes all manufacturing companies listed on the Nepal Stock Exchange (NEPSE), with a purposive sample of five regularly traded companies selected for detailed analysis. Secondary data from audited financial statements over ten years were used, focusing on metrics such as debt ratio, debt-equity ratio, firm size, fixed assets, liquidity ratio, return on equity, return on assets, net profit ratio, and

operating profit ratio. Data collection involved retrieving financial reports from company websites and regulatory bodies. Descriptive, correlation, and regression analyses were conducted using SPSS 25.0 to assess the relationships and impact of capital structure on profitability.

The regression analyses reveal distinct impacts of financial variables on firm performance metrics. For Return on Equity (ROE), the constant term is 253.423 ($t = 2.366$, $p = 0.022$), indicating a significant baseline ROE when all predictors are zero. However, neither the debt ratio ($\beta = 0.442$, $t = 1.189$, $p = 0.241$) nor the debt-to-equity ratio ($\beta = 7.325$, $t = 0.742$, $p = 0.462$) significantly impacts ROE. In contrast, fixed assets have a significant negative effect ($\beta = -19.966$, $t = -3.800$, $p < 0.001$). For Return on Assets (ROA), the debt-to-equity ratio negatively impacts ROA significantly ($\beta = -25.387$, $t = -4.051$, $p < 0.001$), while the debt ratio ($\beta = 0.184$, $t = 0.780$, $p = 0.439$) and other variables do not significantly affect ROA. Regarding Net Profit Margin (NPM), the debt-to-equity ratio shows a significant negative effect ($\beta = -12.733$, $t = -3.528$, $p = 0.001$), while the debt ratio ($\beta = -0.121$, $t = -0.893$, $p = 0.377$) and other variables do not significantly impact NPM. Lastly, for the Operating Profit Ratio (OPR), the debt-to-equity ratio negatively affects OPR significantly ($\beta = -16.608$, $t = -3.967$, $p < 0.001$), while the debt ratio ($\beta = 0.018$, $t = 0.112$, $p = 0.912$) does not show a significant effect. The models demonstrate moderate to high explanatory power with R^2 values ranging from 0.391 to 0.777, indicating that while multicollinearity is present, it does not severely distort the results.

The findings of this research provide a number of benefits, particularly for academics, practitioners, and policymakers. It offers practitioners evidence-based insights into the best management of capital structures, assisting manufacturing companies in Nepal in making educated financial choices that improve profitability and decrease financial risks at the same time. Policymakers can use the results to construct regulatory frameworks that support and promote balanced capital structures and sustainable business practices upon implementation. Academically speaking, the study contributes to the current body of literature by giving a comprehensive analysis of the Nepalese setting. As a result, it addresses a large research gap and lays the groundwork for further research. The research findings, taken as a whole, provide stakeholders with the information they need to enhance financial performance and propel economic development within Nepal's manufacturing sector.

5.2 Conclusion

This study conducted on a analysis of the capital structure and profitability of manufacturing companies. The study concentrated on three primary objectives: assessing the current scenario of capital structure and profitability; investigating the relationship between capital structure variables and profitability metrics; and analyzing the impact of these variables on profitability. This study provides a assessment of the capital structure and profitability of manufacturing firms in Nepal by focusing on key financial metrics including debt ratio, debt-to-equity ratio, firm size, fixed assets, and liquidity, as well as profitability indicators such as return on equity (ROE), return on assets (ROA), net profit margin (NPM), and operating profit ratio (OPR). The analysis highlights that manufacturing firms in Nepal exhibit varied levels of leverage, asset investment, and liquidity, which significantly influence their profitability outcomes.

To begin, the analysis of the current situation found that there is a significant amount of diversification in terms of capital structure and profitability among the manufacturing companies. The companies used various financial strategies, as evidenced by the broad range of variation in the debt ratio (DR), the debt-to-equity ratio (DER), firm size, fixed assets and liquidity ratio. Similar to the previous point, the profitability indicators, which include return on equity (ROE), return on assets (ROA), net profit margin (NPM), and operating profit ratio (OPR), exhibited a substantial amount of diversity. This variation reflected the various levels of efficiency and profitability that were present across the companies.

The study reveals that the debt ratio positively correlates with ROE, suggesting that higher leverage can enhance equity returns. However, it also found no significant impact of the debt ratio on ROA, NPM, and OPR, indicating that while leverage may boost equity returns, it does not uniformly improve other profitability metrics. Conversely, a high debt-to-equity ratio was associated with a significant negative impact on ROA, NPM, and OPR, underscoring the potential drawbacks of excessive leverage in diminishing overall profitability.

Firm size and fixed assets were found to negatively impact ROE, indicating that larger firms and those with significant fixed asset investments might face challenges in generating higher returns on equity. This suggests that while scale and asset investment can drive growth, they may also lead to inefficiencies or increased capital costs that affect

profitability. Liquidity was positively correlated with ROA, NPM, and OPR, highlighting its crucial role in supporting operational efficiency and financial stability. Firms with better liquidity are better equipped to manage their financial obligations and capitalize on growth opportunities, thus improving their profitability metrics.

The study demonstrates the complex interplay between capital structure components and profitability indicators in Nepalese manufacturing firms. It underscores the need for firms to carefully balance their leverage, asset investments, and liquidity to optimize financial performance. By understanding these relationships, manufacturing firms can devise more effective financial strategies to enhance profitability and sustain growth in a competitive environment.

5.3 Implications

Based on the findings of this study, several practical and theoretical implications can be drawn:

- Manufacturing firms should strategically manage their capital structures by balancing debt and equity to maximize profitability. While leveraging can enhance returns on equity, excessive debt can strain resources and negatively impact asset efficiency and profit margins.
- The positive impact of the debt ratio on ROE suggests that firms can use debt strategically to enhance shareholder returns. However, caution must be exercised to avoid excessive debt that could lead to financial distress.
- Firms should aim for an optimal level of debt that leverages the benefits of borrowing without overburdening the company. This balance is crucial for maintaining profitability across various metrics, including ROA, NPM, and OPR.
- Given the negative impact of high debt-to-equity ratios on ROA, NPM, and OPR, firms should consider increasing their reliance on equity financing. This approach can improve asset efficiency and profit margins, leading to better overall financial health.
- Policymakers should create an enabling environment that supports optimal capital structure management. This could include incentives for equity financing and regulations that prevent excessive leveraging among manufacturing firms.

- Continuous monitoring and assessment of financial performance metrics, in relation to capital structure, can help firms make informed decisions. Regular analysis can identify the need for adjustments in debt and equity levels to sustain profitability.
- Manufacturing firms should develop customized financial strategies that align with their specific operational and market conditions. Tailored approaches can help in achieving the right mix of debt and equity, ensuring long-term financial stability and profitability.
- Future studies should explore the impact of capital structure on profitability across different industries. Examining other financial variables, such as liquidity ratios and market conditions, could offer a more comprehensive understanding of the determinants of profitability.

References

Al-Nsour, O., & Al-Muhtadi, A. (2019). Capital structure, profitability and firm's value: Evidence from Jordan. *Research Journal of Finance and Accounting, 10*(20), 1–12.

Bedada, T. (2020). Effect of capital structure on firm's profitability (evidence from endowment fund for rehabilitation of Tigray /EFFORT/manufacturing companies). *Research Journal of Finance and Accounting, 11*(7), 44–54.

Bhatt, S. (2020). Capital structure and profitability of commercial banks in Nepal. *Account and Financial Management Journal, 05*, 12–25.

Bhattarai, B. P. (2020). Effects of capital structure on financial performance of insurance companies in Nepal. *International Journal of Accounting and Financial Reporting, 10*(3), 67–82.

Billett, M. T., King, T. H. D., & Mauer, D. C. (2007). Growth opportunities and the choice of leverage, debt maturity, and covenants. *Journal of Finance, 62*(2), 697–730.

Chechet, I. L., & Olayiwola, A. B. (2014). Capital structure and profitability of Nigerian quoted firms: The agency cost theory perspective. *American International Journal of Social Science, 3*(1), 139–158.

Chalise, D. R., & Adhikari, N. R. (2022). The impact of capital structure and firm size on financial performance of commercial banks in Nepal. *EFFORTS, Journal of Education and Research, 4*(1), 102–111.

Essel, R. E. (2024). The effect of capital structure on corporate performance: Panel empirical evidence of an emerging capital market. *Journal of African Business, 25*(2), 224–263.

Fachri, M., & Aira, A. (2024). The effect of capital structure, firm size, and inventory turnover on profit growth (empirical study of coal mining companies listed on the BEI in 2021–2023). *JAWI, 2*(1), 369–380.

Firaz, M., & M. M., A. (2022). The effect of capital structure on company value with profitability as an intervening variable. *Management Science Research Journal, 1*(3), 27–42.

Frank, M. Z., & Goyal, V. K. (2003a). Testing the pecking order theory of capital structure. *Journal of Financial Economics, 67*(2), 217–248.

Frank, M. Z., & Goyal, V. K. (2003b). Capital structure decisions. *SSRN Electronic Journal, 38*(1), 1–55.

Graham, J. R. (2000). How big are the tax benefits of debt? *Journal of Finance, 55*(5), 1901–1941.

Jaishi, B., & Poudel, R. L. (2019). Capital structure and firm efficiency of non-financial institutions in Nepal. *Journal of Nepalese Business Studies, 12*(1), 19–32.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360.

Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *Journal of Finance, 28*(4), 911–922.

Kim, Y., Jung, S., & Kim, C. (2023). The impact of capital structure on the profitability performance of ICT firms. *Processes, 11*(2), 1–15.

Lamichhane, P., & Shrestha, P. M. (2021). Nexus between capital structure and financial performance of Nepalese hydropower companies. *Management Dynamics, 24*(1), 117–127.

Leary, M. T., & Roberts, M. R. (2005). Do firms rebalance their capital structures? *Journal of Finance, 60*(6), 2575–2619.

Leary, M. T., & Roberts, M. R. (2010). The pecking order, debt capacity, and information asymmetry. *Journal of Financial Economics, 95*(3), 332–355.

Marpaung, P., Sinaga, J., & E., P. (2021). Effect of capital structure on the profitability of manufacturing companies. *Journal of Industrial Technology, 15*(2), 140–147.

Mensah, M. O. (2021). The impact of capital structure on profitability of manufacturing firms on the Ghana stock exchange: A conceptual analysis. *International Journal of Business and Management, 9*(10), 25–40.

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review, 48*(3), 261–297.

Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Review, 53*(3), 433–443.

Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics, 5*(2), 147–175.

Myers, S. C. (1984). The capital structure puzzle. *Journal of Finance, 39*(3), 575–592.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13*(2), 187–221.

Nimalathasan, B. (2010). Capital structure and its impact on profitability: A study of listed manufacturing companies in Sri Lanka. *Journal of Economics Theory and Practice and Social Issues, 56*(2), 83–92.

Noriska, N., Rosdaliva, M., & Kuncorojati, M. (2023). An analysis of capital structure, stock ownership structure, and profitability as intervening variables in firm value testing. *Jurnal Multidisiplin Madani, 3*(6), 1363–1373.

Omokore, D. E., Njogo, B. O., Omankhanlen, A. E., Islaka, M., & Akinjare, V. A. (2024). Impact of capital structure on financial performance of firms in the Nigerian healthcare sector. *Journal of Comprehensive Business Administration Research, 4*(2), 188–202.

Rahman, M. A., Sarker, M. S. I., & Uddin, M. J. (2019). The impact of capital structure on the profitability of publicly traded manufacturing firms in Bangladesh. *Applied Economics and Finance, 6*(2), 1–12.

Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance, 50*(5), 1421–1460.

Shrestha, S. (2023). Impact of capital structure on profitability of Dabur Nepal Private Limited. *Journal of Economics and Management, 3*(1), 25–33.

Shubita, M. F., & Alsawalhah, F. (2012). The relationship between capital structure and profitability. *International Journal of Business and Social Science, 3*(15), 105–112.

Shyam-Sunder, L., & Myers, S. C. (1999). Testing static trade-off against pecking order models of capital structure. *Journal of Financial Economics, 51*(2), 219–244.

Smith, C. W., & Warner, J. B. (1979). On financial contracting. *Journal of Financial Economics, 7*(3), 117–161.

Sovaniski, T. (2020). Capital structure impact on financial performance of Kurdistan manufacturing firms. *SSRN Electronic Journal*.

Stulz, R. M. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics, 26*(3), 3–27.

Sultan, A. S., & Adam, M. H. (2015). The effect of capital structure on profitability: An empirical analysis of listed firms in Iraq. *European Journal of Accounting, Auditing and Finance Research, 3*(4), 61–78.

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance, 43*(1), 1–19.

Velnamphy, T., & Aloy, N. J. (2012). The relationship between capital structure and profitability. *Global Journal of Management & Research, 12*(2), 67–73.

Wardani, O. M., & Subowo, S. (2020). Factors that influence capital structure with profitability as a moderating variable. *Accounting Analysis Journal, 9*(2), 103–109.

Warner, J. B. (1977). Bankruptcy costs: Some evidence. *Journal of Finance, 32*(2), 337–347.

Watson, R., & Wilson, N. (2002). Small and medium size enterprise financing: A note on some of the empirical implications of a pecking order. *Journal of Business Finance and Accounting, 29*(4), 557–578.

Appendices

Appendix i

Data Utilized in the Study Variables

Companies	FY	ROA	ROE	NPM	OPM	DR	DER	SIZE	FA	LIQ
	2013/14	9.00	20.00	8.18	9.09	23.37	0.40	22.32	21.92	.70
	2014/15	8.00	21.50	7.78	8.91	24.43	0.50	22.36	21.99	.65
	2015/16	7.00	24.00	8.80	10.68	23.77	0.80	22.48	22.04	.70
	2016/17	10.00	29.00	11.46	12.28	11.85	0.30	22.65	22.10	.70
	2017/18	15.00	30.00	14.40	14.37	7.13	0.10	22.66	22.16	.90
	2018/19	7.00	18.00	7.77	10.95	11.00	0.30	23.08	22.75	.60
	2019/20	-1.00	-2.00	-0.89	2.90	17.42	0.50	23.13	22.76	.70
	2020/21	4.00	11.00	5.80	10.04	16.69	0.40	23.11	22.70	.80
	2021/22	7.00	16.00	6.59	11.96	10.50	0.20	23.14	22.67	1.00
BNL	2022/23	7.00	16.00	7.75	11.15	21.85	0.50	23.32	22.66	1.10
	2013/14	19.00	27.25	18.74	14.83	18.81	0.70	22.14	21.52	.50
	2014/15	13.00	35.54	19.46	15.62	19.08	0.80	22.19	21.60	.60
	2015/16	14.00	33.45	17.86	17.01	22.85	0.60	22.15	21.69	.40
	2016/17	11.00	38.00	17.12	14.21	19.29	0.20	22.16	21.74	.50
	2017/18	17.00	37.00	13.12	16.68	11.70	1.10	22.17	21.78	.70
	2018/19	6.00	19.00	8.13	11.97	20.64	0.70	22.77	22.53	.40
	2019/20	0.10	0.20	0.13	6.20	26.99	1.00	22.84	22.54	.50
	2020/21	5.30	15.70	6.76	12.65	25.75	0.80	22.81	22.48	.60
	2021/22	7.50	18.90	6.87	12.82	22.13	0.60	22.84	22.46	.70
BNTL	2022/23	6.90	16.30	6.86	11.01	30.04	0.70	22.95	22.47	.80
	2013/14	31.65	45.61	20.86	28.31	30.85	0.44	21.78	19.91	1.16
	2014/15	34.71	53.26	21.93	23.77	30.42	0.47	21.82	19.96	1.32
	2015/16	36.84	54.76	28.43	39.20	32.73	0.49	21.84	20.01	1.26
	2016/17	29.05	46.53	21.72	37.03	38.41	0.62	21.92	20.18	1.46
	2017/18	31.59	52.50	20.52	29.13	39.82	0.66	21.87	20.30	2.05
	2018/19	27.61	45.83	18.51	22.85	39.75	0.66	22.07	20.71	1.57
	2019/20	9.62	18.14	6.45	9.45	47.01	0.89	22.04	20.91	1.66
	2020/21	18.11	33.05	15.02	17.71	45.19	0.82	22.28	20.80	1.87
	2021/22	26.57	42.22	21.03	24.67	37.10	0.59	22.48	21.20	1.98
UNL	2022/23	28.24	42.05	21.63	25.33	32.86	0.49	22.59	21.25	2.45
	2013/14	5.96	125.00	4.37	13.25	69.47	1.05	19.47	16.89	1.10
	2014/15	6.73	75.00	4.52	12.09	65.66	1.00	17.21	17.04	.90
	2015/16	7.61	83.00	5.44	9.65	58.97	1.01	19.73	17.12	.89
	2016/17	10.08	134.00	5.69	10.74	77.59	0.95	19.69	17.26	1.11
	2017/18	8.68	152.00	5.11	9.82	76.57	0.96	19.95	17.21	1.05
	2018/19	7.56	137.00	4.51	9.57	74.35	0.97	20.11	17.18	.95
	2019/20	0.15	33.00	0.15	6.52	59.79	0.68	20.32	18.94	1.21
	2020/21	3.25	103.00	2.60	6.25	58.26	0.92	20.46	19.04	1.65
NLO	2021/22	3.76	98.60	2.81	5.78	61.83	1.62	20.65	19.11	1.43

	2022/23	0.57	139.00	0.54	5.18	58.72	1.43	20.59	19.36	1.55
	2013/14	37.59	49.21	21.03	29.56	51.25	0.25	20.67	20.19	1.88
	2014/15	55.26	39.89	22.56	31.33	49.56	0.45	20.77	20.22	2.15
	2015/16	34.48	47.56	24.27	33.43	48.47	0.35	20.86	20.12	3.18
	2016/17	44.56	58.89	29.89	38.47	46.25	0.19	20.92	20.17	2.05
	2017/18	41.26	59.25	21.45	31.25	42.26	0.25	21.05	20.20	1.77
	2018/19	38.00	77.00	17.00	26.00	41.65	0.14	21.06	20.22	1.98
	2019/20	23.00	52.00	19.00	29.00	43.55	0.11	21.41	20.14	1.95
	2020/21	45.00	71.00	28.00	40.00	45.46	0.00	21.56	20.06	6.32
	2021/22	33.00	50.00	26.00	36.00	42.9	0.00	21.88	20.03	8.36
HDL	2022/23	18.00	27.00	22.00	32.00	33.2	0.00	22.02	19.94	10.83

Appendix ii

Regression Results with Dependent Variable ROE

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.882	.777	.752	18.56134	1.684

a. Predictors: (Constant), LIQ, SIZE, DER, DR, FA

b. Dependent Variable: ROE

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52887.113	5	10577.423	30.702	.000
	Residual	15159.025	44	344.523		
	Total	68046.138	49			

a. Dependent Variable: ROE

b. Predictors: (Constant), LIQ, SIZE, DER, DR, FA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	253.423	107.091		2.366	.022		
	DR	.442	.372	.222	1.189	.241	.145	6.875
	DER	7.325	9.868	.071	.742	.462	.552	1.812
	SIZE	8.759	5.944	.286	1.474	.148	.135	7.416
	FA	-19.966	5.253	-.915	-3.800	.000	.087	9.450
	LIQ	-2.074	1.794	-.106	-1.156	.254	.601	1.663

a. Dependent Variable: ROE

Appendix iii

Regression Results with Dependent Variable ROA

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.626	.391	.322	11.78897	.930

a. Predictors: (Constant), LIQ, SIZE, DER, DR, FA

b. Dependent Variable: ROA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3933.140	5	786.628	5.660	.000
	Residual	6115.113	44	138.980		
	Total	10048.252	49			

a. Dependent Variable: ROA

b. Predictors: (Constant), LIQ, SIZE, DER, DR, FA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	48.454	68.017		.712	.480		
	DR	.184	.236	.241	.780	.439	.145	6.875
	DER	-25.387	6.268	-.641	-4.051	.000	.552	1.812
	SIZE	-.504	3.775	-.043	-.133	.894	.135	7.416
	FA	-.614	3.337	-.073	-.184	.855	.087	11.450
	LIQ	.445	1.139	.059	.391	.698	.601	1.663

a. Dependent Variable: ROA

Appendix iv

Regression Results with Dependent Variable NPM

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.667	.445	.381	6.78825	.648

a. Predictors: (Constant), LIQ, SIZE, DER, DR, FA

b. Dependent Variable: NPM

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1622.635	5	324.527	7.043	.000
	Residual	2027.532	44	46.080		
	Total	3650.167	49			

a. Dependent Variable: NPM

b. Predictors: (Constant), LIQ, SIZE, DER, DR, FA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	53.920	39.165		1.377	.176		
	DR	-.121	.136	-.263	-.893	.377	.145	6.875
	DER	-12.733	3.609	-.534	-3.528	.001	.552	1.812
	SIZE	.893	2.174	.126	.411	.683	.135	7.416
	FA	-2.405	1.921	-.476	-1.252	.217	.087	11.450
	LIQ	.881	.656	.194	1.342	.186	.601	1.663

a. Dependent Variable: NPM

Appendix v

Regression Results with Dependent Variable OPR

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.710	.504	.448	7.87531	.670

a. Predictors: (Constant), LIQ, SIZE, DER, DR, FA

b. Dependent Variable: OPR

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2772.675	5	554.535	8.941	.000
	Residual	2728.906	44	62.021		
	Total	5501.581	49			

a. Dependent Variable: OPR

b. Predictors: (Constant), LIQ, SIZE, DER, DR, FA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	48.355	45.437		1.064	.293		
	DR	.018	.158	.031	.112	.912	.145	6.875
	DER	-16.608	4.187	-.567	-3.967	.000	.552	1.812
	SIZE	.862	2.522	.099	.342	.734	.135	7.416
	FA	-2.038	2.229	-.328	-.914	.366	.087	11.450
	LIQ	1.396	.761	.251	1.834	.073	.601	1.663

a. Dependent Variable: OPR

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Abstract This research focuses on the relationship between capital structure and the profitability of manufacturing businesses listed on the Nepal Stock Exchange (NEPSE). This research focuses on five regularly traded companies, examining how various capital structure and control factors like debt ratio, debt-to-equity ratio, firm size, fixed assets and liquidity ratio influence profitability indicators like

return on equity (ROE), return on assets (ROA), net profit margin (NPM), and **operating profit ratio** (OPR). **To**