CHAPTER: ONE

INTRODUCTION

1.1 Background of the Study

Bank is defined as a place where the transactions of money take place. In other words, bank is an institution, which deals in money, receiving it on deposits from customers, honoring customer's drawings against such deposits on demand, collection cheques for customers and lending or investing surplus deposits until they are required for repayment. Generally, an institution established by law, which deals with money and credit is called bank. A bank simply carries out the work of exchanging money, providing loan, accepting deposit and transferring the money. This world cannot run without banks. Bank plays a significant and vital role in the economic development of the country. Bank is a mobilizing institution, which accepts deposit from various sources, and invests such accumulation resources in the field of agriculture, trade, commerce; industry and tourism etc the bank word is derived from Italian word Banca, Italian joint fund Monte and French word Banque which means to provide cash loan or exchange. Bank fills the gap between the searcher and provider of the fund. It also provides sufficient back support for the growth and expansion of trade of the country, which eventually helps to develop the economic condition of the country.

Commercial Banks are considered second types of banks. These banks are established to improve people's economic welfare and facility, to provide loan to the agriculture, industry and commerce and to offer banking services to the people and the country. These banks have been playing a great role for the economic development of the country directly or indirectly. The services made by these banks are very important. For instance, the functions of banks are: to provide loan, to accept deposits, to perform task related to the agencies and the tasks concerned to the general utility. Commercial banks are the heart of the financial system. They hold the deposits of individuals, government establishment and business units. They make funds available through their lending and investing activities to borrower: individuals, business firms and government establishments. These banks are the suppliers of finance for trade and

industry and play a vital role in the economic and financial life of the country. By investing the saving in the productive areas, they help in the formation of capital.

Every Business firm needs capital to operate the business. Capital is the blood of the business. A business firm or enterprises cannot run their business without capital. Enterprises whether they are government owned or privately owned have to make pertinent capital structure decision in identifying exactly how much capital is needed to run their operation smoothly. There are many methods for the firm to raise its required funds. But the most basic and important instruments are stocks and bonds. The firm's mix of different securities is known as its capital structure.

Capital structure is considered as the mix of debt and equity and to operate in long run prospect. A firm must concentrate in its proportion. A firm can raise required fund by issuing various types of financial instruments. Investors and creditors being the key supply of capital, they hold greater degree of risk and hence have claims over firm’s assets and cash flow. Similarly debt holders are also sources of financing fund and they have risk considering firm’s cash flow is uncertain and there is probability that it may default in its obligations to pay off its interest and principle. In the other hand, if a firm issue preference share, those shareholders have the priority in payment of dividend before common shareholders but after debt holders. Since the percentage of preference dividend is fixed as the percentage of interest to debt, it is preferably paid off only after interest payment. Common shareholders as are the owner of the firm; they are paid from cash remaining after all payment is being made. Since the common share i.e. equity fluctuate in the market more than the preference share and debt, there is more risk

The term capital structure refers to the proportion of debt and equity capital. The capital structure concept has an important place in the theory of financial Management. The financing decision of a firm relates to choice of proportion of debt and equity to finance the investment requirement. A proper balance between debt and equity is necessary to ensure a trade-off between risk and return to the shareholders. A capital structure with reasonable proportion of debt and equity capital is called optimal capital structure. However, it can be expected that is the capital structure decision affect the total value of the firm should select such a financing mix. Which maximize

the shareholder wealth? Optimum capital structure may define as the capital structure or combination of debt and equity that leads to the maximum value of the firm.

The cost of capital concept occupies a pivotal place in the theory of financial management as a criterion of allocating capital. The cost of capital refers to the discount rate that would be used UN determining the present value of the estimated future cash proceeds and eventually deciding whether the project's worth undertaking or not (Bagges, 1963). The concept of cost of capital is significant not only as investment criteria but can also be used to evaluate the financial performance of the top management (Bhattacharya, 1970). In addition, the cost of capital concept helps management in moving towards its target capital structure or an optimal capital structure provided; there exists relationship between the two. The capital and cost of capital both are important in maximizing the wealth of the shareholder. The cost of capital concept helps management in moving towards its target capital structure or an optimal capital structure provided; there exists relationship between the two. The capital and cost of capital both are important in maximizing the wealth of the shareholder.

The firm's objective to maximize the wealth of the shareholder or return and equity is not meet by the Nepalese companies because in most of the companies there is no existence of debt in their capital structure and equity capital so only one source of financing while in some cases the proportion of debt is very high which crests the excess burden to the firm use of debt financing in the capital structure is very poor in banking sector. 'Most of companies have debt capital relatively very higher than equity capital; consequently most of them are operating at losses to the extent that payment of the interest on loan has been serious issues. Most of the losses are after changing interest on loan.

Capital structure is different from financial structure as 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. Thus, the financial structure shows the true picture of organization. It reflects out of short term obligation and long term sources of fund of the company. Different factor such as sale stability assets structure operating leverage, growth rate, profitability, taxes management attitude, lender attitudes, market

condition, legal requirement etc. should be taken into consideration while designing the capital structure.

The success and failure of the industry mainly depends, the ability of the top management and make appropriate capital structure management. One of the most perplexing issues facing financial managers is to relationship between capital structure and stock price. How much debt financing, as opposed to equity financing should a firm use? Should different industries and different firms within industries have different capital structures and if so what are the factors that lead to these differences? (Brigham 1999) studied capital structure which leads to the following conclusion:

a. There exists an optimal capital structure, or at least an optimal range of structure, for every firm.

b. However, financial theory is not powerful enough at this point to locate a firm optimal capital structure with precision.

c. The capital structure is not set in isolation; rather it depends on a set of factors. Which include the firm's dividend policy, its capital investment opportunities, and investor's preferences for different types of securities at each point in time?

Capital structure is concerned with the management of liabilities side of the balance sheet. It refers to the way the firm's assets are financed with. Prudent financial structure design requires answers to the following questions:

a. What should be the maturity composition of the firm's sources of funds?

b. In what proportions relative to should the various forms of permanent financing be utilized?

The first question refers to the division of short-term and long term funds, which is turn is decided by assets structure of the firm. The second question refers to the ratio of debt, preferred stock and equity to total assets, which implies capital structure management. The important aspect of capital structure management is to find out the proper mix that will maximize market price of share or minimize composite cost of capital. The proper mix is known as optimal capital structure.

There are four dimensional lists when thinking about capital structure lists: (Brigham and Houston 2001,)

a. Business Risk: Greater the firm's business risk the lower it is optimal debt ratio and vice versa.

b. The firm tax position: The major reason for using debt is that interest is deductible, which lowers the effective cost of debt. If the tax rate will be low, additional debt will not be as advantageous as if would be to a firm with higher effective tax rate.

c. Financial flexibility: While money is tight in the economy or when a firm is experiencing operating difficulties, suppliers of capital prefer to provide funds to companies with strong balance sheet. Therefore both the potential future need for fund and the consequences of a funds shortage influence the capital structure.

d. Managerial conservation or aggressiveness: Some managers are more aggressive than others, hence some firms are more, inclined to use debt in an offer to boost profit. This factor does not affect the true optimal, or value maximizing capital structure, but it does influence the manager determined capital structure.

These four points largely determine the capital structure, but operating condition can cause the actual structure to vary form the target.

Within a period of two and half decades, the Nepalese financial system has grown significantly both in terms of business volume and size of assets and market. The period show a number of financial institutions coming into existence with varied rapture of operations and offering a wide range of financial service. Since the second half of the 1980, significant achievement have been made in Nepalese financial system in mid July 2007, the Nepalese financial comprised the commercial banks, development banks, cooperatives, non-government organizations and some non banking financial institutions. Commercial banks, development banks, cooperatives and non-government organization licensed to carry out limited banking business come under the regulatory and supervisory jurisdiction of NRB.

From the above discussion, it is cleared that capital structure concept is not taken seriously by Nepalese companies. Therefore optimal capital structure does not exist at all. Cost of capital concept is not clear in Nepalese companies because it is impossible to minimize the average cost of capital without proper combination of capital structure component in financing of the firm. Determining the cost of capital is major problem in Nepalese companies. “It is in fact, an important measuring variable in the financing process of various companies for expanding the volume of companies. Management is not able to analysis cost of capital properly in their firm for investment decision making.

The significant of the study is that the banks selected for the study hold a strong position in contributing to uplift the economy. Therefore, their financial position capital structure and cost of capital is the matter of concern. This study will be beneficial to overview their capital structure management and to formulate future strategies to do much better in their horizon. Not only can the sampled banks benefited from the study but also the other firms and new researchers for the review of literature in near future. The researcher chosen the study of capital structure management as the subject matter and also in the present context it seems relevant**.**

1.2 Statement of the Problem

Bank plays a significant role in the economic development of the country by extending credit to the people. Although banking industry in Nepal is making remarkable progress and growth, it’s not without the problems. At the present context, the main problem faced by the business sector as well as bank is the unstable political and economic condition of the country. At the same time, there are very few profitable sectors where a bank can invest. This has forced the banks to lower down their interest rates to discourage deposit and, the same period, to encourage loan and advances. This has decelerated the pace of economic development.

Another problem facing by the banking industry is the lack of sound investment policy of the commercial banks. The success and prosperity of a bank relies heavily upon the successful utilization of the collected resources that is deposit. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of a commercial bank.

Actually, commercial banks are not properly utilizing their resources that is making loan and advances and lending for a profitable project. This is due to the lack of knowledge on financial risk, interest rate risk, business risk, liquidity risk etc. Granting loan against insufficient deposit, overvaluation of goods pledged, high percentage of non-performing loan, risk averting decision regarding loan recovery and negligence in recovery of overdue loan are some of the basic lapses and the result of unsound investment policy sighted in the banks. That condition will lead the commercial banks to the position of liquidation. Government owned banks are the perfect examples for this. This has created the perfect environment for mushrooming of private commercial banks. Still, only a handful of commercial banks have satisfactory investments that are good performing loans. Following are the major problems that show in the study.

How is capital structure managed in Nepalese commercial banks?

a. How is the trend of composition of debt and equity capital structure?

b. What are the relationships among total deposit to total loan and advances, total assets to net profit after tax, long term debt to net profit after tax and shareholders fund to net profit after tax of commercial banks in Nepal?

c. How far the commercial banks are aware of the importance of capital structure management and try to state the earning capacity of selected banks.

1.3 Objectives of the Study

The major objective of the study is to evaluate and analyze the capital structure management in Nepalese commercial banks. Following are the specific objectives:

a. To evaluate the performance of Commercial banks, in terms of long term debt, shareholders equity, total assets, total deposit, total loan and advances, EBIT and net profit after tax + interest etc.

b. To compare the financial results of selected commercial banks.

c. To examine the relationship between variables affecting debt and equity capital of commercial banks.

d. To assess the relationship between deposit, loan and advances, long term debt, net profit after tax and shareholders' equity.

1.4 Limitation of the Study

The study is made for the partial requirement of Masters Degree in Business Studies (MBS). This research is mainly concerned with the capital structure management of the selected commercial banks. However, some commonly attributed limitations are as follows:

1. The whole study is concerned to only two commercial banks.
2. This study covers only period of 5 years (i.e. F/Y 2063/064 to 2067/068).
3. The time frame is limited therefore the study cannot cover all the aspects of the subject matter.
4. The study will be particularly based on secondary data therefore the accuracy of calculation is fully depended on the accuracy of data provided by the concerned banks.

1.5 Organization of the Study

The study is accomplished according to approved general format of thesis of Tribhuwan University. Formalities and styles are those adopted in the study is not new but following the senior who make study possible come in this form and format. This study includes five chapters (i.e. Introduction, Review of Literature, Research Methodology, Data Presentation and Analysis and Summary Conclusion and Recommendation). The rational behind this kind of organization is to follow a simple methodology approach.

Chapter one dealt with major issues to be investigated along with background of the study, statement of problem, theoretical framework of capital structure, objectives of the study, significance of the study, limitations of the study and organization of the study.

Chapter two includes a discussion of the conceptual framework and review of relevant research studies. They are review of related studies, review of dissertations/thesis. It also includes concluding remarks and research gap.

Chapter three describes the research methodology employed in the study. It includes introduction of research methodology. Research design, selection of enterprises, nature of sources of data, data processing procedure and tools for data analysis are the major components of this chapter. Tools for data analysis include financial ratio analysis and statistical analysis.

Chapter four data presentation and analysis is the heart of the study in which all the relevant collected data are analyzed and interpreted. Mainly different financial and statistical tools are used for the analysis purpose. Financial analysis includes leverage ratio, coverage ratio, profitability ratio and capital adequacy ratio. And statistical analysis includes average, standard deviation, and coefficient of variation, correlation coefficient and test of hypothesis.

Chapter five indicates that the summary conclusion and recommendations of the study. This chapter mainly divided into three sub-headings they are summary, conclusion and suggestions and recommendations.

CHAPTER: TWO

LITERATURE REVIEW

2.1 Conceptual Framework

In this chapter, review of various literatures has been done to clarify the concept of the topic as well as to examine the previous studies made by various researchers in the field of capital structure. This chapter has been divided into the following sections.

2.1.1 Concept of Capital Structures

The structure concept has an important place in the theory of financial management. The term capital structure is also known as financial structure of financial plan or leverage. The financial decision of a firm is one of the tools for achieving firm's objectives of shareholders wealth maximization. The term capital structure refers to the proportion of debt and equity capital. Thus, the financial decision of a firm relates to choice of proportion of debt and equity to finance the investment requirement a proper balance between risk and return to the shareholders. Capital structure with reasonable proportion of debt and equity capital is called optimal capital structure. However, it can be expected that if the capital structure decision affected the total value of the firm, a firm should select such a financing mix that maximizes the shareholders wealth. The optimal capital structure and its implication are more noticeable. Capital structure refers to the way a corporation finances its assets through some combination of equity, debt or hybrid securities. A Firm's capital structure is then the composition or 'Structure' of its liabilities. "Capital structure is the combination of long term debt and equity. It is a part of financial structure i.e. preferred stock, common stock, long term debt & current liabilities. If current liabilities are removed from it we get capital structure" (Mathur, 1979).

Capital structure is used to represent the proportionate relationship between debt and equity. Equity includes paid up share capital, share premium and reserve and surplus (retained earning) (Pandey, 1995).Capital structure refers to the combination of long term sources of funds such as debentures long term debt, preference share capital and equity share capital including reserve & surplus. (Gautam & Thapa, 2061).Capital

structure is the composition of debt and equity securities that comprise a firm's financing of its assets. Both debt and equity securities are used in most large corporations. The choice of the amount of debt and equity is made after a comparison of certain characteristics of each kind of securities of internal factors related to the firm's operations and of external factor that can affect the firm. (Hampton, 1980).Capital structure is the mix of long term debt and equity maintained by the firm. (Gitman, 1988).Capital structure is the mix (or proportion) of a firm's permanent long term financing represent by debt, preferred stock and common stock equity. (Van Home & Wachowich, 1997). A capital structure with a reasonable proportion of debt And equity capital is called the optimum capital structure. (Khan & jain, 1997).So, the financial manager is concerned with determining the best financial mix or capital structure, the optimal financing mix would exits in which market price per share could be maximized. (Pandey, 1988).As earlier stated, the financing or capital structure decision is a significant managerial decision as it influences the shareholders return and risk. Consequently, whenever funds have capital structure initially at the time of its promotion and subsequently, whenever funds have to be raised to finance investment a capital structure decision is involved. (Van Horne, 1997).

"An optimum capital structure would be obtained at the combination of debt and equity that maximizes the total value of the firm and minimizes the weighted average cost of capital"(Pandey 1995)."The main function of manager is to determine the proportion of equity and debt capital. If a company can increase its total valuation by carrying it's capital structure, and optimal financing Mix would be in existence" (Van Horne, 1997).The capital structure is made up of debt & equity securities, which comprises a firm's finance of its assets. It is the permanent sources of financing represented by long term debt, plus preferred stock, plus net worth; the determination of the degree of liquidity of a Firm is no simple task. In the long run, liquidity may depend on the profitability of a firm but whether it services to achieve long run profitability depends to some extent on its capital structure. This term includes long term debt and total stockholder's investment. It may be defined as one including both short term and long term fund (Western & Brigham, 2003).

Thus, the capital structure involves long term financing decision, a decision of choice between debt or equity capital. Selection of appropriate mix of debt & equity capital minimizes cost of capital & maximizes value of the firm or shareholder's Wealth. The

cost of capital and the value of the firm vary with the changes in capital structure. The cost of capital & capital structure are interrelated and has a joint impact up on the value of a Firm. Moreover, capital structure affects financial risks of the firm. Using more debt in capital structure leads to increases the financial risk of the Firm. It is a significant financial decision, since it affects the financial risks & return & consequently market value per share.

Brigham (1994) Stated capital structure which had following conclusions: - 1) There does not exist an optimal capital structure or at least an optimal capital structure or at least an optimal range of structure for every firm. 2) However, financing theory is not powerful enough to locate a firm's optimum capital structure with precision. 3) The capital structure is not set in isolation rather it depends on a set of factors which include the firm's dividend policy, capital investment opportunities and investor's preference for different types of securities at the point of time.
There are four dimensional lists when thinking about capital structure decision:- 1) Taxes: - If a company is the taxpaying proposition and increase in leverage reduces the income tax paid by the company. If the company has a large accumulated loss, an increase in leverage cannot reduce corporate tax, but does increases personal taxes. 2) With or without bankruptcy: - Financial distress is costly. Other things equal distress is more likely for the firm with high business risk. That's why such Firms generallissue less debt.3) Asset type: - The cost of distress is likely to be greater for firms whose value depends on growth opportunity or intangible assets. These firms are more likely to go for profitable opportunities and if default occurs, their assets may be eroding rapidly. Hence, firms whose assets are weighted forward intangible asset should borrow significantly less on average their firms holding assets you can kick. 4) Financial slack:- In the long run, a company's value rests more on its capital investment on operating decisions on Financing. Therefore you want to make sure your firm has sufficient financial slacks, so that financing is quickly accessible when good investment opportunity arises. Financial slack is the most valuable of firms that have ample positive NPV growth opportunity. That is another reason why growth companies usually aspire to conservative capital structure.

2.1.2 History of Banks

The evolution of Bank is not a non-Phenomenon. The crude form of banking is found even in the ancient Vedic era. The banking terms such as deposits, pledge, policy of loan, interest rates etc can be found in the "Manusmiriti".

The Roman Empire collapse in the last of the 15^{th} century and beginning of 16^{th} century. Consequently, Commercial banking transaction was received because of revival of commercial and other trading activities in European countries. According to opinion of Geoffrey Crothers, following community groups are the ancestors of modern banking.

1. The Merchant trader
2. The goldsmith
3. The money lenders

History tells us that it was the merchant banker who first involved the system of banking by trading in commodities than money. Their trading activities required the remittance of money from one place to another. For this they issued different documents as the near substitutes of money, called draft of hands in modern days.

The next stage in the growth of banking was the goldsmith; the business of goldsmith was such that he had to take deposits such as bullion, money and amendments for the security from the theft. This makes possible to the goldsmith to charge something for taking care of money and bullion. On the other hand, as the evidence of receiving valuables, he used to issue a receipt to the depositors. As such receipts are good for payment equipment to the amount mentioned, it become like the modern cheaque, as a medium of exchange and a means of payment.

Finally, money lender in the early age contributed to the growth of banking to a large extent. He advanced coins on load by charging interest. As a safe guard he used to keep some money in the reserve. Therefore goldsmith and moneylender became a banker who started performing the two functions of collecting and advancing loans. "The Bank of Venice" of Italy was established in 1157A.D. as first banking institution of the World. The second banking institution namely, "The bank of Barcelona" of Spain was established in 1401A.D. Its function is to exchange money, receive deposits and discount bill of exchange, both for the citizens and for the foreigner. The Bank of Geneon was established in 1694A.D. "The Bank of England" was incorporated in

1694A.D. as a joint stock bank and later on in 1844A.D, became the first central bank of the world.

2.1.3. Commercial Banks in Nepal

Commercial banks are the most numerous banks. They offer a full range of services, including current and savings accounts, loans, and trust services. They primarily serve the needs of businesses but also offer their services to individuals. A commercial bank is owned by shareholders, who buy shares in it (the world Book Encyclopedia, 1996,'B')

Thus, commercial bank plays a vital role in the economic growth of the nation. They hold the deposits of persons, government and business houses. They make funds available through their lending and investing activities to borrowers, individuals, business firms and governments. Moreover they provide technical and administrative assistance to industries, trade and business enterprises.

Nepal's first ever commercial bank, NBL, began operating in 1994B.S with the government owing 51 percent of its share .It was followed decade later, by RBB established in 2022 B.S which also was owned by the government. In order to police these commercial banks and guide the country's monetary policy the government established NRB in 2013 B.S prior to the establishment of RBB, Kathmandu valley had a little power over its foreign currency holdings. The use of Nepalese currency was Nepal signed the trade and transit treaty with India in 1960A.D; Nepal had the full access to foreign currencies other than the Indian Rupees.

It was only in the early 40s that three foreign commercial banks made their way to Nepal. Nepal Arab Bank Limited, a joint venture bank established in 2041B.S. was Co-owned by the Emirates Bank International Limited (Dubai), Nepalese financial institution and the local public. Nepal Indosuez Bank Limited, now known as Nepal Investment Bank Limited (NIBL) established in 2042 B.S. was jointly owned by French Basque Indosuez, Rastriya Banijya Bank, Rastriya Beema sansthan and the local public. Thirdly, Nepal Grind lays Bank Limited (NGBL) now known as standard chartered Bank Limited (SCBNL) established in 2043 B.S. was co-owned by a British firm called Grind lays Bank, Nepal Bank Limited and the local public. Ever since, the country's financial world has come a long way with 32 commercial Banks in the country.

2.2Theories of Capital Structure

Capital structure is an important subject, especially for firms. A bad capital structure is more expensive than good capital structure. Firms raise investment funds in number of different ways. A firm's mix of these different sources of capital is referred to as its capital structure. Basically, the theories of capital structure are distinguished into six different groups:

- Traditional Theory
- Modigliani- Miller Theory
- Trade off Theory
- Free cash flow Theory
- Pecking order Theory
- Stakeholder Theory

2.2.1 Traditional Theory:

The first theory is called the "traditional theory" supporters of this theory believe that the lowest weighted average cost of capital (WACC) will maximize the firm's market value. This means the existence of an optimum relation between debts and equity but it is very difficult to reach that point.

Although it is cheaper to finance with debt, this theory certainly rejects to finance all with debt because after a certain level of the risks of nonpayment increases. In this case shareholders and debt financers demand a higher compensation.

2.2.2 Modigliani- Miller Theory:

In 1958, two prominent financial researchers, Franco Modigliani and Merton Miller (MM), showed that under certain assumptions, a firm's overall cost of capital, and therefore, its value is independent of the capital structure. The Modigliani- Miller theorem states that it the capital structure decision has no effect on the cash flows generated by a firm, the decision also will have no effect in the absence of transaction costs on the total value of the firms debt and equity. This means that there is no

relationship between a firm's market value and the capital structure. Profitability of firm's activities is the only factor that determines the market value. This theory is based on the perfect capital market. The only market imperfections they admit are corporate taxes. (Van Horne,1995). The assumptions of the Modigliani- Miller theorem are: Capital markets are perfect. Information is free of costs and widely available. There are no transaction costs of buying and selling securities. All investors behave rationally and have homogeneous expectations of a firm's earnings. Every firm has perpetual flows of money with equal time values. All investors can borrow or lend at the same time. There are no personal or corporate taxes.

2.2.3 Trade off Theory

The third theory is called trade off theory. The tradeoff between the costs and return of debt financing determines the optimum debt ratio. Firms consider this ratio as a target debt ratio, because this ratio will maximize the market value of the firm corporation. Myers assumes that firms need to adapt their capital structure to reach that ratio. But an adaptation of the capital structure needs time and costs money. Therefore, it is possible that present temporary debt ratios differ from the target ratios. Or as Myers formulated it: "A static trade off framework in which the firm is viewed as setting debt to value ratio and moving gradually towards it in much the same way that a firm adjusts dividend to move towards a target payout ratio" (Myers, 1984)

2.2.4 Free Cash Flow Theory

In the contrary of the trade off theory, in which a firm strives after a maximization of the market value, the free cash flow theory presumes that there are enormous conflicts of interest between shareholders and stakeholders. This implies that manager's decisions don't always maximize the market value of the firm. (Jensen, 1986)

Debt also reduces the freedom of decisions, because a firm is forced to pay at certain times interest and payoffs. There will always be risk that a firm won't be able to pay interest and payoffs in future times. This risk causes managers to lead and organize a firm more efficient.

2.2.5 Pecking Order Theory:

Pecking order is also known as a ladder or class structure of financing. It was first suggested by Myers and Majluf in 1984. It is also known as pecking order theory for capital structure. This theory is preference theory because the fund sources are selected in preference.

The first preference is given to the internal financing that is retained earnings. It is because it avoids the outside scrutiny of suppliers of capital and there is no flotation costs associated with the use of retained earnings. The next preference is also given to the straight debt. As explained in the previous section it is a good signal to the investors and help to raise the market price. Moreover, debt results in less intrusion into management by suppliers of capital and flotation costs are less than those with other types of external financing. Next in order of financing preference is preferred stock which has some of the feature of debt. This is followed by the various hybrid securities, like convertible bonds. Finally, the least desirable security to issue is straight equity. It is not only a method of financing but it is also likely to have an adverse signaling effect.

This story is mainly a behavioral explanation of why certain companies finance the way they do. It is consistent with some rational arguments, such as asymmetric information and signaling, as well as flotation costs. The sequence of investment resources is restricted by problems caused by asymmetrical information between managers and potential investors. The following assumptions are made by this theory. (Myers,1984).

This Theory assumes: Firms prefer internal ways to finance projects. Firms adapt their target dividend payout ratios to available investment resources. Internal resources of a firm are fluctuating because of unpredictable fluctuations of profitability. When firms need extra resources, they prefer the safest way of getting funds; this means that they prefer debt to convertible stocks and common stocks.

The result of this pecking order theory is that a firm doesn't have a certain target debt ratio. The target ratio is dependent on the way a firm financed its projects in the past. This theory also pays attention to costs of asymmetrical information and cost of bankruptcy. When this cost exists, a firm doesn't always choose to finance projects

with a positive net present value. Not a positive net present value determines whether a firm finance a project or not, but the way in which a firm is able to finance their projects.

Baskin researched the validity of this theory in 1989 and he made the following conclusion:

The accumulated evidence in favor of the pecking order hypothesis is now substantial. Now it is possible to provide pecking order behavior with a rational basis and there seems no longer any reason to ignore the manifest empirical evidence.

2.2.6 Stakeholders Theory:

Cornell and Shapiro (1987) assume that only investors have an interest in a firm. There are different groups of non- investor stakeholders and some of them have a lot of influence in the financial policy of a firm. Or as Cornell and Shapiro wrote: financial structure may also depend on a firm's net organizational capital and on the nature of its stakeholders (Cornell and Shapiro, 1987:215)

Examples of non- investor stakeholders are customers, employees and suppliers.

Non investor stakeholders hold implicit claims. Implicit claims are non- written promises and rights, such as the right to provide service to customers or job security for employees.

2.3 Approaches to Capital Structure:

Different approaches have been developed under the relevancy of capital structure to value of the firm and cost of capital as follows:

- Net Income Approach
- Net Operating Income Approach
- Traditional Approach
- Modigliani- Miller's Approach

2.3.1 Net Income (NI) Approach:

David Durand proposed the Net Income Approach. The essence of the NI approach is that the firm can increase its value or lower the overall cost of capital by increasing in the proportion of debt in the capital structure. Under this approach, the cost of debt (k_d) and cost of equity (k_e) are assumed to independent of the capital structure. The weighted average cost of capital declines and the total value of the firm rise with increased use of leverage. (Pandey, 1992)

A change in the capital structure use will lead of corresponding changes in the overall cost of capital as well as the total value of the firm. As the firm adds cheaper debt to its capital structure, its cost of capital decline because debt is less risky than equity, on the other hand, the overall value of the firm increases. Thus, as the firm increases its leverage by increasing debt in capital structure, the overall cost of capital declines which ultimately increases the value of the firm.The emphasis is an EBIT is to measure how the degree of leverage changes in the valuation of the firm. Assuming a constant equity capitalization rate, the increase in cheaper debt funds lower the weighted average cost of capital and thereby raising the value risky. (Shrestha, 1985)

2.3.2 Net Operating Income Approach:

Under the net operating income (NOI) approach the cost of equity is assumed to increase linearly with leverage. As a result the weighted average cost of capital remains constant and the total value of the firm also remains constant as leverage is changed (Brigham and Johnson 1976). The net operating income approach is based on the following proposition. Overall cost of capital or capitalization is on rate is constant. Residual value of equity. Change in cost of equity capital. Cost of debt is constant and optimal capital structure.

2.3.3 Traditional Approach:

Traditional view, which is also known as an intermediate approach, is a compromise between the net income approach and net operating income approach. According to this view the value of the firm can be increased or cost of capital can be reduced by a judicious mix or debt and equity capital. This approach very clearly implies than the cost of capital decreases within the reasonable limit or debt and then increase with

leverage. Thus, an optimum capital structure exists and occurs, when cost of capital is minimized or the value of the firm is maximized. The cost of capital declines with leverage because debt capital is cheaper than the equity capital within reasonable, or acceptable, limit of debt. Traditional approach is based on the following assumptions (i) Equity holders adjust their required rate of return proportionately for every unit of debt inclusion. (ii) It assumes that debt holders do not really care for the level of debt inclusion and not demand any premium for the leverage risk at least in the beginning (iii) the expected outcome of the behavior of equity holders and debt holder is the benefit of cheaper debt financing cases as the cost of equity and debt increases.

2.3.4 Modigliani-Miller Approach (MM Approach):

Modigliani and Miller (1958) in their original propositions advocate that the relationship between leverage and cost of capital is explained by the net operating income approach. They make a formidable attack on the traditional proposition by offering behavior justification for having the cost of capital remains constant through all degree of leverage (Van Horn: 2000).

The Modigliani and Miller cost capital hypothesis can be the best expressed in terms of their propositions (i.) and (ii.) However, the following assumptions regarding the behavior of the investors and capital market, the action of the firm and environment, are crucial for the validity of the Modigliani and Miller hypothesis (Van Horn 2000). (i.) capital markets are perfect; information's are cost less and readily available to all investors. There are no transactions costs, and all securities are infinitely divisible. Investor is assumed to be national and behave accordingly. (ii) Firms are categorized into equivalent return classes. All firms within a class have same degree of business risk. (iii) The average expected future operating earnings of firms are represented by subjective distribution of all investors are the same (v) dividend payout rates 100 percent.

Proposition I: The Modigliani and Miller proposition I states that market value of a firm is independent of its capital structure. The reason is that the value of the firm is determined by capitalizing the net operating income (NOI or EBIT) at a rate for the firm risk class (Modigliani and Miller: 1958). According to this proposition there is no

relationship between the value of a firm and the way its capital structure is made up and there is no relationship between the average cost of capital and capital structure.

Proposition II: The proposition ii states that the cost of equity rises proportionately with increase in the financial leverage in order to compensate in the form of premium for bearing additional risk arising form increased leverage. Thus, the Modigliani and Miller theory in the tax contends that overall costs of capital as well as the value of the firms are independent of capital structure. The theory in a tax-free is identical to the net operating income approach. It is also called, the value of levered firm V_l is equal to the value of an unlevered firm Vu in the same risk class i.e. $V_l=V_u$ (Pradhan: 1992).

With tax consideration Modigliani and Miller theory reveals that its conclusion is identical to that of net income approach, which says that the value of a firm increases with every additional unit of debt financing. Such as, the theory suggests that it is always better to have maximum debt financing.

2.4 Factors Affecting Capital structure:

Capital structure decision is not an easy task that a manager can handle individually. Some major factor that lay significant role on affecting the capital structure of firm are: a) Capital Structure is affected by the growth rate of future sales. The expected future growth rate of sales is measure of the extent which the earning per share of firm is likely to be magnified by leverage. However, the common stock of a firm whose sales and earnings are increasing at favorable rate commands a high price, thus it sometimes appears that equity financing is desirable. The firm must weight the benefits of using leverage against the opportunities of broadening its equity base when it chooses between future financing alternative. b) It also affected by sales stability With greater stability in sales and earnings, a firm can incur the fixed charge of debt with less risk than when its sales and earnings are subject to periodic. It will have difficult to meet its obligation. Thus sales stability and debt ratio are directly related. c) Competitive structure affect the capital structure. Debt servicing capacity is not only dependent on sales volume but also on the profitability. Loss (week) entry barriers and ability of competing firms influence profit margin. d) Assets structure of the firm directly influences the financing. The firm having lived fixed asset and having much

assumed demand for its outputs uses long- term debt extensively. The firms have their assets mostly in receivables and in inventory, as in wholesale and retail trade, rely less on long term debt. e) Capital structure depend upon Management attitudes. Choice of financing is influenced by management attitude about risk and control. Large firms having wide spread common stock holders prefer issuance of more stock, because it does not influence on control of the firm significantly, in contrast, the owners of small firms may prefer to avoid issuing the manager of small company is comparative on account of risk taking. f)Lender attitudes also affects capital structure.The management can't individually determine it's capital structure ignoring lender's attitude. Sometimes lenders attitude can be the most influencing factor. They emphasize that excessive debt reduces the credit standing of the borrower and the credit rating the securities previously issued.

2.5 Review of Related Studies

This topic deals with some Journals, Articles, Researches, Dissertations and some Thesis. They are as follows:

2.5.1 Review of Articles and Research

The Modigliani and Miller first study (1958) was carried out in the American electric utilities and oil companies turned out the result in support of their hypothesis that cost of capital or value of the firm is independent of capital structure decision. Franco Modigliani and Merton Miller, both recent Nobel Prize winners in financial economics said that the value of a firm is determined solely by its investment of capital budgeting, decisions and therefore, how the firm is financed is irrelevant. Under the Modigliani and Miller no tax case, the value of the firm V and the firm’s opportunity cost of capital are not affected by the use of more or less debt financing. Modigliani and Miller conclude in the no tax case that there is no advantage or disadvantage to financing with common stock. Any “saving” from debt financing are immediately offset by a higher return required by common stockholders (due to greater financing risk) leaving the firm and its stockholders in the same position as before.

Thus, according to Modigliani and Miller the value of the firm does not change; rather increased financing risk causes the stockholder required rate of equity capital increases so that any apparent gain from using cheaper debt financing is completely offset. Both

of the firm and its cost of capital are independent of financial leverage in the absence of taxes. There is no optimal capital structure.

The Modigliani and Miller second study (1963) find out that the second study almost immediately after Modigliani and Miller presented their no-tax case critics reminded them that corporate taxes are a fact for firms. Because of corporate taxes, and fact that interest on debt is a tax deductible expenses, the after tax cost or debt is less than the before taxes actually paid by the firm is referred to as the interest tax shield. According to Modigliani and Miller debt financing has value because on an after tax basis its costs the firm less than equity. Therefore, the value of the levered firm (V_L) once corporate taxes are introduced, as equal to the unlevered value of the firm, (V_u) plus the present value of the interest tax shield.

The Modigliani and Miller results once corporate tax is introduced. Note that financing risk still remained and increases as debt is employed, as signified by the rising cost of common stock. Even with this increase in the cost of equity, the presence of corporate taxes has the effect of subsidizing the use of debt; the result is that increases in the total value of the firm and decreases in the firms overall opportunity of capital. As long as firms are profitable, and government provides an incentive for using debt through allowing interest to be tax deductible, there is an advantage to using debt financing. This advantages leads to an increase in the value of the firm providing that the investment decisions of the firm are unaffected.

Pandey (1981), in his dissertation, shows that the study is concerned with the test of the relationship between cost of capital and leverage, effect of leverage cost of equity and effect of tax deductibility on cost of capital in Indian context. In a cross-sectional analysis of 131 observations, it was drawn from cotton chemical, engineering and electricity industries for the year 1969, and 1970. He found that the conclusion that Modigliani and Miller independent hypothesis does not hold reliable conclusion that Modigliani and Miller independent hypothesis does not hold reliable conclusion especially in the context of India. Pandey (1984) did the attitude survey of the practicing managers of 30 Indian companies and drew the conclusion that Indian practicing manager have the concept of optimal capital structure and it should be maintained by every company.

Taggart (1985) and Masuli (1988) further identifies that the work of Masuli and Taggart highlighted on the general trend of capital structure. Masuli showed that distributed profit account for about 22% of total sources of funds of non-farms, non-financial corporate business in 1986. the figure in average, was about 49 percent over the period of 1946 to 1966 in U.S.A. Taggart (1985) in his study, provides that an account on secular trends in leverage by using verities of measurements. He concluded that there was increasing trend of leverage in U.S.A since the Second World War. Taggart again found that debt was 45 percent of total sources of funds for U.S.A. non-financial corporation. He further showed that the increasing trend of debt financing after the Second World War till 1974 and decreasing trend after 1974.in his study, he showed that debt financing was used to an unprecedented extent during the period of 1974-86. It is argued that debt financing has come down to the level that is not high by historical standard after 1974.

Pradhan (1986) in his study about "public corporation of Nepal: A study of financial ratios." For the purpose of this study, altogether twenty corporations were selected. Among them, ten corporations were selected from the manufacturing sector and ten from the non- manufacturing sector. Altogether 22 ratios have been computed and analyzed. A study of financial ratio in public corporations of Nepal investigated whether the financial ratios differ in manufacturing and non-manufacturing public corporations and sick and non-sick public corporations of Nepal. While studying the behavior financial ratios in the sick and non-sick corporations, sickness is defined in a simple way. A corporation is sick, if it is able to earn some profit, no matter how little.

Findings of the study: The manufacturing corporations have liquidity ratios as compared to the non-manufacturing corporation. Liquidity ratios of the non-sick periods are higher than the ratios of the sick periods of corporations. The manufacturing corporations have a higher turnover of cash and receivables than the non-manufacturing corporations. All the selected turnover ratios of the non-sick periods are higher than the ratios of sick periods of the corporations. The manufacturing corporations have higher ratios of return of total assets, profit margin on sales and return on net worth as compared to the non manufacturing corporations. Average return on net worth has declined over a period of time in both groups of corporations. The ratios of debt to total assets and total debt to net worth of the non-manufacturing corporations are higher than the ratios of the manufacturing

corporations. The average ratio of total debt to total assets of the sick period is higher than that of the non-sick periods of the corporation.

Agrawal and Nagearojan (1990) provide the evidence that all equity firms have a greater family improvement firms have a greater family improvement in corporate corporation than in levered firms. And managers of all equity firms have greater control of corporate voting right. This finding implies that human capital involved in the firm affects the capital structure through the agency problems.

Pradhan (1994) has conducted a study of "financial Management Practices in Nepal". A study of consensus approach to financial ratios for the prediction of financial distress in Nepal provides behavioral evidence from 63 General manager and financial managers of Nepalese industries on the appropriateness of the choice of variables for sickness prediction. The 15 financial ratios selected for the purpose of the study. The respondents were requested to rank these ratios in ascending order of their perceived importance. A value of one was to be assigned to the ratios that are considered most important in sickness prediction context and a value of 15 to the ratios that is considered least considered least important.

Findings are: The most important ratios for industrial sickness or financial distress may be seen as net income to sales followed by current ratio, quick ratio, and total debt to total assets, sales to average inventory, net income to net worth, EBIT to fixed interest charges and so on. The short-term liquidity ratios as the important indicators of financial distress.

2.5.2 Review of Dissertation/ Thesis

There are many thesis works have been submitted in different aspect of manufacturing public and private industries. In which, capital structure management in Nepalese commercial banks are analyzed. Under this section, some master's level thesis related to these studies has been reviewed as follows:

Aryal (1991) has conducted a study of "An evaluation of capital structure of Bottlers Nepal ltd." He found that the company has high debt equity ratio and interest coverage ratio is in decreasing trend. Therefore, he suggested that management must bring about stasis factor compromise among confusing factors of cost of capital; risk and return.

The company is highly levered and low return. So, uses the equity capital instead of debt to form optimal capital structure. The return on total assets is low because of highly operation cost. So, to reduce operation cost by reducing administration expenses and direct labor cost.

Dhungana (1993) has conducted on study of "A comparative evaluation of capital structure between Butwal Spining Mill Ltd and Jyoti Spining Mill Ltd". He has pointed out various findings and recommendations. Among these few major findings and recommendations are as follows: Both the companies have depended on the commercial bank, foreign banks and he machine supplier for the long term financing. Long term debt to total debt ratio is very high. The debt equity ratio is to be higher. Interest coverage ratio of both companies is negative and it is decreasing trend. The return on capital employed is not significant in both the companies. Both the company suffers from operating losses. The capacity utilization is low.

Pathak (1995) has conducted a study of "A study on capital structure management of Gorkhkali Rubber Udhyog ltd." He has pointed out various findings and recommendations. Among these, few major findings and recommendations are as follows: Debts to total capital ratio are in increasing trend and vary high. Total debt to equity ratio is negative. Interest coverage ratio is negative. The return on equity is negative. The utilization of capacity is low. Over administrative and operational costs appeared.

Shah (2001) has studied on the title of "Capital Structure and Cost of Capital". He has selected 26 enterprises via judgmental non-random sampling method, out of 115 enterprises listed in NEPSE ltd. The study analyzed capital structure on cost of capital in the context of Nepalese enterprises by taking major objectives. He has pointed various findings and recommendations. Among them major findings and recommendations are as follows: Average leverage (i.e. Total debt to capital employed) , average cost of capital, cost of equity, tax adjusted stock yield and size of capital employed of finance sector enterprises are less than that of non-finance sector enterprises. Averages growth in total assets, dividend payout ratio, earning variability and liquidity ratio of finance sector are higher than that of non- finance sector enterprises. The comparative correlation matrix shows that cost of capital is negatively related to leverage and liquidity ratio and positively related to size of capital

employed, growth in total assets, dividend payout ratio and earning variability of non-finance sector enterprises. The cost of capital of finance sector enterprises is negatively correlated to growth in total assets, earning variability and liquidity ratio, while it is positively related to leverage, size of capital employed and dividend payout ratio. The regression coefficient of cost of capital is negatively related to leverage (i.e. total debt to capital employed), dividend payout ratio and liquidity ratio, and positively related to size of capital employed, growth in total assets and earning variability, growth in total assets and earning variability for non-finance sector enterprises. While, it is negative for growth in total assets, and earning variability and positively related to leverage, dividend payout ratio and liquidity ratio for the finance sector enterprises. Nepalese enterprises should be designed an appropriate capital structure in order to maximize the shareholder's wealth. Proper analysis and evaluation of capital mix decision should be required in the Nepalese enterprises. Nepalese enterprises should aware about the debt financing resulted tax advantages on interest charges that would help to maximize value of the firm.

Pokhrel (2005) has conducted a study on "Capital and Assets Structure of Commercial Banks in Nepal". He has selected 6 commercial banks for the analysis of the subject matter. By analyzing he has found following results. Liquidity position of State Bank of India is comparatively better than that of other five banks. The liquidity position of NABIL, Rastriya Banijya Bank and Nepal Bank Limited is not performing better than the rest other three banks and no banks can maintain the consistent liquidity position during the study period and this shows that the banks have not been successful to formulate stable policy. Bank Of Kathmandu and Everest Bank Limited are only concentrating in increasing loan and advance of its deposit and total working fund and not looking in the area of investment where their ratio is quite low and it could make them way behind in competitive market of banking. Similarly, NABIL is only concentrating to use its deposit and working fund towards investment in government securities and other areas but not looking the area of loan and advance and this could make them lack of costumer in the near future. NABIL and Everest Bank Limited are getting higher return on its resources and paid low interest than other banks. Bank Of Kathmandu manage to get higher interest on its total working fund but two public banks Rastriya Banijya Bank and Nepal Bank Limited didn't manage

to get any return on its resources and it gives them serious problem to sustain in future on competitive market of banking.

Sharma (2005) has conducted the study on "Capital Structure Management of manufacturing companies." The selected companies are Jyoti Spinning Mill, Nepal Lube Oil and Nepal Lever Ltd. The basic objective was to analyze return on equity and assets. It was found in the study that Jyoti Spinning Mill had a huge amount of debt and there is a need to reduce the debt capital and Nepal Lever Limited has no long term debt so, they should reduce tax by taking long term debt. It is suggested that Jyoti Spinning Mill and Nepal Lube Oil Limited should increase the equity portion for financing its assets to be in safe mode against liquidation. The study observed that among same type of manufacturing companies, there is a vast difference in the degree of operating leverage (DOL) and capital structure. Therefore, the companies should concentrate on restructuring their capital structure. They should try to increase their sales volume to reduce their operating cost. The assets, equity and debts condition is very poor in Jyoti Spinning Mill. Nepal Lever Limited is highly dependent on short term debt, it should try to adopt long term source of debt.

The sample size of the study is small and limited to manufacturing sector. Furthermore, the study did not cover the issue of determinants of capital structure and the tools used for analysis is limited to ratio analysis and degree of operating leverage (DOL).

Sapkota (2006) has conducted a study on "Capital Structure management of Nabil Bank". The capital and liabilities analysis say that the overall condition and position of Nabil Bank is better until 2057/58, all they declined continuously and the profit is very low in comparison to the deposit. Therefore, the bank is suggested to adopt the corrective measure to strengthen its position. It should operate different programs to attract people to save money to collect more deposit which can be invested in favorable projects. It is recommended that the bank should increase its profit two times than in present. The study demands better investment of fixed deposit as it is not mobilized in proper manner.

The study focused on only one bank so, the conclusion drawn from the study is not relevant for other commercial banks and could not be able to analyze other sectors of capital structures. The study excludes the factors influencing capital structure decision.

The sources of input in the study are from limited area and the statistical tools used are limited to ratio analysis.

Giri (2006) has conducted study on "Capital Structure Management of listed joint venture commercial banks in which he has analyzed the capital structure of Standard Chartered Bank and Nepal Bangladesh Bank. The study shows that the private sector banks have been successful in increasing their deposit and credit portfolio remarkably over the past few years and have been cautious about loans and advances. The operating profit of all private sector commercial banks have gone up so has the provision for loss. However, he suggested joint venture banks to open their doors to small depositors and entrepreneurs .They have lack of theoretical and practical knowledge with regard to capital structure. JVB are suggested to play merchant banking role like underwriting securities, brokers, development of capital market and supportive role to the security exchange center to uplift the nation. However, the sample size of the study was quite small. The researcher could have made more effective had number of sampled company been more.

Pokharel (2008) has carried out a study on *"Analysis of Capital Structure in Selected Joint Venture Banks of Nepal."* His study has been under taken only five Joint Venture Banks.Himalayan Bank Limited, Nepal Bangladesh bank, Nabil, Standard Chartered Bank Limited, and State Bank of India to examine and evaluate the financial data, besides, latest financial rate of five fiscal years from 2059/2060 to 2063/2065. All Joint Venture Banks has used higher percentage of total debt in raising the assets. Higher ratio constitutes that the outsider's claim in total assets of the banks is higher than owner's claim. The financial risk of Standard Chartered Bank Limited has average of financial leverage which indicates the higher degree of financial risk. Though the banks are highly leveraged, Standard Chartered Bank Limited seems to be more leverage bank in comparison with selected banks. On an average, Standard Chartered Bank Limited has high D/E ratio, which should be reduce as quickly as possible. As well as, other four banks should check their D/E ratio carefully. The ROE ratio has great impact to show the relative performance and strength of the bank on attractive future investment. Nabil banks earning of 42.01% refers that the banks has been able to utilize shareholders equity inefficient way. The ROE ratio of Himalayan Bank Limited. Standard Chartered Bank Limited and State Bank of India banks shows

them satisfactory return of earning that is most desirable objective has been accomplished likewise; State Bank of India has 12.08% earnings on shareholders equity which is in comparison with other banks slightly low rate of return.

Thapa (2010) has conducted a research entitled *"Analysis of Capital Structure of Joint Venture Banks in Nepal"* The major objective of the study was to analyze capital structure management of selected Joint Venture Banks. To achieve the main objective, following specific objectives were set out for the study: To examine the trend in financial leverage of selected enterprises. To determine the structure of equation of capitalization rates on overall capitalization rates. To analyze the relation of the capital structure and cost of capital of selected Joint Venture Banks. To evaluate the comparative capital structure of selected Joint Venture Banks. To evaluate the relation between profitability position and capital structure of the banks under study.

This study was mainly based on the secondary data collected from the different published sources. In additional to the published data, some information were collected from the visit of the concerned banks, conversation with the employees, and the observation of concerned banks, telephonic inquirers, personal visit, inquires by e-mail etc. the major sources of secondary data are: Brochure of concerned banks, published reports from Security Board, economic surveys, and websites of concerned banks. From the presentation and analysis of the data, the following findings are down out. The highest Coefficient of Variation is 3.10 for Standard Chartered Bank Limited and the lowest is 0.69 for State Bank of India. Standard deviation of Himalayan Bank Limited is 0.10, which is lowest than other two banks and Standard Chartered Bank Limited has highest standard deviation, which is 0.31, the highest Coefficient of Variation is 13.33 for State Bank Of India and the lowest is 5.05 for Himalayan Bank Limited.The average DFL for State Bank Of India is -01.08 times. The highest Coefficient of Variation is 321.29 for State Bank Of India and the lowest is 115.72 for Standard Chartered Bank Limited. The cost of overall capital for Himalayan Bank Limited has 3.25 on as average of overall capitalization rate. Standard Chartered Bank Limited overall capitalization rate is 3.12 in average rate, which is lower than other banks and State Bank of India has the average ratio of 3.52, which is higher than other banks.

Sapkota (2011) has conducted a research entitled *"Capital Structure of Nabil Bank Limited."* The major objectives of the study were to examine and analyze the capital structure of Nabil Bank Limited. Following were the specific objectives of the study: To examine the existing financial position regarding capital structure. To analyze the composition of Nabil Bank Limited of the mixture of debt and equity. To evaluate the relationship between deposit and capitalization of Nabil Bank Limited. To examine the different profitability ratios of Nabil Bank Limited. This study was based on secondary data provided by Nabil Bank Limited. Data and information are collected from balance sheet of Nabil Bank Limited. There relevant data and information were collected from different sources, mentioned in bibliography. From the analysis he has find out some findings, which are as follows: Liabilities are increasing more than share capital. Reserve & surplus trend is not consistently. Reserve and surplus is more than paid up capital. Debt to equity ratio in average is more than 2. It means the claim of creditors and share holders against the property of the firm. The Debt to Capital ratio must be greater than 1. In overall the interest coverage of the Nabil bank is too small to cover the debt cost. The mix of debt and equity is in the average ratio. Return on total Deposit is satisfactory because ratio of ROD is greater than 1.75 and the more ratio shows the more earning.

Capital structure is a topic that has received much attention in the financial management area. And managing the capital structure is the challenging job to the every organization's managers. Capital structure decision has been a subject of controversy in financing literature. The central issue of controversies are first the relevance and irrelevance of the capital structure decision in the determinants by value of the firm and second, it is relevant the factors influencing the capital structure. Traditional approach suggests that there is optimal capital structure for each firm, which is obtainable by the tradeoff between the cost and benefit of using debt in capital structure. But net operating income approach and Modigliani and Miller proposition on capital structure subjected the presence of any such optimal capital structure. The view shows that decade of 1960's was center around the MM independent hypothesis and MM tax correction hypothesis. Many researchers worked under the MM hypothesis and their results conducted that the cost of capital is the function of leverage.

2.6 Research Gap

As the above research works are concerned with capital structure, they are mostly done by taking single firm as a sample. This study has been taken only 2 commercial banks like NABIL bank ltd, Everest bank ltd which are listed in NEPSE ltd. In most of the studies, the samples are taken from different sector (i.e. financial and non-financial sector) which may represent different sectors. The studies presents the correlation between the variable which affect debt and equity capital comparison of financial results and also observed some defects in capital structure. The tools used for analysis have been limited to ratio analysis. So, this study tries to explore the determinants of capital structure management in commercial banks and capital structure pattern from four different sectors of Nepalese organization with the data of five years. Furthermore, this study will be helpful to the interested groups. At last, this study will be different from the above in terms of sample banks, data presentation as well as statistical tools used for interpretation and analysis of data.

CHAPTER: THREE

RESEARCH METHODOLOGY

3.1 Introduction

The Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objective in view (Kothari, Delhi 1994). The purpose of this chapter is to discuss the method of research followed in this study. The approach followed is to regress the cost of capital to the leverage and other explanatory variables. In other word research methodology describes the method and process applied in the entire aspect of the study. A focus is given to research question, the model used, definition of variables, samples selection and size, sources of data. Research methodology deals with research design, nature and sources of data collection adopt by a researcher in studying a problem with certain objectives in view or it is a various sequential steps to how research in accomplished, it depends on the researcher. Research methodology is the way of doing and completing research work.

3.2 Research Design

The study is a case study in nature. A true research design is basically concerned with various steps to collect the data for analysis and draw a relevant conclusion. Recommendation is another important aspect of design strategy. The research design allows the researchers to take an appropriate measure and direction towards the predetermined goals and objectives. A research design is the arrangement of conditions for the collection and analysis of data in a manner to combine relevance to the research purpose with economy in procedure. Research design is the plan, structure and strategy of investigation imagines obtaining answers to research questions and controlling various things (Sharma, 2064). To conduct this study descriptive approach has been adopted. Descriptive approach has been utilized mainly for conceptualization of the problem. Analytical approach has been followed mainly to analyze the variable that affect the capital structure management.

3.3 Population and Sample

All the commercial banks operating in Nepal i.e. 32 have been considered as population of the study. It is not possible to study all the data related with all JVBs because of the limited time period and it is considered for the partial fulfillment of the Master's Degree. For the study purpose, only two banks have been taken as sample. The sample banks are NABIL bank ltd., Everest bank ltd. as via judgmental non-random sampling method. These two banks are joint venture bank with other country and both bank have foreign ownership in its share capital. Both banks are reputed banks in Nepal. It has been expanding its branches all parts of the country. They are successfully launching its services and facilities to the public. Thus, they are taken as a population sample for this study.

3.4 Nature and Sources of Data

This study is based on secondary data provided by Nabil Bank Limited and Everest Bank Limited. Data and information are collected from balance sheet of Nabil Bank Limited and Everest Bank Limited.. There relevant data and information are collected from different sources, mentioned in bibliography.

3.5 Data Collection Procedure

The study is basically based on the secondary data. The data are collected in crude form in the initial stage and then properly synthesized, arranged, tabulated and calculated to serve the objective of the study.

3.6 Tools for Analysis:

Data collected from various sources are analyzed and presented in proper tables and format. To analyze the data different tools are used, for this, mainly two types of tools have been used.

i. Financial tools

ii. Statistical tools

3.6.1 Financial Tools

For the analysis of financial statement ratio analysis is used as a technique to quantify the relationship between two set of financial data taken from either profit and loss account or balance sheet. In this study leverage ratio (capital structure ratio), interest coverage ratio, profitability ratio and capital adequacy ratio are taken as financial tools to analyze optimal capital structure. The required financial ratios for the study are in detail as follows:

3.6.1.1 Leverage Ratio:-

It is also known as capital structure ratio. These ratios are the measures of long term solvency of a firm. Capital structure generally refers to the composition of debt and equity component of overall capital of a firm. These ratios also provide some measure of risk of debt financing by the calculation of the coverage of fixed charge. In this study following ratio are to be calculated.

3.6.1.1.1 Debt Equity Ratio

Debt equity ratio is used as a tool for analyzing financial risk both investors as well as by the firms. And the other hand, how much debt is used in comparison of equity. A higher debt ratio indicates greater contribution at a firm's financing by debt holders than those of equity holders.

$$\text{Debt equity ratio} = \frac{Long\ term\ debt}{Shareholder's\ equity}$$

3.6.1.1.2 Debt to Total Capital Ratio

Debt to total capital ratio represents the relationship between long term debts to total capital of the firm. Total capital includes long term liabilities plus shareholders equity. Total capital is also regarded as permanent capital or capital employed or long term fund. It indicates how much debt is used out of total capital. The ratio is ascertained by using following formula:

$$\text{Debt to total capital ratio} = \frac{Long\ term\ debt}{Total\ Capital}$$

3.6.1.2 Interest Coverage Ratio:

The interest coverage ratio evaluates the debt serving capacity of a firm. Interest coverage ratio shows how many times the interest charge is covered by funds that are ordinarily available to pay the interest charge. The higher ratio is desirable, too higher ratio indicates that the firm is very conservative. It is calculated as:

$$\text{Interest coverage ratio} = \frac{EBIT}{Interest}$$

The ratio calculated using this relation indicates the times that interest on debt capital is covered by earnings before interest and taxes.

3.6.1.3 Profitability Ratio:

Profitability is the net end result of a number of corporate policies and decisions. It is the essential factor that measures how efficiently the firm is being operated and managed. Every organization's main objective is to gain more profit. The organization will be success when they maintain optimal capital structure.

3.6.1.3.1 Return on Assets Ratio:

Return on total assets ratio measures the overall profitability of the bank. Assets management is very essential and important because of the return on assets will vise if fewer assets one employed and all the required measures of the effective management of working capital apply. A bank has to earn satisfactory return on assets on working fund for its survival. This ratio is expressed as a ratio of net income and total assets.

$$\text{Return on total assets ratio} = \frac{Net\ profit\ after\ tax + Interest}{Total\ assets}$$

The numerator indicates the position of incomes left after all expenses cost; tax and bonus have been deducted.

3.6.1.3.2 Net Profit to Total Deposit Ratio :

Net profit to total assets ratio measures the relationship between net profits towards bank's total deposit. This ratio is expressed as a ratio of net income and total assets.

Net profit to total deposit ratio = $\frac{Net\ \ profit\ \ after\ \ tax + Interest}{Total\ \ deposit}$

3.6.1.3.3 Return on Loan and Advance Ratio:

This ratio measures how efficiently the bank has employed its loan and advances. This is the most important ratio in which every bank has to be concentrate because higher the ratio higher the bank can generate more profit. This ratio is expressed as a ratio of net profit and total loan and advances.

Return on loan and advances ratio = $\frac{Net\ \ profit\ \ after\ \ tax + Interest}{Total\ \ loan\ \ and\ \ advance}$

3.6.1.4 Capital Adequacy Ratio:

The question of capital adequacy lies at the heart of the financial strength safety and solvency. This ratio is highly applied especially to assess the strength of the capital adequacy of the available capital. The following ratios are selected under capital adequacy ratio.

3.6.1.4.1 Shareholder's Fund to Total Deposit Ratio:

This ratio shows how well commercial banks are maintaining sufficient amount as shareholders fund in comparison to the amount of total deposit. This ratio is expresses as a ratio of total shareholders fund and total deposit.

Shareholder's fund to total deposit ratio = $\frac{Shareholder's\ \ fund}{Total\ \ deposit}$

3.6.1.4.2 Shareholder's Fund to Total Assets Ratio.

This ratio is quite essential for every financial institution to have a balance of required percentage of total assets as capital fund. This ratio measures the relative claims of owners of the bank over the bank's assets.

This ratio is expressed as a ratio of shareholders fund and total assets.

Shareholders fund to total assets ratio = $\frac{Shareholder's\ \ fund}{Total\ \ Assets}$

3.6.2 Statistical Tools

Statistical tools are mathematical measure of various variables, which helps to estimate or predict to unknown value of one variable with the help of other known variable. Similarly, it helps to measure interrelationship of various variables. In this study following statistical tools are used to analyze the data.

Average (Arithmetic mean)

Arithmetic mean or simply a mean of a set of observation is the sum of all the observation divided by the number of observations. Arithmetic mean is also known as the arithmetic average.

Let x_1, x_2, x_3……..x_n be the n values of the variables then their arithmetic mean denoted by:

$$\overline{X} = \frac{\sum x}{n}$$

Where,

$\overline{x}$ = Arithmetic mean

$\sum x$ = sum of the observation

N = number of observation

3.6.2.1 Standard Deviation

The standard deviation is the absolute measure of dispersion in which the drawbacks present in order to measure of dispersion are removed. It is said to be the best measure of dispersion as it is satisfies must of the requisites of good measure of dispersion.

Standard deviation (S.D.) is defined as the positive square root of the mean of the square of the deviation taken from the arithmetic mean. It is denoted by σ. (Bajracharya B. C., 2059). It is calculated by using following formula:

$$\text{S.D.} = \sqrt{\frac{1}{N} \times (X-\overline{X})^2}$$

3.6.2.3 Coefficient of Variation (C.V.)

The coefficient of dispersion based on standard deviation multiplied by 100 is known as the coefficient of variation (C. V.). If x be the arithmetic mean and d the standard deviation of the distribution, then the C.V. is defined by:

$$\text{C. V.} = \frac{\pm}{X} \times 100\%$$

It is independent of unit so, we distributions can bitterly be compared with the help of C.V., for their variability. Less the C.V. more will be the uniformity; consistency etc. and more the C.V. less will be the uniformity, consistency etc. (Bajracharya, B. C. 2059 :).

3.6.2.4 Coefficient of Correlation

The term correlation indicates the relationship between two such variables in which with changes in the values of one variable the values of other variable also change. In other words, correlation is a tool to measure the co-movement's relationships of two headings of statistics. One of the widely used statistical methods of calculating the correlation coefficient between two variables is Karl Pearson's correlation of coefficient, which is generally known as correlation coefficient. Universally, such relation can be fund with in the limitation of – 1 to +1. It is denoted by r_{xy} or simply 'r' and can be calculated by using following formula:

$$r = \frac{N\sum xy - \sum x.\sum y}{\sqrt{N\sum x^2 - (\sum x)^2}\ \sqrt{N\sum y^2 - (\sum y)^2}}$$

Where, N = No. of observations of X and Y

Σ X = Sum of the observations in series X

Σ Y = Sum of the observations in series Y

Σ X^2 = Square of the sum of the observations in series X

Σ Y^2 = Square of the sum of the observations in series Y

ΣXY = Sum of the product of the observations in series X and Y

Correlation coefficient lies between -1 and +1. When r=1 there is positive perfect correlation between the two variable. When r = -1, there is a negative perfect correlation between the two variables. When r = 0, the variables are uncorrelated. Nearer the value of r to +1, closer will be the relationship between two variables and nearer the value of r to 0, lesser will be the relationship.

3.6.2.5 Probable Error.

Probable error of the correlation coefficient denoted by P.E., is the measure of testing the reliability of the calculated value of r. if r be the calculated value of r from a sample of n pair of observations then, P.E. is defined by:

$$\text{P.E.} = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

It is used in interpretation whether calculated value of r is significant or not. If, r < P.E., it is insignificant. So, perhaps there is no evidence of correlation. If, r >P.E. it is significant. In other cases, nothing can be concluded; the probable error of correlation coefficient may be used to determine the limit within which the population correlation coefficient lies. Limits for population correlation coefficient are $r \pm$ P.E. (Bajracharya B. C.: 2059).

3.6.2.6 Test of Hypothesis

The objective of this test is to test the significance regarding the parameters of the population on the basis of sample drawn from the population. This test has been conducted on the various ratios related with the banking business.

I) Test of hypothesis on loan and advances to total deposit ratios between NABIL and EVEREST Bank.

II) Test of hypothesis on total asset to net profit ratio between NABIL and EVEREST Bank.

III) Test of hypothesis on long term debt to net profit after tax ratio between NABIL and EVEREST Bank.

IV) Test of hypothesis on share holder fund to net profit after tax between NABIL and EVEREST Bank.

V) Test of hypothesis on long term debt to shareholders equity ratios between NABIL and EVEREST Bank.

Research methodology and the various financial and statistical tools discussed above have been used in the next chapter to analyze and interpret the data regarding the NABIL and EVEREST Bank for the study period from Fiscal year 2006/2007 to 20010/2011.

CHAPTER: FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introductions

This chapter deals with the presentation analysis and interpretation of joint venture banks in Nepal in order to fulfill the objectives of this study. The motto of this chapter is to study, evaluate and analysis those major financial' performance which are related to capital and assets structure of commercial banks. To obtain best result the data have been analyzed according to the research methodology as mention in third chapter.

4.2 Financial Analysis

Ratio analysis is the expression of the relationship between the mutually independent figures. It shows the quantitative relation between two variables. Ratio analysis is very much powerful tools of financial analysis. Financial ratios are frequently and widely used in practice to assess the company's financial performance and condition. Ratio analysis is defined as the systematic use of a firm as well as its historical performance and current financial condition can be determined. Out of so many ratios, some important ratios can be calculated from balance sheet and profit and loss account. These calculated ratios can be useful for analyzing and assessing the performance and position of the banks, which reflect the relative strength and weakness of any particular bank over others.

As mentioned earlier, the following financial ratios are selected for the study purpose:

1. Leverage ratio
2. Coverage ratio
3. Profitability ratio
4. Capital adequacy ratio

4.2.1 Leverage Ratio:

Leverage ratio reveals the proportion of funds used by the institution either creditor's side or owner's side. It shows how much of the firm's assets are financed by debt and equity. Firm employed higher proportion of debt than it is called levered firm and firm with lower debt capital is called un-levered firm. If the firm employed excessive debt in its capital structure, additional debt financing will be difficult in future. The use of the debt enables the owners to maintain their control over the firm. But if the firm rises its capital through the equity then the owner will lose the control over the firm, while analyzing the financial performance of commercial bank, the following leverage ratio can be calculated:

4.2.1.1 Debt Equity Ratio

The debt equity ratio implies that debt equity proportion used by the institution. High debt equity ratio indicates more used of money from creditor's side and vice versa. High debt equity ratio considered good if the institution is able to earn higher return than the cost paid on debt. It can be calculated by dividing total debt by total equity as follows:

Table No. 4.1

Debt Equity Ratio of different selected banks (in %)

Banks	Fiscal Year							
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	Mean	S.D.	C.V.(%)
NABIL	42.9	65.65	63.3	97.8	42.7	62.47	20.16	32.27
EBL	28.26	18.97	14.97	12.98	9.63	16.96	6.41	38.59

Source: Appendix-2 &3

The table No. 4.1 implies that the debt to equity ratio during the study period. The study shows NABIL bank ltd. has maximum debt to equity ratio is 97.80% in 2009/2010 and the minimum 42.70% in 2010/2011. It means the bank used maximum debt capital in comparison to equity capital. EBL has maximum debt to equity ratios is 28.26% in 2006/2007 and minimum 9.63% in 2010/2011. It implies, the bank used

minimum debt capital in comparison to equity capital. In conclusion, the study indicates that NABIL has more debt equity ratio than EBL in its capital structure. In other words, more deviation or more fluctuation has seen in capital structure.

While observing the A.M., S.D, and C.V. of debt to equity ratio from the table NABIL seems better consistent, because A.M. and S.D is higher but C.V. are lower in comparison to EBL. On the other hand EBL seems conservative because it's A.M. & S.D of debt equity ratio are lower while C.V. is higher. It means EBL maintain optimal debt equity capital.

4.2.1.2 Debt to Total Capital Ratio

Debt to total capital ratio represents the relationship between long term debts to total capital of the firm. It indicates how much debt is used out of total capital.

Table No. 4.2

Dept to Total Capital Ratio of Different selected Banks (in %)

Banks	Fiscal Year							
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	Mean	S.D.	C.V.(%)
NABIL	33.58	44.5	46.67	85.38	37.69	49.564	18.51	37.35
EBL	24.96	15.61	13.61	11.95	8.12	14.85	5.62	37.85

Source: Appendix-2 &3

The table No. 4.2 shows the debt to total capital ratio during the research period. During the research period, NABIL bank ltd. has utilized minimum debt capital at initial period and at the end of the period. The bank has maximum debt to total capital ratio is 85.38% in 2009/2010 and it has minimum debt to total capital ratio is 33.58% in 2006/2007. EBL used maximum debt capital at initial period and EBL used minimum debt capital at the end of period. The study shows NABIL used more debt capital out of total capital than EBL, On the other hand EBL used very negligible debt capital out of total capital.

While observing the A.M., S.D, and C.V. of debt to equity ratio from the table NABIL seems better consistent, because A.M. and S.D is higher but C.V. are lower in comparison to EBL. On the other hand EBL seems conservative because it's A.M. & S.D of debt equity ratio are lower while C.V. is higher. It means EBL maintain optimal debt capital ratio.

4.2.2 Interest Coverage Ratio:

The interest coverage ratio evaluates the debt serving capacity of a firm. The ratio calculated using this relation indicates the times that interest on debt capital is covered by earnings before interest and taxes.

Table No. 4.3

Interest Coverage Ratio of Different Selected Banks (in times)

Banks	Fiscal Year							
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	Mean	S.D.	C.V.(%)
NABIL	2.213	1.984	1.895	1.581	1.645	1.8636	0.23	12.34
EBL	1.9685	2.1453	1.9734	1.8309	1.529	1.8896	0205	10.9

Source: Appendix-2 &3

Interest coverage ratio shows how many times the interest charge is covered by funds that are ordinarily available to pay the interest charge. The higher ratio is desirable, too higher ratio indicates that the firm is very conservative. Here the table no. 4.3 reflects that the NABIL bank ltd., EBL was considerable in interest coverage ratio. NABIL bank ltd. has higher interest coverage ratio is 2.213 times in 2006/2007 and lower 1.581in 2009/2010. EBL has higher interest coverage ratio i.e. 2.15in 2007/2008 and minimum 1.529in 2010/2011.

By observing the above table, average interest coverage ratio of NABIL has seen quite lower than that of NABIL, while observing S.D & C.V. of interest coverage ratio NABIL has higher i.e. 12.34%.

4.2.3. Profitability Ratio:

The main objective of a bank is to generate profit by providing different types of services to its customer. So profitability is the major concern of all the banks. It is an obvious that profitability ratios are the best indicators of overall efficiency of the bank. These ratios enable to judge the overall performance of the bank. The various profitability ratios, which reflect the operating efficiency of the banks, are analyzed below:

4.2.3.1 Return on Total Assets Ratio:

Return on total assets ratio measures the overall profitability of the bank. Assets management is very essential and important because of the return on assets will vise if fewer assets one employed and all the required measures of the effective management of working capital apply. A bank has to earn satisfactory return on assets on working fund for its survival. This ratio is expressed as a ratio of net income and total assets.

Table No. 4.4

Return on Total Assets Ratio of Different Selected Banks (in %)

Banks	Fiscal Year							
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	Mean	S.D.	C.V.(%)
NABIL	4.5119	4.0527	4.9793	5.9498	7.3838	5.3755	1.1845	22.04
EBL	3.7953	3.9183	4.4738	5.8106	7.4020	5.08	1.3633	26.83

Source: Appendix-2 &3

The return on assets measures the efficiency of financial resources invested in the firms' assets to generate profitability. The return on capital employed indicates how well management has used the funds supplied by creditors and owners. The table No. 4.4 presents return on assets ratio. Return on assets ratio increasing continuously during the study period of NABIL bank limited. It has 4.5119% in 2006/2007 but it has decreased to 4.0527 in 2007/2008. It has increased to 7.3838% in 2010/2011. EBL has 3.7953% returns on assets ratio in 2006/2007. It has increased to 7.4020%.

While observing the mean return to total assets ratio NABIL has the higher i.e. 5.3755 percent but EBL seems lower of 5.08 percent. In case of S.D. and C.V., EBL has higher. It means EBL could not utilize its total assets efficiently. The study presents NABIL utilized its total assets efficiently because its C.V. 22.04 percent is lower than EBL.

4.2.3.2 Net Profit to Total Deposit Ratio :

Net profit to total assets ratio measures the relationship between net profits towards bank's total deposit. This ratio is expressed as a ratio of net income and total assets.

Table No. 4.5

Net Profit to Total Deposit Ratio of Different Selected Banks (in %)

Banks	Fiscal Year							
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	Mean	S.D.	C.V.(%)
NABIL	5.2679	4.7153	5.8485	6.6867	9.1409	6.3319	1.546	24.42
EBL	4.4737	4.4369	4.9564	6.5108	8.43	5.7615	1.532	26.59

Source: Appendix-2 &3

The table No. 4.5 presents the net profit to total deposit ratio. During the research period NABIL bank limited able to utilize its deposit. It has 5.2679 % net profits to total deposit ratio in 2006/2007 and increased to 9.1409% in 2010/2011. The table shows EBL was also able to utilize its deposit. Its net profit to total deposit ratio increased gradually. It has 4.4737% in 2006/2007 and it has increased to 8.43% in 2010/2011. In conclusion, both selected banks are utilized their total deposits efficiently to earn net profit.

From the above analysis NABIL has the higher average net profit to total deposit ratio. In case of S.D. and C.V. EBL seems better because it's S.D. and C.V. seems higher than that of NABIL. It means EBL manage their deposit efficiently to get return.

4.2.3.3 Return on Loan and Advance Ratio:

This ratio measures how efficiently the bank has employed its loan and advances. This is the most important ratio in which every bank has to be concentrate because higher the ratio higher the bank can generate more profit. This ratio is expressed as a ratio of net profit and total loan and advances.

Table No. 4.6

Return on Loan and Advance Ratio of Different Selected Banks (in %)

Banks	Fiscal Year							
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	Mean	S.D.	C.V. (%)
NABIL	7.9108	7.0438	7.917	9.6025	11.2875	8.7523	1.5149	17.3
EBL	5.954	5.8	6.9148	8.7261	11.1635	7.7116	2.016	26.14

Source: Appendix-2 &3

The table No. 4.6 shows the return on loan and advance ratio. NABIL bank ltd. has minimum return on loan and advance ratio is 7.0438% in 2007/2008 and maximum 11.2875% in 2010/2011. During the study period EBLseems the ratio increased every year return on loan and advance ratio. It has maximum ratio is 11.1635% in 2010/2011 and minimum ratio is 5.81% in 2007/2008.

While observing table No.4.6, it is found that the average return on loan and advance of NABIL seems higher of 8.7523 percent, whereas EBL has 7.7116 percent. And in case of S.D. and C.V. NABIL has quite lower than EBL. It means NABIL mobilized its loan and advances efficiently to get return.

From the above description of profitability ratio, the conclusion can be drawn that the average profitability ratio of NABIL is comparatively higher than EBL. But in case of S.D. and C.V. EBL seems higher.

4.2.4 Capital Adequacy Ratio:

The question of capital adequacy lies at the heart of the financial strength safety and solvency. This ratio is highly applied especially to assess the strength of the capital adequacy of the available capital. The following ratios are selected under capital adequacy ratio.

4.2.4.1 Shareholder's Fund to Total Deposit Ratio:

This ratio shows how well commercial banks are maintaining sufficient amount as shareholders fund in comparison to the amount of total deposit. This ratio is expresses as a ratio of total shareholders fund and total deposit.

Table No. 4.7

Shareholder's Fund to Total Deposit Ratio of Different Selected Banks

Banks	Fiscal Year							
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	Mean	S.D.	C.V. (%)
NABIL	8.8819	7.6362	8.3806	8.2713	9.2713	8.5786	1.3029	15.35
EBL	5.8368	6.5948	6.0127	6.2547	7.57	6.4538	0.613	9.50

Source: Appendix: 2 &3

Table No. 4.7 shows the ratio between shareholders fund and total deposit ratio. From the analysis of above table NABIL bank ltd. has the ratio in fiscal year 2006/2007 i.e. 8.8819 and 9.2713 in fiscal year 2010/2011,the bank could success to maintain this performance in the succeeding year. In the context of EBL has also increases from 5.8368in fiscal year 2006/2007 and it is 7.57in 2010/2011. Both the banks NABIL and EBL have the increasing trend of shareholders fund to total deposit ratio. In conclusion, the NABIL bank ltd. has higher than that of EBL to maintained efficient ratio.

From the above analysis mean shareholders fund to total deposit ratio of NABIL seems higher of 8.488 and higher of S.D. and C.V of 1.30 and 15.35 percent

respectively. On the other hand EBL has quite lower average shareholders fund to total deposit ratio of 6.4538 and lower S.D and C.V of 613 and 9.50% respectively. It means NABIL bank ltd has higher than that of EBL in their mean, S.D and C.V.

4.2.4.2 Shareholder's Fund to Total Assets Ratio.

This ratio is quite essential for every financial institution to have a balance of required percentage of total assets as capital fund. This ratio measures the relative claims of owners of the bank over the bank's assets.

This ratio is expressed as a ratio of shareholders fund and total assets.

Table No. 4.8

Shareholder's Fund to Total Assets Ratio of Different Selected Banks

Banks	Fiscal Year							
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	Mean	S.D.	C.V (%)
NABIL	7.5473	6.5632	7.1351	7.3599	7.8541	7.2912	0.4339	5.95
EBL	4.9518	5.8241	5.4274	5.582	6.6469	5.6848	0.558	9.82

Source: Appendix-2 &3

From the above table No. 4.8, NABIL bank ltd. has 7.5473 ratios in 2006/2007 and this ratio increased to 7.8541in 2010/2011. Similarly, EBL has 4.9518ratios in 2006/2007 and this ratio rose to 6.6469in 2010/2011.

From the above table EBL has quite lower average shareholders fund to total assets ratio and S.D of 5.6844 percent and 0.558. In case of C.V. EBL has higher the ratio than NABIL.

In conclusion, the mean ratio and S.D of capital adequacy ratio of NABIL has been found higher than that of EBL but in case of C.V. EBL seems higher.

4.3 Evaluation and Interpretation of Statistical Tools Analysis

Statistical tools are mathematical measure of various variables, which helps to estimate or predict of unknown value of one variable with the help of other known variable. Similarly, it helps to measure interrelationship of various variables. In this study following statistical tools are used to analysis of data.

4.3.1 Average (Arithmetic mean)

Arithmetic mean or simply a mean of a set of observation is the sum of all the observation divided by the number of observations. Arithmetic mean is also known as the arithmetic average. For the simplicity of study all financial ratios are calculated arithmetic mean.

The following table shows the summary of arithmetic mean of different financial ratios for selected commercial banks.

Table No. 4.9

Summary of Average Financial Ratios

Particulars	NABIL	EBL
Debt to equity	62.47	16.96
Debt to total capital	49.56	14.85
Interest coverage	1.86	1.89
Return on assets	5.38	5.08
Net profit to total deposit	6.33	5.76
Return on loan and advance	8.75	7.71
Shareholders fund to total deposit	8.57	6.45
Shareholders fund to total assets	7.29	5.68

Source: Appendix 5

The table No. 4.9 shows the arithmetic mean of leverage, interest coverage, profitability and capital adequacy ratio of different selected commercial banks. By observing the table, NABIL has the highest leverage ratio and EBL has the lowest leverage ratio. The highest arithmetic leverage ratio of NABIL is 62.47% and 49.56%. And lowest leverage ratio of EBL is 5.08% and 5.68%. It means, the NABIL has used more debt capital then EBL. In the context of interest coverage ratio, NABIL has the highest interest coverage ratio i.e. 2.213 times. It means the bank has more interest bearing capacity than EBL. By observing the table, arithmetic mean of return on assets ratio NABIL has got higher i.e. 7.3838%. It means NABIL is getting more profit by utilizing its deposits. NABIL is also seen more strengthen then EBL on average net profit to total deposit ratio. Similarly, the table presents that NABIL have greater return on loan and advance ratio than other bank EBL. In capital adequacy ratio of NABIL seems higher ratios where other bank EBL seems lower ratio.

4.3.2 Standard Deviation

The standard deviation is the absolute measure of dispersion in which the drawbacks present in order measure of dispersion are removed. It is said to be the best measure of dispersion as it is satisfies must of the requisites of good measure of dispersion. Standard deviation (S.D.) is defined as the positive square root of the mean of the square of the deviation taken from the arithmetic mean. It is denoted by σ.

The following table shows the summary of standard deviation of different financial ratios.

Table No. 4.10

Summary of Standard Deviation of Financial Ratios

Particulars	NABIL	EBL
Debt to equity	20.16	6.41
Debt to total capital	18.51	5.62
Interest coverage	0.23	0.205
Return on assets	1.1845	1.363
Net profit to total deposit	1.546	1.532
Return on loan and advance	1.5149	2.016
Shareholders fund to total deposit	1.3029	0.613
Shareholders fund to total assets	0.4339	0.558

Source: Appendix 5

From the analysis of above table, it is found that EBL maintain consistent capital structure because it's standard deviation of leverage ratio lesser than NABIL. The ratios are 18.5and 5.62. Both banks have considerable interest coverage ratio because the ratios are not less than one times. The table shows the consistent standard deviation of profitability ratio of EBL. Standard deviation of capital adequacy ratio of NABIL shows more variation then other bank.

4.3.3 Coefficient of Variation (CV)

The coefficient of dispersion based on standard deviation multiplied by 100 is known as the coefficient of variation (CV). If x be the arithmetic mean and d the standard deviation of the distribution, then the CV is defined by:

$$\text{C. V.} = \frac{\pm}{X} \times 100\%$$

The following table shows the comparative summary of coefficient of variation of different financial ratios.

Table No. 4.11

Summary of Coefficient of Variation of different Financial Ratios (In %)

Particulars	NABIL	EBL
Debt to equity	32.27	38.59
Debt to total capital	37.35	37.85
Interest coverage	12.34	10.90
Return on assets	22.04	26.83
Net profit to total deposit	24.42	26.59
Return on loan and advance	17.3	26.14
Shareholders fund to total deposit	15.35	9.5
Shareholders fund to total assets	5.95	9.82

Source: Appendix 5

The coefficient of variation is relative measures of dispersion. From the table No. 4.11 the EBL has the higher leverage in comparison to other bank NABIL. The bank has 38.59% and 32.27% leverage ratio respectively. It means it has not consistent and uniform nature of capital structure. Coefficient of variation of interest coverage ratio of NABIL is higher i.e. 12.34%. NABIL has lower CV of profitability ratio. It means the bank has consistent in earning profit. CV of profitability ratio of EBL has higher. It means the bank cannot utilize its total assets and capital. CV of shareholders fund to total deposit ratio of NABIL bank ltd. has higher i.e. 15.35%. But CV of shareholders fund to total assets ratio of EBL is higher than NABIL.

4.3.4 Correlation Coefficient Analysis

Karl Pearson's simple correlation coefficient has been used to find out the relationship between two variables independent and dependent. Here correlation coefficient between total deposit to total loan and advance, total assets net profit after tax, long term debt to net profit after tax and shareholders' equity to net profit after tax.

i. Correlation Coefficient between Total Deposit and Total Loan and Advance

The correlation coefficient between total deposit and loan and advances is to measure the degree of relationship. In this relation total deposit is independent variable (X) and total loan and advance is dependent variable (Y). The main purpose of computing correlation coefficient is to justify whether there is any relationship exist or not between these two variables.

The following table shows the correlation coefficient between total deposits and total loan and advances i.e. PEr, 6PEr and coefficient of determination r^2 of selected commercial banks during the study period.

Table No. 4.12

Correlation Coefficient between Total Deposit and Total Loan and Advances

	Evaluation criteria			
Banks	r.	r^2	PEr	6PEr
NABIL	0.9753	0.9512	0.0147	0.0882
EBL	0.9967	0.9934	0.00199	0.01194

Source: Appendix 4

From the above table, it is found that NABIL bank ltd. and EBL are highly correlated. It is obvious that the correlation coefficient between total deposit and total loan and advances, the value of r are 0.753and 0.9967.

In the application of coefficient of determination r^2 of NABIL and EBL are 0.9512and 0.9934 respectively. It means, 95.12 and 99.34 percent of variation in the dependent (total loan and advance) has been explained by the independent variables.

In the case of PEr, we can conclude that the relationship of variables is significant of NABIL and EBL because the value of r is six time more than PEr.

From the above analysis we can conclude that the NABIL and EBL have efficiently utilized their deposits as a loan and advance because of their relationship between variables are significantly positive as well as r^2 is higher.

ii. Correlation Coefficient between Total Assets & Net Profit After Tax

The correlation coefficient between total assets and net profit measures the degree of relationship between two variables. In correlation coefficient between total asset and net profit after tax, total assets are independent variable (X) and net profit is dependent variable (Y). The main purpose of computing correlation of coefficient is to justify the whether there exist any relationship between these two variables.

The following table shows the correlation coefficient between total assets and net profit i.e. PEr, 6PEr and coefficient of determination (r^2) of commercial banks.

Table No. 4.13

Correlation Coefficient between Total Assets and Net Profit after Tax

	Evaluation Criteria			
Banks	R	r^2	PEr	6PEr
NABIL	0.9764	0.9533	0.01408	0.08451
EBL	0.9944	0.9888	0.03005	0.1803

Source: Appendix 4

By evaluating above table No. 4.13, it is found that NABIL and EBL are highly correlated between variables. It is obvious that the correlation coefficient between total assets and net profit after tax, the value of r are 0.9764 and 0.9944 in the application of coefficient of determination r^2 of NABIL and EBL are 0.9533 and 0.9888. It means 95.33 and 98.88 percent of variation in the dependent variables (net profit after tax) has been explained by the independent variable (total assets).

In the case of PEr, we can conclude that the relationship of the variables is significant of NABIL and EBL because the value r is six time more than PEr .

In conclusion we can say the NABIL and EBL have efficiently utilized their assets to formation net profit because their relationships between the variables are significantly positive.

iii. Correlation Coefficient between Long Term Debt and Net Profit

The correlation coefficient between long term debt and net profit after tax is to measure the degree of relationship between two variables. In correlation analysis of long term debt and net profit after tax, long term debt is independent variable (X) and net profit after tax is dependent variable (Y). The main purpose of computing correlation of coefficient is to see whether there is any relationship between two variables.

The following table shows the correlation coefficient between long term debt and net profit i.e. PEr, 6PEr and coefficient of determination r^2 of selected commercial banks.

Table No. 4.14

Correlation Coefficient between Long Term Debt and Net Profit after Tax

	Evaluation Criteria			
Banks	R	r^2	PEr	6PEr
NABIL	0.598	0.3576	0.1937	1.1626
EBL	0.6436	0.4142	0.1767	1.0602

Source: Appendix 4

The table No. 4.14 presents the both selected bank has positive correlation between variables. It is found that the correlation coefficient of NABIL and EBL, are 0.598 and 0.6436. NABIL bank has moderate positive correlation but EBL has highly positive correlation.

In the context of coefficient of determination r^2 of NABIL and EBL are 0.03576 and 0.4242 respectively. It means 3.57 and 41.42 percent of the variation in the dependent variable (net profit) has been explained by independent variables (long term debt).

In the case of PEr, we conclude that the relationship of the variables is significant of EBL because the value of r is six time more than PEr but the relationship of the variables is insignificant of NABIL because the value of r is six time less than PEr. By evaluating correlation coefficient between long term debts to net profit, it is found that the NABIL bank is unable to utilize its debt capital because their relationship between the variable positive insignificant and EBL is utilizing its debt capital because their relationship between the variable positive is significant.

iv. Correlation Coefficient between Shareholders Equity and Net Profit

The correlation coefficient between shareholders fund (equity) and net profit is to show the degree of relationship between two variables. Here shareholders fund is taken as independent variable (X) and net profit as dependent variable (Y). The purpose of analyzing this correlation is how banks are utilized their shareholders equity to get net profit.

The following table shows the correlation coefficient between shareholders equity and net profit after tax i.e. PEr, 6PEr and coefficient of determination r^2 of selected commercial banks.

Table No. 4.15

Correlation Coefficient between Shareholders Equity and Net Profit

	Evaluation criteria			
Banks	R	r^2	PEr	6PEr
NABIL	0.9895	0.9791	0.006304	0.00378
EBL	0.967	0.9350	0.019606	0.1176

Source: Appendix 4

The table indicates the correlation coefficient between shareholders equity and net profit. The table shows NABIL and EBL has positive highly correlated between variables. It is found that NABIL and EBL have 0.9895 and 0.967 correlation between variables respectively.

In the context of coefficient of determination r^2 of NABIL and EBL are 0.9791 and 0.9350. It means 97.91 and 93.5 percent of variation in dependent variable (net profit) has been explained by the independent variable (shareholders equity).

In case of PEr, we can conclude that the relationship of the variables is significant of positive of NABIL and EBL because the value of r is six time more than PEr. In conclusion we can conclude that NABIL and EBL are efficiently utilizing its shareholders equity to earn profit.

v. Correlation Coefficient between Long Term Debt & Shareholders' Equity

The correlation coefficient between long term debt and shareholders fund (equity) is to show the degree of relationship between two variables. Here long term debt taken as independent variable (X) and shareholders equity is taken as dependent variable (Y). The purpose of analyzing this correlation is to find trend of increasing or decreasing debt equity capital.

The following table shows the correlation coefficient between long term debt and shareholders equity i.e. PEr, 6PEr and coefficient of determination r^2 of selected commercial banks.

Table No. 4.16

Correlation Coefficient between Long Term Debt and Shareholders' Equity

	Evaluation criteria			
Banks	r	R^2	PEr	6PEr
NABIL	0.586	0.3433	0.1981	1.1885
EBL	0.7945	0.6312	0.1112	06674

Source: Appendix 4

The table indicates the correlation coefficient between long term debt and shareholders' equity. The table shows NABIL and EBL has positive moderate

correlated between variables. It is found that NABIL and EBL have 0.586 and 0.7945 correlation

In the context of coefficient of determination r^2 of NABIL and EBL are 0.3433 and 0.6312. It means 34.33 and 63.12 percent of variation in dependent variable (Long term debt) has been explained by the independent variable (shareholders equity).

In case of PEr, we can conclude that the relationship of the variables is significant of Lower positive of NABIL and EBL because the value of r is six time more than PEr. In conclusion we can conclude that NABIL and EBL are efficiently utilizing its shareholders equity to earn profit between variables respectively.

4.4: Test of Hypothesis

The test of hypothesis disclose the fact whether the difference between the computed statistic and hypothetical parameter is significant.

Types of hypothesis:

i. Null hypothesis
ii. Alternative hypothesis

i. Null hypothesis (H_0): $\overline{X}_1 = \overline{X}_2$

This hypothesis always rejects the difference and accepts of the assumption value and the actual value is same i.e. there is no significant difference between mean ratios of loan and advances to total deposit of Nabil and Everest bank limited.

ii. Alternative hypothesis (H_1): $\overline{X}_1 \neq \overline{X}_2$

Complementary of null hypothesis is called alternative hypothesis i.e. there is significant difference between mean ratios of loan and advance to total deposit of Nabil and Everest bank.

Generally, following steps are taken for test of hypothesis:

1. Formulating hypothesis
    a. Null hypothesis
    b. Alternative hypothesis

2. Computing the test statistics
3. Fixing the level of significance
4. Finding critical region
5. Making decision

In this topic t-statistics is used to find out the test of significance regarding the parameter of population on the basis of sample drawn form the population.

T-test

If we draw a large number of small samples i.e. ($n < 30$) and compute the mean for each sample and then plot the frequency distribution of these mean, the resulting sampling distribution would be t-test. In this study, samples are taken only for five years i.e. ($5 < 30$).

Assumptions made for using t-test in this case are:

a. The parent population's forms which samples are drawn are normally distributed.
b. The two samples are random and independent of each other.

Based on above assumptions, following hypothesis is tested:

i. Test of hypothesis on Loan and Advance to Total Deposit Ratio between Nabil and Everest Bank.

We take the mean ratio of loan and advance to total deposit of Nabil and Everest bank to carry out t-test.

Table 4.17

Test of Hypothesis on Loan and Advances to Total Deposit Ratio between Nabil and Everest Bank

S.N.	Nabil	Everest
1	$\Sigma X_1 = 358.02$	$\Sigma X_2 = 373.44$
2	$\overline{X}_1 = 71.604$	$\overline{X}_2 = 74.688$
3	$\Sigma X_1^2 = 143.7337$	$\Sigma X_2^2 = 13.1979$

Source: Appendix: 6

Setting hypothesis,

Null hypothesis (H_0): $\overline{X}_1 = \overline{X}_2$, i.e. there is no significant difference between mean ratios of loan and advances to total deposit of Nabil and Everest bank.

Alternative hypothesis (H_1): $\overline{X}_1 \neq \overline{X}_2$ (two-tailed test), i.e. there is significant difference between the mean ratios of loan and advances to total deposit of Nabil and Everest bank.

The test statistics under H_0 is

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where, $S^2 = \frac{1}{n_1 + n_2 - 2}(\sum X_1^2 + \sum X_2^2)$

$= \frac{1}{5+5-2}(143.73 + 13.19)$

$= 19.615$

Now, $t = \frac{71.604 - 74.688}{\sqrt{19.615\left(\frac{1}{5}+\frac{1}{5}\right)}}$

= -1.1010

Calculated value of |t| = 1.1010

Tabulated value of't' (two-tailed test) at 5% level of significance of (n_1+n_2-2) d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of |t| i.e. 1.1010 is less than that of tabulated value i.e. 2.306 at 5% Level of significance for two tailed test. Null hypothesis accepted, i.e. there is no significant difference between mean ratios of loan and advance to total deposit ratio of Nabil and Everest bank.

ii. Test of Hypothesis on Share Holders Equity and Net Profit After Tax Ratio between Nabil and Everest.

We take the mean ratio of share holder equity and net profit after tax of Nabil and Everest bank are taken and carried out under t-test of significance difference.

Table 4.18

Test of Hypothesis on Share Holders Equity and Net Profit After Tax between Nabil and Everest Bank

S.N.	Nabil	Everest
1	$\Sigma X_1 = 16.14$	$\Sigma X_2 = 16.51$
2	$\overline{X}_1 = 3.228$	$\overline{X}_2 = 3.302$
3	$\Sigma X_1^2 = 0.1219$	$\Sigma X_2^2 = 0.5128$

Source: Appendix- 6

Setting hypothesis,

Null hypothesis (H_0): $\overline{X}_1 = \overline{X}_2$, i.e. there is no significant difference between mean ratios of Share Holders Equity to Net Profit After Tax of Nabil and Everest bank.

Alternative hypothesis (H_1): $\overline{X}_1 \neq \overline{X}_2$ (two-tailed test), i.e. there is significant difference between the mean ratios of Share Holders Equity to Net Profit After Tax of Nabil and Everest Bank.

The test statistics under H_0 is

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where, $S^2 = \frac{1}{n_1 + n_2 - 2}(\sum X_1^2 + \sum X_2^2)$

$= \frac{1}{5+5-2}(0.1219 + 0.5128)$

$=0.07933$

Now, $t = \frac{3.228 - 3.302}{\sqrt{0.07933\left(\frac{1}{5} + \frac{1}{5}\right)}}$

$= -0.4155$

Calculated value of $|t| = 0.4155$

Tabulated value of't' (two-tailed test) at 5% level of significance of (n_1+n_2-2) d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of t i.e. 0.4155 is less than that of tabulated value i.e. 2.306 at 5% Level Of Significance for two tailed test. Null hypothesis is accepted, i.e. there is no significant difference between mean ratios of Share Holders Equity to Net Profit After Tax ratio of Nabil and Everest Bank.

iii. Test of hypothesis on Long Term Debt to Net profit After Tax Ratio between Nabil and Everest Bank

Here, mean ratios of Long Term Debt to Net profit After Tax of Nabil and Everest bank are taken and carried out under t-test of significance difference.

Table 4.19

Test of Hypothesis on Long Term Debt to Net profit After Tax Ratio **between Nabil and Everest Bank**

S.N.	Nabil	Everest
1	$\Sigma X_1 = 10.11$	$\Sigma X_2 = 2.85$
2	$\overline{X}_1 = 2.022$	$\overline{X}_2 = 0.57$
3	$\Sigma X_1^2 = 2.4167$	$\Sigma X_2^2 = 0.3246$

Source: Appendix: 6

Setting hypothesis,

Null hypothesis (H_0): $\overline{X}_1 = \overline{X}_2$, i.e. there is no significant difference between mean ratios of Long Term Debt to Net profit After Tax of Nabil and Everest bank.

Alternative hypothesis (H_1): $\overline{X}_1 \neq \overline{X}_2$ (two-tailed test), i.e. there is significant difference between the mean ratios of Long Term Debt to Net profit After Tax of Nabil and Everest bank.

The test statistics under H_0 is

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where, $S^2 = \frac{1}{n_1 + n_2 - 2}(\sum X_1^2 + \sum X_2^2)$

$$= \frac{1}{5+5-2}(2.4167 + 0.3246)$$

$$= 0.3426$$

$$\text{Now, } t = \frac{2.022 - 0.57}{\sqrt{0.3426\left(\frac{1}{5}+\frac{1}{5}\right)}}$$

$$= 5.308$$

Calculated value of |t| = 5.308

Tabulated value of't' (two-tailed test) at 5% level of significance of (n_1+n_2-2) d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of t i.e. 5.308 is greater than that of tabulated value i.e. 2.306 at 5% Level Of Significance for two tailed test. Null hypothesis rejected, i.e. there is significant difference between mean ratios of Long Term Debt to Net profit After Tax ratio of Nabil and Everest bank.

iv. Test of Hypothesis on Long Term Debt to Share Holders Equity between Nabil and Everest Bank

Here, mean ratio of Long Term Debt **to** Share Holders Equity of Nabil and SBI bank taken and carried out under t-test of significance difference.

Table 4.20

Test of Hypothesis on Long Term Debt to **Share Holders Equity Ratio between Nabil and Everest Bank**

S.N.	Nabil	Everest
1	$\Sigma X_1 = 312.36$	$\Sigma X_2 = 84.82$
2	$\overline{X}_1 = 62.472$	$\overline{X}_2 = 16.964$
3	$\Sigma X_1^2 = 2033.55$	$\Sigma X_2^2 = 205.1127$

Source: Appendix: 6

Setting hypothesis,

Null hypothesis (H_0): $\overline{X}_1 = \overline{X}_2$, i.e. there is no significant difference between mean ratios of Long Term Debt **to** Share Holders Equity of Nabil and Everest bank.

Alternative hypothesis (H_1): $\overline{X}_1 \neq \overline{X}_2$ (two-tailed test), i.e. there is significant difference between the mean ratios of Long Term Debt **to** Share Holders Equity of Nabil and Everest bank.

The test statistics under H_0 is

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where, $S^2 = \frac{1}{n_1 + n_2 - 2}(\sum X_1^{\,2} + \sum X_2^{\,2})$

$= \frac{1}{5+5-2}(2033.55 + 205.12)$

$= 279.83$

Now, $t = \frac{62.472 - 16.964}{\sqrt{279.83\left(\frac{1}{5} + \frac{1}{5}\right)}}$

$= 4.3014$

Calculated value of $|t| = 4.3014$

Tabulated value of't' (two-tailed test) at 5% level of significance of (n_1+n_2-2) d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of t i.e. 4.3014 is greater than that of tabulated value i.e. 2.306 at 5% Level Of Significance for two tailed test. Null hypothesis rejected, i.e. there is significant difference between mean ratios of Long Term Debt **to** Share Holders Equity ratios of Nabil and Everest bank.

v. Test of Hypothesis on Total Asset to Net Profit after Tax Ratio between Nabil and Everest Bank

Here, mean ratio on **Total Asset to Net Profit after Tax** Nabil and Everest bank are taken and carried out under t-test of significant difference.

Table 4.21

Test of Hypothesis on Return on Loan and Advance Ratio between Nabil and Everest Bank

S.N.	Nabil	Everest
1	$\Sigma X_1 = 221.94$	$\Sigma X_2 = 293.13$
2	$\overline{X}_1 = 44.388$	$\overline{X}_2 = 58.626$
3	$\Sigma X_1^2 = 50.405$	$\Sigma X_2^2 = 355.0969$

Source: Appendix: 6

Setting hypothesis,

Null hypothesis (H_0): $\overline{X}_1 = \overline{X}_2$, i.e. there is no significant difference between mean ratios of **Total Asset to Net Profit After Tax** of Nabil and Everest bank.

Alternative hypothesis (H_1): $\overline{X}_1 \neq \overline{X}_2$ (two-tailed test), i.e. there is significant difference between the mean ratios of **Total Asset to Net Profit After Tax** of Nabil and Everest bank.

The test statistics under H_0 is

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where, $S^2 = \frac{1}{n_1 + n_2 - 2}(\sum X_1^2 + \sum X_2^2)$

$$= \frac{1}{5+5-2}(50.405 + 355.0969)$$

$$= 50.6933$$

$$\text{Now, } t = \frac{44.388 - 58.626}{\sqrt{50.6933\left(\frac{1}{5}+\frac{1}{5}\right)}}$$

$$= 3.16$$

Calculated value of t = 3.16

Tabulated value of't' (two-tailed test) at 5% level of significance of (n_1+n_2-2) d.f. i.e. 8 d.f. is 2.306.

Decision: Since the calculated value of |t| i.e. 3.16 is greater than that of tabulated value i.e. 2.306 at 5% Level Of Significance for two tailed test. Null hypothesis rejected, i.e. there is significant difference between mean ratios of **Total Asset to Net Profit After Tax** of Nabil and Everest bank.

4.5 Major Findings of the study

- Debt to Equity Ratio is higher in NABIL than EBL, it means Nabil bank ltd utilizes more debt in its capital structure than EBL. NABIL has mean ratio 62.47 and EBL have16.96 and S.D of NABIL is 20.16 & EBL is 16.96, which show that NABIL seems better consistent. C.V of EBL 38.59 which is higher than EBL 32.37.
- Debt to Total Capital Ratio is higher in NABIL i.e.49.564 on average while EBL have only 14.85 on average. S.D. is 18.51 in NABIL and 5.62 in EBL. By observing C.V EBL maintain optimal Debt Capital Ratio and NABIL seems better consistent in its mean and standard deviation.
- Interest Coverage Ratio is higher in EBL. On average interest bearing capacity of EBL is 1.89 and NABIL is 1.86. Higher ratio indicates that the firm is conservative. S.D. and C.V. is higher in NABIL.
- Return on Total Assets is increasing trend in both banks. It measures the efficiency of financial resources invested in firms. NABIL has higher mean 5.38

and S.D.1.18 in respect of 5.08 &1.36 in EBL. C.V. of EBL 26.83 is high than 22.04 NABIL.

- Both banks have Net profit To Total Deposit Ratio increasing continuously over the years 2006 to 2011 but it was decreased in 2007. This ratio indicates that both banks are utilized its total deposit to get return.
- Retturn on Loan and Advances is also increasing gradually as increased in NPAT to Total Deposit ratio. It has higher mean on NABIL than EBL i.e. 8.75 and 7.71 respectively. S.D and C.V. is higher in EBL which show that Nabil mobilized its loan and advances efficiently to get return.
- Shareholder Fund To Total Deposit ratio is higher in NABIL than EBL. NABIL has Higher in respect of Mean, S.D. and C.V. .8.57, 1.30 and 15.35 where as EBL have 6.45, 0.61 and 9.5 respectively.
- Shareholder Fund To Total Assets ratio is higher in NABIL than EBL. NABIL has Higher Mean, 7.3 and EBL has 5.69. S.D and C.V are higher in EBL i.e. 0.55 and 9.82 then that of NABIL 0.43 and 5.95.
- NABIL and EBL are highly correlated on total deposit and loan and advances, total assets and net profit after tax & shareholder equity and net profit.
- Both banks have moderate correlation on LTD and NPAT &LTD and SHE.
- Null hypothesis is accepted between NABIL and EBL on loan and advances to total deposit & shareholder equity to net profit after tax.
- Null hypothesis is rejected between NABIL and EBL on long term debt to net profit after tax, long term debt to shareholders equity and total assets to net profit after tax.

CHAPTER: FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONA

This chapter includes the aggregate summary of the previous chapter and recommends for the betterment to the respective organization. For simplicity this section has divided in to three subheadings named summary and conclusion, major findings and recommendation section.

5.1 Summary

Economic activities remain half in the absence of banking industries as it play the role of catalyst for economic development of the country. So, commercial banks have played significant role in the economic development of the country. They have introduced new technology in the banking system to mobilize the saving of the community. They have focused their services on commerce, trade and industry along with general public. But the cut-throat competition and lack of sufficient investment opportunities have created threats to the bank.

Being chapter of introduction, chapter I deals with the overall introduction of the study. General background deals with historical background of commercial banks operating in Nepal. There are 32 commercial banks listed in NEPSE out of them 2 commercial banks named NABIL Bank limited and Everest Bank limited are selected for study. The main objective of the study is to evaluate and analysis of capital structure of selected commercial banks. The specific objectives are examined the factors (variables) that affects the capital structure, to evaluate existing capital structure and to show relation and compositions of capital structure. There are some serious limitations of the study. The whole study is concerned only two commercial banks, only five years data are analyzed and all data are based on secondary sources. The first chapter is also known as the main guide line for the entire study.

Existing studies which are conducted by other authors are reviewed in second chapter to get the in depth information and leakages of existing studies.

Similarly the third chapter contains the briefing and mechanism of analytical tools and methodologies which are used to draw meaningful conclusion from the scattered and random data.

Being the main chapter of the study, chapter four consists of various analysis and data presentation procedures, which is directly related with the achievements of objectives of the study. Capital structure management plays important role in a real life of an organization. Organization whether they are government owned or privately owned have to make pertinent capital structure decision in identifying exactly how much capital is needed to run their operation smoothly. Capital structure is different from financial structure as financial structure includes both long term and short term sources of financing while capital structure includes only long term sources of financing. Generally, fund is acquired by the firm in two way equity and debt. Equity provides the ownership to the shareholders. On the other hand, the debt or borrowed fund has a fixed charge irrespective to the earnings of the firm and firm has to pay fixed charge periodically. To see the relationship between the variables that affect the capital structure the forth chapter has been analyzed. The chapter deals with capital structure management, for this financial and statistical tool has been used. From the analysis of financial ratio, leverage ratio, both NABIL bank ltd and EVEREST bank ltd maintain consistent capital structure. It means EBL and NABIL bank ltd have utilized debt and equity both capital. On the other hand EVEREST bank ltd utilized debt capital more than NABIL bank ltd. By analyzing interest coverage ratio EVEREST bank ltd has higher interest bearing capacity. In case of profitability ratio, the NABIL bank ltd has been getting more than EBL bank. It means these two banks have utilized their assets, total deposit, loan and advances. In the view of capital adequacy ratio.

From the analysis of statistical tools, the average of financial ratio presents leverage ratio, profitability ratio, capital adequacy ratio and shareholders to total deposit ratio are higher of NABIL but lower in interest coverage ratio. EBL seem lower profitability ratio and shareholders to total deposit ratio and capital adequacy ratio and leverage ratio, but higher in interest coverage ratio.

Standard deviation shows that the NABIL bank has lower in profitability ratio on loan and advances, shareholder fund to total assets but higher in leverage ratio, profitability ratio, interest coverage ratio. On coefficient of variation NABIL shows higher in

interest coverage ratio and shareholder fund to total deposit but lower in leverage ratio, profitability ratio and capital adequacy ratio. On the other hand EBL has higher SD on return on loan and advances, shareholder fund to total assets but lower in profitability ratio, interest coverage ratio, leverage ratio and capital adequacy ratio. It means the bank has more fluctuations on capital structure but consistent on earning profit. Every bank has consistent capital adequacy ratio. On coefficient of variation EBL shows lower in interest coverage ratio and shareholder fund to total deposit but higher in leverage ratio, profitability ratio and capital adequacy ratio.

By analyzing of correlation coefficient of different variables affecting capital structure shows that correlation coefficient between total deposit and loan and advance, total assets and net profit after tax and shareholders equity and net profit after tax of NABIL and EBL have highly positive correlated. NABIL bank has positive lower correlation between long term debt to shareholder equity, But EBL has moderate positive correlation. NABIL and EBL have moderate positive correlation between Long term debt to Net profit after tax. It means none of the banks can utilize their debt capital efficiently.

5.2 Conclusion

The study has been conducted on the title of "Capital Structure Management in Nepalese Commercial Banks". It has been selected two commercial banks (i.e. NABIL and EBL) via judgmental non-random sampling method. The study used financial as well as statistical tools to accomplish the objectives. Different financial rations, average, standard deviation and coefficient of variation are used to examine the existing capital structure and compare the financial results. And simple correlation coefficient tool has been used to examine the relationship between variables affecting debt and equity capital. Evaluation and analysis of capital structure is the major objectives and examining the relationship between variables affecting debt and equity capital, evaluating existing capital structure, comparing financial results are specific objectives of the study.

Mean leverage (i.e. debt equity ratio, debt to total capital ratio) capital adequacy ratio, profitability ratio and assets management ratio of NABIL seems higher than that of other EBL. Mean. It means NABIL utilize their profitability ratio (i. e. Return on

assets, Net profit to total Deposit, Return on loan and advances), leverage ratio(i.e debt equity ratio and debt to capital ratio), Assets management ratio (i.e shareholder equity to tatal assets and shareholder to total deposit), EBL has higher mean in interest coverage ratio, which means EBL utilized their capital to earn profit then NABIL. NABIL utilized their equity, total assets, total deposits, loan and advances, debt effectively than that of EBL.

While observing C.V. of different financial ratio of different banks it is found that NABIL has more fluctuations or deviation on debt and equity capital. C.V of debt to equity and debt to total capital (i.e. 32.27 and 37.35 percent respectively). On the other hand EBL have consistent C.V of leverage. But C.V. of profitability ratio, and capital adequacy ratio NABIL seems consistent, because it has lower C.V. of these ratio than that of EBL. It indicates that NABIL utilized their equity, total assets and loan and advances more efficiently than that of EBL. EBL seems consistent in interest coverage ratio and shareholder fund to total deposit more efficiently than NABIL because it has lower C.V than NABIL.

The correlation coefficient shows that NABIL and EBL are highly and positive correlated between total deposit and loan and advances, total assets and net profit after tax and shareholders equity and net profit after tax. In case of long term debt and shareholder equity EBL has positive highly correlation and NABIL has positive moderate correlation. In the context of long term debt and net profit after tax EBL and NABIL have positive moderate correlation.

5.3 Recommendations

Following suggestions and recommendations can be advanced to overcome the efficiency and weakness to improve present capital structure management to increase the profit and success of every commercial bank.

i. All commercial banks must diversity its resources in different sectors. It should keep in mind about this ‘a bank should not lay all its eggs on the same basket’ to get success itself and encourage financial and economic development of the country. Commercial bank must mobilize its funds in different sectors like

purchasing shares and debentures, investing in government securities, investing in other profitable projects etc. So EBL should increase the portion of debt capital to get more profit and minimize the risk.

ii. Sound capital structure management ensures the company success so, capital structure should be designed an appropriate structure in order to maximize the shareholders wealth. Though the NABIL has the higher mean leverage ratio, profitability ratio and capital adequacy ratio. It means the bank utilize its debt capital efficiently, to earn desire profit.

iii. It is often said that private commercial banks are mainly focused in urban area only and looking for big customer like multinational companies, large scale industries, huge manufacturers, etc. so all private and public commercial banks also need to go to rural areas to develop those areas and needs to provide the banking services to small and medium level customers. They also need to introduce different borrowing and loan scheme which is also capable to low and medium class customers to service in competitive market of banking.

iv. Only the EBL has the positive high correlation between long term debt and shareholders equity while other bank NABIL has moderate correlation. So other NABIL have to increase long term debt to get more return because there is tax advantages on debt capital.

v. Designing efficient organizational structure, motivation and satisfaction of employees, participation the employees in different training program, discussion with employees while formulating different plans and programs, similarly identification of sources of funds, studying of leading environment, management of gaps in different sectors, regular monitor the performance of staffs are also a huge factor of the success of every commercial to increase the profit and sustain in long run in the competitive market of banking.

vi. Profitability is the main indicator of the financial performance. In this study, profitability ratio of NABIL is good from the view of return. So EBL is recommended to increase its interest earning capacity by investing more funds on loan and advances.

vii. In the light of growing competition in the banking sector, the business of the bank should be customer oriented. The bank is recommended to adopt new technology and services such as financial switch system (SWIFT), automatic teller machine (ATM) cards, visa electron debit card, international credit card, locker services, lending against gold and silver services, parking service, 24 hour services etc. The bank should involve in different kinds of social and community development activities. The bank has been able to provide more personalized services and a better environment for its customer, it is an effective tool to attract and retain the customers.

BIBLIOGRAPHY

Books and Thesis

Agrawal, G.R. (2005). *Dynamics of Business Environment in Nepal*. Kathmandu: M.K. Publishers & Distribution.

Bajracharya, B.C. (2003). *Business Statistics and Mathematics*. Kathmandu: M.K. Publication and Distributors.

Bajracharya, S., & Bhattarai, R. (2005). *Corporate Financial Management*, (2nd Edition). Kathmandu: Buddha Academic Publisher and Distributor.

Bhattrarai, R. (2009). *Capital Structure Management*. Kathmandu: Dhaulagiri Books & Stationery.

Brealy, R.A., & Stewart, M. (1991). *Principles of Corporate Finance*. New Delhi: Tata McGraw Hill.

Brigham, E.F., & Raman E. J. (1976). *Issue in Managerial Finance.* Illions: Dryden Press.

Brigham, E.F., Gapenski, L.C., & Ehrhardt, M. C. (1999*). Financial Management*. Singapore: Harcourt Asia.

Giri, G. R. (2006). *Capital Structure Management of Listed Joint Venture Companies.* An unpublished Masters Degree Thesis, Submitted to Shanker Dev Campus Kathmandu.

Joshi, P.R. (2002). *Research Methodology*. Kathmandu: Buddha Academic Enterprises

Khadka, S.J., & Singh, G.(2009). *Banking and Insurance*. Kathmandu: Vidyarthi Publishers.

Kothari, C. R. (1994). *Quantitative Technique.* New Delhi: Vikas Publishing House Pvt. Ltd.

Modigliani, F., & Miller, M.H. (1963). "*Corporate Income Taxes and Cost of Capital*," *American Economic Review,* Vol. 53, No. 3.

Modigliani, F., & Miller, M.H.(1958). "*The Cost of Capital Corporation Finance and Theory of Investment*". *American Economy Review* Vol. 48, No. 3.

Pandey, I. M. (1981). *The Cost of Capital and Capital Structure.* New Delhi: Vikas Publishing House Pvt. Ltd.

Pandey, I. M. (1985). *Capital Structure & Cost of Capital*. New Delhi: Vikas Publishing House Pvt. Ltd.

Pokharal, D.R. (2008). *Analysis of Capital Structure in Selected Joint Venture Banks of Nepal.* An Unpublished Master Degree thesis, Submitted to Tribhuvan University, Kathmandu.

Pokhrel, P. (2005). *Study of the Capital Structure and Assets Structure of Commercial Banks in Nepal.* An Unpublished Master Degree Thesis, Submitted to Tribhuvan University, Kathmandu.

Pradhan, M. (2007). *Capital Structure Management of Manufacturing Companies and Hotels.* An unpublished Masters Degree Thesis, Submitted to Shanker Dev Campus, Kathmandu.

Pradhan, R. S. (1986). *Management of Working Management.* New Delhi: National Book Organization.

Pradhan, S. (1996). *Basics of Financial Management,* 1st Edition. Reprint, Kathmandu: Educational Enterprises Pvt. Ltd.

Sapkota, D. R. (2011). *Capital Structure of Nabil Bank Limited*. An Unpublished Master Degree Thesis, Tribhuvan University, Kathmandu.

Sapkota, P. R. (2006). *Capital Structure Management of Nabil Bank Ltd*. Kathmandu: An unpublished Masters Degree Thesis, Submitted to Shanker Dev Campus, Kathmandu.

Shah, B. (2001). *Capital Structure on Cost of Capital in the Context of Nepalese Enterprises.* An Unpublished Masters Degree Thesis, Submitted to Tribhuvan University.

Shrestha, M. K. (1981). *Capital Structure & Cost of Capital*. New Delhi: Vikas Publishing House Pvt. Ltd.

Shrivastav, R. M. (1984). *Financial Management.* New Delhi.: Kalyani Publication House.

Thapa, P. (2010). *Analysis of Capital Structure of Joint Venture Banks in Nepal.* An Unpublished Master Degree Dissertation, Kathmandu: Central Department of Management, Tribhuvan University.

Websites:

www.nabilbankltd.com

www.ebl.com

www.nepse.com

Appendix-1

NABIL Bank Ltd. (Amount in crore)

Year	2063/064	2064/065	2065/066	2066/067	2067/068
EBIT	122.98	150.49	218.53	309.95	486.16
Total Assets	2725.33	3713.27	4386.73	5207.97	5814.14
Long term debt	88.25	160.00	198.13	374.90	1950.59
Shareholders equity	205.69	243.71	313	383.3	456.65
Total capital	262.8	359.5	424.6	439.05	517.30
Interest expenses	55.57	75.84	115.32	196.01	295.54
Net profit (after tax)	67.39	74.64	103.10	113.85	133.77
Total deposit	2334.22	3191.50	3734.82	4634.07	4696.61
Total loan and advance	1554.57	2136.50	2758.99	3226.88	3803.41
EAT+ interest	122.96	150.49	218.43	309.86	429.31

Source: Annual reports from FY 2063/64 to 2067/68.

EVEREST Bank Ltd. (Amount in crore)

Year	2063/064	2064/065	2065/066	2066/067	2067/068
EBIT	101.81	135.71	199.89	287.96	387.96
Total Assets	2143.26	2714.93	3691.68	4138.28	4684
Long term debt	30	30	30	30	30
Shareholders equity	106.15	158.12	200.38	231	311.34
Total capital	120.15	192.12	220.36	251	369.02
Interest expenses	51.72	63.26	101.29	157.28	253.58

Net profit (after tax)	29.64	43.12	63.87	83.18	93.13
Total deposit	1818.62	2397.62	3332.29	3693.23	4112.79
Total loan & advance	1366.47	1833.91	2388.47	2755.64	3105.76
EAT+ interest	81.36	106.38	165.16	240.46	346.71

Source: Annual reports from FY 2063/64 to 2067/68.

Appendix-2

Calculation of Different Financial Ratio

NABIL Bank Ltd.					
Debt to Equity Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
long term debt	88.25	160	198.13	374.9	195.01
Shareholder's equity	205.69	243.71	313	383.3	456.65
	42.9	65.65	63.30	97.8	42.7
Debt to Total Capital Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
long term debt	88.25	160	198.13	374.9	195.01
Total capital	262.8	359.5	424.6	439.5	517.3
Ratio	33.58	44.50	46.67	85.38	37.69
Interest Coverage Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
EBIT	122.98	150.49	218.43	309.86	429.31
Interest expenses	55.57	75.84	115.32	196.01	295.54
Ratio	2.213	1.984	1.895	1.581	1.645
Return on total Assets Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
EAT+ interest	122.98	150.49	218.43	309.86	429.31
Total Assets	2725.34	3713.28	4386.74	5207.97	5814.14
Ratio	4.5119	4.0527	4.9793	5.9498	7.3838

Net Profit to Total Deposit Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
EAT+ interest	122.98	150.49	218.43	309.86	429.31
Total deposit	2334.23	3191.5	3734.83	4634.07	4696.61
Ratio	5.2679	4.7153	5.8485	6.6867	9.1409
Return on Loan and Advances Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
EAT+ interest	122.98	150.49	218.43	309.86	429.31
Total loan and advance	1554.57	2136.5	2758.99	3226.88	3803.41
Ratio	7.9108	7.0438	7.917	9.6025	11.2875
Shareholder Fund to Total Deposit Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Shareholders fund	205.69	243.71	313	383.3	456.65
Total deposit	2334.23	3191.5	3734.83	4634.07	4696.61
Ratio	8.8119	7.6362	8.3806	8.2713	9.7229
Shareholder Fund to Total Assets Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Shareholders fund	205.69	243.71	313	383.3	456.65
Total Assets	2725.34	3713.28	4386.74	5207.97	5814.14
Ratio	7.5473	6.5632	7.1351	7.3599	7.8541
Loan advances to Total deposit Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Loan and advances	1554.57	2136.5	2758.99	3226.88	3803.41
Total deposit	2334.23	3191.5	3734.83	4634.07	4696.61

Ratio	66.5988	66.9434	73.8719	69.6338	80.982
Shareholder Fund to Net profit after tax					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Shareholders fund	205.69	243.71	313	383.3	456.65
Net profit after tax	67.39	74.64	103.1	113.85	133.77
Ratio	3.0522	3.2651	3.0359	3.3667	3.4137
Long term debt to Net profit after tax					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Long term debt	88.25	160	198.13	374.9	195.01
Net profit after tax	67.39	74.64	103.1	113.85	133.77
Ratio	1.3095	2.1436	1.9217	3.2929	1.4578
Total assets to Net profit after tax					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Total assets	2725.34	3713.28	4386.74	5207.97	5814.14
Net profit after tax	67.39	74.64	103.1	113.85	133.77
Ratio	40.4413	49.7491	42.5484	45.7441	43.4637
Long term debt to Share holders equity Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Long term debt	88.25	160	198.13	374.9	195.01
Shareholders fund	205.69	243.71	313	383.3	456.65
Ratio	42.90	65.65	63.30	97.81	42.70

Appendix-3

Calculation of Different Financial Ratio

EVEREST Bank Ltd.					
Debt to Equity Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
long term debt	30	30	30	30	30
Shareholders fund	106.15	158.12	200.38	231	311.34
Ratio	28.2618	18.9723	14.9715	12.9870	9.6357
Debt to Total Capital Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
long term debt	30	30	30	30	30
Total capital	120.15	192.12	220.36	251	369.02
Ratio	24.9688	15.6152	13.6140	11.9521	8.1296
Interest Coverage Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
EBIT	101.81	135.71	199.89	287.96	387.96
Interest expenses	51.72	63.26	101.29	157.281	253.58
Ratio	1.9685	2.1453	1.9734	1.8309	1.5299
Return on total Assets Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
EAT+ interest	81.36	106.38	165.16	240.46	346.71
Total Assets	2143.68	2714.93	3691.68	4138.28	4684
Ratio	3.7953	3.9183	4.4738	5.8106	7.4020

Net Profit to Total Deposit Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
EAT+ interest	81.36	106.38	165.16	240.46	346.71
Total deposit	1818.62	2397.62	3332.29	3693.23	4112.79
Ratio	4.4737	4.4369	4.9564	6.5108	8.43
Return on Loan and Advances Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
EAT+ interest	81.36	106.38	165.16	240.46	346.71
Total loan and advance	1366.47	1833.9	2388.47	2755.64	3105.76
Ratio	5.954	5.8	6.9148	8.7261	11.1635

Shareholders fund to Total Deposit Ratio

Year	2062/063	2063/064	2064/065	2065/066	2066/067
Shareholders fund	106.15	158.12	200.36	231	311.34
Total Deposit	1818.62	2397.62	3332.29	3693.23	4112.79
Ratio	5.8368	6.5948	6.0127	6.2547	7.5700
Shareholders fund to total Assets Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Shareholders fund	106.15	158.12	200.36	231	311.34
Total Assets	2143.68	2714.93	3691.68	4138.28	4684
Ratio	4.9518	5.8241	5.4274	5.582	6.6469
Loan advances to Total deposit Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Loan and advances	1366.47	1833.9	2388.47	2755.64	3105.76
Total deposit	1818.62	2397.62	3332.29	3693.23	4112.79

Ratio	75.1377	76.4883	71.6834	74.6132	75.5147
Shareholders fund to Net profit after tax					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Shareholders fund	106.15	158.12	200.36	231	311.34
Net profit after tax	29.64	43.12	63.87	83.18	93.13
Ratio	3.5813	3.6669	3.1369	2.7771	3.3431
Long term debt to Net profit after tax Ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
long term debt	30	30	30	30	30
Net profit after tax	29.64	43.12	63.87	83.18	93.13
Ratio	1.0121	0.6957	0.4697	0.3606	0.3221
Total assets to Net profit after tax					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
Total Assets	2143.68	2714.93	3691.68	4138.28	4684
Net profit after tax	29.64	43.12	63.87	83.18	93.13
Ratio	72.32	62.96	57.8	49.75	50.3
Long term debt to Share holders equity ratio					
Year	2063/064	2064/065	2065/066	2066/067	2067/068
long term debt	30	30	30	30	30
Shareholders fund	106.15	158.12	200.36	231	311.34
Ratio	28.26	18.97	14.97	12.98	9.64

Appendix-4

Calculation of Correlation between different Ratio

correlation coefficient between total deposit and total loan and advance

NABIL BANK LTD.

X	Y
2,334	1,555
3,192	2,137
3,735	2,759
4,634	3,227
4,697	3,803
0.9753	

Correlation coefficient between total assets and net profit

NABIL BANK LTD.

X	Y
2,725	67
3,713	75
4,387	103
5,208	114
5,814	134
0.9764	

EBL

X	Y
1,819	1,366
2,398	1,834
3,332	2,388
3,693	2,756
4,113	3,106
0.9967	

EBL

X	Y
2,143	30
2,715	43
3,692	64
4,138	83
4,684	93
0.9944	

Correlation coefficient between long term debt to net profit after tax

Correlation coefficient between shareholders fund to net profit after tax

NABIL BANK Ltd.

NABIL BANK LTD.

X	Y
88	67
160	75
198	103
374	114
195	134
0.598	

X	Y
206	67
244	75
313	103
383	114
467	134
0.9895	

EBL	
X	Y
30	30
30	43
30	64
30	83
30	93
0.6436	

EBL	
X	Y
106	30
158	43
200	64
231	83
311.34	93
0.967	

Correlation coefficient between long term debt to shareholders equity

NABIL			EBL	
X	Y		Ā	Y

88	206		30	106
160	244		30	158
198	313		30	200
374	383		30	231
195	467		30	311
0.5860			0.7945	

Appendix-5

Average Calculation of different financial ratio

Average Debt to Equity Ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average	S.D	C.V
NABIL	42.9	65.65	63.3	97.8	42.7	62.47	20.16	32.27
EBL	28.26	18.97	14.97	12.98	9.63	16.96	6.41	38.59
Average debt to total capital ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average	S.D	C.V
NABIL	33.58	44.5	46.67	85.38	37.69	49.564	18.51	37.35
EBL	24.96	15.61	13.61	11.95	8.12	14.85	5.62	37.85
Average interest coverage ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average	S.D	C.V
NABIL	2.213	1.984	1.895	1.581	1.645	1.8636	0.23	12.34
EBL	1.9685	2.1453	1.9734	1.8309	1.5299	1.8896	0.21	10.9
Average Return on Total Assets ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average	S.D	C.V
NABIL	4.5119	4.0527	4.9793	5.9498	7.3838	5.3755	1.1845	22.04
EBL	3.7953	3.9183	4.4738	5.8106	7.4020	5.08	1.3633	26.83
Average Net Profit to Total Deposit ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average	S.D	C.V
NABIL	5.2679	4.7153	5.8485	6.6867	9.1409	6.3319	1.546	24.42
EBL	4.4737	4.4369	4.9564	6.5108	8.43	5.7615	1.532	26.59

Average Return on Loan and Advance Ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average	S.D	C.V
NABIL	7.9108	7.0438	7.917	9.6025	11.2875	8.7523	1.5149	17.3
EBL	5.954	5.8	6.9148	8.7261	11.1635	7.7116	2.016	26.14
Average Shareholders Fund to Total Deposit Ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average	S.D	C.V
NABIL	8.8819	7.6362	8.3806	8.2713	9.7229	8.5786	1.3029	15.35
EBL	5.8368	6.5948	6.0127	6.2547	7.57	6.4538	0.613	9.5
Average Shareholders Fund to Total Assets Ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average	S.D	C.V
NABIL	7.5473	6.5632	7.1351	7.3599	7.8541	7.2912	0.4339	5.95
EBL	4.9518	5.8241	5.4274	5.582	6.6469	5.6848	0.558	9.82
Average Loan advances to Total deposit Ratio								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average		
NABIL	66.5988	66.9434	73.8719	69.6338	80.982	71.6059		
EBL	75.1377	76.4883	71.6834	74.6132	75.5147	74.6875		
Average Share holders equity to Net profit after tax								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average		
NABIL	3.0522	3.2651	3.0359	3.3667	3.4137	3.2267		
EBL	3.5813	3.6669	3.1369	2.7771	3.3431	3.3010		

Average Long term debt to Net profit after tax								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average		
NABIL	1.3095	2.1436	1.9217	3.2929	1.4578	2.0251		
EBL	1.0121	0.6957	0.4697	0.3606	0.3221	0.5721		
Average Total assets to Net profit after tax								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average		
NABIL	40.4413	49.7491	42.5484	45.7441	43.4637	44.3887		
EBL	72.32	62.96	57.8	49.75	50.3	58.626		
Average Long term debt to Shareholders equity								
Year	2063/064	2064/065	2065/066	2066/067	2067/068	Average		
NABIL	42.90	65.65	63.30	97.81	42.70	62.472		
EBL	28.26	18.97	14.97	12.98	9.64	16.964		

Appendix-6

Calculation of Hypothesis on Loan and Advances to Total Deposit Ratio of Nabil and Everest Bank

Fiscal year	Nabil			Everest		
	X_1	$x_1 (X_1 - \overline{X}_1)$	x_1^2	X_2	$x_2 (X_2 - \overline{X}_2)$	x_2^2
2063/064	66.6	-5.004	25.04	75.14	0.452	0.2043
2064/065	66.94	-4.664	21.7529	76.49	1.802	3.2472
2065/066	73.87	2.266	5.1348	71.68	-3.008	9.0481
2066/067	69.63	-1.974	3.8967	74.61	-0.078	0.0061
2067/068	80.98	9.376	87.9093	75.52	0.832	0.6922
N = 5	$\Sigma x_1 = 358.02$	$\Sigma x_1 = 0$	$\Sigma x_1^2 = 143.7337$	$\Sigma x_2 = 373.44$	$\Sigma x_2 = 0$	$\Sigma x_2^2 = 13.1979$

Here,

$\overline{X}_1 = \frac{\sum x_1}{n}$ $\overline{X}_2 = \frac{\sum x_2}{n}$

$= \frac{358.02}{5}$ $= \frac{373.44}{5}$

= 71.604 = 74.688

Calculation of Hypothesis on Share Holders Equity and Net Profit After Tax Ratio of Nabil and Everest Bank

Fiscal year	Nabil			Everest		
	X_1	$x_1 (X_1 - \overline{X}_1)$	x_1^2	X_2	$x_2 (X_2 - \overline{X}_2)$	x_2^2
2063/064	3.05	-0.178	0.0316	3.58	0.278	0.0773

2064/065	3.27	0.042	0.0018	3.67	0.368	0.1354
2065/066	3.04	-0.188	0.0353	3.14	-0.162	0.0262
2066/067	3.37	0.142	0.0201	2.78	-0.522	0.2725
2067/068	3.41	0.182	0.0331	3.34	0.038	0.0014
N = 5	$\Sigma x_1 = 16.14$	$\Sigma x_1 = 0$	$\Sigma x_1^2 = 0.1219$	$\Sigma x_2 = 16.51$	$\Sigma x_2 = 0$	$\Sigma x_2^2 = 0.5128$

Here,

$\overline{X}_1 = \frac{\sum x_1}{n}$ $\overline{X}_2 = \frac{\sum x_2}{n}$

$= \frac{16.14}{5}$ $= \frac{16.51}{5}$

= 3.228 = 3.302

Calculation of Hypothesis on Long Term Debt and Net Profit After Tax of Nabil and Everest Bank

Fiscal year	Nabil			Everest		
	X_1	$x_1 (X_1 - \overline{X}_1)$	x_1^2	X_2	$x_2 (X_2 - \overline{X}_2)$	x_2^2
2063/064	1.31	-0.712	0.5069	1.01	0.44	0.1936
2064/065	2.14	0.118	0.0139	0.69	0.12	0.0144
2065/066	1.92	-0.102	0.0104	0.47	-0.1	0.01
2066/067	3.29	1.268	1.6078	0.36	-0.21	0.0441
2067/068	1.45	-0.572	0.2777	0.32	-0.25	0.0625
N = 5	$\Sigma x_1 = 10.11$	$\Sigma x_1 = 0$	$\Sigma x_1^2 = 2.4167$	$\Sigma x_2 = 2.85$	$\Sigma x_2 = 0$	$\Sigma x_2^2 = 0.3246$

Here,

$\overline{X}_1 = \frac{\sum x_1}{n}$ $\overline{X}_2 = \frac{\sum x_2}{n}$

$= \frac{10.11}{5}$ $= \frac{2.85}{5}$

= 2.022 = 0.57

Calculation of Hypothesis on Total Asset to Net Profit After Tax of Nabil and Everest Bank

Fiscal year	Nabil			Everest		
	X_1	$x_1 (X_1 - \overline{X}_1)$	x_1^2	X_2	$x_2 (X_2 - \overline{X}_2)$	x_2^2
2063/064	40.44	-3.948	15.5867	72.32	13.694	187.5256
2064/065	49.75	5.362	28.7510	62.96	4.334	18.7835
2065/066	42.55	-1.838	3.3782	57.8	-0.826	0.6823
2066/067	45.74	1.352	1.8279	49.75	-8.876	78.7833
2067/068	43.46	-0.928	0.8612	50.3	-8.326	69.3222
N = 5	$\Sigma x_1 = 221.94$	$\Sigma x_1 = 0$	$\Sigma x_1^2 = 50.405$	$\Sigma x_2 = 293.13$	$\Sigma x_2 = 0$	$\Sigma x_2^2 = 355.0969$

Here,

$\overline{X}_1 = \frac{\sum x_1}{n}$ $\overline{X}_2 = \frac{\sum x_2}{n}$

$= \frac{221.94}{5}$ $= \frac{293.13}{5}$

= 44.388 = 58.626

Calculation of Hypothesis on Long Term Debt to Share Holders Equity of Nabil and Everest Bank

Fiscal year	Nabil			Everest		
	X_1	$x_1 (X_1 - \overline{X}_1)$	x_1^2	X_2	$x_2 (X_2 - \overline{X}_2)$	x_2^2
2063/064	42.9	-19.572	383.0632	28.26	11.296	127.5996

2064/065	65.65	3.178	10.0997	18.97	2.006	4.02403
2065/066	63.3	0.828	0.6855	14.97	-1.994	3.9760
2066/067	97.81	35.338	1248.7742	12.98	-3.984	15.8722
2067/068	42.7	-19.772	390.9319	9.64	-7.324	53.6409
N = 5	$\Sigma x_1 = 312.36$	$\Sigma x_1 = 0$	$\Sigma x_1^2 = 2033.55$	$\Sigma x_2 = 84.82$	$\Sigma x_2 = 0$	$\Sigma x_2^2 =$ 205.1127

Here,

$\overline{X}_1 = \frac{\sum x_1}{n}$

$= \frac{312.6}{5}$

= 62.472

$\overline{X}_2 = \frac{\sum x_2}{n}$

$= \frac{84.82}{5}$

= 16.964

Appendix-7

Profile of Concerned Bank

In this section, general introduction of the bank under study is being attempted to furnish for the easy reference of sample to the research.

Everest Bank Ltd.

Everest Bank Ltd. is joint venture with Punjab National Bank (PNB) India was established in 1994 (2051B.S). The bank started operation in first of kartik 2051.The head office is situated in Lazimpat, Kathmandu. This bank has 64 branches in different parts of the country. The bank has an authorized capital of Rs 2000 million, issued capital of Rs 1281.4065 million and paid up capital Rs 1279.60949 million. The present configuration consist of 80% Local Ownership which includes 12% other institution and 68% general public, 30% & 20% foreign Ownership which is Punjab National Bank. Following activities & service are provided by EBL.

- Tele Banking
- Credit card facility
- Locker facility
- Foreign exchange
- Remittance
- ATM facility

This bank is awarded as Bank of the year in 2066.

Nabil Bank Ltd.

Nabil Bank Ltd, the commercial bank was incorporated in 1984.Dubai Bank Ltd. was the initial joint venture partner with 50% equity investment. The shares owned by Dubai Bank Ltd. (DBL) were transferred to Emirates Bank International Ltd. (EBIL) Dubai. Later on EBIL sold its entire stock its entire stock to National Bank Ltd, Bangladesh (NBLB).

The present configuration consists of 50% share capital by NB International Limited which is foreign Ownership and 50% by local government which consists of 6.15% NIDC, 9.67% Rastriya Beema Sansthan, o.34% Nepal Stock Exchange,3.85 by others and 30% Nepalese public. At present 48 branches of this bank are operating in different parts of country. The bank has an authorized capital of Rs 2100 million, issued capital and paid up capital Rs 2029.7694 million. Following activities and services are undertaken by Nabil bank Ltd.

- Tele banking
- Credit Card Facility
- SWIFT
- Deposit locker
- Western Union Money Transfer
- ATM
- International Trade and Bank Guarantee
- This bank is awarded the “Bank of year 2004
- This bank is awarded as best presented accounts, 2009 & 2010

Curriculum Vitae

1.Personnel Description

Name	**: Narayani Nyaupane**
Father's Name	: Khimananda Nyaupane
Date of Birth	: 2042-03-15
Pemanent add.	: Butwal-7, Rupandehi
Contact No.	: 9847244914,071-544399,078-540125
Nationality	: Nepali
Religion	: Hindu
E-mail	:nyaupane_nanu@yahoo.com
	:neupanenarayani @gmail.com
Language	:English, Nepali & Hindi
Sex	: Female
Marital Status	: Married

2. Academic Qualification

S.N	Level	Passed year	Institute	Board
1.	M.B.S		Lumbini Banijya Campus, Butwal	T.U
2.	B.B.S	2064	Achievers Campus, Butwal	T.U
3.	+2	2061	Achievers Campus, Butwal	H.S.E.B
4.	S.L.C	2057	Shaligram Ma. Vi, Parvat	H.M.G

3. Experience

- 2.5 years working experience as Assistant in Tinau Development Bank.

4. Training

- General Banking Training.
- Basic Course Of Computer.