DETERMINANTS OF CAPITAL STRUCTURE OF NEPALESE COMMERCIAL BANKS

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By

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CERTIFICATION OF AUTHORSHIP

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

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REPORT OF RESEARCH COMMITTEE

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APPROVAL SHEET

We, the undersigned, have examined the dissertation entitled **"Determinants of Capital Structure of Nepalese Commercial Banks"** presented by Rubina Nakarmi a candidate for the degree of Master of Business Studies (MBS Semester) and conducted the viva voce examination of the candidate. We hereby certify that the dissertation is worthy of acceptance.

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ABBREVIATIONS

ANOVA	Analysis of Variance
B	Value of Debt
DF	Degree of Freedom
EAT	Earnings After Share
EBIT	Earnings before Interest and Tax
EBT	Earnings after Tax
EPS	Earnings per Share
F/Y	Fiscal Year
GR	Growth Rate
LTDTD	Long Term Debt to Total Debt Ratio
NI	Net Income
NOI	Net Operating Income
ROA	Return on Assets
SPSS	Statistical Package for Social Science Research
TANG	Tangibility
TDA	Total Debt Assets
TDE	Total Debt Equity

ABSTRACT

This research investigates the determinants of capital structure in Nepalese Commercial Banks, using secondary data from four banks, resulting in 40 observations spanning from 2013/14 to 2022/23. Dependent variables include the total debt to total assets and total debt to total equity, while independent variables are return on assets, bank size, assets tangibility, assets growth, and liquidity. Data were sourced from the annual reports of the selected banks. Pearson's correlation coefficients and regression models were used to evaluate the significance and impact of specific bank factors on the capital structure of these banks. The findings reveal that bank size and assets tangibility are positively correlated with total debt to total assets, whereas return on assets and assets growth are negatively correlated with total debt to total assets. Additionally, return on assets, bank size, assets tangibility, and assets growth are negatively correlated with total debt to total equity. This indicates that higher assets growth and return on assets are associated with lower total debt to total assets and total debt to total equity, whereas larger bank size and greater assets tangibility are associated with higher total debt to total assets. The study concludes that return on assets, bank size, and assets tangibility are the most influential factors, while assets growth is the least influential factor affecting the capital structure of Nepalese commercial banks.

Keywords: *Assets Growth, Assets Tangibility, Bank Size, Return On Assets, Total Debt to Total Assets, Total Debt to Total Equity.*

CHAPTER I
INTRODUCTION

1.1 Background of Study

The concept of capital structure is centered around identifying the ideal mix of debt and equity for a company's long-term operations. This blend is vital for firms to secure the necessary funding, which can be achieved through the issuance of various financial instruments. Both investors and creditors are key suppliers of capital, bearing different levels of risk and thus holding claims over the firm's assets and cash flow. Debt holders, while providing financing, also face risks associated with uncertain cash flows and potential defaults on interest and principal payments. Conversely, preference shareholders have priority over common shareholders in dividend payments, but they rank after debt holders. Common shareholders, as the firm's owners, receive the remaining cash after all obligations are fulfilled, but their equity shares are subject to market fluctuations, posing higher risks compared to preference shares and debt (Boateng et al., 2022).

Capital structure, defined as the ratio of debt to equity, plays a crucial role in financial management theory. The financing decision involves determining the appropriate mix of debt and equity to meet investment requirements, ensuring a balance between risk and return for shareholders. An optimal capital structure entails a reasonable proportion of debt and equity, aiming to maximize shareholder wealth. The choice of capital structure directly impacts the firm's overall value, underscoring the importance of selecting a financing mix that enhances shareholder wealth (Gautam & Thapa, 2008).

Firms use various financing sources to meet their financial needs, including both short-term and long-term options. Short-term financing matures within a year or less, while long-term financing supports activities over several years. Expansion or operational needs require capital, often categorized as long-term funds. Capital includes all liabilities excluding current liabilities on the firm's balance sheet and is divided into debt capital and equity capital. These components are essential sources of funding for the firm's operations and growth (Bawuah, 2024).

Capital is critical for businesses, spanning from initial promotion to ongoing operations. Without it, business functions cease, earning it the moniker "Life Blood of Business." Capital originates from various sources, such as shares, debentures, public deposits, and

bank loans. The financial manager must decide on these sources or their blend for funding. Firms often use debt capital due to its tax advantages, flexibility, and cost-effectiveness. Consequently, the capital structure decision is among the financial manager's most critical choices. This decision significantly impacts the firm's weighted average cost of capital (WACC), firm value, and risk profile. To maximize profit and shareholder wealth, businesses must maintain an optimal capital structure, regardless of their nature.

Total capital divides into two components: Debt Capital and Share Capital. Capital Structure includes debt and equity securities, financing a firm's assets. It constitutes the permanent financing composed of long-term debt, preferred stock, and net worth. Assessing a firm's liquidity level is complex, with long-term liquidity potentially influenced by profitability, which is affected by its capital structure. The term encompasses solely long-term debt and total stockholders' investment, though it could involve both short-term and long-term funds (Western & Brigham, 2003).

A commercial bank can be defined as a financial institution that primarily accepts deposits from the public and provides loans, along with various other financial services, to individuals and businesses. Commercial banks play a vital role in the economy by facilitating the flow of funds between savers and borrowers, thereby promoting economic growth and development. In the Nepalese context, commercial banks operate under regulatory frameworks set by the Nepal Rastra Bank, serving as crucial intermediaries in the country's financial system. The capital structure of these banks, including the composition of equity and debt financing, is influenced by various factors such as regulatory requirements, market conditions, profitability, risk management practices, and the overall economic environment. Understanding the determinants of capital structure is essential for policymakers, regulators, and stakeholders in ensuring the stability and efficiency of Nepalese commercial banks (Khanal, 2016).

Debt Capital

Debt capital includes all the long-term borrowing undertaken by the company. This consists of debentures, bonds, and long-term loans, which serve as significant sources of borrowed funds. Firms often utilize substantial amounts of debt capital due to advantages such as tax deductions on interest payments, flexibility, and lower overall costs. However, excessive reliance on debt exposes the firm to high levels of risk.

Equity Capital

Equity capital represents the long-term funds contributed by the firm's owners, namely the stockholders. Essentially, equity capital comprises common stock, paid-in capital (share premium), reserves and surpluses, as well as retained earnings.

Development of Commercial Banks in Nepal

Nepal Bank Ltd., the first modern bank in Nepal, is considered a significant milestone in the country's banking history. It served as the sole financial institution until the establishment of Nepal Rastra Bank in 1956 A.D. Prior to this, due to the absence of a central bank, Nepal Bank had to fulfill the functions of a central bank. Consequently, the Nepal Rastra Bank Act of 1955 was enacted, leading to the establishment of Nepal Rastra Bank in 1956 A.D. as the central bank of Nepal. Nepal Rastra Bank formulates various guidelines for the banking sector (Campus, 2019).

Rastriya Banijya Bank, established in 1965 A.D., became the second commercial bank in Nepal. Recognizing agriculture as a fundamental occupation for many Nepalese, the establishment of the Agricultural Development Bank in 1968 A.D. aimed to prioritize the development of this sector (Campus, 2019).

Presently, Nepal's banking sector is characterized by increased liberalization, modernization, and efficient management. Various types of banks operate within the modern banking system, including central, development, commercial, financial, cooperative, and Micro Credit (Grameen) banks. Evolving technology, such as banking software, ATMs, e-banking, mobile banking, debit cards, credit cards, and prepaid cards, has significantly impacted traditional banking services, enhancing efficiency for both customers and banks.

Commercial banks are crucial suppliers of finance for trade and industry, playing a vital role in the economic and financial landscape of the country. They facilitate capital formation by directing savings into productive areas. Despite the concentration of banks in urban and semi-urban sectors, rural areas in underdeveloped countries like Nepal require diverse banking facilities to bolster their economies. Commercial banks gather dispersed savings and allocate them to productive channels, serving various individuals, businesses, and government establishments. In doing so, they contribute to the flow of

goods and services, influence monetary policy, and serve as resources for development, fostering economic confidence and extending credit to the populace (Campus, 2019).

1.2 Problem Statement

The banking sector in Nepal is undergoing considerable growth but is also encountering several challenges. A significant issue for both businesses and banks is the country's volatile political and economic environment. Additionally, there are few lucrative sectors for banks to invest in, compelling them to lower interest rates to discourage deposits while encouraging loans. Due to political instability and security issues, government focus has shifted away from business and industry sectors. This shift has resulted in weaker regulatory oversight in the banking industry, leading to unfair competition.

Different theories provide varied views on how capital structure affects a firm's value. To delve into this, we analyze the capital structures of Nepalese commercial banks, considering factors such as the debt-equity ratio, long-term debt ratio, and return on assets. The objective of this study is to clarify the current capital structures of these banks and their solvency, thereby illuminating the relationship between various financial metrics and the banks' performance. The problem of statement of the study are discussed below: -

- What are the determinants of capital structure in Nepalese commercial banks?
- What is the impact of ROA, Bank size, Growth Rate, and Tangibility on TDA?
- What is the impact of ROA, Bank size, Growth Rate, and Tangibility on TDE?

1.3 Objective of the Study

Every research project aims to achieve specific goals, and this study is no different. Its primary aim is to analyze and pinpoint the factors influencing the capital structure of commercial banks in Nepal. The specific goals of this study includes: -

- To examine the determinants of capital structure in Nepalese commercial banks.
- To identify the impact of ROA, Bank size, Growth Rate, and Tangibility on TDA.
- To identify the impact of ROA, Bank size, Growth Rate, and Tangibility on TDE.

1.4 Rational of the Study

Commercial banks have the capacity to shape the economic framework of a nation. This research aims to explore the capital structure policies of commercial banks, striving to achieve a balanced use of equity and debt capital. Modern banking has transcended traditional functions such as deposit-taking and loan-granting, now offering a wide array of additional services. Consequently, this study seeks to present a comprehensive overview of commercial banks' capital structures, analyzing factors like earnings per share, cost of capital, and shareholder equity. Specifically focusing on Nepalese commercial banks, the research evaluates their financial positions over several years, utilizing various capital structure tools and methodologies. While primarily concentrating on the capital structure, the study also briefly examines other aspects such as management, profit functions, and overall bank performance.

Conducted with reference to the periodic performance of Nepalese commercial banks, this study aims to enhance the understanding of bank capital structures. By offering a concise analysis over the past five years, it serves as a valuable resource for stakeholders interested in revising bank capital structures. Its findings hold potential benefits for various groups, providing insights into the dynamics of commercial banking and facilitating informed decision-making.

The research could be advantageous to several groups in the following ways: i. Investors: This study offers valuable insights into the debt and equity ratios of selected Nepalese enterprises. Investors can use this information to conduct thorough securities analysis before making investment decisions. ii. Financial managers: Managers in Nepalese enterprises will gain important insights into optimal capital structures, aiding them in achieving the most cost-effective balance between debt and equity. iii. Future researchers: Researchers will find additional data on capital structure and cost of capital in finance literature, benefiting from access to secondary data.

The proposed study aims to deepen understanding of capital structure for future researchers, management scholars, and other stakeholders.

1.5 Limitations of the Study

The research utilizes financial reports and publications from the bank to investigate various aspects of its capital structure, employing the provided figures for calculation purposes. The thesis, conducted by a student rather than an economic or financial analyst, has the following inherent limitations:

- It does not account for other variable determinants of capital structure.
- The scope of the study is confined to selected commercial banks, potentially excluding a wider perspective.
- By using correlation and multiple regression methods with secondary data from chosen commercial banks, the study overlooks other research designs and primary data.
- The focus is on specific internal variables affecting bank capital structure, such as return on assets, bank size, growth rate, and asset tangibility, without considering additional factors.
- The study is limited to data from a decade, spanning from 2013/14 to 2022/23, which restricts the timeframe.

CHAPTER II
LITERATURE REVIEW

A literature review involves the examination of books, scholarly articles, and other relevant sources pertaining to a particular topic, research area, or theoretical framework. It provides a description, summary, and critical evaluation of these works in relation to the research issue being investigated.

This chapter is divided into three sections. The first part presents the theoretical review, concentrating on the concepts and theories related to capital structure. The second part offers an overview of empirical studies on the determinants of capital structure in Nepalese commercial banks. Finally, the third part discusses the current research gap.

2.1 Theoretical Review

The Trade-off Theory

The trade-off theory, rooted in the foundational works of Modigliani and Miller (1963) on taxes, Warner (1977) on bankruptcy and financial distress costs, and insights from the agency literature by Jensen and Meckling (1976), posits that firms aim for an optimal capital structure. This balance is achieved by considering the tax benefits of debt financing, the costs of financial distress, and the agency-related advantages and costs of debt. According to this theory, the optimal capital structure maximizes the firm's value, often indicated by high stock prices and the lowest weighted average cost of capital (WACC). Myers (1984) suggests that firms adhering to the trade-off theory set a target debt-to-value ratio and gradually adjust to it, balancing debt tax shields against bankruptcy costs. Modigliani and Miller (MM) explained that companies using debt typically have higher firm value than those without debt, but excessive debt increases risk and can lower firm value due to the risk of default.

The trade-off theory emphasizes finding a balance where the benefits of debt enhance firm value without leading to excessive financial distress. This delicate balance is crucial as firms seek to optimize their capital structure by carefully weighing the costs and benefits of debt financing. Firms need to strategically manage their debt levels to maximize the advantages of debt tax shields while minimizing the risks associated with financial distress and bankruptcy. By doing so, firms can enhance their overall value and

performance, as indicated by higher stock prices and a lower WACC. The trade-off theory underscores the importance of strategic debt management and its impact on a firm's financial health and long-term success.

Pecking Order Theory

Pecking order theory, extensively studied by Myers and Majluf (1984) and later expanded by Lucas and McDonald (1990), delves into the asymmetric information between managers and investors. Managers inherently possess better insights into the firm's true value and risks. According to Myers (1984), firms prefer financing with retained earnings first. If internal funds are insufficient, debt is utilized, and equity is considered a last resort. This hierarchical approach is grounded in the need to minimize costs related to information asymmetry. The theory suggests that firms adjust their dividend payout ratios to align with investment opportunities and prefer debt over equity due to its relatively lower risk.

Consequently, the pecking order theory highlights the strategic financing choices firms make to optimize resource allocation and minimize external funding costs. Firms adhere to a financing hierarchy to mitigate the adverse effects of asymmetric information, which can lead to higher costs and reduced firm value. By prioritizing internal financing and resorting to external debt and equity only when necessary, firms can maintain greater control over their financial decisions and reduce the risks associated with external financing. This approach allows firms to strategically manage their capital structure and align their financing decisions with their overall business objectives and market conditions.

Net Income Approach

David Durand's Net Income Approach posits that a firm can increase its value or lower its cost of capital by strategically using debt. This approach asserts a positive relationship between capital structure and firm valuation, where increasing the debt-to-equity ratio lowers the overall cost of capital and raises the firm's value. It assumes that both stockholders and debt holders do not change their required rates of return with changes in the debt-equity ratio. Debt financing is considered cheaper than equity due to lower risk and fixed interest rates, suggesting that an optimal capital structure involves significant debt usage.

By leveraging the lower cost of debt, firms can enhance their overall value and financial performance. The Net Income Approach highlights the importance of strategic debt management in optimizing a firm's capital structure and maximizing its value. Firms can achieve a lower overall cost of capital by increasing their reliance on debt financing, thereby enhancing their profitability and competitiveness. However, this approach also requires careful consideration of the risks associated with high levels of debt, as excessive leverage can lead to financial distress and reduced firm value. Therefore, firms must strike a balance between debt and equity to achieve the optimal capital structure and maximize their long-term success.

Net Operating Income Approach (NOI)

Proposed by Durand David, the NOI approach argues that a firm's capital structure is irrelevant to its value. Unlike the NI approach, the NOI approach maintains that the overall cost of capital and firm value are independent of the capital structure. It assumes a constant cost of debt and posits that equity holders demand higher returns for increased leverage risk, negating the benefits of cheaper debt financing. This approach challenges the notion that debt can consistently lower a firm's cost of capital, suggesting instead that market perceptions and equity demands play a critical role in determining a firm's financial health and valuation.

The NOI approach provides a contrasting perspective to other capital structure theories, emphasizing the independence of firm value from capital structure decisions. It suggests that the cost of capital remains constant regardless of the mix of debt and equity, and that equity holders' demands for higher returns offset any potential benefits of cheaper debt financing. This perspective highlights the importance of considering market perceptions and investor expectations when making capital structure decisions. By understanding the implications of the NOI approach, firms can better navigate the complexities of capital structure management and make informed decisions that align with their overall financial strategy and market conditions.

Modigliani and Miller Approach: No Taxes

MM's 1958 study, foundational in capital structure theory, assumed no taxes, bankruptcy costs, or informational asymmetries. It concluded that in perfect markets, a firm's value is unaffected by its capital structure, as the value is determined by future earnings. The first

proposition, MM Proposition I, states that the value of a levered firm equals that of an unlevered firm, assuming no taxes. This principle emphasizes the idea that capital structure is irrelevant in a perfect market, focusing instead on the firm's operational efficiency and profit generation capabilities as the primary drivers of value.

This theoretical framework laid the groundwork for modern capital structure theory, providing a basis for understanding the impact of market imperfections on firm value. The Modigliani and Miller approach highlights the importance of market efficiency and the role of future earnings in determining firm value. It suggests that, in the absence of taxes and other market imperfections, the choice between debt and equity financing does not affect the overall value of the firm. This insight has significant implications for corporate finance, as it underscores the importance of focusing on operational performance and profitability rather than capital structure decisions in maximizing firm value.

Modigliani and Miller II: The Effect of Corporate Taxes

In 1963, MM included taxes in their proposition, showing that debt financing benefits firms through tax-deductible interest payments, thereby increasing firm value. A firm financed with both debt and equity has a higher value than one financed only with equity due to the tax shield on debt. This modification introduced a critical factor—corporate taxes—into the capital structure debate, illustrating how tax considerations can significantly impact a firm's valuation and financing decisions. By acknowledging the role of taxes, MM II provided a more nuanced understanding of capital structure's effect on firm value.

The inclusion of corporate taxes in the Modigliani and Miller framework highlights the importance of tax planning and strategic debt management in enhancing firm value. Firms can leverage the tax benefits of debt financing to reduce their overall tax burden and increase their profitability. This approach underscores the significance of considering tax implications when making capital structure decisions, as the tax shield on debt can provide a substantial advantage in maximizing firm value. By incorporating tax considerations into their financial strategy, firms can achieve a more effective and efficient capital structure, ultimately enhancing their long-term success and competitiveness in the market.

Financial Leverage

Financial leverage involves using fixed-cost funds to enhance returns to stockholders. Defined by Weston and Brigham (1981) and Pandey (1999), financial leverage or "trading on equity" refers to the strategic use of debt to increase equity returns, though it also increases financial risk. This concept emphasizes the potential benefits and risks associated with leveraging, where higher returns are sought through debt financing, but at the cost of increased financial vulnerability. Firms must carefully manage leverage to maximize returns while mitigating the risks associated with high levels of debt.

Financial leverage can significantly impact a firm's financial performance and overall value. By strategically using debt, firms can amplify their returns on equity, enhancing shareholder value and profitability. However, this approach also increases the firm's exposure to financial risk, as higher levels of debt can lead to financial distress and reduced firm value if not managed properly. Therefore, firms need to strike a balance between leveraging for higher returns and maintaining financial stability to achieve optimal performance and long-term success. The concept of financial leverage underscores the importance of prudent debt management and strategic financial planning in maximizing firm value and achieving sustainable growth.

Traditional Theory

The traditional theory, an intermediate between the NI and NOI theories, argues that a judicious mix of debt and equity can increase a firm's value and reduce its cost of capital. Debt is considered a cheaper source of funds compared to equity. However, beyond a certain leverage point, the cost of debt and equity rises, increasing the WACC and reducing the firm's value. This theory suggests a balanced approach to capital structure, advocating for an optimal mix of debt and equity to maximize firm value while controlling for the escalating costs of excessive leverage.

The traditional theory provides a pragmatic perspective on capital structure management, balancing cost and risk considerations. By carefully managing the mix of debt and equity, firms can achieve a lower overall cost of capital and enhance their value. However, this approach also requires careful monitoring of leverage levels to avoid the pitfalls of excessive debt, which can lead to increased financial risk and reduced firm value. The traditional theory emphasizes the importance of strategic financial planning and prudent

debt management in optimizing capital structure and achieving long-term success. By following this balanced approach, firms can enhance their financial performance and competitiveness in the market.

Free Cash Flow Theory

Jensen's (1986) free cash flow theory suggests that high debt levels can increase firm value by imposing financial discipline, particularly in mature firms with excess cash flow. High leverage can prevent management from overinvesting in unprofitable projects, thus enhancing firm value despite the risk of financial distress. By enforcing strict financial constraints, high debt levels can curb managerial excesses and ensure that free cash flow is directed towards value-enhancing activities.

This theory highlights the role of debt as a governance mechanism, aligning managerial actions with shareholder interests and improving overall firm performance. By imposing financial discipline through high leverage, firms can optimize their use of free cash flow and enhance their long-term value. However, this approach also requires careful management of financial risk, as excessive debt can lead to financial distress and reduced firm value. The free cash flow theory underscores the importance of strategic debt management and financial discipline in maximizing firm value and achieving sustainable growth. By following this approach, firms can enhance their financial performance and align their actions with shareholder interests, ultimately achieving greater success and competitiveness in the market.

2.2 Empirical Review

The study titled "Capital Structure and Financial Performance of Commercial Banks in Rwanda" explores the unresolved question since the emergence of traditional theory about whether capital structure influences a firm's value and cost of capital. The research evaluated the impact of capital structure on the financial performance of five selected commercial banks in Rwanda, using time series data from 2010 to 2019. Capital structure was measured using the debt-to-equity ratio and debt-to-asset ratio, while financial performance was assessed through Return on Equity (ROE), Return on Assets (ROA), and Net Interest Margin (NIM). The findings indicated varying trends in capital structure, suggesting no specific optimal debt-to-equity ratio for any of the banks, contrary to the static trade-off theory of capital structure. Similarly, financial performance showed instability across all five banks, indicating a somewhat risky investment environment. For

instance, in the Bank of Kigali and Equity Bank, higher leverage correlated with higher returns to investors, as evidenced by the positive relationship between ROE and the debt-to-equity ratio. Conversely, in BPR Atlas Mara, there was a negative relationship between these two ratios. The study found no relationship between ROA, NIM, and the debt-to-equity ratio in any of the banks, supporting Modigliani and Miller's irrelevance theory of capital structure. These findings suggest that finance managers in these banks can adjust their capital structure to the desired leverage without impacting their financial performance (Kadhafi, 2024).

Aloy and Velnampy (2023) studied the relationship between capital structure and profitability of ten listed Sri Lankan banks over an eight-year period from 2002 to 2009. Using descriptive statistics and correlation analysis, the study found a negative association between capital structure and profitability, except for the association between debt-to-equity and return on equity. The results further suggested that 89% of total assets in the banking sector of Sri Lanka are represented by debt, confirming that banks are highly geared institutions. The outcomes of the study could guide banks, loan creditors, and policy planners in formulating better policy decisions regarding capital structure.

Nawaj (2022) examined the impact of capital structure on firms' profitability in the USA telecom industry using annual data from 2012 to 2020, encompassing 421 firm-year observations for 72 firms. The study employed pooled panel regression, univariate analysis, correlation, and descriptive statistics models to assess the impact of total liabilities to total assets (TLsTAs) and total equity to total assets (TETAs) on profitability, measured by Return on Assets (ROA) and Return on Equity (ROE). The findings revealed that TLsTAs significantly impacted ROA, and TETAs significantly impacted ROA, but both TLsTAs and TETAs had no impact on ROE.

Woldemariam and Gashaw (2022) explored the theoretical framework of capital structure and profitability, reviewing previous research and using empirical data from the Commercial Bank of Ethiopia (CBE) to analyze the impact of capital structure on profitability. The study employed multiple regression analysis and found a significant positive relationship between capital structure and profitability. It suggested that an optimal capital structure for CBE would include a higher proportion of debt. Additionally, asset quality and liquidity positively impacted profitability, while inflation had a negative impact.

Jadah (2021) investigated the determinants of capital structure in Iraqi banks using dynamic panel GMM for the period 2005 to 2019. The study found that bank size, profitability, and age played dominant roles in explaining the variation in long-term debt ratios, while size, profitability, growth, and age were key in explaining short-term debt ratios. The findings could help Iraqi banks choose an optimal capital structure.

Rahman (2020) studied the impact of capital structure on the profitability of publicly traded manufacturing firms in Bangladesh, using a descriptive research design under a quantitative methodology. The results indicated a significant positive impact of debt and equity ratio on ROA and ROE, while the debt-to-equity ratio negatively impacted ROA, ROE, and EPS.

Timilsina (2020) analyzed the determinants of capital structure in Nepalese commercial banks using secondary data from 16 banks over the period 2011/12 to 2017/18. The study found that bank size and asset tangibility were positively correlated with total debt to total assets, while return on assets, asset growth, and liquidity were negatively correlated with total debt to total assets. The study concluded that return on assets, bank size, and asset tangibility were the most influential factors, while asset growth and liquidity were the least influential.

Dhodary (2019) examined the determinants of capital structure in Nepalese trading and manufacturing firms, using descriptive and causal comparative research designs. The study found a positive relationship between asset tangibility and leverage, indicating that firms with more tangible assets use more long-term debt. Asset tangibility, profitability, liquidity, and interest coverage ratio were identified as major determinants of corporate capital structure.

Singh and Bagga (2019) analyzed the effect of capital structure on the profitability of Nifty 50 companies listed on the National Stock Exchange of India from 2008 to 2017. Using descriptive statistics, correlation, and multiple panel data regression models, the study found that an increase in total debt decreased return on assets, while an increase in equity increased return on assets. The study concluded that capital structure significantly impacts firm profitability.

Ariyani and Raharjo (2018) examined the effect of asset structure, profitability, firm size, and company growth on the capital structure of manufacturing companies listed on the

Indonesia Stock Exchange from 2013 to 2017. Using multiple regression analysis, the study found that asset structure had a positive effect on capital structure, while profitability had a negative and significant effect. Company size positively and significantly impacted capital structure, while company growth had a negative and significant effect.

Nasimi (2016) identified significant determinants of capital structure for 15 firms listed on the S&P 500 index, New York Stock Exchange, using panel data from 2010 to 2014. The study found that tangibility had a significant impact on total debt ratio, long-term debt ratio, and short-term debt ratio. Profitability, size, growth, tangibility, cost of financial distress, and non-debt tax shield effects were identified as determinants of capital structure for IT firms in the USA.

Abu Tawahina (2015) analyzed the effect of capital structure on corporate financial performance of Palestinian firms, using return on assets (ROA), return on equity (ROE), and return on investment (ROI) as dependent variables. The study found that short-term debt to total assets (STDTA) and total debt to total assets (TDTA) negatively influenced financial performance, except for ROE. The study recommended that firms achieve an optimal debt ratio with minimum cost to maximize financial performance.

Mutairi and Naser (2015) identified determinants of capital structure in GCC commercial banks, using data from 47 banks from 2001 to 2010. The study found that profitability and liquidity impacted banks' capital structure decisions. It recommended emphasizing long-term debts in commercial banks' financing.

Badar and Saeed (2013) examined the impact of capital structure components on firm performance in the Pakistani food sector, using data from 2007 to 2011. The study found a significant positive impact of long-term debts on firm performance and a significant negative impact of short-term debts. The study recommended firms use long-term debts rather than short-term loans.

Saeed, Gull, and Rasheed (2013) studied the impact of capital structure on the performance of Pakistani banks from 2007 to 2011. The study found a positive relationship between capital structure determinants and banking performance. It recommended further research with a broader selection of capital structure and profitability measures.

Ahmadimousaabad et al. (2013) investigated the determinants of capital structure in Iranian firms listed on the Tehran Stock Exchange from 2001 to 2010. The study found that size and risk were positively related to capital structure, while profitability, growth, and tangibility were negatively related. The study recommended considering financial factors to explain capital structure in future research.

Arulvel and Ajanthan (2013) explained the importance of capital structure decisions for a firm, particularly in a competitive environment. The study investigated the relationship between capital structure and financial performance of trading companies listed on the Colombo Stock Exchange from 2007 to 2011. It found that debt ratio negatively correlated with all financial performance measures, while debt-equity ratio (D/E) only showed a significant relationship with net profit (NP).

Culata (2012) analyzed whether listed companies on the Indonesian stock exchange follow the pecking order theory or trade-off theory. The study found that the trade-off theory was supported, while the pecking order theory was not. It recommended that the capital structure of Indonesian companies is based on optimal capital structure.

Shubita and Alsawalhah (2012) examined the effect of capital structure on the profitability of industrial companies listed on the Amman Stock Exchange from 2004 to 2009. The study found a significantly negative relationship between debt and profitability, suggesting that profitable firms rely more on equity. The study recommended using an optimal capital structure and investigating findings beyond the manufacturing sector in future research.

Table 1

Meta Table

Year	Author	Topics	Objective	Methodology	Findings
2023	Aloy and Velnampy	Capital structure on profitability of Sri Lankan Banks.	Examine the relationship between capital structure and profitability	Descriptive statistics and correlation analysis	Reveals a negative association between capital structure and profitability, except for debt to equity. Debt represents 89% of total assets

					in Sri Lanka's banking sector, suggesting insights for policy decisions on capital structure.
2022	Nawaj	Capital structure effect on firm's profitability.	Test the impact of CapSt (Total Liabilities to Total Assets (TLsTAs) and Total Equity to Total Assets (TETAs)) on profitability.	Pooled panel regression, univariate analysis, correlation, and descriptive statistical models.	Indicates that TLsTAs significantly impact ROA, and TETAs significantly impact ROA, while both have no impact on ROE.
2022	Woldemariam & Gashaw	Impact of capital structure on profitability of commercial bank of Ethiopia (CBE).	Determine the relationship between capital structure and profitability, including factors like asset quality, liquidity, and inflation.	Multiple regression analysis.	Finds a positive relationship between capital structure and profitability in Ethiopian commercial banks, with higher debt proportions being optimal. Asset quality and liquidity positively impact profitability, while inflation negatively affects it.
2021	Jadah H. M	Choice of capital structure of Iraqi banks.	Explore determinants of capital structure in	Dynamic panel GMM	Bank size, profitability, and age significantly

			Iraqi banks		influence long-term debt ratios, while growth and age affect short-term ratios. Provides insights for directors on optimal capital structure choices.
2020	Rahman MD	Impact of capital structure on profitability of publicly traded manufacturing firms in Bangladesh.	Examine the significance and impact on ROA, ROE, AND EPS.	Descriptive research design under qualitative methodology.	Shows a significant positive impact on ROA and ROE with debt and equity ratios, while D/E ratio has a significant negative impact on ROA, ROE, and EPS.
2020	Timilsina	Determinants of capital structure in Nepalese Commercial Banks	Analyze significance and impact of bank-specific factors on capital structure	Pearson's correlation coefficients and regression models	Finds bank size and asset tangibility positively correlate with total debt to total assets. Conversely, return on assets, asset growth, and liquidity negatively affect debt to total assets and equity.
2019	Dhodary	Determinant of capital	Examine their effect	Descriptive and casual	Reveals a positive

		structure in Nepalese trading and manufacturing firms	on corporate capital structure.	comparative research design.	correlation between asset tangibility and leverage, indicating that firms with more tangible assets tend to use more long-term debt, affecting their corporate capital structure.
2019	Singh & Bagga	Effect of capital structure on profitability of firms	Examine the effect on profitability of Nifty 50 companies listed on the National Stock Exchange of India.	Descriptive statistics, correlation, and multiple panel data regression models.	Shows that higher total debt decreases return on assets, while an increase in equity enhances return on assets.

National Context

This research on the "Impact of capital structure on the financial performance of five-star hotels in Nepal" explores the influence of capital structure on the financial performance of Soaltee Hotel, listed on NEPSE, from 2017 to 2021. Utilizing secondary data from the annual reports of the selected hotel, the study employs correlation and multiple regression analysis. The debt equity ratio, total debts to total assets ratio, and shareholder equity ratio are used as independent variables, while the ratio on assets, ratio on equity, and earnings per share serve as dependent variables. Firm size is included as a control variable. The findings from 2017 to 2021 reveal that the debt equity ratio and total debt-total assets ratio significantly impact the ratio on assets, whereas the shareholder equity ratio and firm size do not have a statistically significant effect. Furthermore, firm size and the total debt-total assets ratio significantly influence the ratio on equity, but the debt equity ratio and shareholder equity ratio do not. The analysis also shows that the total debt-total assets ratio does not significantly affect earnings per share, although the debt

equity ratio, shareholder equity ratio, and firm size do have a significant impact on this metric (Bhumika, 2024).

Gurung and Gurung (2022) examined the various factors influencing the profitability of commercial banks in Nepal, considering bank-related and external macroeconomic variables. The study utilized a balanced panel dataset comprising 13 Nepali commercial banks over 12 years (2009-2020), totaling 156 observations. Descriptive statistics and Pearson's correlation analysis were used to assess the status and relationships between independent and dependent variables. The study's findings, derived from fixed-effect panel regressions, revealed that the loan-to-deposit ratio significantly positively impacts the return on assets and net interest margin of commercial banks. Additionally, the growth of economic activities, as measured by GDP growth, significantly influences profits, indicating that increased economic activities lead to higher loans and advances, thereby boosting bank earnings. However, non-performing assets have a weak influence on return on assets but a significant negative effect on equity return. These results suggest that commercial bank profitability can be enhanced by increasing the loan-to-deposit ratio, promoting economic activities, and reducing non-performing assets.

Chalise and Adhikari (2022) investigated the impact of capital structure and firm size on the financial performance of Nepalese commercial banks. The study analyzed a sample of 14 commercial banks, including government-owned, joint venture, and private banks, over the period 2013/2014 to 2018/2019, using secondary data. Regression analysis was employed to estimate the relationships between Return on Assets (ROA) and Earnings per Share (EPS) with measures of capital structure and firm size (total assets). The results showed a negative relationship between ROA and EPS with capital structure (Debt/Equity), but a positive relationship with firm size (total assets). These findings support the idea that a higher level of equity capital in the capital structure of Nepalese commercial banks positively influences financial performance.

Bhatta (2020) examined the relationship between capital structure and profitability of Nepalese commercial banks. The study randomly selected ten commercial banks out of twenty-seven as of March 2020. The theoretical framework categorized capital structure as the independent variable and profitability as the dependent variable. Various measures of capital structure, such as debt assets ratio, debt equity ratio, and interest coverage ratio, were used, while profitability was measured by return on assets, return on equity, and net

interest margin. The study, based on 110 observations from ten commercial banks for 2009-2019, used secondary data sources, including individual bank annual reports and NRB annual financial statistics. Descriptive statistics and correlation analysis were conducted to measure the relationships, and regression models were used to test the significance and effect of capital structure on profitability. The results indicated a negative relationship between bank profitability and both debt assets ratio and debt equity ratio, while a positive relationship was found with interest coverage ratio.

Kharel (2020) explored the relationship between capital structure and profitability of Nepalese commercial banks. Secondary data sources, such as individual bank annual reports and NRB annual financial statistics, were utilized. Descriptive statistics and correlation analysis were performed to assess the relationships, and regression models were used to test the significance and effect of capital structure on profitability. The findings indicated a negative relationship between bank profitability and both debt assets ratio and debt equity ratio, and a positive significant relationship with interest coverage ratio.

Acharya (2019) investigated the relationship between capital structure and bank performance of commercial banks in Nepal, using secondary data from financial statements and NRB annual publications for the period 2008-2015. The study included four independent variables: total debt to equity ratio, long-term debt to assets, short-term debt to assets, and total debt to assets. Profitability, measured by return on assets (ROA) and return on equity (ROE), was the dependent variable. Previous studies, particularly those by Zafar, Zeeshan, & Ahmed (2016) and Ghosh (2007), were consulted to determine the variables. A descriptive research design was adopted, using various descriptive statistical measures. A multiple regression model was applied for data analysis, revealing that long-term debt to assets, total debt to assets, and total debt to equity are statistically significant for ROE and ROA.

Timilsina (2018) examined the determinants of capital structure in Nepalese commercial banks using secondary data from 16 commercial banks, comprising 112 observations for the period 2011/12 to 2017/18. Pearson's correlation coefficients and regression models were used to test the significance and impact of bank-specific factors on capital structure. The results showed that bank size and asset tangibility are positively correlated with total debt to total assets, while return on assets, asset growth, and liquidity are negatively

correlated. Similarly, return on assets, bank size, asset tangibility, asset growth, and liquidity are negatively correlated with total debt to total equity. The findings suggest that higher asset growth, return on assets, and liquidity reduce total debt to total assets and total debt to total equity, while higher bank size and asset tangibility increase these ratios. Return on assets, bank size, and asset tangibility were identified as the most influential factors, while asset growth and liquidity were the least influential in affecting the capital structure of Nepalese commercial banks.

2.3 Research Gap

In reviewing prior studies, it was found that most research (Timilsina 2020, Shrestha 2010) concentrated on examining the factors affecting the capital structure of Nepalese commercial banks. However, it became apparent that no previous research has used the specific sample banks and data featured in the current study. This research is based on data collected from four commercial banks.

In examining earlier theses, it was observed that researchers primarily focused on dissecting various components of capital structure ratios, their interrelationships, debt repayment capacity, and the correlation between metrics such as return on equity and debt, as well as earnings before tax and interest. This study also explores the influence and correlation of capital structure determinants with other indicators, such as bank size, asset tangibility, asset growth, total debt to equity, and total debt to assets ratios of the firms.

CHAPTER III
RESEARCH METHODOLOGY

This chapter delves into the research methodologies employed, encompassing theoretical foundations, data gathering, and analytical processes. It highlights the importance of utilizing appropriate techniques and procedures to examine pertinent variables and comprehend their fundamental relationships. Financial and statistical instruments are utilized to achieve the research goals. The chapter covers aspects such as research design, population and sampling methods, data collection sources, and the techniques and tools used for data processing and analysis.

3.1 Research Design

Research design acts as a blueprint for researchers, directing their inquiries and analyses. It offers a comprehensive plan or structure for data examination. This particular study concentrates on evaluating the internal factors and determinants of commercial banks. To fulfill the study's goals, a descriptive research design is utilized, relying on secondary data for the analysis.

Table 2

Number of commercial banks selected for the study

S. No	Name of commercial banks	Study period
1.	Everest bank	2013/14-2022/23
2.	Himalayan bank	2013/14-2022/23
3.	Siddhartha bank	2013/14-2022/23
4.	Laxmi Sunrise bank	2013/14-2022/23

3.2 Population, Sample, and Sampling Design

This study encompasses 20 commercial banks in Nepal, as identified by the Nepal Rastra Bank (NRB, 2024). Using a convenience sampling method, Everest Bank Limited, Himalayan Bank Limited, Siddhartha Bank Limited, and Laxmi Sunrise Bank Limited

were chosen as the sample for this research. The aim is to explore the factors that influence the capital structure of these selected banks. The analysis utilizes data from the fiscal years 2013/20114 to 2022/2023.

3.3 Nature and Sources of Data

This study primarily utilizes secondary data derived from chosen banks. The data collection process involves acquiring annual reports directly from the banks and downloading them from their official websites. Furthermore, supplementary information is gathered from various sources, including newspapers, magazines, brochures, booklets, periodicals, bulletins, pertinent documents, and journals. These resources are accessible at Tribhuvan University's library and other institutions such as Nepal Rastra Bank.

3.4 Data Processing Procedure and Data Analysis Method

The choice of tools is tailored to the nature of the data and the subject under study. The main technique employed for data analysis is ratio analysis, which determines the quantitative relationship between two variables within financial statements. Moreover, statistical tools and SPSS software version 2007 are also applied in the analysis.

3.5 Data Analysis Tools

The collected information will be systematically organized, ensuring only pertinent and valuable data is categorized according to the research requirements. This data will be displayed using appropriate formats such as tables, graphs, and charts. To analyze the data for this study, specific financial and statistical tools will be utilized, as outlined below.

3.5.1 Financial Tools

Ratio analysis stands out as the most effective method for a comprehensive examination of financial data. This straightforward analytical tool involves comparing various ratios to highlight the connections between different data sets. By employing ratio analysis, one can discern relationships within the data and draw meaningful conclusions. When conducting ratio analysis specifically for banks, a set of ratios relevant to the banking sector is scrutinized.

a. Total Debt to Assets Ratio

This ratio indicates the extent to which a company's assets are funded by debt. It measures the company's leverage level and is calculated by dividing total debt by total assets. The firm's total debt includes long-term debt and current liabilities, while total assets include permanent capital and current liabilities.

$$\text{Total debt assets ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

b. Total Debt to Equity Ratio

The leverage ratio assesses the proportion of funding provided by owners compared to external sources. It also offers insight into the extent of debt financing through the evaluation of fixed charge coverage. This ratio is widely used for evaluating a firm's long-term financial stability. Calculation involves dividing long-term debt by shareholders' equity, which encompasses preference share capital, accumulated losses, and discounts on share issuance. Shareholders' equity is essentially defined as net worth, and the Debt-to-Equity (D/E) ratio, also known as the debt-to-net-worth ratio, is linked to the total debt. This ratio gauges the creditors' and owners' claims against the company's assets.

$$\text{Total debt equity ratio} = \frac{\text{Total debt}}{\text{Total equity}}$$

c. Return on Assets (ROA)

ROA is calculated by dividing net income by total assets. It is a metric commonly referred to as the firm's return on total assets, indicating the efficiency of management in generating profits with the assets at its disposal. ROA quantifies the profit earned per dollar of assets and indicates the effectiveness of bank management in utilizing the bank's investment resources to generate profits. Nassar (2016) found that excessive levels of debt have a detrimental impact on a firm's return on assets.

$$\text{Return on assets (ROA)} = \frac{\text{Net income}}{\text{Total assets}}$$

d. Bank Size

The size of a bank is determined by its total assets. Larger banks tend to have more diversified assets and more consistent cash flow, making them less risky. As a result, they typically face lower debt costs and find it easier to borrow from external markets.

Bank size=Total assets

e. Asset Growth Rate

Asset growth refers to the increase in assets from one year to the next, calculated as the percentage change between the current year's assets and the previous year's assets divided by the assets of the current year. Assets represent the economic resources of a company that are anticipated to contribute to the firm's future activities.

$$\text{Growth rate} = \frac{\text{(assets of current year - assets of previous year)}}{\text{assets of current year}}$$

f. Asset Tangibility

The tangibility of assets refers to the ratio of net fixed assets to total assets. This ratio is seen as a key factor influencing a company's capital structure and overall performance (Chechet et al., 2013). Companies that allocate a higher portion of their retained earnings to tangible assets typically face lower bankruptcy costs and financial distress compared to those relying on intangible assets (Akintoye, 2008).

$$\text{Assets tangibility} = \frac{\text{Fixed assets}}{\text{Total assets}}$$

3.4.2 Statistical Tools

Statistical tools are mathematical methods employed for analyzing and understanding performance. They help describe relationships between variables and interpret outcomes. These tools are crucial for testing set objectives and gaining insights into population information. Various statistical tools are utilized in research, each with its defined purpose, as follows:

a. Mean

One of the most familiar and commonly employed measures of central tendency is the arithmetic mean, also known simply as the mean. This is obtained by adding up all the values in a set and dividing the total by the number of values present. The mean can be computed for any set of numerical data, ensuring its universal applicability.

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

Where,

$\bar{x}$ = Arithmetic mean

ΣX = Sum of Values of all items, and

N =Number of items

b. Standard Deviation

The standard deviation shows how spread out data is. It's calculated as the square root of the average of the squared differences from the mean. A larger standard deviation indicates bigger differences from the mean. A smaller standard deviation suggests more consistency, while a larger one suggests more variation.

The standard deviation (σ or SD) of a set of numerical data is calculated using the following formula:

$$\sigma = \sqrt{\frac{\sum_{i=1}^{N} (x_i - \bar{x})^2}{N}}$$

Where:

- σ (sigma) is the standard deviation
- x_i represents each individual data point in the sample
- $\bar{x}$ ($\bar{x}$) is the mean (average) of the data set
- N is the total number of data points in the sample

- ∑ denotes the summation symbol, indicating that you need to sum the values inside the brackets for each data point.

c. Coefficient of Variation (C.V)

The coefficient of variation is a way to measure how spread out data points are relative to the mean. It's calculated by expressing the standard deviation as a percentage of the mean. This measure is useful for comparing the variability of different sets of data. Importantly, it's a relative measure, meaning it doesn't depend on the units used. A higher coefficient of variation indicates greater variability, while a lower coefficient of variation suggests less variability.

This is given by:

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}}$$

Where,

σ = standard deviation

$\bar{x}$ = mean

d. Correlation Coefficient (r)

Correlation analysis is a statistical method that helps describe how much one variable is linked to another in a linear manner. The correlation coefficient gauges the strength of this relationship between two sets of data. It's a commonly used tool in practical applications. Correlation can be either positive or negative, represented by 'r,' with its value ranging from -1 to +1. A value of -1 indicates a perfect negative correlation, while +1 indicates a perfect positive correlation between variables.

e. Regression Analysis

Regression analysis involves creating a statistical model to forecast the values of the dependent variable by considering at least one independent variable. This method aids in understanding the relationship between variables and their movements relative to each other.

The multiple regression method is used in this analysis and can be described as follows:

Multiple Regression Analysis

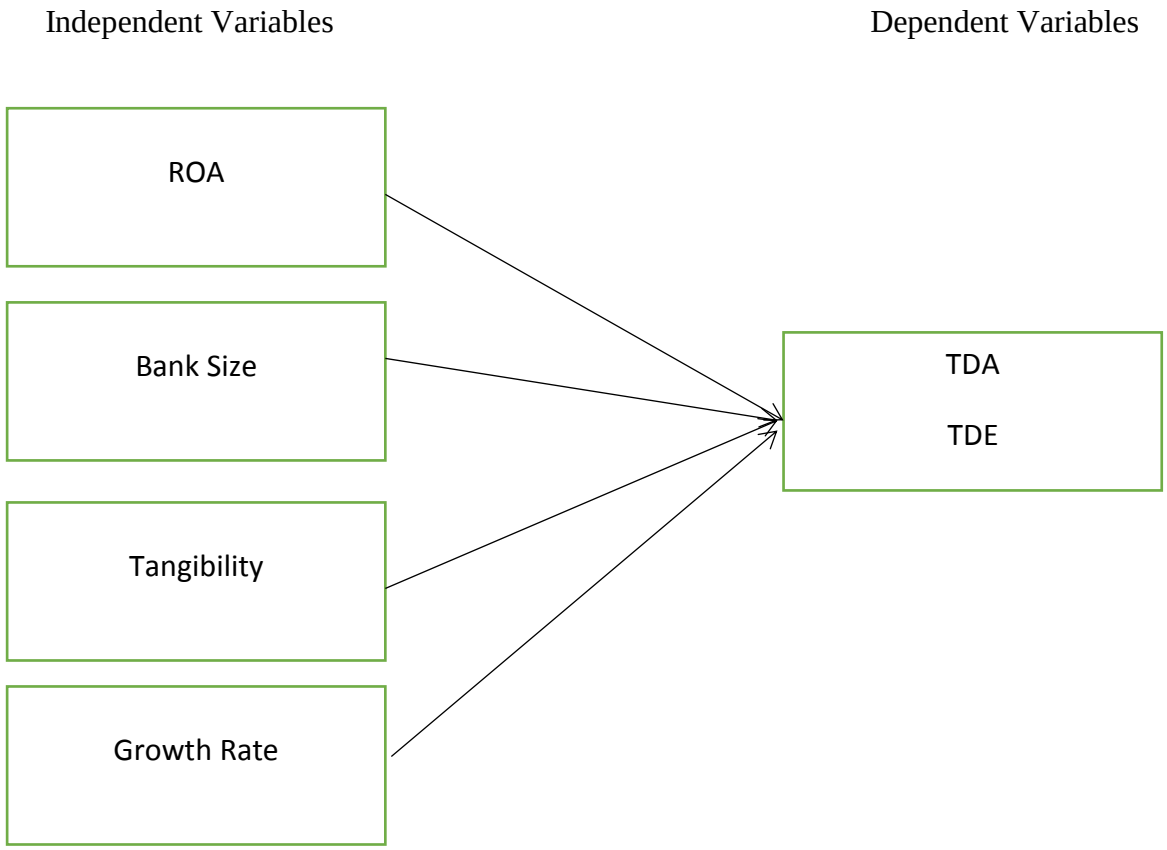
This is described as a statistical tool utilized for forecasting the most likely value of a dependent variable by considering the known values of two or more independent variables. It serves as a logical continuation of simple regression analysis. The focus of this investigation lies in analyzing the provided multiple regression equation.

TDE =a+b1 ROA+b2 SIZE+ b3 TANGILILITY+ b4GROWTH…… (i) .

TDA =a+b1 ROA +b2 SIZE +b3 TANGIBILITY+b4GROWTH……. (ii)

3.6 Research Framework and Variable Definitions

This research delves into the factors influencing capital structure by examining six variables. In this framework, capital structure serves as the dependent variable, as established by prior studies, while the remaining five variables are considered independent variables, also supported by existing literature.



(Source: - Timilsina, 2020)

Figure 1 Research Framework

Independent Variables

Return on Assets (ROA)

Return on Assets (ROA), also known as the return on total assets, is a performance metric calculated by dividing net income by total assets. This indicator assesses the efficiency of management in utilizing available assets to generate profits. It reflects the profit earned for each dollar of assets, thereby showcasing how effectively bank management deploys its resources (Naceur, 2003). Nassar (2016) found that high levels of debt can adversely affect ROA. Similarly, Antoniou et al. (2008) observed that increased profitability typically leads to a lower leverage ratio, influenced by a country's legal and financial frameworks. According to Phung and Le (2013), capital structure negatively impacts performance metrics such as ROA and Return on Equity (ROE), with ROA serving as a crucial indicator of overall profitability relative to total assets.

Bank Size

Bank size is measured based on total assets. Research by Pervan and Visic (2012) indicates that firm size has a moderate effect on leverage. Dogan (2013) also highlighted a relationship between size indicators and capital structure. Larger firms often exhibit better economic performance compared to smaller counterparts, potentially due to economies of scale (Kuncova et al., 2016). However, Olawale et al. (2017) noted that larger firms might face negative impacts on financial leverage, as their size can lead to greater diversification and more stable cash flows, thereby reducing financial risk and lowering debt costs. Alzomaia (2014) similarly reported a positive correlation between firm size and leverage.

Assets Growth Rate

The growth rate of assets is calculated by subtracting the previous year's assets from the current year's assets and then dividing this difference by the current year's assets. This metric provides insight into the economic resources expected to contribute to future operations. Mutai (2014) found a positive but statistically insignificant correlation between financial leverage and asset growth. Conversely, Sarchah and Hajiha (2013) identified a significantly positive effect of asset growth on leverage. Zhao and Wijewardana (2012) demonstrated a positive correlation between financial leverage, growth, and financial strength. Growth often leads to additional capabilities and increased revenue (Maggina and Tsaklanganos, 2012). Firms with significant non-collateralizable

assets may face higher credit costs due to asset substitution effects (Titman and Wessels, 1988).

Assets Tangibility

Assets tangibility is evaluated by dividing net fixed assets by total assets. This measure is essential for assessing capital structure and performance (Chechet et al., 2013). Firms that allocate more retained earnings to tangible assets generally experience lower bankruptcy costs and financial distress, relying less on intangible assets (Akintoye, 2008). Research has shown a positive correlation between asset tangibility and the debt ratio, indicating that greater tangible assets often result in increased leverage (Anafo et al., 2015). According to Kraus and Litzenberger's (1973) trade-off theory, tangible assets enhance borrowing decisions due to their value in bankruptcy scenarios. MacKie-Mason (1990) found that firms with higher tangible assets are more likely to utilize debt, impacting overall performance. Gurunlu and Gursoy (2010) also observed a positive relationship between asset tangibility and leverage.

Dependent Variables

Capital Structure

Capital structure refers to the composition of long-term financing sources, including debentures, extended debt, preference shares, equity shares, and reserves and surplus funds. This concept is crucial for understanding how firms balance different sources of financing to support their operations and growth.

Total Debt to Assets Ratio

The Total Debt to Assets Ratio measures the proportion of company assets financed through debt, serving as an indicator of financial leverage. It is calculated by dividing total debt by total assets. Total debt encompasses long-term debt and current liabilities, while total assets include both permanent capital and current liabilities. Assets, as valuable resources owned by the company, are acquired at measurable costs and are expected to provide future benefits. Intangible assets are often excluded from the net worth calculation to determine the tangible net worth of the company.

Total Debt to Equity Ratio

The Total Debt to Equity Ratio shows the proportion of funding obtained from owners compared to external sources, gauging the extent of debt financing. It is computed by dividing long-term debt by shareholders' equity, which includes preference share capital, accumulated losses, and discounts on share issuance. This ratio, also referred to as the debt to net worth ratio, is used to assess a firm’s long-term financial stability and the balance between debt and equity financing.

CHAPTER IV
RESULTS AND DISCUSSION

This chapter is essential to the research since it concentrates on a through examination and mathematical depiction of the collected data. The data will be carefully examined and presented using a variety of financial and statistical techniques that were previously covered.

In line with the research approach described in Chapter Three, this chapter offers a variety of presentations and analyses for assessing financial performance in connection to capital structure. Numerous financial and statistical instruments are used in these assessments.

As mentioned before, the capital structure consists of a combination of long-term debt, reserves, surplus, equity share capital, and preference shares. The objective is to determine the best capital structure to increase business value, earnings per share (EPS), and total cost of capital. Sections comprise the analysis in this chapter.

4.1 Results

4.1.1 Total debt equity ratio

The debt-to- equity ratio is used to analyze financial risk both by creditors and the firm.

Table 3

Debt-equity ratio

Fiscal year	EBL	HBL	LSBL	SBL
2013/2014	0.25116	0.29721	0.1656	0.02134
2014/2015	0.1872	0.28181	0.164	0.0201
2015/2016	0.18045	0.24695	0.0269	0.051
2016/2017	0.08591	0.21745	0.2352	0.02573
2017/2018	0.15512	0.18987	0.1797	0.0295
2018/2019	0.12757	0.18133	0.0698	0.3386
2019/2020	0.09514	0.54677	0.0761	0.1708
2020/2021	0.12468	0.08556	0.31833	0.6819
2021/2022	0.16364	0.08613	0.64711	0.8219
2022/2023	0.12258	0.27783	0.3927	0.7458
Mean	0.14935	0.24109	0.2275	0.2906
S.D	0.0237	0.17113	0.2176	0.2738
C.V	0.1587	0.70983	0.9565	0.942

Source: Annual report of sample banks

Table 3 displays the Debt-Equity Ratio (D/E) for selected banks over the period from 2013/2014 to 2022/2023. The banks included in the analysis are EBL, HBL, LSBL, and SBL. The mean D/E values over the study period vary for each bank. SBL has the highest mean D/E of 0.2906, indicating its relatively higher debt to equity ratio on average compared to other banks. LSBL follows with a mean D/E of 0.2275. The mean D/E for the remaining banks is as follows: HBL (0.24109) and EBL (0.14935).

HBL demonstrates the highest standard deviation of 0.17113, indicating relatively greater variability compared to other banks. Conversely, EBL has the lowest standard deviation of 0.0237, suggesting relatively stable D/E values over the study period. The coefficients of variation (C.V) for the banks indicate that EBL has the most consistency in its D/E ratio (0.1587), while LSBL has the highest variability (0.9565), followed closely by SBL (0.942).

4.1.2 Total debt assets ratio

The debt to assets ratio measure how much of business is owned by the creditors compared with how much of the company's assets are owned by shareholders.

Table 4

Total debt to assets ratio

Fiscal year	EBL	HBL	LAXMI	SBL
2013/2014	0.01691	0.0254	0.01623	0.02134
2014/2015	0.014	0.02401	0.01458	0.0201
2015/2016	0.01325	0.0214	0.02516	0.051
2016/2017	0.00665	0.0179	0.0214	0.0257
2017/2018	0.01	0.01595	0.01645	0.0295
2018/2019	0.0095	0.01602	0.00724	0.0284
2019/2020	0.0094	0.05967	0.01037	0.01902
2020/2021	0.0138	0.01038	0.0438	0.07796
2021/2022	0.0169	0.01034	0.0765	0.0802
2022/2023	0.0123	0.03134	0.0425	0.06544
Mean	0.0123	0.02325	0.02745	0.04188
S.D	0.0031	0.01873	0.02565	0.026
C.V	0.254	0.80552	0.9348	0.6223

Source: Annual report of sample banks

The Table 4 displays the Total Debt to Assets Ratio (TDA) for selected banks over the fiscal years from 2013/2014 to 2022/2023. The banks included in the analysis are EBL, HBL, LAXMI, and SBL. The mean TDA values over the study period vary for each bank.

SBL has the highest mean TDA of 0.04188, indicating its relatively higher debt to assets ratio on average compared to other banks. LAXMI follows with a mean TDA of 0.02745. The mean TDA for the remaining banks is as follows: HBL (0.02325) and EBL (0.0123).

HBL demonstrates the highest standard deviation (S.D) of 0.01873, indicating relatively greater variability compared to other banks. Conversely, EBL has the lowest standard deviation of 0.0031, suggesting relatively stable TDA values over the study period. Additionally, the coefficient of variation (C.V) indicates the relative variability of the TDA values, with LAXMI having the highest C.V of 0.9348, followed by HBL (0.80552), SBL (0.6223), and EBL (0.254).

4.1.3 Bank Size

Bank size measures the total assets of the bank. Total assets refer to the total amount of assets owned by a bank. It means sum of all current and long term assets held by a bank.

Table 5

Bank Size

Fiscal year	EBL	HBL	LAXMI	SBL
2013/2014	24.557	24.5678	23.7941	23.918
2014/2015	24.7453	24.7189	23.9781	24.112
2015/2016	24.909	24.8366	24.118	24.2405
2016/2017	24.9781	25.0218	24.2781	24.4203
2017/2018	25.3199	25.1397	24.5427	24.6495
2018/2019	25.4584	25.327	24.7341	25.0328
2019/2020	25.4812	25.3984	24.9917	25.2217
2020/2021	25.698	25.48	25.1172	25.5096
2021/2022	25.8595	25.6147	25.396	25.76
2022/2023	25.9437	25.772	25.5822	25.9298
Mean	25.2951	25.1878	24.653	24.8794
S.D	0.4539	0.2085	0.3641	0.6784
C.V	0.0179	0.00827	0.01477	0.02726

Source: Annual report of sample banks

The Table 5 displays the Bank Size, measured by the total assets of selected banks, over the period from 2013/2014 to 2022/2023. The banks included in the analysis are EBL, HBL, LAXMI, and SBL. The mean total asset values over the study period vary for each

bank. EBL has the highest mean bank size of 25.2951, indicating its relatively larger asset base on average compared to other banks. HBL follows with a mean bank size of 25.1878. The mean total assets for the remaining banks are as follows: SBL (24.8794) and LAXMI (24.653).

SBL demonstrates the highest standard deviation of 0.6784, indicating relatively greater variability in its total assets compared to other banks. Conversely, HBL has the lowest standard deviation of 0.2085, suggesting relatively stable total asset values over the study period. The coefficient of variation (C.V) further supports these observations, with SBL having the highest C.V of 0.02726 and HBL the lowest at 0.00827, indicating consistency in bank size for HBL.

4.1.4 Assets growth rate

Assets growth is defined as the percentage of assets of current year minus assets of previous car divided by assets of current year. Assets are the economic resources of a company expected to benefit the firm's future operations.

Table 6

Assets growth rate

Fiscal year	EBL	HBL	LAXMI	SBL
2013/2014	24.7452	24.7189	23.9781	24.112
2014/2015	24.9089	24.8366	24.118	24.2405
2015/2016	24.978	25.0217	24.2781	24.4203
2016/2017	25.3199	25.1397	24.5427	24.6995
2017/2018	25.4584	22.9	22.4682	25.0327
2018/2019	25.4584	25.327	24.7341	25.0327
2019/2020	25.4812	25.3984	24.9916	25.2217
2020/2021	25.6986	25.4808	25.1172	25.5096
2021/2022	25.8595	25.6147	25.396	25.7604
2022/2023	25.9437	25.7723	25.5822	25.9298
Mean	25.3852	25.0211	24.5206	25.991
S.D	0.3822	0.2578	0.3976	0.3889
C.V	0.015	0.01	0.01621	0.01556

Source: Annual report of sample banks

The Table 6 displays the Assets Growth Rate for selected banks over the period from 2013 to 2023. The banks included in the analysis are EBL, HBL, Laxmi, and SBL. The mean assets growth rate values over the study period vary for each bank. EBL has the highest mean assets growth rate of 25.3852, indicating its relatively higher growth in

assets on average compared to other banks. SBL follows closely with a mean assets growth rate of 25.991. The mean assets growth rate for the remaining banks is as follows: HBL (25.0211) and Laxmi (24.5206).

SBL demonstrates the highest standard deviation of 0.3889, indicating relatively greater variability compared to other banks. Conversely, HBL has the lowest standard deviation of 0.2578, suggesting relatively stable assets growth rate values over the study period.

4.1.5 Tangibility

Assets tangibility ratio shows the relationship of the total tangible assets of the bank to the portion owned by the shareholders and it as indicator of the level of the bank leverage.

Table 7

Tangibility

Fiscal year	EBL	HBL	LAXMI	SBL
2013/2014	0.0099	0.0254	0.01634	0.015
2014/2015	0.0098	0.024	0.01212	0.01246
2015/2016	0.0096	0.0214	0.01469	0.0138
2016/2017	0.0089	0.01797	0.01367	0.0111
2017/2018	0.00635	0.01595	0.01204	0.008
2018/2019	0.0596	0.01925	0.01854	0.0085
2019/2020	0.01427	0.02028	0.01619	0.0084
2020/2021	0.01286	0.01909	0.01534	0.0089
2021/2022	0.01244	0.01796	0.12579	0.0083
2022/2023	0.01163	0.01547	0.01079	0.0077
Mean	0.01018	0.01968	0.0142	0.0102
S.D	0.00256	0.00173	0.0027	0.0008
C.V	0.25183	0.08762	0.192	0.0821

Source: Annual report of sampled banks

The Table 7 displays the Tangibility ratio for selected banks over the period from 2013 to 2023. The banks included in the analysis are EBL, HBL, LAXMI, and SBL. The mean Tangibility values over the study period vary for each bank. EBL has the highest mean Tangibility of 0.01018, indicating its relatively higher asset tangibility ratio on average

compared to other banks. This is followed closely by HBL with a mean Tangibility of 0.01968. The mean Tangibility for the remaining banks is as follows: LAXMI (0.0142) and SBL (0.0102).

HBL demonstrates the highest standard deviation of 0.0027, indicating relatively greater variability compared to other banks. Conversely, SBL has the lowest standard deviation of 0.0008, suggesting relatively stable Tangibility values over the study period. The coefficient of variation (C.V) for HBL is 0.08762, indicating it has the lowest relative variability, while EBL shows the highest relative variability with a C.V of 0.25183.

4.1.6 Return on assets

Return on assets measures the profit earned per dollar of assets and reflect how well bank management uses the bank's real investment resources test create profits.

Table 8

Return on assets

Fiscal year	EBL	HBL	LAXMI	SBL
2013/2014	1.76	1.91	1.76	1.28
2014/2015	1.5	1.76	1.5	1.12
2015/2016	1.48	1.54	1.48	1.43
2016/2017	1.38	1.3	1.38	1.74
2017/2018	1.04	1.21	1.04	1.51
2018/2019	1.35	1.94	1.35	1.54
2019/2020	1.52	2.09	1.52	1.59
2020/2021	1.55	1.67	1.55	1.47
2021/2022	1.66	2.21	1.66	1.18
2022/2023	1.2	1.79	1.2	1.42
Mean	1.444	0.977	1.444	1.43
S.D	0.1621	0.4387	0.1621	0.1449
C.V	0.1122	0.4487	0.1122	0.101

Source: Annual report of sampled banks

The Table 8 displays the Return on Assets (ROA) for selected banks over the period from 2013 to 2023. The banks included in the analysis are EBL, HBL, LAXMI, and SBL. The mean ROA values over the study period vary for each bank. HBL has the highest mean ROA of 0.977, indicating its relatively higher profit earned per dollar of assets on average compared to other banks. EBL and LAXMI both have a mean ROA of 1.444, reflecting their similar performance in utilizing the bank's real investment resources to create profits. SBL has a mean ROA of 1.43.

HBL demonstrates the highest standard deviation of 0.4387, indicating relatively greater variability compared to other banks. Conversely, SBL has the lowest standard deviation of 0.1449, suggesting relatively stable ROA values over the study period. The coefficients of variation (C.V) show that SBL has the lowest variability in ROA values with a C.V of 0.101, while HBL has the highest variability with a C.V of 0.4487.

4.2 Descriptive Statistics Analysis of Determinants of Capital structure

Table: 9

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Debt-equity ratio	40	.02	.82	.2272	.20190
Total debt to assets ratio	40	.01	.08	.0262	.02022
Bank Size	40	23.79	25.94	25.0038	.60013
Assets growth rate	40	22.47	25.94	24.9807	.75150
Assets tangibility ratio	40	.01	.13	.0177	.01951
Return on assets	40	1.04	2.21	1.5145	.26586

In Table 10, we present descriptive statistics analyzing the determinants of capital structure among Nepalese commercial banks. The table outlines key variables including Debt-equity ratio, Total debt to assets ratio, Bank Size, Assets growth rate, Assets tangibility ratio, and Return on assets. Firstly, for the Debt-equity ratio, we analyzed data

from 40 banks, observing a range from 0.02 to 0.82. The mean debt-equity ratio is calculated at 0.2272 with a standard deviation of 0.20190, indicating notable variability among the banks in terms of their leverage. Next, the Total debt to assets ratio is assessed across the same 40 banks, showing values between 0.01 and 0.08. The mean ratio is computed as 0.0262, with a standard deviation of 0.02022, reflecting relatively low debt levels relative to assets on average. Bank Size, measured in billions of Rupees, demonstrates consistency among the banks, with values ranging from 23.79 to 25.94. The mean bank size is determined to be 25.0038 billion Rupees, with a standard deviation of 0.60013, indicating relatively uniform bank sizes within the sample. Assets growth rate is observed across the banks, showing movement from 22.47% to 25.94%. The mean growth rate is calculated at 24.9807% with a standard deviation of 0.75150, highlighting significant variability in asset growth performance. Assets tangibility ratio, representing the proportion of tangible assets to total assets, ranges from 0.01 to 0.13 across the banks. The mean assets tangibility ratio is computed at 0.0177, with a standard deviation of 0.01951, suggesting varied levels of asset tangibility within the banks. Lastly, return on assets (ROA) is analyzed, displaying values from 1.04% to 2.21%. The mean ROA is calculated at 1.5145%, with a standard deviation of 0.26586, indicating variation in profitability performance among the banks. Overall, these descriptive statistics provide insights into the capital structure determinants of Nepalese commercial banks. The variability observed across these key variables suggests diverse financial profiles and operational strategies among the banks included in the study.

4.3 Presentation of statistical variables

Statistical tools are the mathematical technique used to analyzed and interpret performance. It is used to describe the relationship between variables and interpret the results. This analysis includes correlation coefficient and the regression coefficient between the following financial variables have been calculated and interpreted.

4.3.1 Correlation Analysis

Correlation analysis is used to assess the relationship between two variables. The correlation analysis results have been presented in Table 10

Table 10

Correlation Analysis

	ROA	SIZE	TDA	TDE	GR	TAN
ROA	1					
SIZE	.181*	1				
TDA	-.319*	.263*	1			
TDE	-.318*	.197*	.946**	1		
GR	-.018*	.741**	.277*	.237*	1	
TAN	.109*	-.173*	-.242*	-.309*	-.161*	1

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

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

In the above table 10, the correlation coefficients indicate the strength and direction of the relationships between the variables. The correlation coefficient between Return on Assets (ROA) and bank size (SIZE) is 0.181*, indicating a weak positive relationship that is statistically significant at the 0.05 level. This suggests that larger banks tend to have slightly higher returns on assets.

The correlation coefficient between ROA and Total Debt to Assets ratio (TDA) is -0.319*, indicating a weak negative relationship that is statistically significant at the 0.05 level. This suggests that higher debt levels relative to assets are associated with lower returns on assets. The correlation coefficient between ROA and Total Debt to Equity ratio (TDE) is -0.318*, indicating a weak negative relationship that is statistically significant at the 0.05 level. This suggests that higher debt levels relative to equity are associated with lower returns on assets.

The correlation coefficient between ROA and Assets Growth Rate (GR) is -0.018*, indicating a very weak negative relationship that is statistically significant at the 0.05 level. This suggests that as the growth rate of a company's assets increases, the return on assets tends to decrease slightly. The correlation coefficient between ROA and Tangibility (TAN) is 0.109*, indicating a weak positive relationship that is statistically

significant at the 0.05 level. This suggests that companies with higher proportions of tangible assets tend to have slightly higher returns on assets.

The correlation coefficient between SIZE and TDA is 0.263*, indicating a weak positive relationship that is statistically significant at the 0.05 level. This suggests that larger banks tend to have higher total debt to assets ratios. The correlation coefficient between SIZE and TDE is 0.197*, indicating a weak positive relationship that is statistically significant at the 0.05 level. This suggests that larger banks tend to have higher total debt to equity ratios.

The correlation coefficient between SIZE and GR is 0.741**, indicating a strong positive relationship that is statistically significant at the 0.01 level. This suggests that larger banks tend to have higher assets growth rates. The correlation coefficient between SIZE and TAN is -0.173*, indicating a weak negative relationship that is statistically significant at the 0.05 level. This suggests that larger banks tend to have lower proportions of tangible assets.

The correlation coefficient between TDA and TDE is 0.946**, indicating a very strong positive relationship that is statistically significant at the 0.01 level. This suggests that banks with higher total debt to assets ratios also tend to have higher total debt to equity ratios. The correlation coefficient between TDA and GR is 0.277*, indicating a weak positive relationship that is statistically significant at the 0.05 level. This suggests that banks with higher total debt to assets ratios tend to have higher assets growth rates.

The correlation coefficient between TDA and TAN is -0.242*, indicating a weak negative relationship that is statistically significant at the 0.05 level. This suggests that banks with higher total debt to assets ratios tend to have lower proportions of tangible assets. The correlation coefficient between TDE and GR is 0.237*, indicating a weak positive relationship that is statistically significant at the 0.05 level. This suggests that banks with higher total debt to equity ratios tend to have higher assets growth rates.

The correlation coefficient between TDE and TAN is -0.309*, indicating a weak negative relationship that is statistically significant at the 0.05 level. This suggests that banks with higher total debt to equity ratios tend to have lower proportions of tangible assets. The correlation coefficient between GR and TAN is -0.161*, indicating a weak negative

relationship that is statistically significant at the 0.05 level. This suggests that banks with higher assets growth rates tend to have lower proportions of tangible assets

4.3.2 Regression analysis

The regression analysis is carried out to determine whether the dependent variable is influence by the given independent variables or not.

Table 11

Variation in TDA explained by ROA, SIZE, GR and TANG

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.480[a]	0.231	0.143	0.01917

a. Predictors: (Constant), TANGIBILITY, ROA, GR, SIZE

The table above 11 presents the results of the regression analysis performed to determine whether the total debt to assets ratio (TDA) is influenced by the return on assets (ROA), bank size (SIZE), assets growth rate (GR), and tangibility (TANG).

R Value (0.480) represents the correlation coefficient, indicating a moderate positive relationship between the independent variables and the dependent variable (TDA). R Square (0.231 value suggests that approximately 23.1% of the variation in TDA is explained by the model, which includes ROA, SIZE, GR, and TANG.

Adjusted R Square (0.143) this value indicates that about 14.3% of the variance in TDA is accounted for by the independent variables, after considering the degrees of freedom. Standard Error of the Estimate (0.01917 value measures the typical distance between the observed values and the regression line, indicating the precision of the model's predictions.

Table 12

Variation in TDE explained by ROA, SIZE, GR and TANG

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.472[a]	0.223	0.134	0.1911331

a. Predictors: (Constant), TANGIBILITY, ROA, GR, SIZE

The table above 12 presents the results of the regression analysis performed to determine whether the total debt to equity ratio (TDE) is influenced by the return on assets (ROA), bank size (SIZE), assets growth rate (GR), and tangibility (TANG).

The correlation coefficient (R) is 0.472, indicating a moderate positive correlation between the independent variables (ROA, SIZE, GR, TANG) and the dependent variable (TDE). The R Square value is 0.223, meaning that approximately 22.3% of the variability in the TDE ratio can be explained by the independent variables included in the model.

The Adjusted R Square value is 0.134, which adjusts the R Square value for the number of predictors in the model. This value indicates that after accounting for the number of predictors, approximately 13.4% of the variance in the TDE ratio is explained by the model. The standard error of the estimate is 0.1911331, which provides a measure of the average distance that the observed values fall from the regression line.

The table 13 shows the analysis of variance (ANOVA)

Table 13

Goodness of fit of regression (ANOVA) for TDA

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.004	4	0.001	2.624	.050[b]
	Residual	0.013	35	0.000		
	Total	0.017	39			

a. Dependent Variable: TDA

b. Predictors: (Constant), TANGIBILITY, ROA, GR, SIZE

Table 13 presents the results of the analysis of variance (ANOVA) conducted to assess the goodness of fit for the regression model predicting Total Debt to Assets Ratio (TDA). The dependent variable in this analysis is TDA, with Tangibility (TAN), Return on Assets (ROA), Assets Growth Rate (GR), and Bank Size (SIZE) as the predictors.

The table shows that the regression model explains a sum of squares of 0.004, while the residual sum of squares is 0.013, resulting in a total sum of squares of 0.017. The degrees of freedom for the regression model are 4, and for the residuals, they are 35, with a total of 39 degrees of freedom. The mean square values are 0.001 for the regression model and 0.000 for the residuals.

The F-statistic, which tests the overall significance of the model, is 2.624. This indicates the ratio of the model's mean square to the residual mean square. The significance level (p-value) associated with the F-statistic is 0.050. This p-value suggests that the regression model is marginally significant at the 5% level, indicating that the predictors collectively explain a significant portion of the variance in TDA.

The table 14 shows the analysis of variance (ANOVA)

Table 14

Goodness of fit of regression (ANOVA) for TDE

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.367	4	0.092	2.512	.043[b]
	Residual	1.279	35	0.037		
	Total	1.646	39			

a. Dependent Variable: TDE

b. Predictors: (Constant), TANGIBILITY, ROA, GR, SIZE

Table 14 presents the analysis of variance (ANOVA) results, demonstrating the goodness of fit for the regression model used in this study. The dependent variable in the model is the total debt to equity ratio (TDE), and the independent variables include tangibility (TAN), return on assets (ROA), growth rate (GR), and bank size (SIZE).

The regression model accounts for a sum of squares of 0.367 with 4 degrees of freedom (df), resulting in a mean square of 0.092. The residual sum of squares is 1.279 with 35 degrees of freedom, leading to a mean square of 0.037. The total sum of squares for the model is 1.646 with 39 degrees of freedom.

The F-value for the regression model is 2.512, indicating the overall fit and significance of the model. The p-value (Sig.) is 0.043, which is below the conventional threshold of 0.05. This suggests that the regression model is statistically significant and that the predictors—tangibility, return on assets, growth rate, and bank size—collectively have a significant relationship with the total debt to equity ratio.

Table 15

Regression results for independent effect of ROA, SIZE, GR and TANG ON TDA

Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	-0.197	0.133		-1.483	0.01
ROA	-1.782	0.799	-0.349	-2.23	0.003
SIZE	0.009	0.008	0.262	1.129	0.04
GR	0.001	0.006	0.052	0.228	0.02
TANGBLTY	-0.655	0.664	-0.15	-0.986	0.03

a. Dependent Variable: TDA

Table 15 presents the regression analysis results examining the independent effect of Return on Assets (ROA), bank size (SIZE), asset growth rate (GR), and tangibility (TANG) on the Total Debt to Assets ratio (TDA). The table includes the unstandardized coefficients, standardized coefficients (Beta), t-values, and significance levels (Sig.) for each variable.

The regression model's constant is -0.197 with a standard error of 0.133, yielding a t-value of -1.483 and a significance level of 0.01. This indicates that when all independent variables are held at zero, the total debt to assets ratio (TDA) is predicted to be -0.197, which is statistically significant.

The coefficient for ROA is -1.782, with a standard error of 0.799. The standardized coefficient (Beta) is -0.349, with a t-value of -2.23 and a significance level of 0.003. This negative coefficient indicates that an increase in return on assets (ROA) is associated with a decrease in the total debt to assets ratio (TDA), and this effect is statistically significant.

Bank size (SIZE) has a positive unstandardized coefficient of 0.009 and a standard error of 0.008. The standardized coefficient (Beta) is 0.262, with a t-value of 1.129 and a significance level of 0.04. This suggests that larger banks tend to have a higher total debt to assets ratio (TDA), and this relationship is statistically significant.

The asset growth rate (GR) shows a coefficient of 0.001, with a standard error of 0.006. The standardized coefficient (Beta) is 0.052, resulting in a t-value of 0.228 and a significance level of 0.02. This indicates a positive but relatively weak and statistically significant association between asset growth rate (GR) and the total debt to assets ratio (TDA).

Tangibility (TANG) has a negative coefficient of -0.655 and a standard error of 0.664. The standardized coefficient (Beta) is -0.15, with a t-value of -0.986 and a significance level of 0.03. This result suggests that higher tangibility is associated with a lower total debt to assets ratio (TDA), and this effect is statistically significant.

Table 16

Regression results for independent effect of ROA, SIZE, GR and TANG ON TDE

Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	-1.191	1.325		-0.899	0.02
ROA	-16.174	7.968	-0.319	-2.030	0.00
SIZE	0.053	0.080	0.156	0.666	0.03
GR	0.021	0.062	0.079	0.345	0.04
TANGBLTY	-10.157	6.623	-0.234	-1.534	0.01

a. Dependent Variable: TDE

The table includes the coefficients for each independent variable, their standard errors, standardized coefficients (Beta), t-values, and significance levels (Sig.).

The constant term in the regression model has an unstandardized coefficient of -1.191 with a standard error of 1.325, resulting in a t-value of -0.899 and a significance level of 0.02. This indicates that the constant term is statistically significant at the 0.05 level.

For ROA, the coefficient is -16.174 with a standard error of 7.968. The negative coefficient and t-value of -2.030, along with a significance level of 0.00, suggest a significant negative relationship between ROA and TDE. Specifically, a higher ROA is associated with a lower TDE.

Bank Size (SIZE) has a coefficient of 0.053 and a standard error of 0.080. The standardized coefficient (Beta) is 0.156 with a t-value of 0.666 and a significance level of 0.03. The positive yet statistically significant effect implies that as the bank size increases, the TDE tends to increase, albeit the effect size is relatively small.

Asset Growth Rate (GR) shows a coefficient of 0.021 with a standard error of 0.062. The Beta value of 0.079, t-value of 0.345, and significance level of 0.04 indicate a positive and statistically significant effect of asset growth on TDE, although the magnitude of the effect is modest.

Tangibility (TANGBLTY) has a coefficient of -10.157 and a standard error of 6.623, resulting in a Beta of -0.234, a t-value of -1.534, and a significance level of 0.01. This negative coefficient signifies a significant negative relationship between tangibility and TDE, suggesting that higher tangibility is associated with a lower TDE.

4.4 Findings

The findings of our study are as follows: -

- SBL has the highest average Debt-Equity Ratio (D/E) of 0.2906, indicating the highest average debt relative to equity among the banks studied.
- LSBL follows with a mean D/E of 0.2275, while HBL and EBL have means of 0.24109 and 0.14935, respectively.
- HBL exhibits the highest standard deviation in D/E ratios at 0.17113, showing greater variability.
- EBL has the lowest standard deviation at 0.0237, reflecting more stable D/E ratios.

- EBL also has the lowest coefficient of variation (C.V) of 0.1587, indicating the most consistency in D/E ratios, while LSBL has the highest variability with a C.V of 0.9565.
- SBL has the highest mean Total Debt to Assets Ratio (TDA) of 0.04188, suggesting the highest average debt relative to assets.
- LAXMI follows with a mean TDA of 0.02745, and HBL and EBL have means of 0.02325 and 0.0123, respectively.
- HBL shows the highest standard deviation in TDA at 0.01873, indicating greater variability.
- EBL has the lowest standard deviation at 0.0031, suggesting more stable TDA values.
- LAXMI has the highest coefficient of variation (C.V) of 0.9348, indicating the highest relative variability in TDA.
- EBL has the highest mean total assets of 25.2951 billion Rupees, indicating the largest average asset base among the banks.
- HBL follows with a mean asset base of 25.1878 billion Rupees, with SBL and LAXMI having means of 24.8794 and 24.653 billion Rupees, respectively.
- SBL exhibits the highest standard deviation in total assets at 0.6784, showing more variability.
- HBL has the lowest standard deviation at 0.2085, indicating more stable asset values.
- SBL also has the highest coefficient of variation (C.V) of 0.02726, suggesting the greatest relative variability in bank size.
- EBL has the highest mean assets growth rate of 25.3852%, indicating the highest average growth in assets.
- SBL follows closely with a mean growth rate of 25.991%, while HBL and LAXMI have means of 25.0211% and 24.5206%, respectively.
- SBL has the highest standard deviation in asset growth rates at 0.3889, indicating greater variability.
- HBL has the lowest standard deviation at 0.2578, suggesting more stable growth rates.
- 4.1.5 Tangibility
- EBL has the highest mean Tangibility ratio of 0.01018, reflecting the highest average asset tangibility.

- HBL follows with a mean Tangibility of 0.01968, while LAXMI and SBL have means of 0.0142 and 0.0102, respectively.
- HBL has the highest standard deviation in Tangibility at 0.0027, showing greater variability.
- SBL has the lowest standard deviation at 0.0008, indicating more stable Tangibility values.
- HBL has the lowest coefficient of variation (C.V) of 0.08762, indicating the least relative variability in Tangibility.
- HBL has the highest mean Return on Assets (ROA) of 0.977, indicating the highest average profit per dollar of assets.
- EBL and LAXMI both have mean ROAs of 1.444, reflecting similar performance, while SBL has a mean ROA of 1.43.
- HBL exhibits the highest standard deviation in ROA at 0.4387, showing greater variability.
- SBL has the lowest standard deviation at 0.1449, indicating more stable ROA values.
- SBL also has the lowest coefficient of variation (C.V) of 0.101, suggesting the lowest variability in ROA.
- The mean Debt-Equity Ratio (D/E) across 40 banks is 0.2272, with a standard deviation of 0.20190, reflecting notable variability in leverage.
- The mean Total Debt to Assets Ratio (TDA) is 0.0262, with a standard deviation of 0.02022, indicating relatively low average debt levels.
- Bank Size averages 25.0038 billion Rupees with a standard deviation of 0.60013, showing relatively uniform bank sizes.
- The mean Assets Growth Rate is 24.9807% with a standard deviation of 0.75150, highlighting significant variability in growth performance.
- The mean Assets Tangibility Ratio is 0.0177, with a standard deviation of 0.01951, indicating varied levels of asset tangibility.
- The mean Return on Assets (ROA) is 1.5145% with a standard deviation of 0.26586, reflecting variability in profitability.
- ROA and bank size (SIZE) have a weak positive correlation of 0.181*, indicating slightly higher returns for larger banks.
- ROA and Total Debt to Assets Ratio (TDA) have a weak negative correlation of -0.319*, suggesting higher debt levels are associated with lower returns.

- ROA and Total Debt to Equity Ratio (TDE) also have a weak negative correlation of -0.318*, indicating similar trends as TDA.
- ROA and Assets Growth Rate (GR) show a very weak negative correlation of -0.018*, suggesting minimal impact of growth rate on returns.
- ROA and Tangibility (TAN) have a weak positive correlation of 0.109*, indicating a slight increase in returns with higher tangibility.
- SIZE and TDA have a weak positive correlation of 0.263*, suggesting larger banks tend to have higher debt-to-assets ratios.
- SIZE and TDE show a weak positive correlation of 0.197*, indicating larger banks tend to have higher debt-to-equity ratios.
- SIZE and GR have a strong positive correlation of 0.741**, suggesting larger banks tend to have higher asset growth rates.
- SIZE and TAN have a weak negative correlation of -0.173*, indicating larger banks tend to have lower proportions of tangible assets.
- TDA and TDE have a very strong positive correlation of 0.946**, indicating banks with higher debt-to-assets ratios also have higher debt-to-equity ratios.
- TDA and GR have a weak positive correlation of 0.277*, suggesting banks with higher debt-to-assets ratios tend to have higher growth rates.
- TDA and TAN show a weak negative correlation of -0.242*, indicating higher debt-to-assets ratios are associated with lower asset tangibility.
- TDE and GR have a weak positive correlation of 0.237*, suggesting higher debt-to-equity ratios are associated with higher growth rates.
- TDE and TAN have a weak negative correlation of -0.309*, indicating higher debt-to-equity ratios tend to have lower asset tangibility.
- GR and TAN have a weak negative correlation of -0.161*, suggesting higher growth rates are associated with lower proportions of tangible assets.
- Total Debt to Assets Ratio (TDA)
- The regression model explains 23.1% of the variation in TDA, with an R Square value of 0.231 and an Adjusted R Square of 0.143.
- ROA has a significant negative impact on TDA, with a coefficient of -1.782.
- Bank size (SIZE) has a positive effect on TDA with a coefficient of 0.009.
- Asset growth rate (GR) shows a positive but weak effect on TDA with a coefficient of 0.001.
- Tangibility (TANG) has a negative impact on TDA with a coefficient of -0.655.

- The regression model explains 22.3% of the variation in TDE, with an R Square value of 0.223 and an Adjusted R Square of 0.134.
- ROA has a significant negative effect on TDE, with a coefficient of -16.174.
- Bank size (SIZE) has a positive effect on TDE with a coefficient of 0.053.
- Asset growth rate (GR) has a positive but modest effect on TDE with a coefficient of 0.021.
- Tangibility (TANG) has a significant negative effect on TDE with a coefficient of -10.157.

4.5 Discussion

Descriptive and multiple regression analysis were employed in this study to investigate the factors influencing the capital structure of a commercial bank in Nepal. The right research technique has been applied. Selected commercial banks' annual reports included secondary data that was gathered. Many statistical and financial tools are employed to get the study's results.

The finding that the ratio of total debt to total assets is negatively correlated with return on assets is in line with Timilsina (2020) and Shrestha (2018). This may be the result of a decline in the ratio of total debt to total assets due to an increase in return on assets.

As per Timilsina (2020) and Shrestha (2018), there exists a positive correlation between the bank size rate and the ratio of total debt to total assets. This could be the result of a larger bank having a greater overall debt to asset ratio.

In line with Timilsina (2020), there is also a positive correlation between tangibility and the ratio of total debt to total assets. This could be the case because a rise in the tangibility of assets causes the total debt to assets to increase.

According to Timilsina (2020), there is a negative correlation between the increase of assets and the ratio of total debt to total assets. This is because a higher rate of asset growth causes the ratio of total debt to total assets to fall.

According to Timilsina (2020), the return on assets shows a negative link between total debt and total equity. This could be as a result of ROA decreasing the ratio of total debt to total equity.

In line with Timilsina (2020), bank size has also been negatively correlated with total debt to equity. This may be due to the fact that a larger bank results in a lower ratio of total debt to total equity.

CHAPTER V
SUMMARY AND CONCLUSION

This is the concluding chapter of this study. This chapter is divided into three sections: summary, conclusion and implications. In this chapter, the study has been summarized in brief and some recommendations have been given which could be useful to stakeholders and to concern companies as well.

5.1 Summary

This study examines the determinants of capital structure in Nepalese commercial banks, focusing on Return on Assets (ROA), bank size, growth rate, and asset tangibility. Using secondary data from the annual reports of Everest Bank, Himalayan Bank, Siddhartha Bank, and Laxmi Sunrise Bank over the fiscal years 2013/14 to 2022/23, the research analyzes financial metrics such as Total Debt to Assets (TDA) and Total Debt to Equity (TDE) ratios. The methodology includes descriptive statistics and regression analysis to understand the relationship between the banks' financial performance and their capital structure.

The analysis reveals distinct variations among the banks in terms of debt and asset metrics. Siddhartha Bank demonstrates the highest average debt-equity ratio and total debt to assets ratio, indicating a greater level of leverage compared to the other banks. In contrast, Everest Bank shows more consistent debt-equity ratios. The study finds that ROA, bank size, growth rate, and tangibility have a moderate effect on the TDA and TDE ratios, with these factors explaining approximately 23.1% and 22.3% of the variability in the capital structure, respectively.

Therefore, the study provides a detailed view of how different factors influence the capital structure of Nepalese commercial banks. It highlights the role of bank size, asset growth, and tangibility in shaping debt and equity levels. The findings underscore the importance of these determinants in understanding the financial strategies of the banks within the study's sample period.

5.2 Conclusion

The study concludes that capital structure decisions among Nepalese commercial banks are significantly influenced by a combination of factors including Return on Assets (ROA), bank size, growth rate, and asset tangibility. The varying levels of leverage observed across the banks suggest that while certain banks may prefer higher debt ratios to enhance their growth potential, others adopt a more conservative approach to maintain financial stability. Siddhartha Bank, with its higher leverage ratios, exemplifies a strategy focused on aggressive growth, while Everest Bank's more stable ratios reflect a cautious approach to debt management.

The analysis indicates that the determinants under study ROA, bank size, growth rate, and tangibility explain a notable portion of the variability in capital structure. Specifically, these factors account for approximately 23.1% of the variation in Total Debt to Assets (TDA) ratios and 22.3% of the variation in Total Debt to Equity (TDE) ratios. This underscores the relevance of these factors in shaping the financial policies and strategies of commercial banks in Nepal.

In conclusion, the study provides valuable insights into how Nepalese commercial bank's balance their capital structure decisions amid varying financial conditions and strategic objectives. It highlights the importance of considering both internal and external factors when making financing decisions, and suggests that banks' approaches to capital structure are influenced by their specific financial and operational contexts.

5.3 Implications

This study also has several implications pointing to interesting avenues for future research. Some implications and suggestions for future research are discussed here.

General Implications

- This study has identified several key determinants of capital structure in Nepalese commercial banks, including Return on Assets (ROA), bank size, growth rate, and tangibility. The analysis reveals that these factors have varying impacts on the Total Debt to Assets (TDA) and Total Debt to Equity (TDE) ratios. However, these variables may not encompass all potential determinants. Future research should explore additional factors, such as macroeconomic conditions and regulatory influences, which could affect capital structure.

- The study is confined to selected commercial banks within a specific timeframe (2013/14 to 2022/23). It is recommended that future research expands the scope to include a broader range of banks or financial institutions and extends the timeframe to provide a more comprehensive understanding of capital structure dynamics.
- The study's reliance on correlation and multiple regression analyses with secondary data from selected banks may limit the generalizability of the findings. Future studies could incorporate primary data, alternative research designs, or advanced statistical techniques to enhance the robustness of the results.

Implications for future studies

The implications for future studies are as follows;

- The study is based on four commercial banks in Nepal. Future research should consider including a wider range of financial institutions, such as development banks, insurance companies, and microfinance institutions, to examine whether the identified determinants of capital structure apply across different sectors of the financial industry.
- The current study utilizes secondary data, focusing on historical financial reports. Future research could benefit from incorporating primary data or a combination of both primary and secondary data to gain insights into stakeholders' preferences and current capital structure practices.
- Given the limited sample size and study period, future research should consider expanding the sample to include more banks and extending the study period. This approach would provide a more robust analysis and a better understanding of long-term trends in capital structure.
- The study primarily employs correlation and multiple regression methods. Future research could explore the use of advanced statistical tools, such as non-linear models or structural equation modeling, to gain deeper insights into the relationships between capital structure determinants.

- Future studies could also explore comparative analyses between Nepalese commercial banks and banks in other emerging markets to identify whether the determinants of capital structure are consistent across different economic contexts. This would enhance the generalizability of the findings and offer valuable comparative insights.

REFERENCES

AbuTawahina, M. S. (2015). *Capital structure and firms*. Gaza: Islamic University.

Agyei, S. K., & Yeboah, B. (2011). Working capital management and profitability of banks in Ghana. *British Journal of Economics, Finance and Management Sciences, 2*(2), 1-12.

Ahmadimousaabad, A., Anuar, M. A., Sofian, S., & Jahanzeb, A. (2013). Capital structure decisions and determinants: An empirical analysis. *International Research Journal of Applied and Basic Sciences, 5*(6), 891-896.

Arulvel, K., & Ajanthan, A. (2013). Capital structure and financial performance: A study of listed trading companies in Sri Lanka. *South Asian Academic Research Journal, 3*(1), 1-13.

Alzomaia, T. S. (2014). Capital structure determinants of publicly listed companies in Saudi Arabia. *The International Journal of Business and Finance Research, 8*(2), 53-67.

Badar, R., & Saeed, A. (2013). Impact of capital structure on performance: Empirical evidence. *European Journal of Business and Management, 5*(29), 78-86.

Bei, Z., & Wijewardana, W. P. (2012). Financial leverage, firm growth, and financial strength in the listed companies in Sri Lanka. *Procedia-Social and Behavioral Sciences, 40,* 709-715.

Bhumika, D. (2024). Impact of capital structure on the financial performance of five-star hotels in Nepal: The Soaltee Kathmandu.

Bhunia, A., & Das, A. (2012). Affiliation between working capital management and profitability. *Interdisciplinary Journal of Contemporary Research in Business, 3*(9), 957-968.

Chen, J. J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research, 57*(12), 1341-1351.

Culata, P. R. (2012). Pecking order theory and trade-off theory of capital structure. *Journal of The WINNERS, 13*(1), 40-49.

Dhodary, S. (2019). *Determinants of capital structure on trading*. Kathmandu: Faculty of Management, Tribhuvan University.

Dogan, M. (2013). Does firm size affect the firm profitability? Evidence from Turkey. *Research Journal of Finance and Accounting, 4*(4), 53-59.

Eljelly, A. M. (2004). Liquidity–profitability tradeoff: An empirical investigation in an emerging market. *International Journal of Commerce and Management, 14*(2), 48-61.

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

Gajurel, D. P. (2005). *Capital structure management in Nepalese enterprises*. Kathmandu: Central Department of Management.

Kadhafi, I. M., Iyakaremye, J. D., Gasheja, F., Twesige, D., Mpiranya, J. M. V., Nabulega, C., & Rutungwa, E. (2024). Capital structure and financial performance of commercial banks in Rwanda. *Rwanda Journal of Social Sciences, Humanities and Business, 3*(1), 60-73.

Karadeniz, E., Kandur, S. Y., & Iskenderoglu, O. (2011). Firm size and capital structure decision: Evidence from Turkish lodging companies. *International Journal of Economics and Financial Issues, 1*(1), 1-11.

Khanqah, V. T., & Ahmadnia, A. (2013). The relationship between investment decisions and financing decisions: Evidence from Iran. *Journal of Basic and Applied Scientific Research, 3*(3), 144-150.

Majumdar, S. K., & Chhibber, P. K. (1999). Capital structure and performance: Evidence from a transition economy on an aspect of corporate governance. *Public Choice, 98*(4), 287-305.

Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information. *The Journal of Finance, 40*(4), 1031-1051.

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

Mutai, B. K. (2014). Assessment of human capital management practices, management support, and performance: A case of public university, Kenya. *International Journal of Management & Information Technology, 10*(3), 1903-1918.

Mutairi, A. A., & Naser, K. (2015). Determinants of capital structure in the banking sector in GCC countries. *Asian Economic and Financial Review, 5*(6), 959-972.

Nasimi, R. N. (2016). Determinants of capital structure. *Double Blind Peer Reviewed International Research Journal, 6*(2), 29-42.

Pervan, M., & Visic, J. (2012). Influence of firm size on its business success. *Croatian Operational Research Review, 3*(1), 213-223.

Pradhan, R. S., & Pokharel, K. (2016). Capital structure and corporate performance: A case of Nepal. *Nepalese Journal of Finance, 3*(4), 1-12.

Saberi, S., & Asadipour, E. (2016). Investigating the relationship between financial growth and strength with leverage ratios of companies listed in Tehran Stock Exchange. *International Journal of Humanities and Cultural Studies, 1*(1), 1994-2006.

Saeed, M. M., Gull, A. A., & Rasheed, M. Y. (2013). Impact of capital structure on banking performance. *Interdisciplinary Journal of Contemporary Research in Business, 5*(1), 393-403.

Sarchah, S. F., & Hajiha, Z. (2013). The effect of company growth indices on financial leverage ratios of companies listed in Tehran Stock Exchange. *Journal of Basic and Applied Science Research, 3*(9), 20-30.

Shrestha, M. (2010). *Capital structure management of commercial banks*. Kathmandu: Tribhuvan University.

Shubita, O. F., & Alsawalhah, J. M. (2012). The relationship between capital structure and profitability. *International Journal of Business and Social Science, 3*(16), 105-112.

Singh, N. P., & Bagga, M. (2019). The effect of capital structure on profitability: An empirical panel data study. *Jindal Journal of Business Research, 8*(1), 65-77.

Sritharan, V., & Vinasithamby, K. (2014). Determinants of capital structure: A study of listed banks, finance, and insurance companies in Colombo Stock Exchange in Sri Lanka. *International Journal of Economics, Commerce and Management, 2*(6), 72-87.

Timilsina, L. P. (2020). Determinants of capital structure in Nepalese commercial banks. *International Research Journal of MMC, 5*(2), 50-70.

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

Zhang, T., Yu, T., Yao, T., & Chen, S. (2011). Asset growth and stock returns: Evidence from Asian financial markets. *Pacific-Basin Finance Journal, 19*(1), 115-139.

Zhao, B., & Wijewardana, W. P. (2012). Financial leverage, firm growth, and financial strength: Evidence in Sri Lanka. *Journal of Asia Pacific Business Innovation & Technology Management, 2*(1), 13-22.

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ABSTRACT This research investigates the determinants of capital structure in Nepalese Commercial Banks, using secondary data from four banks, resulting in 40 observations spanning from 2013/14 to 2022/23. Dependent variables include the total debt to total assets and total debt to total equity, while independent variables are return on assets, bank size, assets tangibility, assets growth, and liquidity. Data were sourced from the annual reports of the selected banks.

Pearson's correlation coefficients and regression models were used to evaluate the significance and impact of specific bank factors on the capital structure of these banks. The findings reveal that bank size and assets tangibility are positively correlated with total debt to total assets, whereas return on assets and assets growth are negatively correlated with total debt to total assets . Additionally, return on assets, bank size, assets tangibility , and assets growth are negatively correlated with total debt to total equity . This indicates that higher assets growth and return on assets are associated with lower total debt to total assets and total debt to total equity , whereas larger bank size and greater assets tangibility are associated with higher total debt to total assets . The study concludes that return on assets, bank size, and assets tangibility are the most influential factors , while assets growth is the least influential factor affecting the capital structure of Nepalese