

**IMPACT OF CAPITAL STRUCTURE ON PROFITABILITY OF NEPALESE
COMMERCIAL BANKS**

A Thesis

By

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CERTIFICATION OF AUTHORSHIP

I certify that the work in this thesis has not been previously submitted for degree or has it been submitted as part of requirement for a degree of those selected commercial banks except as fully acknowledge

I also certify that the thesis has been written by me. Any help that I have requested during the study and preparation of the work has been acknowledged. In addition. I certify that all the required information sources and literature used are indicated in the reference section of thesis.

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RECOMMENDATION LETTER

It is certified that thesis entitled '**Impact of Capital Structure on Profitability of Nepalese Commercial Banks**' submitted by Shushila Aryal is an original piece of research work carried out by candidate under my supervision. Literary presentation is satisfactory and thesis is acceptable. Work evinces the capacity has work at least 6 months after registration the proposal. The thesis is forwarded for examination.

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APPROVAL SHEET

We, the undersigned, have examined the thesis entitled '**Impact of Capital Structure on Profitability of Nepalese Commercial Banks**' presented by **Shushila Aryal**, a candidate for degree of **Master of Business Studies (MBS)** and conducted the viva voice examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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Abbreviation

ATM	=	Automatic Tailor Machine
BAFIA	=	Bank and Financial Institution Act
CEO	=	Chief Executive Officer
D/E	=	Debt Equity Ratio
EBIT	=	Earnings Before Interest and Tax
EPS	=	Earnings Per Share
L & A	=	Loan and Advance
LTDTA	=	Long Term Debt to Total Assets
No.	=	Number
NPAT	=	Net Profit After Tax
ROA	=	Return on Assets
ROE	=	Return on Equity
STDTA	=	Short Term Debt to Total Assets
TA	=	Total Assets
TDTA	=	Total Debt to Total Assets
TDTE	=	Total Debt to Total Equity
WACC	=	Weighted Average Cost of Capital

ABSTRACT

This research aims to investigating the impact of capital structure on profitability of Nepalese commercial banks by selecting five commercial banks Agriculture Development Bank Limited, Nepal Investment Bank Limited, Nepal SBI Bank Limited and Siddhartha Bank Limited. The study considers analytical and descriptive methodology are used to find the result. The study considers annual reports for statistical analysis. Descriptive analysis has conducted by collecting data from the annual report and analytical analysis including correlation, multiple regression analysis, hypothesis testing has been done by using annual data for the reliable result from related websites of the concerned banks NRB websites and publications as well. The study has considers annual of 2012-2018. In this study return on equity, return on assets and earnings per share are used as profitability indicators representing dependent variables and long term debt to total assets ratio, short term debt to total assets ratio, total debt to total assets ratio and total debt to total equity ratio are used as capital structure indicators representing independent variables. Both SPSS and excel are used to analyze these variables. The empirical results that GIBL has higher level of mean value of STDTA and NIBL has higher level of mean of ROE. There is no statistically relationship of ROE with STDTA, LTDTA and TDTE. EPS has very weak negative relationship with STDTA. ADBL has higher level of EPS which is highest among others. GIBL has lowest level of EPS because, its risk and return tradeoff between capital composition is weak than other bank. Composition of capital of GIBL bank leads to lower level of EPS due to high using of equity and low level of income as well as it also leads to lower level of ROA. So, with analysis, GIBL is recommended to increases its proportion of debt to finance assets in coming year.

CHAPTER-I

INTRODUCTION

1.1 Background of the study

The term 'structure' means the arrangement of the various parts. So capital structure means the arrangement of capital from different sources so that the long-term funds needed for the business are raised. Thus, capital structure refers to the proportions or combination of equity share capital, preference share capital, debenture, long-term loans, retained earnings and other long-term sources of fund in the total amount of capital which a firm should raise to run its business. Capital structure is the combination of debt and equity securities that comprise a firm's financing of its assets.

The relative proportion of various sources of funds used in a business is termed as financial structure. Capital structure is a part of the financial structure and refers to the proportion of the various long-term sources of financing. It is concerned with making the array of the sources of the funds in a proper manner, which is in relative magnitude and proportion. The capital structure of a company is made of debt and equity securities that comprise a firm's financing of its assets. It is permanent financing of a firm represented by long-term debt, preferred stock and net worth. So, it related to the arrangement of capital and excludes short-term borrowing. It denotes some degree of permanency as it excludes short-term sources of financing. Again each components of capital structure has a different cost to the firm.

Companies can use either debt or equity capital to finance their possessions. Greatest choice is a combination of debt and equity. In circumstance where interest was not duty deductible, companies' proprietors would be uninterested as to whether they used debt or equity, and where interest was tax deductible, they would make best use of the worth of their organization by spending 100% debt bankrolling (Champion, 2000).

A company's capital structure points out how its assets are financed. When a company finances its operations by opening up or increasing capital to an investor (preferred shares, common shares, or retained earnings), it avoids debt risk, thus reducing the potential that it will go bankrupt. Moreover, the owner may choose debt funding and maintain control over the company, increasing return on the operations. Debt takes the form of a corporate bond issue, long-term loan, or short-term debt. The latter directly impacts the working capital. Having said that, a company that is 70% debt-financed and 30% equity-financed has a debt-to-equity ratio of 70%; this is the leverage. It is very important for a company to manage its debt and equity financing because a favorable ratio will be attractive to potential investors in the business.

Capital can be raised either through the acquisition of debt or through equity. Equity financing comes from the sale of stock to shareholders. Debt can come from many sources, such as bank loans, personal loans and credit card debt, but it must always be repaid at a later date, usually with interest. Both types of capital financing carry some degree of expense that must be paid to access funds, called the cost of capital. For debt capital, this is the interest rate charged by the lender. The cost of equity is represented by the rate of return on investment that shareholders expect in dividends. While debt tends to cost less than equity, both types of capital financing impact a company's profit margins in important ways. Perhaps the clearest example of this is the impact of debt on the bottom line. Somewhere between operational expenses and the net profit figure on a company's income statement lies expenses incurred for the payment of debts. A company with a particularly debt-heavy capital structure makes larger interest payments each year, thereby reducing net profit. Debt allows companies to leverage existing funds, thereby enabling more rapid expansion than would otherwise be possible. The effective use of debt financing result in an increases in revenue that exceeds the expense of interest payments. In addition, interest payments are tax-deductible, reducing a company's overall tax burden.

The impact of equity financing on a company's profit margins is equally important, though not quite so straightforward. While equity funds stimulate growth without requiring repayment, shareholders are granted limited ownership rights, including voting rights. They also expect a return on their investment in the form of dividends, which are only paid if the company turns a profit. A business funded by shareholder equity is beholden to its investors and must remain consistently profitable in order to fulfill this obligation. Business ownership is shared, so the proverbial pie of profits must be divided into a greater number of pieces. A company funded fully by debt may have hefty interest payments each month, but when all is said and done, the profits belong entirely to the business owners. Without shareholder dividends to pay, the profits can be reinvested in the business through the purchase of new equipment or by opening a new location, generating even greater profits down the road.

Another indirect effect of capital structure on profitability is its impact on the potential availability of additional capital if it is needed in the future. A company with a particularly high debt to equity ratio may be seen as unnecessarily risky by both lenders and potential shareholders, making it difficult to raise additional funds. Limited access to capital funding, in turn, limits the business's growth potential, keeping profit margins stagnant.

Capital structure is the mix of long-term sources of funds used by a firm. It is made up of debt and equity securities and refers to permanent financing of a firm. It is composed of long-term debt, preference share capital and shareholder's funds. Capital structure also suggests the ratio between owned capital and borrowed capital. While planning the capital structure, proper balance between debt and equity is essential. There is no hard and fast rule in deciding the composition of capital structure.

Every firm employs the use of capital to do its business. This capital employed may be consisting of equity (ownership contribution) and debt. Debt is any external funding which is repayable and has an associated cost. The cost may be direct such as interest payment or indirect such as agency cost. Debt could be short term (less than one year) or long term (more than a year). Firms may use different forms of debt such as taking a

credit facility directly from a financial institution, issuing (warrants or convertible) bonds, using lease financing or taking a trade credit to finance their business (Agyeman, 2015).

Capital Structure refers to balance between equities and long term liabilities and it sets the firm's leverage. Leverage, in turn, determines how owners and creditors share risks and rewards in proportion to their share of company funding (Muzumber, 2006). Modigliani-Miller (MM) theorem is the broadly accepted capital structure theory because is it the origin theory of capital structure theory which had been used by many researchers. According to MM Theorem, these capital structure theories operate under perfect market. Various assumptions of perfect market such as no taxes, rational investors, perfect competition, absence of bankruptcy costs and efficient market. MM Theorem states that capital structure or finances of a firm is not related to its value in perfect market (Modigliani & M, 1958).

Hence capital structure implies the composition of fund raised from various sources broadly classified as debt and equity. It may be defined as the proportion of debt and equity in the total capital that will remain invested in a business over a long period of time. Capital structure is concerned with the quantitative aspect. A decision about the proportion among the proportion among these types of securities refers to the capital structure decision of an enterprise.

1.1.1 Importance of capital structure

Decisions relating to financing the assets of a firm are very crucial in every business and the finance manager is often caught in the dilemma of what the optimum proportion of debt and equity should be. As a general rule there should be a proper mix of debt and equity capital in financing the firm's assets. Capital structure is usually designed to serve the interest of the equity shareholders.

Therefore instead of collecting the entire fund from shareholders a portion of long term fund may be raised as loan in the form of debenture or bond by paying a fixed annual charge. Through these payments are considered as expenses to an entity, such method of

financing is adopted to serve the interest of ordinary shareholders in a better way. The importance of designing a proper capital structures are value maximization, cost minimization, increase in share price, investment opportunity, growth of the country.

1.1.2 Determinants of the capital structure

Capital structure refers to the way a firm chooses to finance its assets and investments through some combination of equity, debt, or internal funds. It is in the best interests of a company to find the optimal ratio of debt to equity to reduce their risk of insolvency, continue to be successful and ultimately remain or to become profitability. The factors influencing the capital structure (or determinants of capital structure) are discussed as follows:

1. **Financial Leverage or Trading on Equity:** The use of long term fixed interest bearing debt and preference share capital along with equity share capital is called financial leverage or trading on equity. If the assets financed by debt yield a return greater than the cost of the debt, the earnings per share will increase without an increase in the owners' investment. Similarly, the earnings per share will also increase if preference share capital is used to acquire assets. But the leverage impact is felt more in case of debt because (i) the cost of debt is usually lower than the cost of preference share capital, and (ii) the interest paid on debt is a deductible charge from profits for calculating the taxable income while dividend on preference shares is not. Because of its effect on the earnings per share, financial leverage is one of the important considerations in planning the capital structure of a company. The companies with high level of the Earnings Before Interest and Taxes (EBIT) can make profitable use of the high degree of leverage to increase return on the shareholders' equity. One common method of examining the impact of leverage is to analyze the relationship between Earnings Per Share (EPS) at various possible levels of EBIT under alternative methods of financing. The EBIT-EPS analysis is one important tool in the hands of the financial manager to get an insight into the firm's capital structure management. The earnings per share also increase with the use

- of preference share capital but to the act fact that interest is allowed to be deducted while computing tax, the leverage impact of debt is much more.
2. **Growth and Stability of Sales:** The capital structure of a firm is highly influenced by the growth and stability of its sales. If the sales of a firm are expected to remain fairly stable, it can raise a higher level of debt. Stability of sales ensures that the firm will not face any difficulty in meeting its fixed commitments of interest payment and repayments of debt. Similarly, the rate of growth in sales also affects the capital structure decision.
 3. **Cost of Capital:** Every dollar invested in a firm has a cost. Cost of capital refers to the minimum return expected by its suppliers. The expected return depends on the degree of risk assumed by investors. A high degree of risk is assumed by shareholders than debt-holders. The capital structure should provide for the minimum cost of capital. Measuring the costs of various sources of funds is a complex subject and needs a separate treatment. Needless to say that it is desirable to minimize the cost of capital. Hence, cheaper sources should be preferred, other things remaining the same. The main sources of finance for a firm are equity share capital, preference share capital and debt capital. The return expected by the supplier of capital depends upon the risk they have to undertake. For shareholders the rate of dividend is not fixed and the Board of Directors has no legal obligation to pay dividends even if the profits have been made by the company. The loan of debt-holders is returned within a prescribed period, while shareholders can get back their capital only when the company is wound up. This leads one to conclude that debt is a cheaper source of funds than equity. The tax deductibility of interest charges further reduces the cost of debt. The preference share capital is cheaper than equity capital, but is not as cheap as debt is. Thus, in order to minimize the overall cost of capital, a company should employ a large amount of debt.
 4. **Risk:** There are two types of risk that are to be considered while planning the capital structure of a firm viz (i) business risk and (ii) financial risk. Business risk refers to the variability to earnings before interest and taxes. Business risk can be internal as

well as external. Internal risk is caused due to improper products mix non availability of raw materials, incompetence to face competition, absence of strategic management etc. internal risk is associated with efficiency with which a firm conducts its operations within the broader environment thrust upon it. External business risk arises due to change in operating conditions caused by conditions thrust upon the firm which are beyond its control e.g. business cycle.

5. **Cash Flow:** One of the features of a sound capital structure is conservation. Conservation does not mean employing no debt or a small amount of debt. Conservatism is related to the assessment of the liability for fixed charges, created by the use of debt or preference capital in the capital structure in the context of the firm's ability to generate cash to meet these fixed charges. The fixed charges of a company include payment of interest, preference dividend and principal. The amount of fixed charges will be high if the company employs a large amount of debt or preference capital. Whenever a company thinks of raising additional debt, it should analysis its expected future cash flows to meet the fixed charges. It is obligatory to pay interest and return the principal amount of debt. A firm which shall be able to generate larger and stable cash inflows can employ more debt in its capital structure as compared to the one which has unstable and lesser ability to generate cash inflow. Debt financial implies burden of fixed charge due to the fixed payment of interest and the principal. Whenever a firm wants to raise additional funds, it should estimate, project its future cash inflows to ensure the coverage of fixed charges.
6. **Nature and Size of a Firm:** Nature and size of a firm also influence its capital structure. All public utility concern has different capital structure as compared to other manufacturing concern. Public utility concerns may employ more of debt because of stability and regularity of their earnings. On the other hand, a concern which cannot provide stable earnings due to the nature of its business will have to rely mainly on equity capital. The size of a company also greatly influences the availability of funds from different sources. A small company may often find it difficult to raise long-term loans. If somehow it manages to obtain a long-term loan, it

is available at a high rate of interest and on inconvenient terms. The highly restrictive covenants in loans agreements of small companies make their capital structure quite inflexible. The management thus cannot run business freely. Small companies, therefore, have to depend on owned capital and retained earnings for their long-term funds. A large company has a greater degree of flexibility in designing its capital structure. It can obtain loans at easy terms and can also issue ordinary shares, preference shares and debentures to the public. A company should make the best use of its size in planning the capital structure.

7. Control: Whenever additional funds are required by a firm, the management of the firm wants to raise the funds without any loss of control over the firm. In case the funds are raised through the issue of equity shares, the control of the existing shareholder is diluted. Hence they might raise the additional funds by way of fixed interest bearing debt and preference share capital. Preference shareholders and debenture holders do not have the voting right. Hence, from the point of view of control, debt financing is recommended. But, depending largely upon debt financing may create other problems, such as, too much restrictions imposed upon imposed upon by the lenders or suppliers of finance and a complete loss of control by way of liquidation of the company.
8. Flexibility: Flexibility means the firm's ability to adapt its capital structure to the needs of the changing conditions. The capital structure of a firm is flexible if it has no difficulty in changing its capitalization or sources of funds. Whenever needed the company should be able to raise funds without undue delay and cost to finance the profitable investments. The company should also be in a position to redeem its preference capital or debt whenever warranted by future conditions. The financial plan of the company should be flexible enough to change the composition of the capital structure. It should keep itself in a position to substitute one form of financing for another to economies on the use of funds.
9. Requirement of Investors: The requirements of investors is another factor that influence the capital structure of a firm. It is necessary to meet the requirements of

- both institutional as well as private investors when debt financing is used. Investors are generally classified under three kinds, i.e. bold investors, cautious investors and less cautious investor.
10. Capital Market Conditions (Timing): Capital Market Conditions do not remain the same for ever sometimes there may be depression while at other times there may be boom in the market is depressed and there are pessimistic business conditions, the company should not issue equity shares as investors would prefer safety.
 11. Marketability: Marketability here means the ability of the company to sell or market particular type of security in a particular period of time which in turn depends upon - the readiness of the investors to buy that security. Marketability may not influence the initial capital structure very much but it is an important consideration in deciding the appropriate timing of security issues. At one time, the market favors debenture issues and at another time, it may readily accept ordinary share issues. Due to the changing market sentiments, the company has to decide whether to raise funds through common shares or debt. If the share market is depressed, the company should not issue ordinary shares but issue debt and wait to issue ordinary shares till the share market revives. During boom period in the share market, it may not be possible for the company to issue debentures successfully. Therefore, it should keep its debt capacity unutilized and issue ordinary shares to raise finances.
 12. Inflation: Another factor to consider in the financing decision is inflation. By using debt financing during periods of high inflation, we will repay the debt with dollars that are worth less. As expectations of inflation increase, the rate of borrowing will increase since creditors must be compensated for a loss in value. Since inflation is a major driving force behind interest rates, the financing decision should be cognizant of inflationary trends.
 13. Floatation Costs: Floatation costs are incurred when the funds are raised. Generally, the cost of floating a debt is less than the cost of floating an equity issue. This may encourage a company to use debt rather than issue ordinary shares. If the owner's

capital is increased by retaining the earnings, no floatation costs are incurred. Floatation cost generally is not a very important factor influencing the capital structure of a company except in the case of small companies.

14. Legal Considerations: At the time of evaluation of different proposed capital structure, the financial manager should also take into account the legal and regulatory framework (MBA Knowledge Base, 2012)

1.2 Profile of Selected Banks

The profile of selected banks are shown by the following table:

Profile of Selected Banks

Table 1.1(in millions)

Name	ADBL*	SBI#	NIBL+	SBL@	GIBL##
Paid up Capital	10374	8047	10646	8464	8888
Total Assets	1354120	102539	17189	119869	125847
Loan and Advance	100525	75236	120825	86077	92352
Debenture	460	1000	1250	1204	400
Reserve	9922	3254	9772	3932	3229
Deposits	104216	84227	136586	94580	949
No. of branch	40	72	78	104	133
ATM	232	110	108	83	141

Note:* ADBL (2018)

SBI (2018)

+ NIBL (2018)

@SBL (2018)

GIBL (2018)

The table 1.1 indicates, the selected commercial bank used paid up capital. They have huge number of branches and ATM services which are available all over the country. The total deposit of ADBL, SBI, NIBL, SBL and GIBL are 104216, 84227, 136586, 94580 and 949.

1.2.1 Agriculture Development Bank Ltd

With the main objective of providing institutional credit for enhancing the production and productivity of the agricultural sector in the country, the Agricultural Development Bank, Nepal was established in 1968 under the Agriculture Development Bank Limited Act 1967, as successor to the cooperative Bank. The Land Reform Savings Corporation was merged with ADBN in 1973. Subsequent amendments to the Act empowered the bank to extend credit to small farmers under group liability and expand the scope of financing to promote cottage industries. The amendments also permitted the bank to engage in commercial banking activities for the mobilization of domestic resources. Agricultural Development Bank Limited (ADBL) is an autonomous organization largely owned by Government of Nepal. The bank has been working as a premier rural credit institution since the last three decades, contributing a more than 67 percent of institutional credit supply in the country. Hence, rural finance is the principal operational area of ADBL. Furthermore, the bank has also been involved in commercial banking operations since 1984. The enactment of Bank and Financial Institution Act (BAFIA) abolished all Acts related to financial institutions including the ADBN Act, 1967. In line with the BAFIA, ADBL has been incorporated as a public limited company on July 14, 1948. Thus, ADBL operates as a "A" category financial Institution under the legal framework of BAFIA and the Company Act, 1996.

1.2.2 Nepal SBI Bank Ltd

Nepal SBI Bank Ltd. (NSBL) is a subsidiary of State Bank of India (SBI) having 55 percent of ownership. The local partner viz. Employee Provident Fund holds 15% equity and General Public 30%. In terms of the Technical Services Agreement between SBI and the NSBL, the former provides management support to the bank through its expatriate officers including Managing Director who is also the CEO of the Bank. Central Management Committee (CENMAC), consisting of the Managing Director & CEO, Chief Operating Officer & Dy. CEO, Chief Financial Officer, Chief Risk Officer and

Chief Officer, exercises overall control functions with the help of 3 Regional Offices, and oversee the overall operations of the Bank.

NSBL was established in July 1993 and has emerged as one of the leading banks of Nepal, with 869 skilled and dedicated Nepalese employees working in a total of 83 outlets, which includes 72 branches, 7 extension counters, 3 Regional Offices and Corporate Office. With presence in 39 districts in Nepal, the Bank is providing value added services to its customers through its wide network of 110 ATMs (including 2 Mobile ATMs and 4 CRMs), internet banking, mobile wallet, SMS banking, etc. NSBL is one of the fastest growing Commercial Banks of Nepal with more than 8.33 lakhs satisfied deposit customers and over 6.50 lakhs ATM/Debit cardholders. The Bank enjoys leading position in the country in terms of penetration of technology products, viz. Mobile Banking, Internet Banking and Card Services. The Bank is moving ahead in the Nepalese Banking Industry with significant growth in Net Profit with very nominal NPA.

1.2.3 Nepal Investment Bank Ltd

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one of the largest banking group in the world.

Later, in 2002 a group of Nepalese companies comprising of bankers, professionals, industrialists and businessmen acquired the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd., and accordingly the name of the Bank also changed to Nepal Investment Bank Ltd. NIBL has 78 branches, 108 ATM available in Nepal.

1.2.4 Siddhartha Bank Ltd

Siddhartha Bank Limited (SBL), established in 2002 and promoted by prominent personalities of Nepal, today stands as one of the consistently growing banks in Nepal. While the promoters come from a wide range of sectors, they possess immense business acumen and share their valuable experiences towards the betterment of the Bank.

Within a short span of time, Siddhartha Bank has been able come up with a wide range of products and services that best suits its clientele. Siddhartha Bank has been posting growth in its portfolio size and profitability consistently since the beginning of its operations. The management of the Bank has been thoroughly professional. Siddhartha bank has 104 branches, 83 ATM services in Nepal.

Siddhartha Bank has been able to gain significant trust of the customers and all other stakeholders to become one of the most promising commercial banks in the country in less than 15 years of its operation. The Bank is fully committed towards customer satisfaction. The range and scope of modern banking products and services the Bank has been providing is an example to its commitment towards customer satisfaction. It is this commitment that has helped the Bank register quantum growth every year. And the Bank is confident and hopeful that it will be able to retain this trust and move even further towards its mission of becoming one of the leading banks of the industry.

1.2.5 Global IME Bank Ltd

Global IME Bank Ltd. (GIBL) emerged after successful merger of Global Bank Ltd (an “A” class commercial bank), IME Financial Institution (a “C” class finance company) and Lord Buddha Finance Ltd. (a “C” class finance company) in year 2012. Two more development banks (Social Development Bank and GulmiBikas Bank) merged with Global IME Bank Ltd in year 2013. Later, in the year 2014, Global IME Bank made another merger with Commerz and Trust Bank Nepal Ltd. (an “A” class commercial bank). During 2015-16, Global IME Bank Limited acquired Pacific Development Bank Limited (a "B" Class Development Bank) and Reliable Development Bank Limited (a “B” Class Development Bank. Global Bank Limited (GBL) was established in 2007 as an ‘A’ class commercial bank in Nepal which provided entire commercial banking services. The bank was established with the largest capital base at the time with paid up capital of NPR 1.0 billion. The paid up capital of the bank has since been increased to NPR 8.88 billion. The bank's shares are publicly traded as an 'A' category company in the Nepal Stock Exchange.

The bank has diversified interests in hydro power, manufacturing, textiles, services industry, aviation, exports, trading and microfinance projects, just to mention a few.

1.3 Statement of the problem

The choice of capital structure is one of the most important strategic financial decisions of firms. Capital structure is the mix of the long-term sources of funds used by a firm. It is made up of debt and equity securities and refers to permanent financing of a firm. It is composed of long term debt, preference share capital and shareholder's funds. The capital structure of a company is made up of debt and equity securities that comprise a firm's financing of its assets.

In practice, it is noticed that firms procure funds without much of the analysis that may cost them an arm and the leg to survive in the competitive modern business environment for the long. Thus, it seems to be the relevant topic discussion which tries to explore the capital structure of selected banks in Nepal, so that the fact can be revealed whether strengthening their proper mixture in capital structure adds to their competitive advantage.

For the study, following research question has been raised;

1. What is the capital structure position of Nepalese commercial banks?
2. What is the relationship between capital structure and profitability?
3. To what extent does capital structure affects the firm efficiency (profitability) of the selected commercial bank?

1.4 Objectives of the study

The general objective of this study is to examine the impact of capital structure on profitability of commercial banks of Nepal, with an emphasis on performance of business operation of banks. The objectives of study are as follows;

1. To find out the capital structure position of Nepalese commercial banks.
2. To analyze the relationship between capital structure and profitability.

3. To assess how capital structure affects the firm efficiency (profitability) of the selected commercial bank.

1.5 Significance of the study

The significance of the study is theoretical as well as practical or applied. Some of the significances are as follows;

1. This study help to provide information regarding the composition of capital structure on the basis of term to maturity,
2. This study have significant role to play in filling gap in understanding of the impact of capital structure decisions on profitability of selected Nepalese Commercial Banks,
3. It is also hoped that this study may be able to explore the capital structure of selected commercial banks,
4. This study will be useful for researchers, students and for those who wants to have further study in details,
5. Similarly, this study may be fruitful to financial institutions.

1.6 Limitation of the study

Following will be the limitation of the study;

1. There is only small size of sample so that the research might not generalized whole population of 28 commercial banks.
2. The study is limited to only five commercial banks, thus may not represent the whole banking industry of Nepal.
3. The reliability of the secondary data is highly depends on the accuracy of the annual report of the concerned banks.
4. In this study, ROE, ROA and EPS are used as dependent variables and STDTA, LTDTA, TDTA and TDTE are used as independent variable.

5. In this study, descriptive and analytical methods are used to analyze the data.

1.7 Organization of the study

The research will be organized into five chapters, which will be presented in such a way that the research objective will be easily met and research questions will be answered properly. Each chapter's content is further described as follows:

Chapter 1: Introduction

It will contain the general introduction and background of the research with the short overview of selected commercial banks. The chapter will also have the statement of problem, research objective, limitations of the study, significance of the study.

Chapter 2: Review of literature

This chapter will look for the review of the previous studies related to this research subject to know the prevalent situations of capital structure and other factors as well. The first part will deal with the conceptual framework and second part will consider the review of different sources of information.

Chapter 3: Research methodology

This chapter will be considered about the method of doing research on which the whole study is based upon, while it contains the nature and sources of data to be used in the research and sampling method and procedures will be mentioned with data analysis tools.

Chapter 4: Data presentation and analysis

The fourth chapter will deal with the presentations and analysis of the data collected from various sources using different financial and statistical tools with findings and brief comments on them.

Chapter 5: Conclusion

This chapter will have summaries, conclusions and recommendations of the study. Reference and appendices will also be attached in this study.

CHAPTER-II

LITERATURE REVIEW

2.1 Introduction

This chapter describes theoretical base for the study to bring out the link between profitability and capital structure. Also analyze the empirical review of impact of capital structure on profitability.

2.2 Theory of capital structure

One of the major objectives of a firm is to maximize the wealth of owners or shareholders of the firm. The wealth of shareholders' in turn is defined as the current price of the firm's outstanding shares. In order to achieve this objective firm's management should take rational financing decisions regarding optimal capital structure which in turn would minimize its cost of capital (Goyal, 2013).

Under this section, the study discusses the theories that are in line with the study of capital structure. These theories includes: Net Income theory, Net Operating theory, Traditional theory and Modigliani and Miller Model Theory.

2.2.1 Net Income Theory

Net income theory suggests that value of the firm can be increased by decreasing the overall cost of capital through higher debt proportion. According to Net Income approach, if the financial leverage increases, the weighted average cost of capital decreases and the value of the firm and the market price of the equity shares increases.

Net Income Theory to valuation is based on three assumptions. First, there are no taxes; second, the cost of debt is less than of equity. Capitalization votes on the cost of equity: found that the use of debt doesn't change the risk perception of investors. That the financial risk perception of the investors doesn't change with the introduction of debtor change in leverage implies that due to change in leverage, there is no change in either the cost of debt or the cost of equity. The implication of the three assumptions under laying the Net Income Theory is that as the degree of leverage

increases, the proportion of a cheaper source of funds that is debt in the capital structure increases. As a result, the weighted average cost of capital tends to decline, leading to an increase in the total value of the firm. Thus, with the cost of debt and cost of equity being constant, the increased use of debt (increase in leverage), will magnify the shareholder's earning and thereby, the market value of the underway shares (Pandey, 1992).

The financial leverage is, according to the Net Income Theory, an important variable to the capital structure of a firm. With a judicious mixture of debt and equity, firms can evolve the highest and the overall cost of capital is the lowest. At that structure, the market price per share would be maximums.

If the firm uses no debt or if the financial leverage is in zero, the overall cost of capital will be equal to the equity capitalization vote. The weighted average cost of capital will decline.

Capital Structure policy includes a trade-off between risk and return, using more debt raises the riskiness of the firms' earning stream, but it also raises the expected rate of return on equity. Higher risk tends to lower the stock's price, but a higher expected rate of return raises it. The optimal capital structure strikes that balance between risk and return which maximizes the price of the stock. Optimal capital structure also minimizes the firm's overall cost of Capital.

2.2.2 Net Operating Income Theory

Net operating income is a calculation used to analyze the profitability of real estate investments that generate income. Net operating income equals all revenue from the property minus all reasonably necessary operating expenses. Net operating income is a before tax figure that excludes principal and interest payments on loans, capital expenditures, depreciation, and amortization. The metric is also used in other industries but is called earnings before interest and tax.

Another theory of capital structure is the net operating income theory. This theory is dramatically opposite to the Net Income theory. The essence of this theory is that the capital structure decision of a firm is irrelevant. Any change in leverage will not lead to

any change in the total value of a firm and the market price of shares as well as the overall cost of capital is independent of the degree of leverage. The Net Operating Income theory is based on the following propositions:

1. Overall cost of capital/Capitalization rate is constant
2. Residual value of equity
3. Changes in cost of equity capital
4. Cost of debt

2.2.3 The Modigliani and Miller Model Theory

There are three basic proposition of the MM theory; the overall cost of capital (K_0) and the value of the firm (V) are dependent of its capital structure. The cost of capital and firm are constant for all degrees of leverage. The total value is given by capitalizing the expected stream of operating saving at a discount rate appropriate for its risk class.

The second proposition of the MM theory is that the K_e is equal to the capitalization rate of a pure equity stream plus a premium for financial risk equal to the difference between the pure equity capitalization rates (K_e) and (K_i) time the ratio of debt to equity. In other word, K_e increases in a manner to offset exactly the use of a less expensive source of funds represented by debt.

Third proposition of the Modigliani and Miller theory is that the unit off rule for investment purpose is completely independent of the way in which an investment is framed. The proposition that the weighted average cost of capital is constant irrespective of the type of capital structure is based on the following assumption:

- i. Perfect Capital Market: The implication of a perfect capital market is that
 - a. securities are infinitely divisible
 - b. investors are free to buy/sell securities
 - c. Investors can borrow without restrictions on the share terms and conditions as firm.
 - d. there are not transaction cost

- e. information is perfect i.e. another investors has the same information which is readily available to him without cost
- f. investors are rational and behave accordingly
- ii. Given the assumption of perfect information and rationally, all investors have the same expectation of firm's net operating income (EBIT) with which to evaluate the value of firms.
- iii. Business risk is equal among all firms within similar operating investments. That means all firms can be divided into equivalent risk class. The term equivalent risk class means that the expected earnings have identical risk characteristics. Firm's within and industry as assumed to have the same risk characteristics. The categorization of firms into equivalent risk class is on the basis of the industry group to which the firm belongs.
- iv. The dividend payment ration is 100%.
- v. There are no taxes. This assumption is removed later.

2.2.4 Traditional Theory

Traditional theory is midway between net income and net operating income theory. It partakes of some features of both these theories. It is also known as the intermediate theory. It resembles the net income theory in arguing that cost of capital and total value of the firm are not independent of the capital structure. But it doesn't subscribe to the view (NI theory) that value of a firm will necessarily increase for all degree of leverage. In other respect it shares a feature with the net operating theory that beyond a certain degree of leverage, the overall cost of capital increases leading to a decrease in the total value of the firm. But it differ from the net operating theory in that is does not argue that the weighted average cost of capital is constant for all degree of leverage.

The crux of the traditional view relating to leverage and valuation is that through judicious use of debt equity proportion, a firm can increase its total value and thereby reduce its overall cost of capital. The rationale behind this view is that debt is a relatively cheaper source of funds as compared to ordinary shares. With a change in leverage, that is, using more debt in place of equity; a relatively cheaper source of funds replaces

sources of funds which involve a relatively higher cost. Thus obviously causes a decline in the overall cost of capital. If the debt- equity ratio is raised further the firm would become financially more risky to the investors who would penalize the firm by demanding a higher equity capitalization rate. But the increase in equity capitalization rate may not be as high as to neutralize the benefit of using cheaper debt. In other words, the advantages arising out of the use of debt is so large that, even after allowing for higher equity capitalization rate the benefit of the use the cheaper source of funds is still available.

If however, the amount of debt is increased further, two things are likely to happen, owing the increased financial risk, equity rate will record a substantial rate and the firm would become very risky to the creditors who also would like to be compensated by a higher return such that cost of debt will rise. The use of debt beyond a certain point will, therefore, have the effect of raising the WACC and conversely the value of the firm. Thus up to a point degree of leverage the use of debt will favorably affect the value of a firm; beyond that point use of debt will adversely affect it. At that level of debt-equity ratio, the capital structure is an optimal capital structure.

2.3 Determinants of Profitability

The measures of bank profitability usually considered in the literature on the determinants of bank profitability are the return on assets (ROA), return on equity (ROE) and in some cases, the net interest margin (NIM). Bank profitability determinants are usually explained in the form of internal and external variables. The internal variables are those that determine bank's management decisions and specifically affect policy objectives, such as liquidity risk, credit risk, bank size, financial leverage and expense management. The external variables are those that emanate from industry related factors and macroeconomic influences, which includes competition and the level of concentration, the level of unemployment, inflation rate and real per capita income.

There are various determinants of a firm's profitability; these determinants might have a positive or undesirable result on the company's profitability. In view of this, the study

will discuss the following determinants of profitability; liquidity, firm size, Leverage and efficiency.

2.3.1 Liquidity

Profitability and liquidity has interrelationship with each other. Liquidity is related to the position of working capital and liquid assets like average receivable, stock, cash, liquidity in any firm is necessary in order to meet short term obligation. But there should be optimal level of liquidity in a firm. The appropriate level of liquidity concept can be explain by following points:

1. Higher level of liquidity in firm negatively affect firm's profitability because idle level of assets each nothing or due to the less productive as set, profitability decrease as higher level of current assets holding in the firm.
2. Insufficient liquidity or current assets in the firm will also have effect on short term obligation payment capacity of the firm, that ultimately loads to close of goodwill in long run.

So, appropriate tradeoff between liquidity and profitability is necessary to maintain optimal level of liquidity assets.

Padachi (2006) notes that liquidity affects the firm profitability, liquidity risk can be evaluated using two approaches, these include: liquidity ratios and liquidity gap. Liquidity gap is the difference between liabilities and assets at present and future data. Liquidity is described as the amount of capital that is available for spending and investing. Capital includes cash, credit and equity. Most institutions prefer using debt because it is a cheaper source of financing because of tax deductions. Stable firms are more liquidity because they invest in short-term investments that generate free cash flows, their long-term investments are examined to ensure that they earn a return on investment. It is argued that a positive gap between assets and liabilities is equal to a deficit. Liquidity ratios can also be described as balance ratios that establish liquidity trends of a firm. The firm should aim at achieving a proper balance between assets and liabilities to minimize the cost of findings while ensuring that funds for investment can be

accessed in a short period of time. Firm can achieve this through holding a portfolio of assets which can easily be converted into liquid assets. Examples include treasury bills that are short-term in nature and risk free (Padachi et al., 2008).

2.3.2 Firm Size

Generally firm size indicates the capital injected by the firm in order to operate business. Whereas the size of the firm can be determined on the basis of operational activities and amount of capital of the firm. So, the firm which has scope of large number of activities with higher level of capital will generate large profit than in having less capital and operational sized firm.

For a firm to be profitable, it means that its assets have to generate income which is important for investments and meeting short-term financial responsibilities. There exists substantial evidence that firm size is instrumental in contributing towards firm profitability. Stable firms opt to diversify their products lines and investment and thus minimize their risk of bankruptcy. So, a optimistic link is anticipated between company scope and leverage (Graham, 2000). Institutional stockholders opt to capitalize hugely in stable companies in the trust that they possess lower peril of insolvency since big companies have access to resources needed and ability to minimize risks of their stock investment. Therefore, they are fewer susceptible to monetary suffering and insolvency peril (Wald, 1999).

Large firms get discounts from suppliers because they deal with bulky products, this minimizes their operational costs and impact positively on their profitability. This is also supported by Jonsson (2007) who maintains that large banks are profitable as compared to smaller banks. They have a large portfolio of customers that attracts more customers while retaining present customers. Such banks possess a huge turnover of customers and a huge assets base and can easily access credit because of its credibility from stakeholders and financial stability (Williamson, 2001).

2.3.3 Leverage

Leverage indicates the proportion of debt capital, total capital injected by the firm. Higher level of leverage or debt capital increases the financial risk of the firm and as higher level of leverage increase risk and return is well but this high of debt employment by firm will have adverse effect on long term solvency capacity of the firm. So, there should be appropriate level of debt employment in the firm. Generally, optimum ratio 40% debt and 60% equity.

Abor (2005) define leverage as the amount of debt used to finance company assets. A firm that utilizes more debt compared to leverage is perceived to be highly levered. Empirical review depicts a mixture of reaction on the link between these two variables (leverage and profitability) as follows: Robb & Robinson (2009), Ruland & Zhou (2011) depict a positive linkage between leverage and profitability. In view of this, Jensen (1976) indicates the presence of a optimistic linkage amid leverage and firm profitability. note that use of debt increases firm market value. Financial leverage was found to contribute positively towards company's yield on equity considering the influence of earnings of the firm's possessions which is more as compared to the aggregate cost of interest of firm's debt. Financial leverage impacts positively on return on equity taking into account the earnings power of a firm's assets that are more compare to the average cost of debt. Abor (2005) posits the being of a positive linkage amid total debt and profitability (profitability was measured using return on equity). Equally, Chandrakumarmangalam & Govindasamy (2010) found that leverage was positively linked to profitability and wealth of shareholders that was maximized when firms utilized excessive debt.

2.3.4 Efficiency

The efficiency of the firm is related to the production and productivity of the firm. The firm which can produce higher level of production with reasonable cost amount, is the firm operating at efficiency level. So, higher the productivity leads to the higher level of profitability. So, there is positive relation between profitability and efficiency.

Berger & De Young (2010) define efficiency as level of performance which defines a procedure that utilizes the lowermost sum of contributions to generate outputs. Efficiency is the use of all contributions to produce a agreed yield which include individual period and vigor. Competence is a notion that can be measured by decisive the proportion of valuable production to entire contribution. It mitigates the surplus of incomes for example physical resources, vigor and period while seeking to achieve the expected yield. Drake & Hall (2013) note that efficiency of firm suggests better profitability, huge amounts of resources directed in, better charges and service value for customers and better security in terms of enhanced wealth buffer in engrossing peril.

The information got from evaluation of the firm's performance can be utilized in improving the general competence of processes and in turn, this might contribute towards realizing a viable verge Hasan & Marton (2009). Charge efficiency looks at the charge expenses of firm (interest plus noninterest expenditures) as a purpose of designated variables supposed to effect the cost arrangement of firms and a price remaining, which replicates the prices that cannot be clarified by the firm. These unsolved prices are presumed to be a quantity of a firm's additional expenses or rate incompetence. Study will measure efficiency using cost efficiency which will be computed by dividing total operating expenses divided by total income.

2.4 Review of Journal and book

Mesquita & Lara (2006) in their article "Capital Structure and Profitability: The Brazilian Case", have shown a great dispersion among the several capital sources used by the Brazilian companies, exception to the equity, the main component, and the one that presents smaller variability. As to the relationship between return rates and debt, the results indicate inverse relationship for the long run financing, and direct relationship for short-run financing and equity.

The facts of the most lucrative companies are the ones with lowest debt are in consonance with other empiric evidences. However the low debt level, when compared to

the debt level of more developed economies, such as United States, Japan, Germany and United Kingdom, indicates that the Brazilian companies are using debt in a extremely conservative way. Perhaps the high interest rates practiced at the Brazilian market, the instability of the exchange rate politics and remaining atmosphere of uncertainty of the local economy which conveys operational and financial risks that hinder the managerial planning and inhibit the adoption of more sophisticated debt politics can explain that fact.

In this article, the variables which are used as rate of return to the equity, total debt of short and long run, and the total equity in the relation to the total liability. Raja & Dave, (2013) in their article 'Capital Structure and Profitability': Indian Evidences. Samiksha, It is undoubted that capital structure decision is imperative over profitability of the company. They analyzes the magnitude and direction of the impact that capital structure decision has on profitability, employing debt negatively affects profitability. Further, it can be conferred that combining short term and long term debt is of vital importance to the finance manager. Merely, keeping debt capital in capital structure and receiving benefits of trading on equity is not enough. However, several times finance managers chose to finance assets depending upon their objectives, irrespective of benefits / pitfalls of concerned source of finance. In this article dependent variable is return on equity and independent variables are short term debt, long term debt and total liability.

Raheman, Zulfiqar, & Mustafa (2007) in their article, "Capital Structure and Profitability: Case of Islamabad Stock Exchange", have stated that firstly there is negative relationship between the long term debt and profitability verifying first hypothesis, which means that firms with having more long term debt are less profitable. This can be attributed to the interest cost bear by the company for a long term debt financing, which increase the fixed costs of the product and resultantly decrease the profitability. Secondly numeric verifications and statistical analysis shows negative relationship between net operating profitability and debt ratio.

Thirdly the relationship of profitability with percentage of equity in the total financing has direct relationship meaning thereby more equity leads to more profits. Fourthly size with profitability numerical calculations have accepted that with the increase in size of

the firm the profitability increases. The study has taken the N-log of sales as proxy for growth in size and the increase in sales result in more profits. In this article the dependent variable is net operating profitability and independent variables are debt ratio, long term debt to liabilities, equity to liabilities and size of the firm.

Abor (2008) has examined the determinants of capital structure decisions of publicly quoted firms, large unquoted firms and small and medium enterprises (SMEs) in Ghana. Publicly quoted and large unquoted firms were found to have higher debt ratios than small and medium enterprises (SMEs). Overall, listed and unquoted firms exhibit different financing behavior from that of SMEs. Short term debt constitutes a relatively high proportion of total debt of Ghanaian firms.

Listed firms are better positioned to raise equity finance from the stock market, and large unquoted firms are also able to access equity finance from institutional investors usually through private placements. Firm size was found to have a positive relationship to short-term debt ratio of SMEs and debt ratios of quoted firms, but negative with respect to long-term debt ratio in the case of unquoted firms. The results of this study seem to support the pecking order hypothesis, given that both long-term and short-term debts have inverse associations with profitability in all the sample groups. Firm growth was found to have a positive association with long-term debt for the unquoted firms' sample and short-term debt ratio for SMEs. Limited liability companies are more likely to obtain long-term debt finance relative to sole-proprietorship businesses.

The issue of capital structure is an important strategic financing decision that firms have to make. Clearly, the pecking order theory appears to dominate the Ghanaian capital structure story. It is therefore important for policy to be directed at improving the information environment. In this article the variables are long term debt ratio, short term debt ratio, age of the firm, size, assets structure, profitability, growth, dividend, risk, tax, and ownership.

Driffield & Pal (2008) have stated that many firms in the worst affected countries indulged in some reckless capital structure behavior. There is evidence that firms in the

worst affected countries not only have higher leverages (being the result of high debt even in a situation of deteriorating assets), but also tend to have lower speed of adjustment than their counterparts in the least affected countries. This general ranking is robust to various alternative specifications and sample selections.

The case of Malaysia is particularly interesting in this context: while by virtue of its rigorous institutional and legal environment and also access to market based finance, the country was successful to restrict leverages to a generally lower level, it was not so successful to ensure speedy adjustment of capital structure and was among the worst affected countries hit by the crisis. This analysis also identifies some important adjustment mechanisms: (a) adjustment speeds are greater for larger firms and firms in the top leverage quartile who tend to have access to cheaper credit, as reflected in a comparison of effective interest rates. (b) Firms with more cash flow tend to have faster speed of adjustment. (c) Firms with only long-term debt however have lower speed of adjustment. (d) Firms in countries with tighter regulations and access to equity finance tend to have lower leverage and higher speed of adjustment (with the exception of Malaysia). (e) In general financially distressed firms in most countries tend to have higher speed of adjustment, revealing cases of sudden adjustment; the latter is especially evident in the post-crisis period, highlighting the fact that lessons have been learnt after the crisis.

Tailab (2014) investigated the impact of capital structure on financial performance as measured by return on equity and return on assets for a period of nine year. It was hypothesized that these factors are not significantly associated with firm's profitability. The main result indicate that the total debt has a significant negative impact on ROE and ROA, while size in terms of sales has significantly negative effect only on ROE of the American firms. However, a short debt significantly has a positive influence on ROE. An insignificant either negative or positive relationship was observed between long term debt, debt to equity and size in terms of total assets and profitability. In this article dependent variables are ROA and ROE and independent variables are short term debt, long term debt, total debt, debt to equity, size.

Mahmood (2009), has assessed the profitability and capital structure among property developers and contractors in Malaysia. The study uses a sample of 25 property companies and 20 construction companies for a period of eight years from 2000 through 2008.

The study provides insight into the performance of property developers and contractor's profitability and factors impacting capital structure decisions of these firms to the Malaysia economy. Thus, the key contributions of the study were to explore and expand on existing literature from a Malaysian perspective. The study presented that the developers in Malaysia are larger and more profitable compared to contractors' counterparts. This is because their capital gearing and debt equity ratio are less than those of contractors. Further, contractors are heavily burden with debt and the need to service this debt is very high and thus, this led to low pre-tax profit margin as well as profit margin. The results from the regression analysis indicate that capital gearing is negatively related with net profit margin and price earnings ratio for both property and construction sectors. The simple argument for the result is that the high gearing firms have to service their large amount of debt which in turn will reduce their profit margin and PE ratio, regardless of sector size.

Hutchison & Cox (2006) has demonstrated that for banks in the U.S. there is a positive relationship between financial leverage and the return on equity for both the 1996-2002 and the 2003-2009 periods. Furthermore, the proportionality of financial leverage to return on equity appears to have been more or less maintained between the later more regulated time periods as opposed to the earlier freer period.

Moreover, when viewing the return on assets relationship a similar pattern as the return on equity to capital relationship is observed. That is, ROA is inversely related to financial leverage. Again, there seems to be a dearth of evidence to sustain the notion that the 1996-2002 periods is different than the 2003-2009 period. Bank performance has been robust to the regulatory environment that they have faced. In this article, used variables are capital, ROA, ROE.

Fred (2015) analyzed that the relationship between capital structure variables (independent variables) against profitability variables (dependent variable). Fixed effect regression method was used to measure the relationship between capital structure and return on asset (ROA) while random effect regression model used to test the relationship between capital structure and return on equity of manufacturing companies (ROE). Moreover, partial correlation technique also used to measure the relationship between the study variables in order to support the regression results.

This study revealed that, capital structure of listed manufacturing companies in Tanzania affect company profitability in terms of return on assets positively. On the other side, capital structure of listed manufacturing companies has negative relationship with company profit in terms of shareholders fund or return on equity. The results indicate that debt usage has more advantage for companies that depend much on assets to generate profit than those that depend much on equity or shareholders fund to generated company profit.

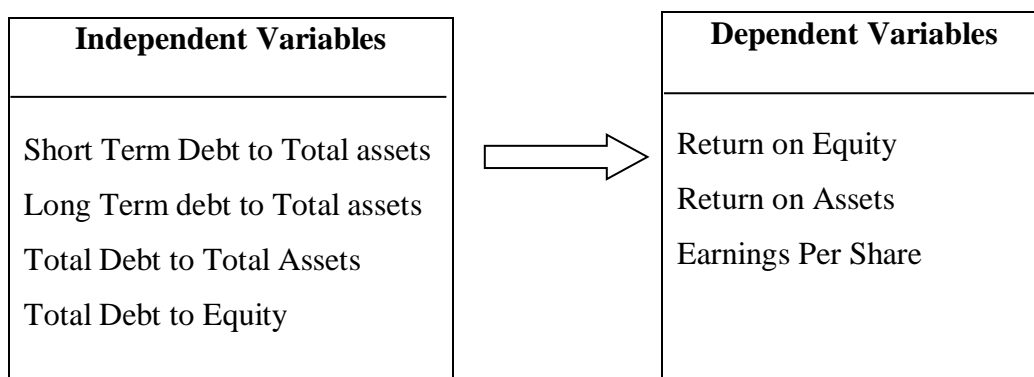
2.5 Conceptual framework of Capital structure

Conceptual framework:

From review of journal and article, different authors used different variable to find out the result. In this study, the selected dependent and independent variables are as follows;

2.5.1 Conceptual relationship between dependent and independent variable of this study is as follows:

Figure 2.1



Sources: Fred (2015)

Fig: Conceptual Framework of the study

The sources of funding for a business are divided into two main categories, owners' funding (equity) and borrowed funding (debt). The objective of the business owners is to increase their wealth and the performance of firms. In relation to this objective the increase in the performance is measured by the increase in return on the shareholders' funds. The independent variable in this study was capital structure and the dependent variable was financial performance. The concept illustrated above assumes that increasing the level of the debt in the capital structure will increase the turnover of the business and hence its profit, resulting in an increase in returns to the business owners. An increase in interest rate is expected to result in reduced borrowing, increased interest expenses and thus reduced returns to business owners.

Model

$$Y_{EPS} = \beta_0 + \beta_1 (SDTA) + \beta_2 (LDTA) + \beta_3 (TDTA) + \beta_4 (TDTE) + \varepsilon$$

$$Y_{ROA} = \beta_0 + \beta_1 (SDTA) + \beta_2 (LDTA) + \beta_3 (TDTA) + \beta_4 (TDTE) + \varepsilon$$

$$Y_{ROE} = \beta_0 + \beta_1 (SDTA) + \beta_2 (LDTA) + \beta_3 (TDTA) + \beta_4 (TDTE) + \varepsilon$$

Where,

β_0 is the intercept, $\beta_1, \beta_2, \beta_3, \beta_4$ is the independent Variable, ε . Are the error terms

Hypothesis

H1: There is a relationship between short term debt ratio and banks profitability in Nepal.

H2: There is a relationship between long term debt ratio and banks profitability in Nepal.

H3: There is a relationship between total debt to total asset ratio and banks profitability in Nepal.

H4: There is a relationship between total debt to total equity ratio and banks profitability in Nepal.

2.6 Research gap

All of the above studies reviewed have concentrated mainly on how the capital structure should be, or how much the company should earn the profit, but none of the theses have put effort to find out the relationship between capital structure and profitability. To fulfill such gap, the present study has been conducted to illuminate the impact of capital structure on profitability, along with the capital structure of the bank, and the profitability position.

While review of literature various studies show that the study are done on other variables but this study also consider EPS as dependent variable and trying to analyze the effect of capital structure composition on shareholders wealth as well.

During review of literature, there was found most of the research is done considering capital structure and profitability for manufacturing company rather than banking sectors. Very few studies are done by considering Earning per share as dependent variable but study use earnings per share as dependent variable and conduct the analysis both profitability and capital structure of banking sectors as well.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Research Design

A research design is the overall path or method by which the research study is guided. It serves as a framework for the study directing the collection and analysis of the data, in which the research method is to be utilized and sampling plan to be followed. Research designed is the way through which we find the required answer of the research questions and ultimately meet the research objectives. The research design of this study is descriptive as well as analytical.

3.2 Population and sampling

There are twenty eight commercial banks operating in the country. However, the analysis of all these commercial banks in terms of capital structure and its impact on profitability will be need great effort to conduct. There are few commercial banks to issue debenture and bond. There are 28 commercial banks. In which the banks which have issued debenture and bond is very rare, Only there are five commercial banks that have record of issuing debt composition in their capital structure from the year of 2012. So, for the research, the population and sampling banks seems to be same and equal as well.

1. Nepal SBI Bank Limited
2. Agriculture Development Bank Limited
3. Nepal Investment Bank Limited
4. Siddhartha Bank Limited
5. Global IME Bank limited

3.3 Nature and Sources of Data

The data used in this are fully secondary in nature. Published annual reports of concerned banks are taken as basic source of data. The relating to financial performance are directly obtained from the concerned banks. Similarly, related books, magazines, journals,

articles, reports bulletins, and Nepal Rastra Bank, related website from internet etc. as well as supplementary data.

3.4 Analysis of Data

Financial as well as statistical tools are used to make the analysis more convenient, reliable and authentic. For the data analysis, different items from the balance sheet and other statement are tabulated. Their ratios, percentage, mean, standard deviation, and coefficients of correlation are then calculated and presented in the tables. To study the relationship between two or more variables, correlation coefficients are also calculated. Following are the brief introduction of the financial and statistical tools used in this study.

3.4.1 Financial Ratio

Under the financial tool, mainly capital structure and profitability of the banks have been measured.

1. Capital structure

Capital structure can be a mixture of a firm's long-term debt, short-term debt, common equity and preferred equity. A company's proportion of short- and long-term debt is considered when analyzing capital structure. When analysts refer to capital structure, they are most likely referring to a firm's debt-to-equity (D/E) ratio, which provides insight into how risky a company is. Usually, a company that is heavily financed by debt has a more aggressive capital structure and therefore poses greater risk to investors.

a. Short Term Debt to total Assets

The short-term debt to total assets ratio is a measurement representing the percentage of corporation's assets financed with loans or other debt obligation lasting less than one. This ratio provides a general measure of the short-term financial position of a company.

$$\text{Short – term Debt to Total Assets Ratio} = \frac{\text{Short Term Debt}}{\text{Total Assets}}$$

b. Long Term Debt to total assets

The long-term debt to total assets ratio is a measurement representing the percentage of corporation's assets financed with loans or other debt obligation lasting more than one. This ratio provides a general measure of the long-term financial position of a company, including its ability to meet financial requirements for outstanding loans. If a business has a high long-term debt to assets ratio, it suggests the business has a relatively high degree of risk, and eventually it may not be able to repay its debts. This makes lenders more skeptical about loaning the business money and investors more leery about buying shares. In contrast, if a business has a low long-term debt to assets ratio, it can signify the relative strength of the business. However, the assertions an analyst can make based on this ratio vary based on the company's industry as well as other factors, and for this reason, analysts tend to compare these numbers between companies from the same industry.

$$\text{Long-term Debt to Total Assets Ratio} = \frac{\text{Long term Debt}}{\text{Total Assets}}$$

c. Total Debt to Assets

Total debt to total assets is a leverage ratio that defines the total amount of debt relative to assets. This metric enables comparisons of leverage to be made across different companies. The higher the ratio, the higher the degree of leverages (DOLs) and, consequently, financial risk. The total debt to total assets is a broad ratio that includes long-term and short-term debt (borrowings maturing within one year), as well as all assets – tangible and intangible. Total debt to total assets is a measure of the company's assets that are financed by debt, rather than equity. This leverage ratio shows how a company has grown and acquired its assets over time. Investors use the ratio to not only evaluate whether the company has enough funds to meet its current debt obligations, but to also assess whether the company can pay a return on their investment. Creditors use the ratio to see how much debt the company already has and if the company has the

ability to repay its debt, which will determine whether additional loans will be extended to the firm.

$$DebtRatio = \frac{Total\ Debt}{Total\ Assets} \times 100$$

d. Total Debt to equity

The Debt/Equity (D/E) Ratio is calculated by dividing a company's total liabilities by its shareholder equity. These numbers are available on the balance sheet of a company's financial statements. The ratio is used to evaluate a company's financial leverage. The debt/equity ratio is also referred to as a risk or gearing ratio. The formula for calculating the D/E ratio is:

The balance sheet requires total shareholder equity to equal assets minus liabilities, which is a rearranged version of the balance sheet equation ($Assets = Liabilities + Shareholder\ Equity$). These balance sheet categories may contain individual accounts that would not normally be considered "debt" or "equity" in the traditional sense of a loan or the book value of an asset. Because the ratio can be distorted by retained earnings/losses, intangible assets, and pension plan adjustments, further research is usually needed to understand a company's true leverage.

Because of the ambiguity of some of the accounts in the primary balance sheet categories, analysts and investors will often modify the D/E ratio to be more useful and easier to compare between different stocks. Analysis of the D/E ratio can also be improved by including short-term leverage ratios, profit performance, and growth expectations.

The debt/equity ratio measures a company's debt relative to the value of its net assets, it is most often used to gauge the extent to which a company is taking on debt as a means of leveraging its assets. A high debt/equity ratio is often associated with high risk; it means that a company has been aggressive in financing its growth with debt.

$$\text{Debt} - \text{Equity Ratio} = \frac{\text{Long term Debt}}{\text{Total Equity Capital}}$$

2. Profitability Ratio

Profitability ratios are a class of financial metrics that are used to assess a business's ability to generate earnings relative to its associated expenses. For most of these ratios, having a higher value relative to a competitor's ratio or relative to the same ratio from a previous period indicates that the company is doing well.

a. Earnings per share

Earning per shares serves as an indicator of a company's profitability. It is the portion of a company's profit allocated to each outstanding share of common stock. An earning per shares is generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio.

$$EPS = \frac{NPAT - \text{Dividend paid on preference share}}{\text{no. of common outstanding shares}}$$

b. Return on equity

The return on equity is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

$$ROE = \frac{NPAT}{\text{Equity Capital}} \times 100$$

c. Return on assets

Return on asset is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as 'return on investment'.

$$ROA = \frac{NPAT}{Total\ Assets} \times 100$$

3.4.2 Statistical tools

The following mentioned statistical tools will be used to interpret data:

1. Arithmetic means

Arithmetic mean is the number which is obtained by adding the various numbers of all the items of a series and dividing the total by the number of items. Arithmetic mean is a useful tool in statistical analysis.

The arithmetic mean is the simplest and most widely used measure of a mean, or average. It simply involves taking the sum of a group of numbers, then dividing that sum by the count of the numbers used in the series.

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

Where,

\bar{X} = Arithmetic Mean

$\sum X$ = Sum of Elements

N = Number of Observations

2. Standard Deviation

The standard deviation is a statistic that measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance. It is calculated as the square root of variance by determining the variation between each data point relative to the mean. If the data points are further from the mean, there is higher deviation within the data set; thus, the more spread out the data, the higher the standard deviation.

$$S. D. = \sqrt{\frac{\sum(X-\bar{X})^2}{N}}$$

3. Coefficient of correlation

The correlation coefficient is a statistical measure that calculates the strength of the relationship between the relative movements of the two variables. It is a useful statistical

tool for measuring the intensity of the magnitude of linear relationship between two variables. The most important method of measuring the correlation between the two variables is “Karl person’s coefficient of correlation. “If the values of the variables are directly proportional then the correlation is said to be positive. On the other hand, if the values of the variables are inversely proportional, then the correlation is said to be negative. The correlation coefficient always remains within the limit of +1 to -1. The correlation coefficients (r) between two variables X and Y can be obtained by using following formula.” (Gupta; 2002)

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

Where,

r = The correlation coefficient between two variables of X and Y

Proprieties:

- a) It lies between -1 and +1
- b) If r = +1, then there is perfect positive correlation.
- c) If r = -1, then there is perfect negative correlation.
- d) If r = 0, then there is no correlation.
- e) If r = 0.7 to 0.99 (or- 0.7 to -0.99) then there is high degree positive or negative correlation.

4. Multiple Regression Analysis

Multiple linear regression is most common form of linear regression is used to explain the relationship between one continuous dependent variable and two or more independent variables. The independent variables can be continuous or categorical.

Multiple linear regression (MLR), also known simply as multiple regression, is a statistical technique that uses several explanatory variables to predict the outcome of a response variable. The goal of multiple linear regression (MLR) is to model the linear relationship between the explanatory (independent) variables and response (dependent) variable.

In essence, multiple regression is the extension of ordinary least-squares (OLS) regression that involves more than one explanatory variable.

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_p x_{ip} + \epsilon$$

Where, for $i = n$ observation

y_i = dependent variable

x_i = explanatory variables

β_0 = y-intercept (constant term)

β_p = slope coefficients for each explanatory variable

ϵ = the model's error term (also known as the residuals)

5. Hypothesis testing

A Hypothesis is a tentative assertion or idea or assumption about the parameters of a population. Hypothesis testing is an act in statistics whereby an analyst tests an assumption regarding a population parameter. The methodology employed by the analyst depends on the nature of the data used and the reason for the analysis.

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The previous chapter presented the research methodology applied to meet the objectives of the study. This chapter is concerned with the presentation and analysis of data collected. This is the one of the major chapter of this study because it indicates detail analysis and interpretation of data from which concrete result of commercial bank. The main objective is to present the results and analysis of the financing as well as discussion of results. Following data is the collection information of capital structure of banks.

1. Equity Capital of Banks

The equity capital of commercial banks are presented in table 4.1. Here, equity capital includes share capital and general reserves.

Table 4.1

Equity Capital (in millions)

Equity Capital					
FY	ADBL	GIBL	NIBL	SBL	SBI
2011/12	12973	2537	6050	2183	3197
2012/13	1422	3231	7020	2502	3799
2013/14	15076	6126	7926	3000	4536
2014/15	16224	7324	9807	3746	5646
2015/16	18127	87057	16288	6241	6920
2016/17	21797	11305	18708	9881	10397
2017/18	26458	13579	24871	13703	12801

(Note: Annual Report of ADBL

Annual Report of GIBL

Annual Report of NIBL

Annual Report of SBL

Annual Report of SBI)

Equity represents the amount of money that would be returned to a company's shareholders if all of the assets were liquidated and all of the company's debt is paid off.

Table 4.1 shows that, every commercial had a fluctuation equity. In ADBL had large amount of equity rather than other commercial banks.

2. Total debt of Banks

Total debt of commercial banks are presented in table 4.2. Here, total debt includes long term debt and short term debt.

Table 4.2

Total Debt (in millions)

Total Debt					
FY	ADBL	GIBL	NIBL	SBL	SBI
2011/12	55673	28127	59706	27395	54862
2012/13	62874	35788	66131	31151	60997
2013/14	73443	53892	78248	37277	56547
2014/15	84704	61863	94538	46901	53631
2015/16	93659	78995	113494	68161	71594
2016/17	1133	105287	132110	80020	89430
2017/18	108961	112268	147022	106166	89737

Debt is the amount of money borrowed by one party from another. Company used debt to pay for long term assets such as land, building and equipment or to add more cash to their working capital to cover ongoing, short term expenses. NIBL had a huge amount of total debt rather than other banks in 2017/18.

3. Long term debt of banks

Long term debt of commercial banks are presented in table 4.3. Here, long term debt includes Debenture and Bonds.

Table 4.3**LTDTA (in millions)**

Long Term Debt					
FY	ADBL	GIBL	NIBL	SBL	SBI
2011/12	2300	400	1050	627	600
2012/13	2300	400	800	931	800
2013/14	2300	400	1050	931	1000
2014/15	1840	400	1550	1431	1000
2015/16	1380	400	1550	1203	1000
2016/17	920	400	1550	1203	1000
2017/18	460	400	1250	1203	1000

Long-term debt is debt that matures in more than one year. Entities choose to issue long-term debt with various considerations, primarily focusing on the timeframe for repayment and interest to be paid. Investors invest in long-term debt for the benefits of interest payments and consider time to maturity as a liquidity risk. A company takes on debt to obtain immediate capital. For example, startup ventures require substantial funds to get off the ground and pay for basic expenses such as research, insurance, licenses, equipment, supplies, and advertising. Mature businesses also use debt to fund their regular operations as well as new capital-intensive projects. Overall, all businesses need to have capital on hand and debt is one source for obtaining immediate funds to finance business operations. Table 4.3 shows that GIBL has a constraints long term debt and ADBL has a decreasing trend while used long term debt to operate their business.

4. Short term debt of banks

Short term debt of banks are presented in table 4.4. Here, short term debt includes Deferred tax liabilities, Deposits liability, Proposed dividend, Bills Payable other liabilities, Borrowing.

Table 4.4**STDTA (in millions)**

Short Term Debt					
FY	ADBL	GIBL	NIBL	SBL	SBI
2011/12	53373	27727	58656	26768	54262
2012/13	60574	35387	65331	30220	60197
2013/14	71143	53491	77198	36346	55547
2014/15	82864	61462	92988	45469	52631
2015/16	92278	78595	111944	66957	70594
2016/17	104149	104887	130560	78816	88430
2017/18	108501	111868	145772	104962	88737

5.Total Assets

Total assets of banks are presented in table 4.5. Here, total assets includes Cash, Marketable securities, Accounts receivable, Prepaid expenses, Inventory, Fixed assets, Intangible assets, Goodwill, Other assets.

Table 4.5**Total Assets (in millions)**

Total Assets					
FY	ADBL	GIBL	NIBL	SBL	SBI
2011/12	68646	30664	65756	29579	58059
2012/13	77097	39018	73152	33653	64796
2013/14	88519	60018	86173	40277	61082
2014/15	100928	69186	104345	50647	59277
2015/16	111786	87701	129782	74402	78515
2016/17	126866	116592	150818	89901	99828
2017/18	135419	125847	171893	119869	102538

Total assets refers to the total amount of assets owned by a person or entity. Assets are items of economic value, which are expended over time to yield a benefit for the owner. If the owner is a business, these assets are usually recorded in the accounting records and appear in the balance sheet of the business. Table 4.5 show that total assets is in increasing trend of all commercial banks.

b. Profitability

Table 4.6

Net profit (in millions)

Net Profit					
FY	ADBL	GIBL	NIBL	SBL	SBI
2011/12	1839	265	1039	330	480
2012/13	2289	449	1915	482	771
2013/14	1520	974	1939	700	922
2014/15	3603	960	1961	767	1065
2015/16	2464	1382	2550	1254	1331
2016/17	2565	2006	3114	1386	1523
2017/18	3442	2101	3659	1904	2023

Profitability is ability of a company to use its resources to generate revenues in excess of its expenses. In other words, this is a company's capability of generating profits from its operations. Table 4.6 show, ADBL has a fluctuation net profit upto 2011 to 2018. GIBL has also a fluctuation net profit upto 2011 to 2014 after 2014 GIBL has increasing trend in net profit. NIBL, SBL and SBI also has a increasing trend of net profits.

4.2 Descriptive Analysis of variables of the study

Descriptive statistics are brief descriptive coefficients that summarize a given data set, which can be either a representation of the entire or a sample of a population. Descriptive analysis only describe the dependent and independent variables of capital structure.

4.2.1 Short Term Debt to Total Assets (STDTA)

Table 4.7

STDTA					
Year	ADBL	GIBL	NIBL	SBI	SBL
2012	0.9049	0.9345	0.892	0.9042	0.7775
2013	0.8979	0.929	0.893	0.9069	0.7856
2014	0.9023	0.9093	0.8958	0.8912	0.8037
2015	0.8977	0.8878	0.8911	0.8883	0.821
2016	0.8999	0.8991	0.8625	0.8961	0.8254
2017	0.8767	0.8858	0.8656	0.8996	0.082
2018	0.0254	0.8889	0.848	0.8654	0.8756
Mean	0.772114	0.904914	0.878286	0.8931	0.710114
S.D	0.329399	0.020096	0.019161	0.013897	0.278836

(Note: Appendix-1)

The table 4.7 shows the short-term debt to total assets of five commercial banks of six consecutive years and their mean and standard deviation. The main value of ADBL, GIBL, NIBL, SBI, SBL are 0.772114, 0.904914, 0.878286, 0.8931 and 0.710114 respectively. The overall mean of STDTA is in satisfactory level, in which the ratio of SBL is lower than in other four banks. GIBL has greater mean value rather than other banks which means that GIBL used huge amount of short-term debt to finance total assets more than other banks.

Similarly, standard deviation of ADBL, GIBL, NIBL, SBI and SBL are 0.329399, 0.020096, 0.019161, 0.013897 and 0.278836 respectively. Through it shows greater fluctuation in STDTA ratio of SBI.

4.2.2 Long Term Debt to Total Assets (LTDTA)

Table 4.8

LTDTA					
Year	ADBL	GIBL	NIBL	SBI	SBL
2012	0.0335	0.013	0.0159	0.0103	0.0212
2013	0.0298	0.0102	0.0109	0.0123	0.0276
2014	0.0259	0.0066	0.0121	0.0163	0.0231
2015	0.0182	0.0057	0.0148	0.0168	0.0282
2016	0.0123	0.0045	0.0119	0.0127	0.0161
2017	0.0072	0.0034	0.0102	0.01	0.0133
2018	0.0034	0.0032	0.0072	0.0097	0.01
Mean	0.018614	0.00665714	0.011857	0.012586	0.019929
S.D	0.011558	0.00367235	0.002899	0.002941	0.007025

(Note: Appendix-1)

The table 4.8 shows the LTDTA of five commercial bank of Nepal. ADBL have shown a decrease in the usage of debt financing from the ratio of 0.0335 in 2012 to 0.0034 in 2017. SBI show a growth in the usage of LTD financing from the ratio of 0.0103 in 2012 upto 0.0168 in 2015 with the slightly fall in long term debt usage with the ratio of 0.0127 in 2016 upto 0.0097 in 2018.

GIBL also experienced a decrease in the usage of long term debt financing from the ratio of 0.013 in 2012 and 0.0034 in 2018. NIBL and SBL showed a fluctuation results in the usage to long term debt to total assets. Finally, SBL indicate a great use of long term debt if compared with other banks with the average mean of 0.019929 while GIBL indicates a less usage of long term debt with the average ratio of 0.00665714.

The overall trend of commercial bank above indicates a fluctuation result, which means rise and fall of debt financing by banks. Few banks indicate an increasing trend of using long term debts to finance their assets. For example, if commercial banks use huge long term debt. This is an indication of growth for their banks because debt are used to finance

their operations and new investment projects which provide return for the banks in the future although using huge debts is much riskier, increase bankruptcy cost and cost of debt of banks. Theoretically debt sage is an advantage for the company because of tax relief acquired by the banks due to interest deducted before company profit generated.

4.2.3 Total Debt to Total Assets (TDTA)

Table 4.9

TDTA					
Year	ADBL	GIBL	NIBL	SBI	SBL
2012	0.811	0.9172	0.9079	0.9449	0.9261
2013	0.8155	0.9171	0.904	0.9413	0.9256
2014	0.8296	0.8979	0.908	0.9257	0.9255
2015	0.8392	0.8941	0.906	0.9047	0.926
2016	0.8378	0.9007	0.8744	0.9118	0.9161
2017	0.0893	0.903	0.8759	0.8958	0.89
2018	0.8046	0.8921	0.8553	0.8751	0.8856
Mean	0.718143	0.903157	0.890214	0.914186	0.913557
S.D	0.277613	0.010244	0.021379	0.025075	0.017995

(Note: Appendix-1)

Result from table 4.9 shows that, ADBL indicated the rise in the use of debt financing to finance assets while reduction in using total debt was shown by SBL. ADBL have been experiencing the rise in the use of debt financing from the ratio of 0.811 in 2012 upto 0.8392 in 2015 and slightly fall in debt financing in the year 2016 to 2017 with the ratio of 0.8378 and 0.0893 respectively after that in 2017 ADBL rise in the use of debt financing the ratio of 0.8046.

4.2.4 Total Debt to Total Equity (TDTE)

Table 4.10

TDTE					
year	ADBL	GIBL	NIBL	SBI	SBL
2012	4.2916	11.0881	9.8689	17.158	12.5481
2013	4.4206	11.077	9.4195	16.0562	12.4497
2014	4.8714	8.7968	9.873	12.4668	7.4087
2015	5.2208	8.4471	9.6399	9.4991	12.52
2016	5.1667	9.0739	6.9681	10.3453	10.9201
2017	0.52	9.3134	7.0617	8.6007	8.0983
2018	4.1182	8.268	5.9114	7.0101	7.7477
Mean	4.087043	9.437757	8.391786	11.59089	10.2418
S.D	1.630141	1.177509	1.680187	3.819923	2.404361

(Note: Appendix-1)

Result from table 4.10 shows that, ADBL indicated the rise in the use of debt financing while other banks indicated a fluctuations results of falling and rising use of debt financing for some years. ADBL have been experiencing the rise in the use of debt financing for the ratio of 4.2916 in 2012 upto 5.1667 in 2016 and slightly fall in debt financing for the 2017 with the ration of 0.52 and after that in 2018, ADBL rise in the use of debt financing with the ratio of 4.1182. Moreover, GIBL, NIBL, SBI and SBL showed a fluctuation in the use of debt financing where from 2012 to 2018.

To summarize the information table 4.10, average mean indicated that SBI was a bank that used huge amount of debt to finance equity if compared with other banks with the ratio of 11.59089 that means a SBI uses more debt as compared with equity or shareholder fund.

4.2.5 Earnings Per Share (EPS)

Table 4.11

EPS(%)					
Year	ADBL	GIBL	NIBL	SBI	SBL
2069	60.57	12.14	34.49	22.93	20.41
2070	71.54	18.57	50.82	32.75	29.8
2071	47.53	23.71	46.77	34.83	38.63
2072	105.23	19.16	41.11	34.84	37.76
2073	62.59	22.42	35.15	34.29	41.52
2074	36.19	24.82	33.7	21.99	26.39
2075	36.64	23.64	35.66	25.16	26.45
Mean	60.04143	20.6371429	39.67143	29.54143	31.56571
S.D	23.99324	4.4307814	6.779748	5.899431	7.830362

(Note: Appendix-1)

The table 4.11 indicates, there was a fluctuation situation of earnings per share of selected commercial bank in Nepal. ADBL show the highest EPS in 2015(105.23) among others. SBL is increasing ratio of 20.41 in 2012 upto 38.63 in 2014 and slightly fall down by 37.76 in 2015 and that slightly rise by 41.52 in 2016 and after that fall by 26.39 in 2017 and slightly rise by 26.45. EPS of ADBL is highest among all because it has optimum level of capital structure that has efficiently managed between risk and return trade off of equity, short term debt, and long term debt. So the shareholders wealth has maximized among other banks.

4.2.6 Return on Assets (ROA)

Table 4.12

ROA					
Year	ADBL	GIBL	NIBL	SBI	SBL
2012	0.0268	0.0086	0.0158	0.0082	0.0111
2013	0.0296	0.0115	0.0261	0.0119	0.0143
2014	0.0171	0.0157	0.0225	0.0151	0.0173
2015	0.0357	0.0138	0.0188	0.0179	0.0151
2016	0.022	0.0157	0.0196	0.0169	0.0168
2017	0.0202	0.0172	0.0206	0.0152	0.0154
2018	0.0254	0.0167	0.0213	0.0197	0.0159
Mean	0.025257	0.01417143	0.020671	0.014986	0.015129
S.D	0.006232	0.00312395	0.003204	0.003873	0.002045

(Note: Appendix-1)

Table 4.12 indicates a return on assets of selected commercial banks in Nepal. This is the contribution of bank assets in profit generation from table 4.7 indicates, ADBL, GIBL, NIBL, SBI and SBL was a fluctuation results for the rest of seven years. ROA of ADBL is rising up the ratio of 0.0268 in 2012 to 0.0296 in 2013 and slightly fall in 2014(0.0171) after that in 2015 ROA is increase and slightly fall by 0.0357 and slightly fall the ratio of 0.022 in 2016 to 0.0254 in 2018.

4.2.7 Return on Equity (ROE)

Table 4.13

ROE					
Year	ADBL	GIBL	NIBL	SBI	SBL
2012	0.1418	0.1045	0.1717	0.1501	0.1513
2013	0.1609	0.139	0.2727	0.203	0.1928
2014	0.1008	0.1589	0.2447	0.2034	0.2334
2015	0.2209	0.1311	0.2	0.1887	0.2047
2016	0.1359	0.1587	0.1566	0.1924	0.201
2017	0.1176	0.1774	0.1664	0.1464	0.1402
2018	0.1301	0.1547	0.1471	0.158	0.1389
Mean	0.144	0.14632857	0.194171	0.177429	0.180329
S.D	0.038786	0.02374115	0.04771	0.025056	0.036884

(Note: Appendix-1)

Table 4.13 indicate a return on equity of selected commercial banks in Nepal, this is the contribution of shareholders fund in profit generation. The information indicate that SBI experienced a rise in return on equity from 2012 showing a ratio of 0.1501 upto 2014(0.2034) and after that 2015 upto 2017 there is fluctuations situation and after that, in 2018 ADBL rise in return on equity. Moreover, ADBL, GBIL, NIBL and SBL was a fluctuation results of falling and rising return on equity ratio.

The table 4.13 indicates that the all commercial banks generate less amount of profit n term of return on equity for all five sampled banks. Profit generated by all companies has less than 50% average of return on equity. That means contribution of equity on profit is less for commercial banks.

4.3 Correlation between dependent and independent variables

4.3.1 Correlation between EPS and independent variables

Table 4.14

		EPS	STDTA	LTDTA A	TDTA	TDTE
EPS	Pearson Correlation	1	-.175	.449**	-.149	-.435**
	Sig. (2-tailed)		.314	.007	.392	.009
STDTA	Pearson Correlation	-.175	1	.052	.998**	.623**
	Sig. (2-tailed)	.314		.765	.000	.000
LTDTA	Pearson Correlation	.449**	.052	1	.108	.014
	Sig. (2-tailed)	.007	.765		.537	.935
TDTA	Pearson Correlation	-.149	.998**	.108	1	.621**
	Sig. (2-tailed)	.392	.000	.537		.000
TDTE	Pearson Correlation	-.435**	.623**	.014	.621**	1
	Sig. (2-tailed)	.009	.000	.935	.000	

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

Note: SPSS Output

The table shows the overall correlation between variables. The correlation coefficient between STDTA and EPS is -0.175 which means there is low degree of negative correlation between STDTA and EPS, however it is not statistically significant. Similarly, the correlation coefficients between LTDTA and EPS is 0.449 correlation value which shows moderate level positive relationship between LTDTA and EPS. It is statistically significant. Again, the correlation coefficient between TDTA and EPS is -0.149 correlation value which shows low degree of negative relationship between TDTA and EPS. However, it is not statistically significant. Similarly, the correlation coefficient TDTE and EPS have -0.435 correlation value which means moderate degree negative relationship between TDTE and EPS. It is statistically significant.

Hypothesis testing

H_0 = There is no significant relationship of EPS and STDTA, LTDTA, TDTA and TDTE.

H_1 = There is a significant relationship of EPS and STDTA, LTDTA, TDTA and TDTE

Summary of hypothesis test

Table 4.15

Null Hypothesis	Significant Value	Decision
There is no significant relationship of EPS and STDTA.	.314	Retain the null hypothesis
There is no significant relationship of EPS and LTDTA.	.007	Reject the null hypothesis
There is no significant relationship of EPS and TDTA.	.392	Retain the null hypothesis
There is no significant relationship of EPS and TDTE.	.009	Reject the null hypothesis

In conclusion, EPS has significant relationship with only LTDTA and TDTE.

4.3.2 ROA and Independent Variables

Table 4.16

Correlations						
		ROA	STDTA	LTDT A	TDTA	TDTE
ROA	Pearson Correlation	1	-.266	.230	-.252	-.659**
	Sig. (2-tailed)		.123	.183	.145	.000
STDTA	Pearson Correlation	-.266	1	.052	.998**	.623**
	Sig. (2-tailed)	.123		.765	.000	.000
LTDTA	Pearson Correlation	.230	.052	1	.108	.014
	Sig. (2-tailed)	.183	.765		.537	.935
TDTA	Pearson Correlation	-.252	.998**	.108	1	.621**
	Sig. (2-tailed)	.145	.000	.537		.000
TDTE	Pearson Correlation	-.659**	.623**	.014	.621**	1
	Sig. (2-tailed)	.000	.000	.935	.000	

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

Note: SPSS Output

The table shows the overall correlation between variables. Under this section, the correlation between independent and dependent variable are analysed. At per correlation analysis the variables are statistically significant at 1 percent or 0.01 significant level. According to the table, the correlation between STDTA and ROA has -0.266 value which means there is negative correlation between STDTA and ROA. Similarly, the correlation coefficients between LTDTA and ROA have 0.230 correlation value which shows moderate relationship between LTDTA and EPS. Again, the correlation coefficient between TDTA and ROA have -0.252 correlation value which shows negative relationship between TDTA and ROA. Similarly, the correlation coefficient TDTE and ROA have -0.659 correlation value which means weak negative relationship between

TDTE and ROA. TDTE variables are statistically significant because their p-value is less than 0.01 significant level.

Hypothesis testing

H_0 = There is no significant relationship ROA and STDTA, LTDTA, TDTA and TDTE.

H_1 = There is a significant relationship of ROA and STDTA, LTDTA, TDTA and TDTE.

Summary of hypothesis testing

Table 4.17

Null Hypothesis	Significant Value	Decision
There is no significant relationship of ROA and STDTA.	.123	Retain the null hypothesis
There is no significant relationship of ROA and LTDTA.	.183	Reject the null hypothesis
There is no significant relationship of ROA and TDTA.	.145	Retain the null hypothesis
There is no significant relationship of ROA and TDTE.	.000	Reject the null hypothesis

In conclusion, ROA has a significant relationship only with TDTE.

4.3.3 ROE and Independent Variables

Table 4.18

Correlations						
		ROE	STDTA	LTDTA	TDTA	TDTE
ROE	Pearson Correlation	1	.286	.247	.298	.381*
	Sig. (2-tailed)		.096	.152	.082	.024
STDTA	Pearson Correlation	.286	1	.052	.998**	.623**
	Sig. (2-tailed)	.096		.765	.000	.000
LTDTA	Pearson Correlation	.247	.052	1	.108	.014
	Sig. (2-tailed)	.152	.765		.537	.935
TDTA	Pearson Correlation	.298	.998**	.108	1	.621**
	Sig. (2-tailed)	.082	.000	.537		.000
TDTE	Pearson Correlation	.381*	.623**	.014	.621**	1
	Sig. (2-tailed)	.024	.000	.935	.000	
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Note: SPSS Output

The table shows the overall correlation between variables. Under this section, the correlation between independent and dependent variable are analysed. At per correlation analysis the variables are statistically significant at 1 percent or 0.01 significant level. According to the table, the correlation between STDTA and ROE has 0.286 value which means there is weak correlation between STDTA and ROE. Similarly, the correlation coefficients between LTDTA and ROE have 0.247 correlation value which shows moderate relationship between LTDTA and ROE. Again, the correlation coefficient between TDTA and ROE have 0.298 correlation value which shows moderate relationship between TDTA and ROE. Similarly, the correlation coefficient TDTE and ROE have 0.381 correlation value which means weak relationship between TDTE and

ROE. All variables have no statistically significant because their p-value is higher than 0.01 significant level.

Hypothesis Testing

H_0 = There is no significant relationship ROE and STDTA, LTDTA, TDTA and TDTE.

H_1 = There is a significant relationship of ROE and STDTA, LTDTA, TDTA and TDTE.

Summary of hypothesis testing

Table 4.19

Null Hypothesis	Significant Value	Decision
There is no significant relationship of ROE and STDTA.	.096	Retain the null hypothesis
There is no significant relationship of ROE and LTDTA.	.152	Retain the null hypothesis
There is no significant relationship of ROE and TDTA.	.082	Retain the null hypothesis
There is no significant relationship of ROE and TDTE.	.024	Reject the null hypothesis

In conclusion ROE has no significant relationship with independent variables.

4.4 Relationship between Dependent Variables and Independent Variables

4.4.1 EPS and Independent Variable

Table 4.20

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.638 ^a	.407	.349	14.27355
a. Predictors: (Constant), TDTE, LTDTA, STDTA				

Note: SPSS Output

Based on modal summary, table 4.20 shows the correlation coefficient (R value for this research is 0.638. this means there is a moderate positive relationship between dependent and independent variables. Similarly, the R square indicates the extent of percentage the independent variable can explain the variation in the dependent variable. So, 40.7% of variance in EPS is contributed by STDTA, LTDTA, TDTE and remaining is due to other factors.

Due to multi-collinearity problem on TDTA, it is excluded from regression analysis.

Table 4.21

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4327.651	3	1442.550	7.081	.001 ^b
	Residual	6315.758	31	203.734		
	Total	10643.409	34			
a. Dependent Variable: EPS						
b. Predictors: (Constant), TDTE, LTDTA, STDTA						

Note: SPSS Output

EPS is the portion of a company's profit that is allocated to every individual share of the stock. EPS serves as an indicator of a company's profitability. EPS is a key driver of share prices. It is generally considered to be the single most important variable in determining a share's price.

EPS is an important factor used in valuing a company because it breaks down a firm's profits on per share basis. So that table 4.21 indicates, there is exist relation between EPS and Independent variable. EPS has significant relationship with all independent variables having significant value of 0.001 which is less than 0.05.

Table 4.22

Coefficient						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.382	16.006		2.023	.052
	STDTA	15.874	22.428	.125	.708	.484
	LTDTA	1011.09	311.397	.450	3.247	.003
	6					
	TDTE	-2.710	.922	-.520	-2.939	.006
a. Dependent Variable: EPS						

Note: SPSS Output

The table 4.22 shows that the impact between dependent variable on independent variable. The independent variable LTDTA and TDTE has affect EPS significantly. However, STDTA have not affect on EPS with significant value 0.484. The model summary can be presented as follows:

$$Y_{EPS}=32.382_0+15.874(SDTA)+1011.096(LDTA)-2.71 (TDTE)+\varepsilon$$

4.4.2 ROA and Independent Variables

Table 4.23

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722 ^a	.521	.475	.00405
a. Predictors: (Constant), TDTE, LTDTA, STDTA				

Note: SPSS Output

Based on model summary, table 4.23 shows the correlation coefficient (R value) for this research is 0.722. This means there is a moderate positive relationship between dependent and independent variables. Similarly, the R square indicates the extent of percentage the

independent variables can explain the variation in the dependent variable. So, 0.521 (52.1%) of variance in ROA is contributed by STDTA, LTDTA, TDTE and remaining is due to other factors.

Table 4.24

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.001	3	.000	11.245	.000 ^b
	Residual	.001	31	.000		
	Total	.001	34			
a. Dependent Variable: ROA						
b. Predictors: (Constant), TDTE, LTDTA, STDTA						

Note: SPSS Output

The table 4.24 indicated that there is significant relationship between dependent variable and independent variable. ROA has significant relationship with all independent variables having significant value of 0.000 which is less than 0.05.

Due to multi-collinearity problem on TDTA, it is excluded from regression analysis.

Table 4.25

Coefficients and Hypothesis Testing						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.020	.005		4.313	.000
	STDTA	.009	.006	.220	1.384	.176
	LTDTA	.163	.088	.230	1.849	.074
	TDTE	-.001	.000	-.799	-5.029	.000
a. Dependent Variable: ROA						

Note: SPSS Output

To looking impact of dependent variable and independent variables from table 4.25 shows that, TDTE has significant impact on ROA with significant level 0.000 because significant value is less than 0.05. However, STDTA and LTDTA have not affect on ROA because their significant value is higher than significant level of 0.05. The model summery can be expressed as follows:

$$Y_{ROA}=0.020_0+0.009(STDTA)+0.163(LDTA)-0.001 (TDTE)+\varepsilon$$

4.4.3 ROE and Independent Variables

Table 4.26

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.454 ^a	.206	.129	.04356
a. Predictors: (Constant), TDTE, LTDTA, STDTA				

Note: SPSS Output

Based on model summary, table 4.26 shows the correlation coefficient (R value) for this research is 0.454. This means there is a moderate positive relationship between dependent and independent variables. Similarly, the R square indicates the extent of percentage the independent variables can explain the variation in the dependent variable. So, 0.206 (20.6%) of variance in ROE is contributed by STDTA, LTDTA, TDTE and remaining is due to other factors.

Due to multi-collinearity problem on TDTA, it is excluded from regression analysis.

Table 4.27

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.015	3	.005	2.682	.064 ^b
	Residual	.059	31	.002		
	Total	.074	34			
a. Dependent Variable: ROE						
b. Predictors: (Constant), TDTE, LTDTA, STDTA						

Note: SPSS Output

The table 4.27 indicates that the overall dependent variable and independent variable have an insignificant relation. ROE has no significant relationship with all independent variables having significance level of 0.064 which is greater than 0.05.

Table 4.28

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.087	.049		1.779	.085
	STDTA	.021	.068	.062	.303	.764
	LTDTA	1.418	.950	.239	1.492	.146
	TDTE	.005	.003	.339	1.656	.108
a. Dependent Variable: ROE						

Note: SPSS Output

To looking the impact of dependent variable on independent variable the table shows 4.28 that, the independent variables STDTA, LTDTA and TDTE have not affect on ROE having significant level of 0.764, 0.146 and 0.108 respectively which is greater than 0.05. The summery can be expressed as follows:

$$Y_{\text{ROE}} = 0.087_0 + 0.021(\text{SDTA}) + 1.418(\text{LDTA}) + 0.005(\text{TDTE}) + \varepsilon$$

CHAPTER-V

CONCLUSION

This capital includes summary, conclusion, implications and implications for further research.

5.1 Summary

Capital structure can be a mixture of a firm's long-term debt, short term debt, Common equity and preferred equity. A company's proportion of short and long term debt is considered when analyzing capital structure. When analysts refer to capital structure, they are most likely referring a firm's debt to equity ratio, which provides insight into how risky a company is. Usually, a company that is heavily financed by debt has a more aggressive capital structure and therefore poses greater risk to investors. This risk, however may be the primary source of the firm's growth.

The term capital structure refers to the percentage of capital at work in a business by types. Broadly speaking, there are two forms of capital: Equity capital and debt capital. Each types of capital has its benefits and drawbacks, and a substantial part of wise corporate steward ship and management is attempting to find the perfect capital structure regarding risk/ reward payoff for shareholders.

The capital structure of a concern depends upon a large number of factors such as leverage or trading on equity, growth of the company, nature and size of business, the idea of retaining control, flexibility of capital structure, requirement of investors, cost of flotation of new securities, timing of issue, corporate tax rate and the legal requirements. It is not possible to rank hem because all such factors of new securities, timing if issues, corporation tax rate and the legal requirements. It is not possible to rank hem because all such factors are of different important and the influence of individual factors of a firm changes over a period of time.

Capital Structure is referred to as the ratio of different kinds of securities raised by a firm as long-term finance.

Capital Structure means a combination of all long-term sources of finance. It includes equity. Share capital, Reserve and Surplus, Preference Share capital, Loan, Debenture and other such long-term sources of finance. A company has to decide the proportion in which it should have its own finance and outsider's finance particularly debt finance. Based on the proportion of finance, WACC and value of a firm are affected.

The main objective of this study is to find out the exact relationship between capital structure and profitability over and across the selected commercial banks, for which out of total population of 28 commercial banks, five major banks agricultural development bank (ADBL), Nepal Investment Bank ltd (NIBL) and Global IME bank ltd (GIBL), Siddhartha Bank Limited(SBL) and Nepal SBI Bank Limited (SBI) is taken as sample of which ADBL is public sectors commercial bank and NIBL, GIBL, SBL and SBI are private sectors commercial banks.

The average value of STDTA of ADBL, GIBL, NIBL, SBI and SBL are 0.772114, 0.904914, 0.878286, 0.8931 and 0.710114 respectively. SBL has lower mean value rather than other banks. It means that SBL use more equity than debt. The average value of LTDTA of ADBL, GIBL, NIBL, SBI and SBL are 0.018614, 0.00665714, 0.011857, 0.012586 and 0.019929 respectively. GIBL has lowest value comparison to other. The average value of TDTA of ADBL, GIBL, NIBL, SBI and SBL are 0.718143, 0.903157, 0.890214, 0.914186 and 0.913557 respectively and ADBL has lower average value than others bank average value.

From regression table and its output, find that there is statistically significant relationship of EPS with LTDTA because the output is 0.003 which is less than 0.05. So, reject the null hypothesis. There is no statistical relationship of EPS with STDTA because there is no statistical evidence to reject null hypothesis because the value of STDTA is 0.484 which is greater than 0.05. So, that accepts the null hypothesis.

There is a significant relation of EPS with TDTE because the output is 0.006 which is less than 0.05. So, null hypothesis is rejected.

From regression analysis, find that there is no statistically significant relationship of ROA and STDTA because the output is 0.176 which is higher than 0.05. So, null hypothesis is accepting.

There is a significant relationship of ROA with TDTE because the output is 0.000 which is less than 0.05. So, null hypothesis is rejected.

There is no significant relationship of ROA and LTDTA because the output is 0.074 which is greater than 0.05. So, null hypothesis is accepting.

From regression analysis table, find that is statistically significant relation of EPS with LTDTA and TDTE having value are 0.003 and 0.006. So, null hypothesis is rejecting. But, there is no statistically significant relationship STDTA with EPS having value of 0.484. So, null hypothesis is accepting. Due to multi-collinearity problem on TDTA, it is excluded from regression analysis.

From regression analysis table, find that there is statistically significant relationship of ROA with TDTE having value is 0.000. So, null hypothesis is rejecting. But there is no statistically significant relationship of ROA with STDTA and LTDTA having value are 0.176 and 0.074. So, null hypothesis is accepting. Due to multi-collinearity problem on TDTA, it is excluded from regression analysis.

From regression analysis table, find that there is no statistically significant relationship of ROE with STDTA, LTDTA and TDTE having value are 0.764, 0.146 and 0.108. So, null hypothesis is accepting. Due to multi-collinearity problem on TDTA, it is excluded from regression analysis.

Which indicates that EPS also increase with the increasing LTDTA that mean LTDTA and EPS has positive relationship between there are two variables. This means, higher the long term debt proportion, higher would be the per share earnings to the shareholders. Higher use of dent proportion reduces the equity proportion may leads to higher EPS. EPS has strong negative relationship with TDTE which have correlation coefficient of 0.435.

5.2 Conclusion

Commercial banks are the backbone of the economic development of the country which flow the capital from various part of the country to deficit unit as an intermediary and ultimately promote and finance the industries, business, infrastructures and other welfare of the citizens. It collects the deposits from the surplus customer units and provide to those who are in need. Its service range and scope of activities are in wide range hence able to earn large profit.

The study reveal that GIBL has higher level of STDTA which has the mean value of 0.904914, which is highest among all. SBL has lowest level of STDTA which has the mean value of 0.710114 which means that SBL use less amount of short term debt to finance total assets. It means that GIBL use huge amount of short term debt to finance their assets rather than other selected banks.

SBL has higher level of LTDTA which has the mean value of 0.019929 which is highest among all. GIBL has lowest level of LTDTA which has the mean value of 0.0065714. It mean that SBL use huge amount of long term debt to finance the assets.

SBI has higher level of TDTA which has mean value of 0.914186 which is highest among all. ADBL has lowest level of TDTA which has the mean value of 0.716143. SBI use huge amount of total debt to finance their assets from the selected commercial banks.

SBI has higher level of TDTE which has the mean value of 11.59089 which is highest among all. ADBL has lowest level of TDTE which has mean value of 4.087043. SBI use huge amount of debt to finance their equity for the wealth of the bank as well as for shareholders.

NIBL has higher level of ROE which has the mean value of 0.194171 which is lowest among all. ADBL has lowest level of ROE. ADBL may have lowest level of ROE because of lowest level long term debt employment in its capital structure that it has adopted lowest level of risk and hence leads to lower of return on equity.

ADBL has higher level of ROA which has the mean value of 0.025257 which is highest among others. GIBL has lowest level of ROA which has the mean value of 0.01417143. ADBL has highest level of ROA because its efficient use of capital structure composition of all the components take short term debt, long term debt and equity.

ADBL has higher level of EPS which has the mean value of 60.04143 which is highest among others. GIBL has lowest level of EPS which has the mean value of 20.6371429 because, its risk and return tradeoff between capital composition is weak than other bank.

5.3 Implications

1. GIBL has higher mean value of STDTA and it has lowest mean value of LTDTA. It means that GIBL has use high level of short term and lower level of long term debt to finance its total assets. It indicates that using lower level of long term debt means it does not assume say risk and tax advantage of using debt hence, using higher level of equity. Such composition of capital of this bank leads to lower level of EPS due to high using of equity and low level of income as well as it also leads to lower level of ROA. So, with this analysis, GIBL is recommended to increases its proportion of debt to finance assets in coming year.
2. ADBL has lowest mean value of TDTE and it has also lowest mean value of TDTA. Which indicates that, it also has use lower proportion of long term debt. Hence, its performance regarding ROA and EPS has highest mean value is quite good, but the ROE has lowest mean value than other four banks. So, it might because of highest employment of equity than other four. So, it is also recommended to slightly increase in its debt capital. Hence, by increasing the other indicators. ADBL is also to manage its rate of return in manage its rate of return in satisfactory level with efficient management of investment and management capability of liquidity and profitability to ensure best return to its shareholders.
3. NIBL has higher mean value of ROE which means that it used lower level of equity.

5.4 Implications for further study

A study should be taken to analyze the impact of capital structure on profitability of other development banks, financial companies, service companies and non listed companies. In addition, future studies could be done to analyze the determinants of capital structure in Nepalese banks. Moreover, study on relationship between the capital structures of Nepalese commercial banks and companies of other nations should be done.

References

(n.d.).

Abor, J. (2008, March). Determinants of the capital structure of the Ghanaian firms. *African Economic Research Consortium, IV(4)*, 1-34.

Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. *Journal of Risk finance*, 6(5), 438-445.

Agyeman, D. A. (2015). Assessing the impact of capital structure on profitability of manufacturing industry in Ghana: A case study at selected firms. Ghana.

Berger, A., & De Young, R. (2010). Problem loans and cost efficiency in commercial banks. *Journal of banking and finance*, 27, 849-870.

Bhattarai, S. (2010). Impact of capital structure on profitability of Commercial Bank. *Shanker Dev Campus*, 16-21.

Champion, D. (2000). Finance: the joy of leverage. *Harvard Business Review*, 77(4), 19-22.

Chandrakumarmangalam, S., & Govindasamy, P. (2010). leverage. An analysis its impact on profitability with reference to selected cement companies in Indian, European. *Journal of economics, finance and Administrative science*, 27, 1450-2275.

Divestopedia. (n.d.). Retrieved from <http://www.divestopedia.com/723/capital-structure>

Drake, L., & Hall, M. (2013). Efficiency in Japanese banking: An empirical analysis. *Journal of banking and finance*, 27, 891-917.

Driffield, N., & Pal, S. (2008). Evaluation of capital structure in East Asia. *Corporate Inertia or Endeavors*, XI (13), 75-76.

Fred, S. S. (2015). The effect of capital structure on profitability of manufacturing companies limited in DAR ES SALAAM stock exchange. *The Open University of Tanzania*, 30-68.

Goyal, A. (2013). The impact of capital structure on performance of listed public sector Banks in India. *International Journal of Business and management*, 2(10), 35-43.

- Graham, J. R. (2000). How big are the tax benefits of debt. *Journal of Finance*, IV(5) , 1901-1939.
- Hasan, I., & Marton, K. (2009). Development and efficiency of the banking sector in a transitional economy: Hungarian experience. *Journal of Banking and Finance*, 27(4), 2249-2271.
- Hutchison, D. E., & Cox, R. A. (2006). The causal Relationship between bank capital and profitability. *Wesrwood Development Group and University of Ontario Institute of Technology*, 3(1), 40-52.
- Jensen, M., & Meckling, W. (1976). Thoery of the firm: Managerial Behavior, agency costs and ownership structures. *Journal of Financial Economics*, 18-22.
- Jonsson, B. (2007). Does the size matter? The realtion between size and profitability of Icelandic firms. *Bidrost Journal of Social Sciences* .
- Jose Marcos Carvalho de Mesquita and Jose Edson Lara. (2006). Capital Structure and Profitability.
- K, A., & Ajanthan, A. (2013). Capital Structure and Financial Performance: A study of listed trading companies in Srilanka. *South asian academic journal*, 3(6) , 02-11.
- Mahmood, W. M. (2009). Profitability and Capital Structure of the property and construction sectors in Malaysia. *Pacific Rim Property Research journal*, 13(1), 92-104.
- MBA Knowledge Base. (2012). *Determinants of Capital Structure*. Retrieved from <http://www.mbaknol.com/financial-management/determinant-of-capital-structure>
- Mesquita, J. M., & Lara, J. E. (2006). Capital structure and Profitability. *Capital structure and Profitability XIV*(9), 152-177.
- Modigliani, F., & Miller, M. (1958). The cost capital, corporation finance, and the theory of Investment. *American Economic Review*, 48.
- Muzumber, D. B. (2006). The impact of capital structure on profitability of listed Indian Infracture Companies. *Journal of business and managenent* , 06-11.

- Muzumber, D. B. (2006). The impact of capital structure on profitability of listed Indian Infrastructure Companies. *Journal of business and management*,5(2), 06-11.
- Padachi, K. (2006). Trends of working capital management and its impact on firms performatio: an analysis of mauritian small manufacturing firms. *International Review of Business Research Papers*,2(2), 45-58.
- Pandey, I. M. (1992). *Financial Management* . New Delhi: Vikash Publishing House.
- Raheman, A., Zulfiqar, B., & Mustafa. (2007). Capital Structure and Profitability. *Case study of Islamabad stock III*(5),347-361.
- Raja, A., & Dave, N. (2013). Capital structure and Profitability:Indian Evidence, 08-11.
- Robb, A., & Robinson, D. (2009). *The Capital Structure decision of new firm(online)*. Retrieved from Available:<http://paper.ssrn.com/s013/papers>.
- Ruland, W., & Zhou, P. (2011). Debt, diversification and valuation. *Review of Quantitative financial, accounting*,25(3), 277-291.
- Statistics Solution. (2013). Retrieved from <http://www.statisticssolutions.com/academic-solutions/member-resources/member-profile/data-analysis-plan-templates/data-analysis-plan-multiple-linear-regression/>
- Tailab, M. M. (2014). Evaluation of capital structure on profitability of Energy American firms. *International Journal of business and management Invention*,3(12), 54-61.
- Wald, J. K. (1999). How firm characteristics affect capital structure: an international comparison. *Journal of financial research*,22(2), 161-87.
- Williamson, O. (2001). Corporate finance and corporate governance. *Journal of finance*,43(3), 567-591.

APPENDICES

Appendix-1

Short Term Debt to Total Assets

STDTA					
Year	ADBL	GIBL	NIBL	SBI	SBL
2069	0.9049	0.9345	0.892	0.9042	0.7775
2070	0.8979	0.929	0.893	0.9069	0.7856
2071	0.9023	0.9093	0.8958	0.8912	0.8037
2072	0.8977	0.8878	0.8911	0.8883	0.821
2073	0.8999	0.8991	0.8625	0.8961	0.8254
2074	0.8767	0.8858	0.8656	0.8996	0.082
mean	0.896567	0.907583	0.883333	0.897717	0.682533
S.D	0.010111	0.020611	0.015052	0.007262	0.294804

Long Term Debt to Total Assets

LTDTA					
Year	ADBL	GIBL	NIBL	SBI	SBL
2069	0.0335	0.013	0.0159	0.0103	0.0212
2070	0.0298	0.0102	0.0109	0.0123	0.0276
2071	0.0259	0.0066	0.0121	0.0163	0.0231
2072	0.0182	0.0057	0.0148	0.0168	0.0282
2073	0.0123	0.0045	0.0119	0.0127	0.0161
2074	0.0072	0.0034	0.0102	0.01	0.0133
Mean	0.02115	0.00723333	0.012633	0.013067	0.021583
S.D	0.010311	0.00365987	0.002241	0.002904	0.006018

Total Debt to Total Assets

TDTA					
Year	ADBL	GIBL	NIBL	SBI	SBL
2069	0.811	0.9172	0.9079	0.9449	0.9261
2070	0.8155	0.9171	0.904	0.9413	0.9256
2071	0.8296	0.8979	0.908	0.9257	0.9255
2072	0.8392	0.8941	0.906	0.9047	0.926
2073	0.8378	0.9007	0.8744	0.9118	0.9161
2074	0.0893	0.903	0.8759	0.8958	0.89
mean	0.703733	0.905	0.896033	0.9207	0.918217
S.D	0.301229	0.009869	0.016249	0.019951	0.014359

Total Debt to Total Equity

TDTE					
year	ADBL	GIBL	NIBL	SBI	SBL
2069	4.2916	11.0881	9.8689	17.158	12.5481
2070	4.4206	11.077	9.4195	16.0562	12.4497
2071	4.8714	8.7968	9.873	12.4668	7.4087
2072	5.2208	8.4471	9.6399	9.4991	12.52
2073	5.1667	9.0739	6.9681	10.3453	10.9201
2074	0.52	9.3134	7.0617	8.6007	8.0983
mean	4.08185	9.632717	8.805183	12.35435	10.65748
S.D	1.785666	1.15955	1.397174	3.55162	2.342154

Return on Equity

ROE					
Year	ADBL	GIBL	NIBL	SBI	SBL
2069	0.1418	0.1045	0.1717	0.1501	0.1513
2070	0.1609	0.139	0.2727	0.203	0.1928
2071	0.1008	0.1589	0.2447	0.2034	0.2334
2072	0.2209	0.1311	0.2	0.1887	0.2047
2073	0.1359	0.1587	0.1566	0.1924	0.201
2074	0.1176	0.1774	0.1664	0.1464	0.1402
Mean	0.146317	0.144933	0.202017	0.180667	0.187233
S.D	0.041954	0.025691	0.047058	0.025793	0.035101

Return on Assets

ROA					
Year	ADBL	GIBL	NIBL	SBI	SBL
2069	0.0268	0.0086	0.0158	0.0082	0.0111
2070	0.0296	0.0115	0.0261	0.0119	0.0143
2071	0.0171	0.0157	0.0225	0.0151	0.0173
2072	0.0357	0.0138	0.0188	0.0179	0.0151
2073	0.022	0.0157	0.0196	0.0169	0.0168
2074	0.0202	0.0172	0.0206	0.0152	0.0154
Mean	0.025233	0.01375	0.020567	0.0142	0.015
S.D	0.006827	0.003197	0.003497	0.00358	0.00220907

Earnings per share

EPS					
Year	ADBL	GIBL	NIBL	SBI	SBL
2012	60.57	12.14	34.49	22.93	20.41
2013	71.54	18.57	50.82	32.75	29.8
2014	47.53	23.71	46.77	34.83	38.63
2015	111.77	19.16	41.11	34.84	37.76
2016	52.79	22.42	35.15	34.29	41.52
2017	31.59	24.82	33.7	21.99	26.39
mean	62.63167	20.13667	40.34	30.27167	32.41833
S.D	27.51977	4.631866	7.169608	6.106116	8.214074

Appendix-2

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	TDTE, LTDTA, STDTA ^b	.	Enter
a. Dependent Variable: EPS			
b. Tolerance = .000 limit reached.			

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.641 ^a	.411	.343	15.21829
a. Predictors: (Constant), TDTE, LTDTA, STDTA				

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4202.237	3	1400.746	6.048	.003 ^b
	Residual	6021.508	26	231.596		
	Total	10223.745	29			
a. Dependent Variable: EPS						
b. Predictors: (Constant), TDTE, LTDTA, STDTA						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	33.022	17.151		1.925	.065		
	STDTA	21.657	24.852	.174	.871	.391	.568	1.759
	LTDTA	892.664	370.912	.369	2.407	.023	.961	1.040
	TDTE	-3.030	1.077	-.564	-2.813	.009	.563	1.775

a. Dependent Variable: EPS

Excluded Variables ^a								
Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics			
					Tolerance	VIF	Minimum Tolerance	
1	TDTA	250.426 ^b	.539	.595	.107	1.079E-7	9265266.158	1.079E-7

a. Dependent Variable: EPS

b. Predictors in the Model: (Constant), TDTE, LTDTA, STDTA

Collinearity Diagnostics ^a							
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	STDTA	LDTA	TDTE
1	1	3.740	1.000	.00	.00	.01	.00
	2	.196	4.370	.00	.00	.69	.10
	3	.053	8.395	.20	.02	.30	.58
	4	.011	18.680	.80	.97	.00	.32
a. Dependent Variable: EPS							

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	TDTE, LTDTA, STDTA ^b	.	Enter
a. Dependent Variable: ROA			
b. Tolerance = .000 limit reached.			

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.723 ^a	.523	.468	.00435
a. Predictors: (Constant), TDTE, LTDTA, STDTA				

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.001	3	.000	9.514	.000 ^b
	Residual	.000	26	.000		
	Total	.001	29			
a. Dependent Variable: ROA						
b. Predictors: (Constant), TDTE, LTDTA, STDTA						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.020	.005		4.041	.000		
	STDTA	.010	.007	.250	1.391	.176	.568	1.759
	LTDTA	.136	.106	.177	1.280	.212	.961	1.040
	TDTE	-.001	.000	-.809	-4.483	.000	.563	1.775
a. Dependent Variable: ROA								

Excluded Variables ^a								
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	TD TA	398.58 ^b	.966	.343	.190	1.079E-7	9265266.158	1.079E-7
a. Dependent Variable: ROA								
b. Predictors in the Model: (Constant), TDTE, LTDTA, STDTA								

Collinearity Diagnostics ^a							
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	STDTA	LTDTA	TDTE
1	1	3.740	1.000	.00	.00	.01	.00
	2	.196	4.370	.00	.00	.69	.10
	3	.053	8.395	.20	.02	.30	.58
	4	.011	18.680	.80	.97	.00	.32

a. Dependent Variable: ROA

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	TDTE, LTDTA, STDTA ^b	.	Enter

a. Dependent Variable: ROE

b. Tolerance = .000 limit reached.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.346 ^a	.120	.018	.04043

a. Predictors: (Constant), TDTE, LTDTA, STDTA

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.006	3	.002	1.177	.338 ^b
	Residual	.042	26	.002		
	Total	.048	29			
a. Dependent Variable: ROE						
b. Predictors: (Constant), TDTE, LTDTA, STDTA						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.100	.046		2.194	.037		
	STDTA	.056	.066	.206	.844	.406	.568	1.759
	LTDTA	.493	.985	.094	.500	.621	.961	1.040
	TDTE	.002	.003	.162	.662	.514	.563	1.775
a. Dependent Variable: ROE								

Excluded Variables ^a								
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	TD TA	1086.977 ^b	2.058	.050	.381	1.079E-7	9265266.158	1.079E-7
a. Dependent Variable: ROE								
b. Predictors in the Model: (Constant), TDTE, LTDTA, STDTA								

Collinearity Diagnostics ^a							
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	STDT A	LTDT A	TDTE
1	1	3.740	1.000	.00	.00	.01	.00
	2	.196	4.370	.00	.00	.69	.10
	3	.053	8.395	.20	.02	.30	.58
	4	.011	18.680	.80	.97	.00	.32

a. Dependent Variable: ROE

**IMPACT OF CAPITAL STRUCTURE ON PROFITABILITY OF NEPALESE
COMMERCIAL BANKS**

A Thesis Proposal

By

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CHAPTER-I

INTRODUCTION

1.1 Background of the study

The term 'structure' means the arrangement of the various parts. So capital structure means the arrangement of capital from different sources so that the long-term funds needed for the business are raised. Thus, capital structure refers to the proportions or combination of equity share capital, preference share capital, debenture, long-term loans, retained earnings and other long-term sources of fund in the total amount of capital which a firm should raise to run its business. Capital structure is the combination of debt and equity securities that comprise a firm's financing of its assets.

The relative proportion of various sources of funds used in a business is termed as financial structure. Capital structure is a part of the financial structure and refers to the proportion of the various long-term sources of financing. It is concerned with making the array of the sources of the funds in a proper manner, which is in relative magnitude and proportion. The capital structure of a company is made up of debt and equity securities that comprise a firm's financing of its assets. It is permanent financing of a firm represented by long-term debt, preferred stock and net worth. So, it related to the arrangement of capital and excludes short-term borrowing. It denotes some degree of permanency as it excludes short-term sources of financing. Again each components of capital structure has a different cost to the firm.

A company's capital structure points out how its assets are financed. When a company finances its operations by opening up or increasing capital to an investor (preferred shares, common shares, or retained earnings), it avoids debt risk, thus reducing the potential that it will go bankrupt. Moreover, the owner may choose debt funding and maintain control over the company, increasing return on the operations. Debt takes the form of a corporate bond issue, long-term loan, or short-term debt. The

latter directly impacts the working capital. Having said that, a company that is 70% debt-financed and 30% equity-financed has a debt-to-equity ratio of 70%; this is the leverage. It is very important for a company to manage its debt and equity financing because a favorable ratio will be attractive to potential investors in the business. Capital can be raised either through the acquisition of debt or through equity. Equity financing comes from the sale of stock to shareholders. Debt can come from many sources, such as bank loans, personal loans and credit card debt, but it must always be repaid at a later date, usually with interest.

Both types of capital financing carry some degree of expense that must be paid to access funds, called the cost of capital. For debt capital, this is the interest rate charged by the lender. The cost of equity is represented by the rate of return on investment that shareholders expect in dividends. While debt tends to cost less than equity, both types of capital financing impact a company's profit margins in important ways. Perhaps the clearest example of this is the impact of debt on the bottom line. Somewhere between operational expenses and the net profit figure on a company's income statement lies expenses incurred for the payment of debts. A company with a particularly debt-heavy capital structure makes larger interest payments each year, thereby reducing net profit. Debt allows companies to leverage existing funds, thereby enabling more rapid expansion than would otherwise be possible. The effective use of debt financing result in an increases in revenue that exceeds the expense of interest payments. In addition, interest payments are tax-deductible, reducing a company's overall tax burden.

The impact of equity financing on a company's profit margins is equally important, though not quite so straightforward. While equity funds stimulate growth without requiring repayment, shareholders are granted limited ownership rights, including voting rights. They also expect a return on their investment in the form of dividends, which are only paid if the company turns a profit. A business funded by shareholder equity is beholden to its investors and must remain consistently profitable in order to

fulfill this obligation. Business ownership is shared, so the proverbial pie of profits must be divided into a greater number of pieces. A company funded fully by debt may have hefty interest payments each month, but when all is said and done, the profits belong entirely to the business owners. Without shareholder dividends to pay, the profits can be reinvested in the business through the purchase of new equipment or by opening a new location, generating even greater profits down the road.

Another indirect effect of capital structure on profitability is its impact on the potential availability of additional capital if it is needed in the future. A company with a particularly high debt to equity ratio may be seen as unnecessarily risky by both lenders and potential shareholders, making it difficult to raise additional funds. Limited access to capital funding, in turn, limits the business's growth potential, keeping profit margins stagnant.

Capital structure is the mix of long-term sources of funds used by a firm. It is made up of debt and equity securities and refers to permanent financing of a firm. It is composed of long-term debt, preference share capital and shareholder's funds.

Hence capital structure implies the composition of fund raised from various sources broadly classified as debt and equity. It may be defined as the proportion of debt and equity in the total capital that will remain invested in a business over a long period of time. Capital structure is concerned with the quantitative aspect. A decision about the proportion among the proportion among these types of securities refers to the capital structure decision of an enterprise.

1.2 Overviews of selected bank

1.2.1 Agriculture Development Bank Limited

With the main objective of providing institutional credit for enhancing the production and productivity of the agricultural sector in the country, the Agricultural Development Bank, Nepal was established in 1968 under the ADBN Act 1967, as

successor to the cooperative Bank. The Land Reform Savings Corporation was merged with ADBN in 1973. Subsequent amendments to the Act empowered the bank to extend credit to small farmers under group liability and expand the scope of financing to promote cottage industries. The amendments also permitted the bank to engage in commercial banking activities for the mobilization of domestic resources. Agricultural Development Bank Limited (ADBL) is an autonomous organization largely owned by Government of Nepal. The bank has been working as a premier rural credit institution since the last three decades, contributing a more than 67 percent of institutional credit supply in the country. Hence, rural finance is the principal operational area of ADBL. Furthermore, the bank has also been involved in commercial banking operations since 1984. The enactment of Bank and Financial Institution Act (BAFIA) abolished all Acts related to financial institutions including the ADBN Act, 1967. In line with the BAFIA, ADBL has been incorporated as a public limited company on July 14, 2005. Thus, ADBL operates as a "A" category financial Institution under the legal framework of BAFIA and the Company Act, 2053. According to the balance sheet of 2074, total deposit is Rs. 99.81 billion, net profit is Rs. 2.5 billion and share capital is Rs.13.93 billion. ADBL still have 40 ATM and 232 branches all over the county.

1.2.2 Nepal SBI Bank Limited

Nepal SBI Bank Ltd. (NSBL) is a subsidiary of State Bank of India (SBI) having 55 percent of ownership. The local partner viz. Employee Provident Fund holds 15% equity and General Public 30%. In terms of the Technical Services Agreement between SBI and the NSBL, the former provides management support to the bank through its expatriate officers including Managing Director who is also the CEO of the Bank. Central Management Committee (CENMAC), consisting of the Managing Director & CEO, Chief Operating Officer & Dy. CEO, Chief Financial Officer, Chief Risk Officer and Chief Credit Officer, exercises overall control functions with the help of 3 Regional Offices, and oversee the overall operations of the Bank.

NSBL was established in July 1993 and has emerged as one of the leading banks of Nepal, with 869 skilled and dedicated Nepalese employees working in a total of 83 outlets, which includes 72 branches, 7 extension counters, 3 Regional Offices and Corporate Office. With presence in 39 districts in Nepal, the Bank is providing value added services to its customers through its wide network of 110 ATMs (including 2 Mobile ATMs and 4 CRMs), internet banking, mobile wallet, SMS banking, IRCTC Ticket Online Booking facility, etc. NSBL is one of the fastest growing Commercial Banks of Nepal with more than 8.33 lakhs satisfied deposit customers and over 6.50 lakhs ATM/Debit cardholders. The Bank enjoys leading position in the country in terms of penetration of technology products, viz. Mobile Banking, Internet Banking and Card Services. The Bank is moving ahead in the Nepalese Banking Industry with significant growth in Net Profit with very nominal NPA. As of 31st Chaitra, 2074, the Bank has deposits of Rs. 83.66 billion and advances (net) of Rs. 74.05 billion, besides investment portfolio of Rs. 17.93 billion.

1.2.2 Nepal Investment Bank LTD

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one of the largest banking group in the world. According to balance sheet of 2074, total deposit is Rs.125.66 billion, net profit is Rs.3.11 billion and share capital is Rs. 10.62 billion.

Later, in 2002 a group of Nepalese companies comprising of bankers, professionals, industrialists and businessmen acquired the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd., and accordingly the name of the Bank also changed to Nepal Investment Bank Ltd. NIBL has 78 branches,108 ATM available in Nepal.

1.2.4 Siddhartha Bank Limited

Siddhartha Bank Limited (SBL), established in 2002 and promoted by prominent personalities of Nepal, today stands as one of the consistently growing banks in Nepal. While the promoters come from a wide range of sectors, they possess immense business acumen and share their valuable experiences towards the betterment of the Bank.

Within a short span of time, Siddhartha Bank has been able come up with a wide range of products and services that best suits its clientele. Siddhartha Bank has been posting growth in its portfolio size and profitability consistently since the beginning of its operations. The management of the Bank has been thoroughly professional. Siddhartha bank has 104 branches, 83 ATM services in Nepal.

Siddhartha Bank has been able to gain significant trust of the customers and all other stakeholders to become one of the most promising commercial banks in the country in less than 15 years of its operation. According to the balance sheet of 2074 total deposit is Rs.77.31 billion, net profit is Rs.1.38 billion and share capital is Rs. 75.84 billion. The Bank is fully committed towards customer satisfaction. The range and scope of modern banking products and services the Bank has been providing is an example to its commitment towards customer satisfaction. It is this commitment that has helped the Bank register quantum growth every year. And the Bank is confident and hopeful that it will be able to retain this trust and move even further towards its mission of becoming one of the leading banks of the industry.

1.2.5 Global IME Bank Limited

Global IME Bank Ltd. (GIBL) emerged after successful merger of Global Bank Ltd (an “A” class commercial bank), IME Financial Institution (a “C” class finance company) and Lord Buddha Finance Ltd. (a “C” class finance company) in year 2012. Two more development banks (Social Development Bank and Gulmi Bikas Bank) merged with Global IME Bank Ltd in year 2013. Later, in the year 2014, Global IME Bank made another merger with Commerz and Trust Bank Nepal Ltd.

(an “A” class commercial bank). During 2015-16, Global IME Bank Limited acquired Pacific Development Bank Limited (a "B" Class Development Bank) and Reliable Development Bank Limited (a “B” Class Development Bank. Global Bank Limited (GBL) was established in 2007 as an ‘A’ class commercial bank in Nepal which provided entire commercial banking services. The bank was established with the largest capital base at the time with paid up capital of NPR 1.0 billion. The paid up capital of the bank has since been increased to NPR 8.88 billion. The bank's shares are publicly traded as an 'A' category company in the Nepal Stock Exchange. Global IME Bank operates 133 branches and 141 ATM services in Nepal.

It is in line with the aim of the bank to be “The Bank for All” by giving necessary impetus to the economy through world class banking service. For the day to day operations, the bank has been using the world renowned FINACLE software that provides real time access to customer database across all branches and corporate locations of the bank. This state of the art customer database has also been linked to a Management Information System that provides easy reach to all possible database information for balanced and informed decision making. A disaster recovery system (DRS) of the Bank has also been established in the Western Region of Nepal (200 kms west of Kathmandu). The bank has been able to achieve excellent diversification of its assets. A well balanced distribution of exposure in areas of national interest has been possible through long term forecasting and timely strategic planning. The bank has diversified interests in hydro power, manufacturing, textiles, services industry, aviation, exports, trading and microfinance projects, just to mention a few. According to the balance sheet of 2074, total deposit is Rs.101.91 billion, net profit is Rs.2.006 billion and share capital is Rs.8.8 billion.

1.3 Statement of the problem

The choice of capital structure is one of the most important strategic financial decisions of firms. Capital structure is the mix of the long-term sources of funds used by a firm. It is made up of debt and equity securities and refers to permanent financing of a firm. It is composed of long term debt, preference share capital and

shareholder's funds. The capital structure of a company is made up of debt and equity securities that comprise a firm's financing of its assets.

In practice, it is noticed that firms procure funds without much of the analysis that may cost them an arm and the leg to survive in the competitive modern business environment for the long. Thus, it seems to be the relevant topic of discussion which tries to explore the capital structure position of selected banks in Nepal, so that the fact can be revealed whether strengthening their proper mixture pattern in capital structure adds to their competitive advantage.

So, this concise study revolves around the derivation of understanding the capital structure pattern of the selected banks in Nepal, namely Nepal SBI Bank Limited (NSBL), Nepal Investment Bank Limited (NIBL), Agriculture Development Bank Limited (ADBL), Global IME Bank Limited and Siddhartha Bank Limited.

For the study, following research question has been raised;

1. What is the impact of capital structure in profitability?
2. What is the relationship between capital structure and profitability?
3. To what extent does capital structure affect the firm efficiency (profitability) of the selected commercial bank?

1.4 Objectives of the study

The general objective of this study is to examine the impact of capital structure on profitability of commercial banks of Nepal, with an emphasis on performance of business operation of banks.

1.4.1 Specific objectives of study:

1. To find out the impact of capital structure in profitability.
2. To analyze the relationship between capital structure and profitability.
3. To assess how capital structure affects the firm efficiency (profitability) of the selected commercial bank.

1.5 significance of the study

The significance of the study is theoretical as well as practical or applied. Some of the significances are as follows;

1. This study help to provide information regarding the composition of capital structure on the basis of term to maturity,
2. It is also hoped that this study may be able to explore the capital structure of selected commercial banks,
3. This study will be useful for researchers, students and for those who wants to have further study in details.
4. Similarly, this study may be fruitful to financial institutions.

1.6 Limitation of the study

Following will be the limitation of the study;

1. There will be small size of sample so that the research might not generalized whole population of 28 commercial banks.
2. The study is limited to only five banks, namely Nepal SBI Bank Limited, Nepal Investment Bank Limited (NIBL), Agriculture Development Bank Limited (ADBL), Global IME Bank Limited and Siddhartha Bank Limited thus may not represent the whole banking industry of Nepal.
3. This reliability of the secondary data highly depends on the accuracy of the annual report of the concerned banks.

4. This study will be focused only secondary source of data collection.

1.7 Organization of the study

The research will be organized into five chapters, which will be presented in such a way that the research objective will be easily met and research questions will be answered properly. Each chapter's content is further described as follows:

Chapter 1: Introduction

It will contain the general introduction and background of the research with the short overview of selected commercial banks. The chapter will also have the statement of problem, research objective, limitations of the study, significance of the study.

Chapter 2: Review of literature

This chapter will look for the review of the previous studies related to this research subject to know the prevalent situations of capital structure and other factors as well. The first part will deal with the conceptual framework and second part will consider the review of different sources of information.

Chapter 3: Research methodology

This chapter will be considered about the method of doing research on which the whole study is based upon, while it will contain the nature and sources of data to be used in the research and sampling method and procedures will be mentioned with data analysis tools.

Chapter 4: Data presentation and analysis

The fourth chapter will deal with the presentations and analysis of the data collected from various sources using different financial and statistical tools with findings and brief comments on them.

Chapter 5: Conclusion

This chapter will have summaries, conclusions and recommendations of the study. Reference and Appendices will also be attached at the end of the study.

CHAPTER-II

LITERATURE REVIEW

2.1 Review of Journals and Article

Mesquita and Lara (2006), in their article “Capital Structure and Profitability: The Brazilian Case”, have shown a great dispersion among the several capital sources used by the Brazilian companies, exception to the equity, the main component, and the one that presents smaller variability. As to the relationship between return rates and debt, the results indicate inverse relationship for the long run financing, and direct relationship for short-run financing and equity.

The facts of the most lucrative companies are the ones with lowest debt are in consonance with other empiric evidences. However the low debt level, when compared to the debt level of more developed economies, such as United States, Japan, Germany and United Kingdom, indicates that the Brazilian companies are using debt in a extremely conservative way. Perhaps the high interest rates practiced at the Brazilian market, the instability of the exchange rate politics and remaining atmosphere of uncertainty of the local economy which conveys operational and financial risks that hinder the managerial planning and inhibit the adoption of more sophisticated debt politics can explain that fact.

Raja and Dave (2013), in their article ‘Capital Structure and Profitability’: Indian Evidences. Samiksha, It is undoubted that capital structure decision is imperative over profitability of the company. They analyzes the magnitude and direction of the impact that capital structure decision has on profitability, employing debt negatively affects profitability. Further, it can be conferred that combining short term and long term debt is of vital importance to the finance manager. Merely, keeping debt capital in capital structure and receiving benefits of trading on equity is not enough. However, several times finance managers chose to finance assets depending upon their objectives, irrespective of benefits / pitfalls of concerned source of finance.

Raheman, Zulfiqar and Mustafa (2007), in their article, “Capital Structure and Profitability: Case of Islamabad Stock Exchange”, have stated that firstly there is negative relationship between the long term debt and profitability verifying first hypothesis, which means that firms with having more long term debt are less profitable. This can be attributed to the interest cost bear by the company for a long term debt financing, which increase the fixed costs of the product and resultantly decrease the profitability. Secondly numeric verifications and statistical analysis shows negative relationship between net operating profitability and debt ratio.

Thirdly the relationship of profitability with percentage of equity in the total financing has direct relationship meaning thereby more equity leads to more profits. Fourthly size with profitability numerical calculations have accepted that with the increase in size of the firm the profitability increases. The study has taken the N-log of sales as proxy for growth in size and the increase in sales result in more profits.

Abor (2008), in his article, “Determinants of the Capital Structure of the Ghanaian Firms”, has examined the determinants of capital structure decisions of publicly quoted firms, large unquoted firms and small and medium enterprises (SMEs) in Ghana. Publicly quoted and large unquoted firms were found to have higher debt ratios than small and medium enterprises (SMEs). Overall, listed and unquoted firms exhibit different financing behavior from that of SMEs. Short term debt constitutes a relatively high proportion of total debt of Ghanaian firms.

Listed firms are better positioned to raise equity finance from the stock market, and large unquoted firms are also able to access equity finance from institutional investors usually through private placements. Firm size was found to have a positive relationship to short-term debt ratio of SMEs and debt ratios of quoted firms, but negative with respect to long-term debt ratio in the case of unquoted firms. The results of this study seem to support the pecking order hypothesis, given that both long-term and short-term debts

have inverse associations with profitability in all the sample groups. Firm growth was found to have a positive association with long-term debt for the unquoted firms' sample and short-term debt ratio for SMEs. Limited liability companies are more likely to obtain long-term debt finance relative to sole-proprietorship businesses.

The issue of capital structure is an important strategic financing decision that firms have to make. Clearly, the pecking order theory appears to dominate the Ghanaian capital structure story. It is therefore important for policy to be directed at improving the information environment.

Driffield & Pal (2008), in their article, "Evolution of Capital Structure in East Asia: Corporate Inertia or Endeavors?" have stated that many firms in the worst affected countries indulged in some reckless capital structure behavior. There is evidence that firms in the worst affected countries not only have higher leverages (being the result of high debt even in a situation of deteriorating assets), but also tend to have lower speed of adjustment than their counterparts in the least affected countries. This general ranking is robust to various alternative specifications and sample selections.

The case of Malaysia is particularly interesting in this context: while by virtue of its rigorous institutional and legal environment and also access to market based finance, the country was successful to restrict leverages to a generally lower level, it was not so successful to ensure speedy adjustment of capital structure and was among the worst affected countries hit by the crisis. This analysis also identifies some important adjustment mechanisms: (a) adjustment speeds are greater for larger firms and firms in the top leverage quartile who tend to have access to cheaper credit, as reflected in a comparison of effective interest rates. (b) Firms with more cash flow tend to have faster speed of adjustment. (c) Firms with only long-term debt however have lower speed of adjustment. (d) Firms in countries with tighter regulations and access to equity finance tend to have lower leverage and higher speed of adjustment (with the exception of Malaysia). (e) In general financially distressed firms in most countries tend to have

higher speed of adjustment, revealing cases of sudden adjustment; the latter is especially evident in the post-crisis period, highlighting the fact that lessons have been learnt after the crisis.

2.2 conceptual framework

“The term structure has been associated with the term capital. The term capital may be defined as the long term funds of the firm. Capital is the aggregation of the items appearing on the left hand side of the balance sheet minus current liabilities. In other words capital may also be expressed as follows $\text{Capital} = \text{Total assets} - \text{Current Liabilities}$.”(Kishor,2016)

“Capital structure refers to the combination of long term sources of fund, such as debentures, long term debt, preference shares capital and equity capital including reserves and surpluses. Capital structure represents the relationship among different kinds of long term sources of capital and their amount. Normally a firm raises long term capital through the issue of common shares, sometimes accompanied by preference shares. The share capital is often supplemented by debt securities and other long term borrowed capital. In some cases, the firm accepts deposits. In a going concern, retained earnings or surpluses too form a part of capital structure, except for the common shares, different kinds of external financing, i.e. preference shares as well as the borrowed capital carry fixed return to the investors.” (Solomon; 1993) Financial structure refers to the compositions of all sources and amount of funds collected to use or invest in the business. In other words, “financial structure refers to the Capital and Liabilities side of balance sheet. Therefore, it includes shareholder's funds, long term loans as well as short term loans. It is different from capital structure as capital structure includes only the long term sources of financing while financial structure includes both long term and short term sources of financing. Thus a firm's capital structure is only a part of its financial structure.” (Keister; 2000). In other words, equity capital includes common stock, paid in capital, reserve and surplus and retained earnings. “One should be clear about the key differences between two types of capital, relative to voice in management, claim on

income and assets, maturity and tax treatment. Debt holders are preferred stockholders to not have voice in management. However, in default, they may receive a voice in management, otherwise only common stock holders have voting rights. Debt holders have a higher priority of claim against any earning or assets available for payment. Generally, life of debt capital is stated, but equity capital remains in the firm for an indefinite period of time. Tax can be saved in interest payment where as payment of dividend is non-tax deductible expenditure. Tax must be paid before payment of dividend to the share holders. It should be clear that due to its secondary position (in income and assets) relative to debt suppliers of equity capital take greater risk and therefore must be compensated with higher expected return those suppliers of debt capital.” (Mathur; 1979)

From the 2.1 reviews of journal and article, many professor’s find out different result from their research. Many of the result, I select some of them are;

According to the Mesquita and Lara, in their articles “capital structure and profitability: The Brazilian Case” have used return on equity as dependent variable and short- term debt to total liability, long term debt to total liability, equity to total liability and proportion of debts of long term in relation to the equity. They have shown a great dispersion among the several capital sources used by the Brazilian companies. As the relationship between return rates and debt the result indicate inverse relationship for the long run financing and direct relationship for short run financing and equity. To compared the debt level of more developed economies, the Brazilian companies are using a debt in a extremely conservative way.

According to Raja and Dave, in their article ‘capital structure and profitability’: Indian Evidences. Samiksha, have used return on equity as a dependent variable, short-term debt to total liability, long-term debt to total liability, equity to total liability and long term to equity as in dependent variable. They analyzed the magnitude and direction of the impact that capital structure decision has on profitability, employing debt negatively affect profitability.

In my research, I use the conceptual relationship between dependent and independent variable of this study is as follows:

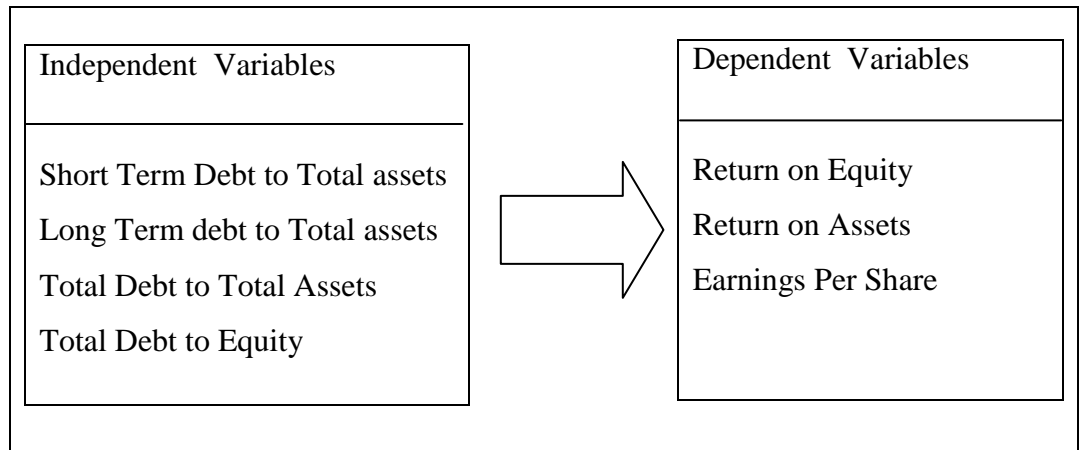


Fig: Conceptual Framework of the study

The sources of funding for a business are divided into two main categories, owners' funding (equity) and borrowed funding (debt). The objective of the business owners is to increase their wealth and the performance of firms. In relation to this objective the increase in the performance is measured by the increase in return on the shareholders' funds. The independent variable in this study was capital structure and the dependent variable was financial performance. The concept illustrated above assumes that increasing the level of the debt in the capital structure will increase the turnover of the business and hence its profit, resulting in an increase in returns to the business owners. An increase in interest rate is expected to result in reduced borrowing, increased interest expenses and thus reduced returns to business owners.

Model

$$Y_{EPS} = \beta_0 + \beta_1 (SDTA) + \beta_2 (LDTA) + \beta_3 (TDTA) + \beta_4 (TDTE) + \varepsilon$$

$$Y_{ROA} = \beta_0 + \beta_1 (SDTA) + \beta_2 (LDTA) + \beta_3 (TDTA) + \beta_4 (TDTE) + \varepsilon$$

$$Y_{ROE} = \beta_0 + \beta_1 (SDTA) + \beta_2 (LDTA) + \beta_3 (TDTA) + \beta_4 (TDTE) + \varepsilon$$

Where,

β_0 is the intercept, $\beta_1, \beta_2, \beta_3, \beta_4$ is the independent Variable, ε . Are the error terms

Hypothesis

H1: There is a negative relationship between short term debt ratio and banks profitability in Nepal.

H2: There is a negative relationship between long term debt ratio and banks profitability in Nepal.

H3: There is a negative relationship between total debt to total asset ratio and banks profitability in Nepal.

H4: There is a negative relationship between total debt to total equity ratio and banks profitability in Nepal.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Research Design

A research design is the overall path or method by which the research study is guided. It serves as a framework for the study directing the collection and analysis of the data, in which the research method is to be utilized and sampling plan to be followed. Research designed is the way through which we find the required answer of the research questions and ultimately meet the research objectives.

3.2 Population and sampling

At present, 28 commercial banks are operating in the country. However, the analysis of all these commercial banks in terms of capital structure and its impact on profitability will be onerous to conduct. There are few commercial banks to issue debenture and bond. So taking this numbers as the population of the study, only five commercial banks; namely Nepal SBI Bank Limited (NSBL), Agriculture Development Bank Limited (ADBL), Nepal Investment Bank Limited (NIBL), Global IME Bank Limited and Siddhartha Bank Limited have been taken as the sample of the study.

There are 28 commercial banks in Nepal, among them I select five commercial banks because each bank issue debenture and bond. In which the sample will represent both private and public commercial banks in Nepal.

1. Nepal SBI Bank Limited
2. Agriculture Development Bank Limited
3. Nepal Investment Bank Limited
4. Siddhartha Bank Limited
5. Global IME Bank limited

3.3 Nature and Sources of Data

The data used in this are fully secondary in nature. Published annual reports of concerned banks are taken as basic source of data. The relating to financial performance are directly obtained from the concerned banks. Similarly, related books, magazines, journals, articles, reports bulletins, and Nepal Rastra Bank, related website from internet etc. as well as supplementary data.

3.4 Analysis of Data

Financial as well as statistical tools are used to make the analysis more convenient, reliable and authentic. For the data analysis, different items from the balance sheet and other statement are tabulated. Their ratios, percentage, mean, standard deviation, and coefficients of correlation are then calculated and presented in the tables. To study the relationship between two or more variables, correlation coefficients are also calculated. Following are the brief introduction of the financial and statistical tools used in this study.

3.4.1 Financial Ratio

Under the financial tool, mainly capital structure, solvency position, profitability, and cost of capital of the banks have been measured.

1. Capital structure

Capital structure can be a mixture of a firm's long-term debt, short-term debt, common equity and preferred equity. A company's proportion of short- and long-term debt is considered when analyzing capital structure. When analysts refer to capital structure, they are most likely referring to a firm's debt-to-equity (D/E) ratio, which provides insight into how risky a company is. Usually, a company that is heavily financed by debt has a more aggressive capital structure and therefore poses greater risk to investors.

- a. Short Term Debt to total Assets

- b. Long Term Debt to total assets

c. Total Debt to Assets

d. Total Debt to equity

1. Profitability Ratio

Profitability ratios are a class of financial metrics that are used to assess a business's ability to generate earnings relative to its associated expenses. For most of these ratios, having a higher value relative to a competitor's ratio or relative to the same ratio from a previous period indicates that the company is doing well.

a. Earnings per share

b. Return on equity

c. Return on assets

3.4.2 Statistical tools

The following mentioned statistical tools will be used to interpret data:

1. Arithmetic means

Arithmetic mean is the number which is obtained by adding the various numbers of all the items of a series and dividing the total by the number of items. Arithmetic mean is a useful tool in statistical analysis.

2. Standard Deviation

The standard deviation is a statistics that measure the dispersion of a dataset relative to its mean and is calculated as the square root of the variance.

3. Coefficient of correlation

The correlation coefficient is a statistical measure that calculates the strength of the relationship between the relative movements of the two variables. The range of values for the correlation coefficient bounded by 1.0 on an absolute value basis or between -1.0 to 1.0. If the correlation coefficient is greater than 1.0 or less than -1.0, the correlation measurement is incorrect. A correlation of

-1.0 shows a perfect negative correlation, while a correlation of 1.0 shows a perfect positive correlation.

4. Regression Lines

The regression line is the line, which gives the best estimate of one variable for any given value of other variable. In case of two variables X and Y, we will have two regression lines i.e. lines is called the regression equation and also estimating equation.

5. Trend analysis

Trend analysis is based on the idea that what has happened in the past gives traders an idea of what will happen in the future.

6. Hypothesis testing

A Hypothesis is a tentative assertion or idea or assumption about the parameters of a population. Hypothesis testing is an act in statistics whereby an analyst tests an assumption regarding a population parameter. The methodology employed by the analyst depends on the nature of the data used and the reason for the analysis.

References

- Abor, J. (2008, March). Determinants of the capital structure of the Ghanain firms. *African Economic Reseaech Consortion,IV(4)*, 1-34.
- Driffield, N., & Pal, S. (2008). Evaluation of capital structure in East Asia. *Corporate Inertia or Endeavors, XI (13)* , 75-76.
- Keister, L. (2000). *Capital Structure in Transition: Financial Strategy in China's Emerging Economy*. Kunming: Aurora Publishing House.
- Kishor, M. R. "Financial Management", *Taxmann Allied services ltd. New Delhi*
- Mathur, V.R. Mutalik (1979). Banking Development in India. *Bombay: Pc Mansktol and Sons Pvt. Ltd.*
- Mesquita, J. M., & Lara, J. E. (2006). Capital structure and Profitability. *Capital structure and Profitability XIV(9)*, 152-177.
- Raheman, A., Zulfiqar, B., & Mustafa. (2007). Capital Structure and Profitability. *Case study of Islamabad stock III(5)*,347-361.
- Raja, A., & Dave, N. (2013). Capital structure and Profitability:Indian Evidance, 08-11.
- Soloman, E. (1993), *Theory of Financial Management*. *Ohio: Columbia Press*.