

CHAPTER-1

INTRODUCTION

1. Background of the Study

Nepal is a small landlocked and underdeveloped country surrounded by the big economics of India and China. There are several instances of underdeveloped as reflected by lower per capita income, high rate of unemployment, lower rate of economic growth, higher illiteracy etc. most of the population is still living below poverty level (i.e.31%) with one of the lowest rate of per capita income (i.e.\$330) only. But it is one of the richest country for hydropower with potentiality of 83000 megawatts but due to its full capacity and has been using only about 0.88% (i.e. 729 megawatts) of full capacity. Here is also potentiality of agriculture base industries and other natural resource base industries. Despite of having a lot of resources we have been unable to utilize them in full capacity due to acute shortage of capital which is necessary for the development and advancement of the country.

“Capital structure is the composition of the debt and equity security and is considered as financing decision undertaking by the financial manager. The financial manager must strive to obtain the best financing mix optimum capital structure for his/her firm. The firm attains capital structure where the debt equity proposition maximizes the market value of the shares. The uses of debt affect the return and risk of the equity shareholders. It increases the return on equity fund and at the same time it also increases risk. A proper balance must be strike between the risk and return in order to maximize the market value of shares” (Pandey: 1995:232)

Capital structure is very crucial part of financial management as the various composition of debt and equity capital may impact differently on risk and return on equity shareholders. The funds require to business enterprises are raise either through the ownership security (i.e. equity share) and creditor ship securities (i.e. debenture, bond, preferred stock). A business enterprise has to maintain a proper mix of both the securities in a manner that the cost and risk perception to the shareholders are minimize. The mixes of different securities are portrayed by the firm's capital structure" (Koirala: 1990:105)

Financial decision must be very sensitive in misappropriate composition of debt equity in capital structure may lead to bank ruplcy of the firm. The optimum capital structure is attaining at the level where the risk perception of shareholders is maximized automatically the market value of the firm is maximized. The capital structure affects the cost of the firm. The financial manager must be sensitive while selecting the optimal capital structure for the firm.

2. Evolution of banking industry

2.1 In Worldwide Context

The evolution of banking industry had started a long time back. Some sort of banking activities has been carried out since the time immemorial. In fact, banking is nearly as old as civilization. Traditional form of banking were tracted during the civilization of Greek, Rome and Mesopotamia

The first banks were in the great centres of international trade in the middle ages. These centres were in Italy, on the western shares of the Mediterranean and in the coastal area of northern and western Europe,

General banking practice developed mostly rapidly in Italy. The word “Bank” in orient in medieval age in 1171 AD from an Italian word “Banko” that means the place where people come together for different transaction. “The Bank of Venice” was the first bank which established in Italy in 1157 AD as first modern banks but the credit of the development of modern banks goes to “The Banks of England” which was established in 1694 AD in London. The growth of banking Act 1883 in United Kingdom as it allowed opening joint stock company banks.

2.2 In Nepalese Context

The growth of financial and monetary sector in Nepal is not so old. In the 14th century, Jayasthiti Malla, a king of Kantipur, classified people in 64 groups according to their occupations. “Tanka Dhari” was one of among them who used to lend money at a fixed rate of interest. During the prime ministership of Ranoddip Singh around 1872 A.D. “Tejarath Adda” was introduced which brought reforms in economic and financial sector. The main purpose of “Tejarath Adda” was to provide credit facilities to the general public at a concession rate. In 1956, 26th April, the first central bank named as “Nepal Rastra bank” (NRB) was established with the objectives of supervising protecting and directly the function of commercial Bank. Hence, Rastra Banijya Bank, a fully government owned was established on 23rd January 1996 A.D.

United 1984, the Nepalese financial sectors were dominated by the above to commercial bank. Commercial bank act 1974 was amended

in 1984 to increase competition among commercial banks. Hence, provision was made to allow private sectors including foreign investment to open commercial banks. As a result Nepal Arab Bank Limited (Nabil bank) was established on July 12, 1984 with the partnership of Dubai Bank Limited. The number of commercial bank operating in the country is increasing everyday and there are almost 29 commercial banks are there in Nepal. And many more in pipe line to commence their business.

Before 1985, only public enterprises such as two development banks NIDC and agriculture development bank and in the form of non-bank financial institutions employees provident fund and National Insurance Corporation were established. So, to increase the financial activities of the country, finance company act 1985 was introduced which promoted people to establish many financial institutions in the country.

3. Statement of the problems

Capital structure concept is not taken seriously by the Nepalese banks. Therefore optimal capital structure does not exist at all. Among the listed commercial banks in the stock exchange very few or using the debt capital and country to his come by the banks are ruined by the excess business of the cost of debt capital.

Generally very company has its own policy in determining capital structure for operating business activities. Some of the business use only equity some only debt capital and some business use debt and equity capital. Therefore determination of capital structure largely depends upon the company policy

and cost of capital. Most of the banks make low cost of capital structure. Unfortunately there is not model for determining capital structure in the Nepalese business organization. In the initial period of any company they want to use equity capital and do not want to include debt in their capital due to high interest. The main key factors risk and return can be used of decision following are the major problems that have been identified for the purpose of this study:

- What does factors affected capital structures?
- What is the financial position of these banks?
- How far commercial banks have been able to use their resource?
- How efficiently these banks are managing their capital structure?
- How much the profitability?
- What is the relation of capital structure and other variables?

4. Objectives of the study

The main objectives of this study is to analyze the capital structure and its effects on the risk and return of the commercial banks in context of Nepal

- a) To examine the current capital structure of the selected commercial banks.
- b) To analyze the relationship of capital structure with other variables such as earning per share, dividend per share and net worth.
- c) To analyze the role of capital structure on the growth, effectiveness and efficiency of the commercial banks in Nepal.
- d) To measure the relationship between debt and equity capital of the commercial banks.

- e) TO give suggestion and recommendation of the optimal capital structure of the commercial banks on the basis of major finding

5. Significance of the Study

The study has-multi dimensional significance which can be divided into four broader heading.

- Its important to the shareholders: The Study will helpful to aware the shareholders regarding the financial performance of their banks. The comparison will help them to identify the productivity of their funds in each of these banks.
- Its importance to the management: The study will helpful to go deep into the matters as to why the performance of their banks is better than their competitions.
- Its importance to the policy makers : Policy makes have referred to government and Nepal Rastra Bank and management. The study will helpful to them while formulating the policy regarding commercial banks.
- Its importance to outsiders : Among outsiders, mainly the customers, financing agencies, stock exchange and stock traders are interested in the performance of banks and the customers both can identify to which banks they could go. The financial agencies can understand where the funds are more secured and stock exchanges stock broker can find the relatives worth of stock of each bank.

6. Scope of the study

In the context of Nepal, there is less availability of research, journals and articles in the field study concerning the capital structure of

commercialbanks as well as other financial institutions. As it is a well-known fact that the commercial banks can affect the economic condition of the whole country, the effect is made to highlight the capital structure policy of commercial banks expecting that the study can balance the proportion of the equity and debt capital used by the commercial banks. On the other hand, the study would help them to take corrective action to optimize the value of the bank by using optimal capital structure. This study can provide information to the shareholders, debt holders and the public on the proportion of equity and debt used as the fund by the bank.

7. Limitation of the Study

This study is simply a study for the partial fulfillment of MBS degree, which has to be finished within a short span of time. This is not far from several limitations, which weaken the objective of the study. Some of the limitations, which weaken the objective of the study. Some of the limitations are given below :

- a) The study is mainly based on secondary data from banks and website of the banks. So, the result depends on the availability and reliability of the secondary data.
- b) The data used in this study are modified as per need of the study.
- c) The study covers period of seven fiscal years only (i.e. from 2003 to 2009 A.D.)
- d) Out of the numerous affecting factors only these factors related with capital structure are considered.

8. Organization of the Study

This research has been divided into five chapters. They are follows:

Chapter I :

This chapter consists background of the study, evaluation of banking industry, profile of concerned banks, statement of the problems, objectives of the study signification of the study, scope of the study and limitation of the study.

Chapter II:

The second chapter deals with review of literature. It includes the discussion on the conceptual framework of the capital structure. It also reviews the major relevant studies with fund mobilization of commercial bank.

Chapter III:

The third chapter explains the research methodology use to evaluate capital structure practices of joint venture banks in Nepal. This chapter deals with research design, nature and sources of data, data collection procedure population and sample tools and methods of analysis.

Chapter IV:

The fourth chapter deals with presentation and analysis of data through a definite course of research methodology. This chapter is to analyse different financial ratios and statistical analysis related to capital structure and fund structure of this sample bank

Chapter V

The fifth chapter discusses summary of the study and suggestion as well recommendation. Besides this, bibliography on appendices is also included

CHAPTER-2

REVIEW OF LITERATURE

This chapter deals with review of literature. Review of literature means reviewing research studies or other relevant proposition in the related area of the study so that all the past studies their conclusions and deficiencies may be known and further research can be conducted. Since completely new and original problems are rare. It is necessary to show how the problem under investigation relates to previous research work done under similar topic, however a previous study not be exactly replicated. It is believed that the review of literature is literature which is helpful to show the need of research work and to justify the work. It tries to clear the conceptual through and bank related terms. This chapter is dividing into different parts which arrange into the following order :-

2.1 conceptual review\framework

2.2 review of journals and articles

2.3 review of thesis

2.1 CONCEPTUAL REVIEW\FRAMEWORK

This section is discuss briefly about the theoretical concept regarding the theories capital structure

2.1.1 Concept of Capital Structure

Capital structure of a company consists of debts and equity securities which provide funds for a firm. A simple capital structure consists of equity shares

and preference shares. But a complex capital structure consist of multi securities as equity, preference shares, debentures, bonds etc.

"Capital structure of the firm is the permanent financing representing by long term debt, preferred stock and shareholders equity. Thus, a firm's capital structure is only part of its financial structure (Westona and Brigham 1978:565)

"Sound capital structure is requiring operating business smoothly and achieving the business goal. Capital structure is concerned with analyzing the capital composition of the company" (Weston and Brigham 1978:555)

"Capital structure refers to the mix of long term sources of fund, such as debenture, long term debt, preference shares capital and equity share capital including reserves and surplus i.e. retained earning" (pandey 1999,718)

"Capital structure is the mix of firm's permanent long term financing represented by the debt, preferred stock and common stock equity" (Van Harne, 1997:240)

Capital structure is one of the most complex areas of financial decision making due to it's interrelation with other financial decision variables. The success and failure of the enterprises depends on the ability of top management to make appropriate capital decision .

A sound or appropriate capital structure should have the following features (Pandey, 1999:719):-

- **Return** : The capital structure of the company should be most advantageous. Subject to other consideration, it should generate

maximum return to the shareholders without adding additional cost to them

- **Risk** : The use of excessive debt threatens the solvency of the company. To the point debt does not add significant risk it should be used otherwise its use should be avoided .
- **Flexibility** : The capital structure should be flexible. Flexibility as company can raise helps to grab market opportunity as company can raise required funds wherever it is needed for profitable investment opportunities. It also when funds from debt and preferred stock are no more required in the business.
- **Capacity** :The capital structure should be determined within the debt capacity of the company and this capacity should not be exceeded. The debt capacity of a company depends on its ability to generate future cash flows.
- **Control** : Control power is the one of the most concerned part for the management. Management always wants to maintain control over the firm. The capital structure should involved minimum risk of less control of the company. Issue of excess equity shares to new investors may bring threats to the control by existing manager.

The capital structure denotes the long term fund of the firm. All of the items on the liabilities side of firm's balance sheet, excluding current liabilities are sources of capital. The total capital can be divided into two components: debt and equity capital.

❖ Debt Capital

It includes all long term borrowing incurred by the firm. Debenture, bonds, long term loan etc. are major sources of debt or borrowed capital. A firm employs subtotal amount of debt capital of tax deductibility of interest payments, flexibility and lower effective cost. However excess amount of debt exposes high risk.

❖ Equity capital

It consists of the long term fund provided by the firm's owners, the stock holders. In other words, equity capital includes common stock, paid in capital of share premium, reserve and surplus and retains earning, Joint Stock Company can be established with no equity financing, preferred stock is neither purely a debt nor equity.

2.1. Assumption of capital structure

To explain different theories, following assumptions are of the capital structure :-

1. The ratio of debt to equity for a firm is changed by issuing debt to repurchase stock or issuing stock to pay off debt.
2. The firm has a policy of paying 100% of its earning in dividends. i.e. no retain earning. Thus we abstract from the dividend decision
3. The expected value of the subjective probability distribution of expected future operating earning for each company is the same for all investors in the market.
4. The operating earning of the firms is not expected to grow. The expected value of the probability distributions of expected operating

earning for all future periods are the same as present operating (VH.2002:2053\54)

5. There are only two sources of funds under by a firm's perpetual risk less debt and ordinary shares.
6. The total financing remains constant. The firm can change its degree of leverage (capital structure) either by selling shares and use the proceeds to retire debenture of by raising more debt and reduce the equity capital.
7. The operating profit (EBIT) is not expected to grow.

2.1.3 Theory of capital structure

"The two principal source of long term financing are equity and debt capital. The composition of these two long term financing is known as capital structure. Under normal economics condition, the EPS can be increase using higher leverage. But , leverage also increases the financial risk of the share holders. As a result, it cannot be said whether or not the value of the firm will increase with leverage. In other word, a great deal of controversy has been developed on whether the capital structure affects of the firm or not. Traditionalists agree that capital structure is relevant factors for valuation of the firm. Further they say value of firm can be maximized by adopting optimal capital structure. Modigliani and Miller, on the other hand argue that in perfect capital market, it doesn't affect value of the firm." (Pandey, 199:675)

2.1.4 Assumptions

These assumptions are constantly applied in the theories of capital structure:-

- There are no corporate or personal income taxes.
- There is no bankruptcy cost.
- The ratio of debt to equity of a firm can change many times but the total assets remain constant
- There are no transaction costs.
- The company pays 100% of its earning as dividend.
- Operating earning of the firm remain constant that is , growth rate is equal to zero.
- The expected values of the subjective probability distribution of expected future operating earning of each company are the same for all investors in the market.

2.1.5 Approaches to capital structure

Different approaches have been developed under the relevancy of capital structure to value of firm and cost of capital. Net income approach and traditional approach argue capital structure matter and net operating income approach and MM approach argue capital structure as irrelevant matter.

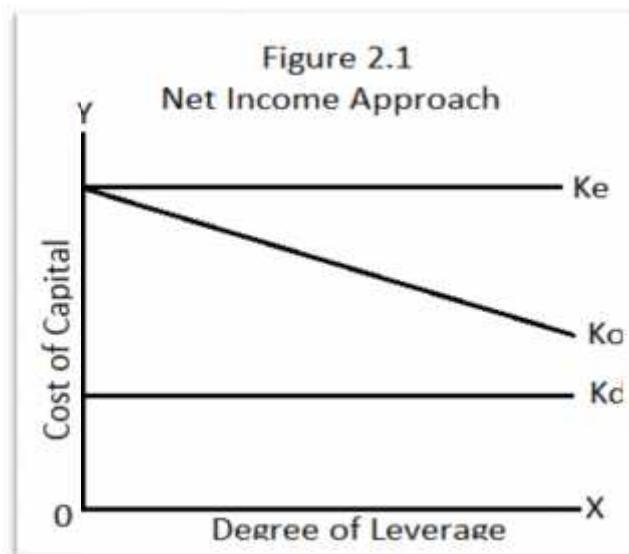
2.1.5.1 Net Income (NI) approach

Net income approach is a relevant theory of capital structure. According to this approach, the capital structure decision is relevant to the valuation of the firm and overall cost of capital. In other words, a change in the financial leverage (proposition of debt in the capital structure) will lead to a corresponding change in the overall cost of capital as well as the total value of the firm. Therefore, if we increase the ratio of debt in the capital structure, the weighted average cost of capital will decline and the value of the firm as well as the market of ordinary shares will increase. in contrast, a decrease in

the debt ratio will cause an increase in the overall cost of capital and a decline both in the value of the firm as well as the market price of equity shares.

Assumptions of net income approach

- There are no taxes
- The cost of debt is less than the equity capitalization rate of the cost of equity. (i.e. $k_d < k_e$)
- Cost of equity and cost of debt remain constant.
- The use of debt doesn't change the risk perceptions of investors.
- Net operation income remains constants.
- Overall cost of capital decrease as leverage increases.



In figure, the degree of financial leverage is plotted along the horizontal axis and the cost of capital figures on vertical axis. Under NI approach, k_e and k_d are assumed not to change with leverage. As proportion of debt is increase in the capital structure, being less costly, it causes weighted coast of capital. To decrease and approach the cost of debt. The capital structure would occur

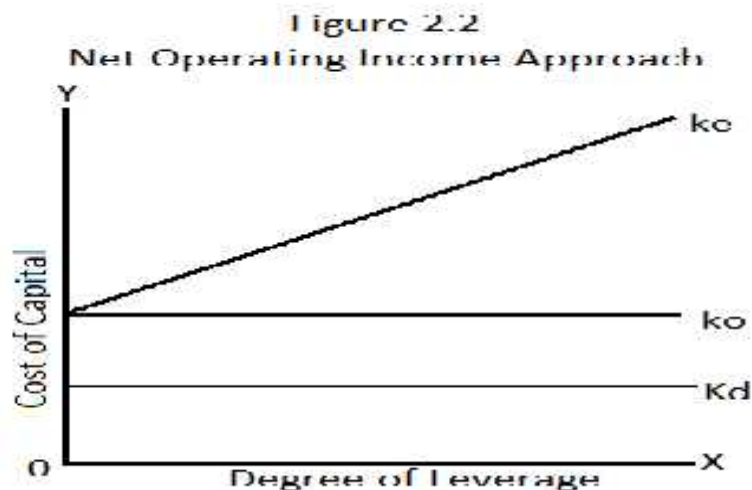
the point where the value of firm maximum and cost of capital is minimum. Under NI approach, the firm will have the maximum value and the lowest cost of capital when it is almost deb financed.

2.1.5.2 Net operating incomes approach

Net operating income approach is an irrelevant theory of capital structure. This theory assumes that the capital structure (proportion of debt and equity) is irrelevant to the value of the firm and the overall cost of capital. Under this approach, net operating income is capitalization at an overall capitalization rate to obtain the total market value of the firm. The market value of the debt then is deducted from the total market value to obtain the market value of the stock.

Assumption NIO approach

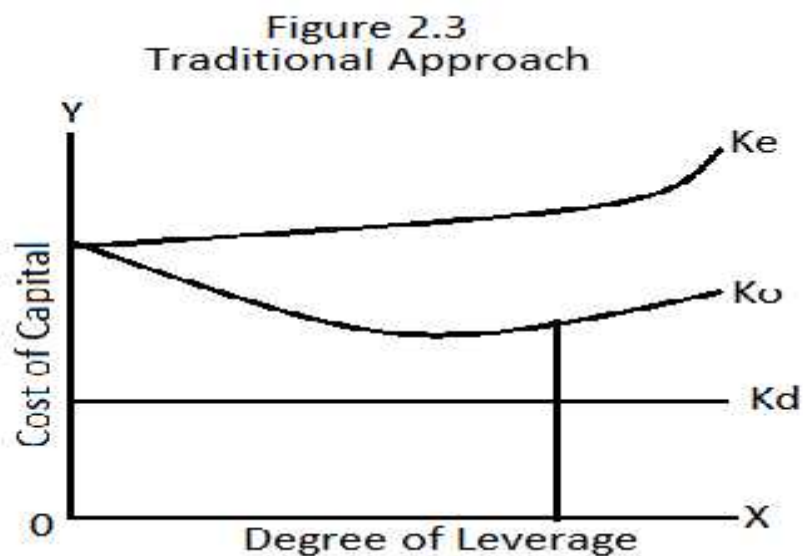
- The overall cost of capital remains constant.
- The cost of debt remains constant
- Cost of debt is less than cast of equity.
- The required rate on equity increases linearly with and increase in debt ratio.
- Total operating profit remains constant.



Here in above figure, degree of leverage is plotted along the horizontal axis and the cost of capital figures on the vertical axis. It shows that k_o and k_d are constant and k_e increase with leverage continuously. As the average cost of capital is constantly, this approach implies that is not any unique optimal capital structure.

2.1.5.3 Traditional Approach

This approach assumes the capital structure as relevant matter for the value and the cost of capital of the firm . It takes some features of both net income and net operating income approach. This approach strikes a balance between the two different approaches net income and net operating income. According to this approach, there is an optimal capital structure therefore the firm can increase the total value of the firm through the wise use of leverage. The firm initially can lower its overall cost of capital through the use of cheapest cost debt and raise its total value through leverage. But the increase in leverage the risk to the debt holders and the debt holders demand high interest rate as a result the overall cost of capital also increases.



At first the overall cost of capital declines with increase in debt ratio because the rise in k_e does not entirely offset the use of cheaper debt funds. As a result, the weighted average cost of capital (k_o) declines with moderate use of leverage. After a point, however, the increase in k_e more than offsets the use of cheaper debt funds in the capital structure and k_o begins to rise. The rise in k_o is supported further as k_d begins to rise. The optimal capital structure is the point at which k_o bottoms out. In the figure, this optimal capital structure point X.

2.1.5.4 Modigliani-Miller Approach

In 1958, two prominent financial researchers, Franco Modigliani and Merton Miller (M-M), showed that, under certain assumptions, a firm's overall cost of capital, and therefore, its value is independent of the capital structure. This approach assumed that,

- There is a perfect capital market.
- There are no transaction costs of buying and selling securities.
- A sufficient number of buyers and sellers exist in the market, so no single investor can have a significant influence on security prices.
- Relevant information is readily available to all investors and is cost free to obtain
- All investors can borrow or lend at the same rate.
- All investors are rational and have homogeneous expectations of a firm's earning.
- All firms are homogeneous in risky.
- There are no personal or corporate taxes.
- All cash flow in perpetuities, that is, all firms expected zero growth.
- EBIT and bond are perpetual.

The Modigliani and Miller position is based on the idea that no matter how we can divide the capital structure of a firm among debt, equity and other claims, there is a conservation of investment value. M-M 1958 proposed that the theory without taxes and they relaxed the theory with tax consideration. So, we can study M-M theory with tax consideration. So, we can study M-M theory under the following headings.

) M-M theory without taxes

) M-M theory with taxes

(I) M-M without taxes

"M-M have restated and amplified the NOI approach. M-M argue that, in the absence of tax, a firm's market value and the cost of capital remain invariant to the capital structure change. In their 1958 article, they provide analytically sound and logically consistent behavior justification in favour of their hypothesis and reject any other capital structure as incorrect."(Modigliani and Miller 1969-261)

The M-M hypothesis can be best explained in terms of their proposition I and II

➤ Proposition-I

The value of the firm is independent of debt equity mix and established by capitalizing its expected NOI and (EBIT) and a constant overall rate (i.e. cost of capital) which is based on the firm's risk class. In other words, M-M argue that for the firm in the same risk class, the total market value is independent of the debt-equity mix and is given by the rate appropriate to the risk class. It can be expressed and follows:-

Value of the firm(V) = market value of (equity + debt)

$$\text{Or, } V = (B+S) = \frac{\text{Expected Net Operating Income}}{\text{Expected overall capitalization rate}}$$

$$\text{Or, } (V) = (B+S) = \frac{\text{NOI}}{K_o}$$

value of levered firm (V_L) = Value of Unlevered firm (V_u)

where,

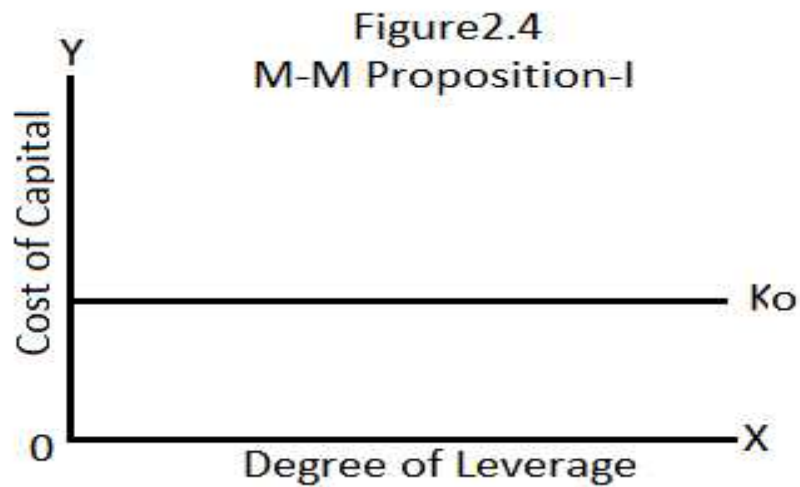
B = total market value of debt

S = total market value of the equity.

NOI = expected net operating income.

KO = overall capitalization rate.

According to this proposition, there is no relationship between value of firm and the way its capital structure is made up, nor there only relationship between the overall cost of capital and capital insurance



The cost of capital on proposition I is shown in the figure which clearly shows that the cost of capital is constant and is not affected by leverage.

➤ **Proposition - II**

According to this proposition, the cost of equity (k_e) is a linear function of leverage, measured by the market value of debt to equity (D/S). Thus leverage will result not only in more earnings per share to shareholders, but also in an increased cost of equity. The benefit of leverage is exactly taken off by the increased cost of equity, and consequently, the firm's market value will remain unaffected.

M-M Proposition II which defines the cost of equity. "The cost of equity to a leveraged firm is equal to: the cost of equity to an unlevered firm in the same risk class plus a risk premium whose size depends on both the differential between an unlevered firm's cost of debt and equity and the amount of debt leverage used" (Panday, 1999:692)

$$K_e(L) = K_e(U) + \text{risk premium}$$

Or,
$$K_e(L) = K_e(U) + [K_e(U) - K_d] \times \frac{B}{S}$$

Where,

$K_e(L)$ = cost of equity of levered firm.

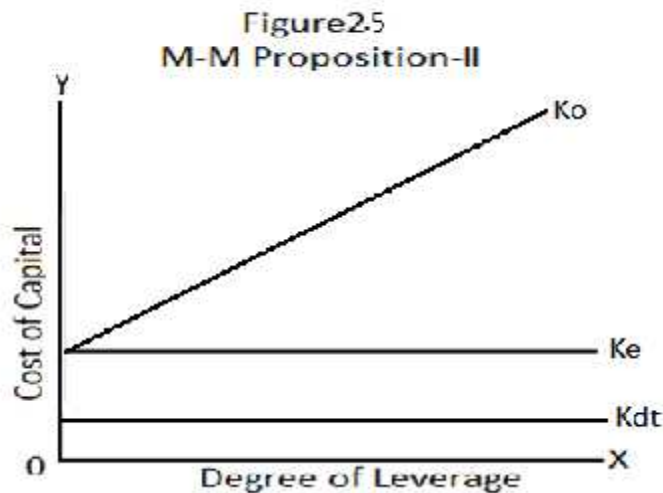
$K_e(U)$ = cost of equity of unlevered firm.

K_d = cost of debt.

B = market value of firm's debt

S = market value of firm's stock.

According to the above equation, as the firm's use of debt increase, its cost of equity also rises. The proposition show the impact of financial leveraged on the cost of equity. Firm gets the benefit of cheaper debt due to the increase in leverage, but the benefit is exactly offset by an increase in the cost of equity in the form of risk premium expected by the shareholders, against an increase in financial risk.



"The above figure indicates that higher the leverage ratio higher the cost of equity ratio. it mean that the cost of equity (k_e) is linear function of leverage, measured by the market value of debt to equity. Thus leverage will result not only in more earning per share to share holders but also increase cost of equity. The benefit of leverage is exactly taken of by the increased cost of equity and consequently, the firm's market value will remain unaffected," (Modigliani and Miller, 1954:59)

The two M-M propositions imply that the inclusion of more debt in the capital structure will not increase the value of the firm. Because of the benefit of cheaper debt will be exactly offset by an increase in the risky ness, hence in the cost of its equity. Thus M-M argue that in the world without

taxes, both the value of the firm and its weighted average cost of capital would be unaffected by its capital structure.

✓ **The Arbitrage Proof**

M-M used an arbitrage proof to support their propositions. They showed that, under their assumptions, if two companies differ only in the way they are financed and in their total market value, the investor would sell shares of the higher value firm to buy those of the lower valued firm, and continue this process until the companies have exactly the same market value.

M-M assumed that all firms are in zero growth situations, i.e. EBIT is expected to remain constant and all earnings are paid out as dividends.

M-M argues that the total risk of the firm is not altered by changes in capital structure. The total value of the firm is the same as levered or unlevered firm. This hypothesis is supported by the arbitrage process. Arbitrage is the process of simultaneously buying and selling the same or equivalent securities in different markets.

Investors would enter into this arbitrage process, if they show two identical firms selling at different prices because of a difference in capital structure. The investor could increase return without increasing risk. But they argue that the value of these two firms has to be the same, otherwise an investor can earn profit by selling the shares of the overvalued firm and buying the shares of the undervalued firm. This arbitrage process will continue until the value of the levered firm and the unlevered firm are identical.

(II) M-M with Taxes

M-M is hypothesis, that the firm is independent of its capital structure. But in reality, the corporate income taxes exist and interest paid to the debt holders is treated as deductible expenses. So, debt financing is advantageous. In their 1963 article, "M-M shows that the value of firm will increase with debt due to the deductibility of the interest charge for tax computation and the value of levered firm will be higher than of the unlevered firm."

➤ Proposition -I

The value of levered firm is equal to the value of unlevered firm in the same risk class plus the gain from leveraged. The gain from leverage is the value of tax saving, found as the product of the corporate tax rate (T) times the amount of debt the firm uses (B).

Value of levered firm = value when unlevered + tax shield

$$V_L = V_u + T \times B$$

Hence, when corporate tax introduced the value of levered firm exceed that of the unlevered firm by the amount of tax shield, it is the important point. Theoretically a firm's value is maximized at 100 percent debt financing. The value of firm is equal to the firm's value of equity with zero debt. The value of unlevered firm can be found by using following equation.

$$V_u = S = \frac{\text{EBIT} (1-T)}{K_e(U)}$$

where,

V_u = value of unlevered firm

T = corporate tax rate

$K_e(U)$ = cost of equity of unlevered firm.

➤ **Proposition-II**

Under this proposition, the cost of equity of levered firm is equal to the cost of equity of an unlevered firm in the same risk class plus a risk premium whose size depends on the differential between the cost of equity and debt to an unlevered firm, the amount of financial leverage used and the corporate tax rate.

$$K_e(L) = K_e(U) + [K_e(U) - K_d] (B/S)$$

Where,

$K_e(L)$ = cost of equity of levered firm

The M-M view under tax consideration implies that because of tax deductibility of interest charges, a firm can increase its value or lower its cost of capital continuously with leverage. Thus the optimal capital structure is reached when the firms employ 100 percent debt in its capital structure. But the observed expenditure does not entirely support this view. In practice firms do not employ large amount of debt, nor are lenders ready to lend beyond certain limits.

2.1.6 Factors affecting capital structure

Capital structure of different types of firms varies widely. There are no hard and fast rule about what percentage of capitalization should be represented by bonds and debentures and what should be equity shares and preference share factors affecting capital structure revolve principally around the adequacy and stability of earning. Following are factors which affect the capital structure :-

1. **Cost of Capital :** " The impact of financing decisions on the overall cost of capital should be evaluated and the criteria should be the minimize the overall cost of capital or to minimize the value of the financial of the firm" (Pandey, 19688:264)
2. **Assets structure :** Firms whose assets are suitable as securities for loans tend to use debt heavily. "Berried capital should not exceed a reasonable percentage of fixed asserts." (Batty, 1963:159)
3. **Flexibility :** " The company's desire for flexibility in future financing decision also affects the capital structure of the company. Therefore the company should compare the benefits and cost of attending the desired degree of flexibility and balance then properly." (Schwartzmen and Ball, 1977:65)
4. **Control:** If management has voting control over the company and is non in a position to buy any more stock, debt may be a choice for new financing. On the other hand, management groups that is not concerned about voting control may be used equity rather than debt.
5. **Profitability:** The firms with very high rate of return on investment use relatively little debt. Their rate of return enables them to do most of their financing with retained earning.
6. **Taxes:** Interest is deductible expanses while dividend is not deductible. hence the higher a firm's tax rate, the greater is the advantage is using debt.
7. **Interest rate:** This affects the choice of securities to be offered to investors. High interest rate makes financing costly. When funds are obtained easily and cheaply . There is greater attitude for choice of types of security to be used.

8. **Operating leverage:** The company with a high level earning before interest and taxes can make a profitable use the high degree of leverage to increase return on the shareholder's equity.
9. **Flotation costs:** Flotation cost is incurred only when the funds are raised. The cost of floating a debt is less than cost of floating and equity issue. This may encourage a company to use debt than issue equity shares.
10. **Market condition:** Condition in the stock and bonds market undergo both long term and short term changes which can have an important bearing on a firm's optimum capital structure.
11. **Growth rate:** Faster growing firm's must rely more heavily on external capital. Other factors are stability of sales, cash flow ability of a company, nature of industry and capital requirements etc.

2.1.7 Optimum capital structure

The overall cost of capital is minimized, theoretically at least, when the firm reaches its optimum capital structure. The optimum capital structure strikes a balance between the risk and returns and thus maximizes the prices of stock.

) "An optimum capital structure would be obtained at the combination of debt and equity that maximizes the total value of the firm (value of shares + value of debt) or minimizes the weighted average cost of capital." (Pandey, 1999:277)

) "Firm has certain structure of assets, which offers net operating earning of a given size and quality and gives a certain structure of rates in the capital market, there are some specific degree of financial leverage at which the market value of firm's securities will

be higher (or the cost of capital will be lower) than at any other degree of leverage." (solomon, 1963:92)

Some of important objectives of the optimal capital structure are as follows:-

- To maximizes return on equity capital
- To maximizes cost of capital
- To minimize risk
- To increase flexibility
- To maintain control power
- To employ high grade security

2.1.8 Capital structure decision

"Capital structure with a reasonable proportion of debt and equity is called the optimal capital financing mix of optimal capital structure. Since, a proper balance between risk and return to stock holder is necessary, the financing of capital structure decision is a significant managerial decision as it influences the shareholders return and risk. Whenever funds have to capital structure initially at the time of its promotion and subsequently. Funds have to rose to finance invest a capital structure decision is involved." (Van Home, 1997:10)

2.2 REVIEW OF JOURNALS, ARTICLES AND THESIS

This section is devoted to review of important empirical works, connecting capital structure and cost of capital since 1958 to 2008. There are numerous studies in capital structure. So, this studies to survey and review all the empirical work extensively and give here in detail. Therefore, some important studies and their findings are presented.

2.1.1 Review of journals and articles

The Modigliani-Millers study (1958, 1963)

In their first study, MM used the previous works of Allen and Smith in support of their independence hypothesis. Allen's study consisted of an analysis of the relation between security yield and financial structure for 43 large electric utilities, which is based on average figure for the years 1947 and 1948, while Smith designed his study of 42 electric utilities.

- ❖ In the first part of their work MM tested their proposition I, the cost of capital is irrelevant to the firm's capital structure by correlation to the firm's capital structure by correlation after tax cost of capital with leverage B/V , they found that the correlation coefficient is statistically insignificant and positive in sign.
- ❖ In the second part of their study, they tested their proposition ii, the expected yield on common share is linear function of debt to equity ratio. The second part of their study is consistent with their view i.e., if the cost of borrowed funds increases, the cost of equity will decline to offset this increase.

MM conducted the second study in 1963 correcting their original hypothesis for corporate income taxes and expected cost to be affected by leverage for its advantages or not. For this they conducted the mathematical analysis regarding the effect of leverage and other variables on the cost of capital, they found that the leverage factors are significant only because of the tax advantage involved.

Rao and Linznberges (1970)

They were conducted the study of the affect of capital structure on the cost of capital in a less developed and less efficient capital market (India) and in a high developed and efficient capital market (United States)

They found that the results for the American utilities are consist to the MM proposition that except for the advantages of debt financing, the cost of capital is un dependent of capital structure, and the results also supported that the MM hypothesis that investors are indifferent for the firm's dividend policy.

In case of Indian utilities, the result are inconsistent to the MM approach and the cost traditional belief, the judicious use of financial leverage will lower the firm's cost of capital and investor have a preferences for current dividends.

In conclusion, they contended that the MM approach after allowing for the tax advantage of debt, the firm's cost of capital is independent of capital structure does not appear to be application in the case of developing economy.

Mayer (1984)

Mayer pointed out that financial economies have not hesitate to give advice on capital structure, even though how firm actually chase their capital structure remains a puzzle as the theories developed did not seem to explain fully actual financial behavior. Mayer states that internal financing is preferred more than external financing. This is due to the transaction (flotation) casts and resulting agency costs of issuing new securities. When

retained earnings are not sufficient, debt financing is the next choice before considering offering new stocks. The reason is that the flotation cost of debt issuing are lower than equity issuing.

Mackin- Mason (1990)

He studied tax effect on corporate financing decisions. The study provided evidence of substantial tax effect on the choice between debt and equity. He conducted that changes in the marginal tax rate for any firm should effect financing decisions. When already exhausted (with loss carry forward) or with a high probability of facing zero tax rate, a firm with high tax shield is less likely to finance with debt. The reason is that tax shields lower the effective marginal tax rate of interest deduction.

Radhe Shyam Pradhan (1994)

On this research financial management and practice in Nepal in 1992. The survey mainly debt with financial function, sources and types of financing, financing decisions involving debt affect of change in taxes on capital structure, financial distress dealing with banks and dividend policy. The major findings of study connected with financial management are gives as:-

- Banks and retained earnings are the most widely used financing sources
- Generally, there is no definite time to borrow the issues stocks. That is majorities of respondents are unable to predict when the interest rate will low or go up are unable to predict when the stock will go down or up.
- The enterprises have a definite performance for bank loans at a lower level of debts.

- The enterprise do not borrow from one bank only and they do switch between banks whichever offer best interest rates.
- Most enterprises find that banks are flexible in interest rate and convenience

The sum up it can be said that out of numerous studies on the capital market of Nepal. This study is established itself as a milestone and an outstanding one.

Joshua Arbor (2005)

Joshua Arbor in his study " The effect of capital structure on profitability" mentioned that the relationship between capital structure and firm has been the subject of consideration debate⁴. Throughout the literature, debate has centered on whether there is an optimal capital structure for an individual firm or whether the proposition of debt usage is irrelevant to the individual firm's value. The capital structure of a firm concerns the mix of debt and equity the firm's uses in its operation Barkley and Myers contend that the choice of capital structure is fundamentally a marketing problem. According to Weston and Brigham, the optimal capital structure is the one that maximize the market value of the firm's outstanding shares.

Other theories that have been advanced to explain the capital structure of firms include bankruptcy cost, agency cost and pecking order theory. These theories are discussed below:-

- Bankruptcy costs are the cost of directly incurred when the perceived profitability that the firm will default on financing is greater than zero. The bankruptcy profitability increases with debt level since it increases the fear that the interest and the company might not be able

to generate profit to pay back the interest and the loans. The potential costs of bankruptcy may be both direct and indirect.

- The use of debt in capital structure of the firm also leads to agency cost. Agency costs arise as a result of the relationship between shareholders and managers and those between debt holders and shareholders.

The need to balance gains and cost of debt financing emerged as a theory known as the static trade off theory by Mayer. It value the company as the value of the firm if unlevered plus the present value of the tax shield minus the present bankruptcy and agency costs.

Sudhir Poudyal

"A study on capital structure: its impact on value of a firm" an article by sudhir Poudyal concentrated to examine the interrelationship between the objectives of achieving on optimal capital structure and to provide conceptual framework for the determination of the optimal structure.

Form this, hypothetical firm is constructed and different assumptions are laid down to analyze the effect of capital structure. Various statistical and financial tools like ration analysis are used to extract reasonable figure for the hypothetical firm. It is observed that the minimum weighted average cost of capital, maximum value of the firm and price per share are attended at debt ratio 30%. Furthermore, if there is flexibility to select capital structure in any proportion, optimal capital structure ranges 30% to 40%. An optimal capital structure would fulfill the interest of equity capital shareholder and financing requirement of a company as well as other concerned groups.

2.2.2 Review of Thesis

Under this section various theses related to this study have been reviewed.

Mr. Shanty Raj Parasi (1999)

In his MBA thesis "A study on capital structure of Nepali Bank Limited." In this research has some issues to accept deposits with or without interest under saving and fixed other, deposit schemes, to provide loans taking the securities such as government securities, movable property, company shares or debenture, bill of exchange and promissory notes. This study of specific objectives is to analysis of debt and equity, trend of total assets and total abilities, relationship between deposit and investment. To analysis the return in ratio to capital employed, relationship between deposit and net profit. Describe the structure and trend of income and expenditure. He has use of various financial and statistical tools such as ratio analysis, percentage, index, trend analysis and coefficient of correlation.

This study found that the major contribution to the total liabilities is deposit, followed by net ad work and burrowing from other banks. The major proportion of the total assets are: bills loans and advances followed by investment in share and debenture, cash and other bank balance and other assets. During this study total assets and liabilities are in increasing trend. It also increasing trend of total deposit and investment. Total deposit and total assets, net profit of other bank is highly fluctuating. Its EPS is increasing trend. There is significant relationship them total assets and net profit. Total income and total expenses are not under control of the bank. The increasing rate of total income and expenditure, total deposit and total investment must

be control by the bank. The banks need to improve market price of sharers reduce its expenses and control fluctuation in the earning per share.

Mr. Umesh Kumar Koirala(2003)

He has studied "A comparative evaluation of capital structure between Dabur Nepal pvt. Ltd. (DNL) and Nepal lever Ltd. (NLL)". According to his study the DNL is highly levered firm and NLL is unlevered since four years. The debt equity ration in terms of long term debt and shareholders equity, of DNL is higher than NLL. The capital structure of DNL is debt based whereas NLL cut off long term debt financing. So, he has suggested both the companies to change their debt by changing long term debt to share capital and in the case of NLL, to maintain appropriate debt while financing. So both the companies are suggested to maintain appropriate debt ratio, which minimizes the cost and maximizes the return of the firm. he further finds that the DNL is bearing high amount of interest expenses due to higher debt equity ratio and other operating expenses. Similarly, NLL is also bearing high interest expenses even it does not use long term bet in its capital structure. As a result, the return of the firm is not satisfactory. So, he has recommended both the companies to maximize interest expenses by using cheaper debt as well as other operating expenses to the return of the firm.

Mr. Nibden Baidya (2004)

His research on title, "Capital structure management of manufacturing companies listed in NEPSE." Under this study , the main objective is to analyze, evaluate and interpret their capital structure employed by the selected organization but specific objectives are: to examine the capital structure. To analyze cost of capital and return on capital in relation to the

employed, debt servicing capacity of these company. he can be used financial and statistical tools are ratio and percentage. He found the average DOL is negative and positive. Negative shows the inefficient earning capacity of the firm which try to increase sales volume. The average ratio between shareholder equity and total assets of Arun Banaspati Udhoyug and Jyoti spinning mills is negative. It shows the negative value of shareholders equity. This indicates that all the assets have been produced out of debt capital, which is not good for any manufacturing company. In this study show EPS, P\|E ratio and book value per share of Nepal lever limited is higher the other company . The higher rice ratio indicates the greater confidence of investors with its future. Book value per share is negative as companies have negative net worth in an average. Cost of equity is also higher of Nepal lever ltd. In these selected companies, The use of less costly debt fund increased the risk to the shareholders. This cause the equity capitalization rate to increase. At last, he suggests increase the equity proportion financing its assets to be a safe model against liquidation. The debt amount is very huge and that is a need to reduce the debt capital. All the companies should try to streamline their sales. To earn high amount of profit from the sales revenue by increasing operating cost of production, unskilled manpower, over staffing, misuses of facilities etc. this cause should be indicate by the management.

Miss Manju Kumari Pandey (2007)

The basic objective of the study made by Miss Manju Kumari Pandey was to analyze the interrelationship of capital structure with various important variable such as earning per share, dividend per share and net work of the

joint venture banks and to provide suggestions to overcome various issues and gaps.

The study has used financial tools such as ratio analysis, EBIT-EPS analysis, overall capitalization rate, equity capitalization rate, total value calculation etc. and statistical tools such as Karl Pearson's correlation and probable error.

The study concluded that all the joint venture banks are using high percent of total debt in raising the assets and all the banks are able to pay the interest. The study suggested that the banks must control total deposit and the bank must also control investment, the bank need to reduce its expenses and control fluctuations in the earning per share to improve its market per share.

CHAPTER-3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research refers to systematic and objectives attempt which s used to study a problem for the purpose of driving general principles. The invitation has been guide by previously collected information and aims to add to the body of knowledge on the subject "research methodology is the way to solve systematically about the research problem" (Kothari 1990:39. This chapter will include research design, nature and source of data, population and sample data collection, and procedure and method of analysis. To accomplish the goal, this study wills follow the research methodology will describe in this chapter.

3.2 RESEARCH DESIGN

Research design is the plan structure and strategy of investigation so as to obtain answer to research equations and to control variance. "A research designed is purely and simply the framework or plan for a study that guides the collection and analysis of the data" (goes, 1989:51)

The main objectives of this study will be analyze and evaluate the capital structure study of selected commercial banks. This study will follow the analytical and descriptive research design. To be completed this study, the following design and format will have used:-

First of all information and data will select. Then the data will arranged by using manner. After the data will analyze by using appropriate financial and

statistical tools. In analysis part interpretation and comments will also be made where ever necessary result and conclusion will be given after analysis of data recommendation and suggestion will also be given. The design will have been adopted from previous research works.

3.3 NATURE AND SOURCE OF DATA

This study will be conducted on the basis of the secondary data for the characteristic study annual report of select banks. The annual report submitted by different commercial banks to Nepal Rastra Bank is taken as a secondary data. From the website of Nepal Rastra Bank www.nrb.gov.np Some other data are directly taken the website of respective bank of their own. These data are published by respective banks. The secondary data published by the bank is respective website of purpose bank. Some of the website we have taken data are as :-

Nepal SBI Bank Limited	www.nepalsbi.com.np
Everest Bank Limited	www.everestbankltd.com.np
Bank of Kathmandu Limited	www.bok.com.np
Himalayan Bank Limited	www.himalayanbank.com.np
Nepal Rastra Bank	www.nrb.gov.np
Nepal Stock Exchange	www.nepalstock.com

Form the above sources organization description financial statement (Viz. Balance sheet and P\L a\c) are taken from the purpose of study.

Supporting data and information will be obtained from the head office of selected banks, booklets, documents, other published and unpublished

material, thesis, newspaper and E-mail internet, financial statement, annuals reports and from Nepal stock exchange, security exchange board and other related office.

3.4 DATA COLLECTIN PROCEDURE

Particularly the study will base on the data available from Nepal SBI Bank, Everest Bank, Bank of Kathmandu and Himalayan Bank Ltd. Such a concentration for these four banks only is simply because of easy access upon their reliable data. For example my own class mates are working as staff in Everest bank, Bank of Kathmandu and Himalayan Bank. My brother is a senior staff in Nepal SBI bank Ltd.

The study will be based on secondary data provided by bank and other relevant sources. The data will be collected from the balance sheet, profit and loss a\c stock exchange, security board, Nepal Rastra Bank and informal enquires from the bank's personnel.

3.4.1 The Population and Sample

The time limitation and unavailability of the relevant data had force me to make research on the few commercial banks functioning allover the kingdom and most their stocks are trade activity in the stock market out of them commercial bank have been choose this study on the sample commercial banks selected are as follows:-

- Nepal SBI Bank
- Everest Bank
- Bank of Kathmandu
- Himalayan Bank Ltd.

3.5 METHOD OF DATA ANALYSIS

As mention earlier this study will be confined to analysis of capital structure of the few selected commercial banks in Nepal. To research the objective the collected data will be computed and analyzed using financial tools which is follows-

- 1. Financial tools**
- 2. Statistical tools**

3.5.1 Financial tools

Financial analysis is the process which will have ben identifying the financial strength and weakness of the firm properly establishing relation between the items of the balance sheet. Financial tools are used to examine the financial performance i.e. strength and weakness of bank.

- Ratio analysis
- Capital structure analysis
- Leverage analysis

(A) Ratio Analysis

Ratio analysis is a technique of analyzing and interpreting financial statement to evaluate the performance of an organization by creating the ratios from the figure of different accounts consisting is balance sheet and income statement. The qualitative judgment concerning financial performance of a firm can be carried out with the help of ratio. The analysis of financial mix is performed by using ratio analysis. It is a powerful tool of financial analysis. A ratio analysis is defined as "The indicated quotient of two mathematical expressions and as the relationship between two or more

things." (websiter's new colloquia dictionary, 1975:958). It used to interpret the financial statement so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. Even though there are many ratios, only those ratios have been covered in this study, which are related to investment operation of the bank. This study contains following ratios:-

❖ **Long term debt to total debt ratio**

The relationship between long term and total debt has a decisive impact on the financial structure of the companies. The relationship indicates what percentage of total debt is covered by long term debt of the firm. Normally firms use short term and long term debt. Current liabilities and provisions are also needed during the operation of the firm. Simply dividing long term debt by total debt can drive the relationship between the long term debt and total debt of the firm. The total includes all types of borrowed fund, current liabilities and provision. If the firm uses large amount of short-term loans and occur current liabilities and provision in the large amount, the percentage of long term debt on total debt will be low and vice-versa. The higher ratio of long term to total debt indicates the higher claim of long term holders upon the total debt and lower ratio indicates the higher portion of short term loans and current liabilities in the total debt of the firm. The amount of short term loan's and current liabilities used depends upon the liquidity of that firm. This relationship of long term debt and total debt is presented in the following table along with the percentage change in that ratio to show the movement of trend individually. In addition the average ratios are also calculated to compare with each other. The long term debt to capital employed ratio is presented as:-

$$\text{Long Term debt to Total debt} = \frac{\text{Long Term Debt}}{\text{Total Debt}}$$

❖ **Long Term Debt to Capital Employed Ratio**

The optimal capital structure has important relationship with the long-term debt to capital employed ratio. This relationship suggests the portion of long term debt and capital employed used in the capital structure of the firm. This ratio highlights the need of long term debt in the capital employed by the firm. Long term debt includes the debt, which measures in more than one accounting period whereas capital employed includes long term debt and shareholders equity of the firm. The relationship of long term debt and capital employed can be analyzed by establishing the ratio between them. The ratio is called the long term debt in the capital employed and vice-versa. This ratio can be calculated by dividing the long term debt with capital employed by the firm. This ratio is also known as debt to permanent capital ratio, whereas permanent capital means total assets minus current liabilities. The long term debt to permanent capital ratio is presented as:

$$\text{Long Term debt to capital employed} = \frac{\text{Long Term Debt}}{\text{Capital Employed}}$$

Debt of Total Assets Ratio

Total debt to total assets ratio express the relationship between creditors fund and total assets. It is also the leverage ratio, which is generally called the debt ratio. This type of capital structure ratio is a variant of debt equity ratio. Calculating debt to tal assets is one calculation approach of the debt to capital ratio. Debt includes all loans and total assets include all type of assets of the firm. It measure the percentage of total funds provided by creditors.

This ratio can be calculated by simply dividing long term debt by the total assets of the firm. It can be represented as:

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

This ratio should be 1:2 ratio above 1:2 implies that lenders and creditors were providing more finance than ordinary shareholders and that too without expectation of a share in any surplus as compensation to creditors in extending credit. A very low ratio can cause worry to shareholders as it means company is not using debt to best advantage.

❖ **Debt of Equity Ratio**

Debt equity ratio is used to show the relationship between borrowed funds and owner's capital. It reflects the relative claims of creditors and shareholders against the assets of the firm. It is an important tool for the financial analysis to appraise the financial structure of a firm. The ratio reflects the relative contribution of owners and creditors capital of business in its financing. In other words, this ratio exhibits the relative proportions of capital contributed by owners and creditors. Debt equity ratio can be calculated in the basis of shareholders equity and long term debt. Shareholder's equity includes reserve and accumulated profit, preference share and equity share capital. Where long term debt includes total debt minus short term debt or current liabilities, here debt equity ratio is also computed by simply dividing long term debt of the firm by shareholder's equity.

$$\text{Debt Equity Ratio} = \frac{\text{Long Term Debt}}{\text{Shareholder's Equity}}$$

The D\E ratio shows the large share of financing in the capital by the creditors then owners or it also reflects that the creditor's claim is higher against the assets of firm and vice versa.

❖ **Interest Coverage Ratio**

The interest coverage ratio is useful tool to measure long term debt serving capacity of the firm. It is also called interest earned ratio. Interest is fixed charges of the companies, which is charged in long term and short term loans. Generally, interest coverage ratio measures the debt serving capacity of a firm and it is concerned with long term loans. It shows how many times the interest charges are covered by EBIT out of which they will be paid. This ratio uses the concept of net profit before tax because interest is tax deductible or tax is calculated after paying interest on loan. This ratio examines the interest paying capacity of the firm by how many times the interest charge is covered BY EBIT. Interest coverage ratio is calculated dividing EBIT by interest. So, it is necessary to analyze EBIT and interest. This ratio is useful to measure long term debt serving capacity of the firm.

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

The high ratio shows that the firm may imply unused debt capacity and the firm has greater capacity to handle fixed charges liabilities of creditors. Whereas, low ratio shows that the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors.

❖ **Return On Total Assets Ratio**

Return on total assets ratio measures the profitability of bank that explains a firm to earn satisfactory return on all financial resource invested in the

bank's assets. This ratio explains net income for each unit of assets. This ratio is presented as

$$\text{Return on Total Assets Ratio} = \frac{\text{Net Profit after Tax}}{\text{Total Assets}}$$

Higher ratio indicates efficiency in utilizing its overall resources and vice-versa. From the point of view judging operational efficiency, rate of return on total assets is more useful measure.

❖ **Return On Shareholders' Equity**

Shareholder's fund represented that part of long term source funds, which is collected by issuing equity and preference share. Shareholders are actually the owners of the company. Shareholders have ultimate claim in the return of the company. To measure the return earned by shareholders, return on shareholder equity is used or this ratio is calculated to find out the profitability on the owner's capital or investment.

If the company's earning is good, shareholder's earning is greater than outside investors because they are ultimate owners and they are bearing high risk as well. But outside investors get return before the owners that is fixed. Shareholders get the return after paying the fixed interest charge to the creditors and tax to the government. Earnings after tax is the profit of the shareholders. Therefore this ratio is calculated on the basis of EAT. In this study, the samples companies have not employed the preference share thus it includes only return on shareholder's equity.

$$\text{Return on Shareholder's Equity} = \frac{\text{Net Profit After Tax}}{\text{Shareholder's Equity}}$$

The high Return on Shareholders' Equity represents the high profitability of the firm and vice-versa. So, high ROSE is desirable from the point of view of the owners of the firm. This ratio can be calculated simply by dividing earning after by shareholder's equity.

❖ **Earning Per Share (EPS) Analysis**

The profitability of the bank from the point of view of the ordinary shareholders is earning per share. The ratio explains net income for each unit of share. Earnings per share of an organization gives the strength of the share in the market. It shows how much of the total earning belongs to the ordinary shareholders. EPS is calculated as below :

$$\text{Earnings Per Share} = \frac{\text{Net Income}}{\text{No. of Share Outstanding}}$$

❖ **Dividend Per Share (DPS Analysis)**

Dividend per share is calculated to know the share of dividend that the shareholders receive in relation to the paid up value of the share. A large number of present and potential investors may be interested in the dividend per share rather than the earning per share. Therefore, an institution offering a high dividend per share is regarded as efficient in fulfilling shareholders expectations, which will also enable to increase the value of an institution.

Dividend per share is the earning distributed to ordinary shareholders divided by the number of ordinary shares outstanding i.e.

$$\text{Dividend per Share} = \frac{\text{Total Dividend}}{\text{No. of Ordinary Share}}$$

(B) Capital Structure Analysis

Capital structure analysis indicates the proportion of debt and equity in financing the firm's assets. It is concerned with the long term solvency of a firm. Capital structure ratios are calculated to measure the financial risk and firm's ability of using the debt for the benefit of the shareholders. "The choice between debt and equity depends on the cost risk and control. The cost of capital is the minimum rate of return of a project must generate to be acceptable to the shareholders; changes in the debt equity mix after the cost of the two source of financial capital are affected. Cost or risk consideration would favors equity however; maintain control can be pivotal whenever capital structure decision are being made and the choice between debt and equity can at times tilt in favor of deb." (Glen and Pinto, 1995:41). For the purpose of capital structure analysis, two approaches- net income approach and net operating income approach are taken into consideration.

❖ Net Income (NI) Approach

Net income approach is known as dependent hypothesis of capital structure. The essence of this approach is that the firm can reduce its cost of capital by using debt and total valuation of the firm through the reduction in the cost of capital leading to an increase in the cost of capital thus leading to an increase in the degree of leverage. This theory assumes that the cost of debt and cost of equity remain constant as change in the firm's capital structure. In other words, the firm can increase its value or lower the overall cost of capital by increasing the proportion of debt in the capital structure. it gives attention on overall capitalization rate is lowest. The overall capitalization rate can be calculated simply by dividing EBIT by the value of the company.

$$\text{Cost of Overall Capitalization Rate (K}_o\text{)} = \frac{\text{Net Operating Income (EBIT)}}{\text{Total Market Value of the firm}}$$

❖ Net Operating Income (NOI) Approach

It is an independent hypothesis of capital structure decision of the firm and which is irrelevant to the value of firm and overall cost of capital. Change in leverage will not lead to any change in the total value of the firm and market price of share, as the overall cost of capital independent of the leverage.

The increase in leverage leads to an increase in financial risk of the ordinary shareholders. To minimize the financial risk, the shareholders want a higher return on their investment. Increase in K_o are exactly offset by using cheaper debt fund keeping K_o constant. So, equity capitalization rate (k_e) is calculated here by simply dividing EAT by the market value of common equity (S).

$$\text{Cost of Equity (k}_e\text{)} = \frac{\text{Earning Available To Common Stockholder (NI)}}{\text{Market Value of Stock (S)}}$$

(C) Leverage Analysis

Leverage and capital are closely related concepts linked to cost of capital. Leverage results from the use of fixed cost assets or tends to: magnify return to the firm's owners. Change in leverage result in change in level of return and associated risk. Generally , increase in leverage result in increase in return and risk, where as decrease in leverage result in decreased return and risk. Because of its effect on value, the financial manager must understand

how to measure and evaluate leverage when attempting to create the best capital structure.

Generally, leverage refers to the use of special force of power to have more than normal results from a particular action. Similarly in financial term it is used to describe about utilization of funds of which the firm has to fixed cost and to have more return than normal having more risk as well. Leverage may be used to boost owner's returns, but it is used at the risk of increasing losses, if the firm's economic fortune declines. Thus gain and losses are magnified by leverage and the higher the leverage employed by a firm, the greater will be the volatility of its returns. There are three types of leverages; operating leverage, financial leverage and combined leverage.

❖ **Operating Leverage**

Operating leverage is the function of fixed cost, contribution margin and sales volume. It is defined as the percentage change in EBIT resulting from 1 percent change in sales.

$$\text{DOL} = \frac{\% \text{ change in EBIT}}{\% \text{ change in Sales}}$$

Or,

$$\text{DOL} = \frac{\text{Sales} - \text{Variable Cost}}{\text{EBIT}}$$

❖ **Financial Leverage**

Financial Leverage explains the relationship between earning before interest and taxes and net profit of the company. Higher the financial leverage, higher will be the financial risk and also higher will be the shareholder's

return. It is defined as the percentage change in earning per share resulting from 1 percentage change in EBIT.

$$\text{DFL} = \frac{\% \text{ change in EPS}}{\% \text{ change in EBIT}}$$

OR,
$$\text{DFL} = \frac{\text{EBIT}}{\text{EBT}}$$

3.5.2 Statistical Tools

Statistical and research cannot be separated whenever work is carried on statistical is most to have output of the risk. It helps us to analyze the relationship between two or more variables. To achieve the objectives of the study, some important statistical tools such as men, standard deviation, coefficient of variance, coefficient of correlation, regression analysis of important variables has been used which are follows :-

❖ Arithmetic Mean

The arithmetic mean is the ratio of the sum of all observations to the number of observation, or simply , it is the average of the total numbers of observations in the sample. The formula for calculation is;

$$\text{Mean } (\bar{X}) = \frac{X}{N}$$

Where, $(\bar{X}) =$ Arithmetic Mean

$X =$ Sum of observation

$X =$ Variable involved

$N =$ Number of observation

- If $r < P.E.$, there is no evidence of correlation, i.e. the value of 'r' is not significant
- If $r > P.E.$, coefficient of correlation is practically certain, i.e. the value of 'r' is significant
- The P.E of correlation may be used to determine the limits with in which the population correlation coefficient lies. The limit of the population correlation is $r \pm P.E.$

❖ Regression Analysis

Regression is the measure of the average relationship between two or more variables in term of original unit of the data. In other word regression analysis is statistical device which is widely used in almost all research work in order to estimate the unknown value of one variable from known value of other values. In this study includes simple and multiple regression models to examine the impractical relationship between the variable.

A) Simple regression Analysis

Simple regression if the estimation of unknown value or prediction of one variable from known value of the other variables.

$$Y = a + bx$$

where,

Y = value of dependent variable

X = value of independent variable

a = interest of regression constant

b = slope of regression line or regression coefficient

b) Multiple regressions

Generally the form of multiple regression equation with two or more independent variable says

$$X_0 = a + b_1X_1 + b_2X_2 + \dots + b_nX_n$$

Coefficient b_1, b_2, \dots, b_n associate with X_1, X_2, \dots, X_n in the above equation are commonly designed as regression coefficients and value a as a regression constant. The above multiple regression equation depends upon the number of independent variables i.e. X_n .

Regression constant (a)

The value of a in a regression model indicates the average value of the dependent variable when the independent variable is zero. In other words, the regression constant a represents the mean or average effect on the dependent variable if other variables remain constant. It is also called the intercept value.

Regression coefficient (b)

The regression coefficient of each independent variable indicates the marginal relationship between the dependent variable and the independent variable. Alternatively, the coefficient describes how the changes in independent variables affect the value of the dependent variable.

CHAPTER - 4

DATA PRESENTATION AND ANALYSIS

This is the most important chapter of the study. This chapter constituent the most crucial part of the study. In this chapter the data collected will be analyzed and presented mathematically. All the above mentioned financial and statistical tools will be used to present the data. It provides mechanism for meeting the basic objectives stated earlier in the metrology described in the third chapter in order to attain the objectives.

The main objective of this study is to evaluate the capital structure of selected banks i.e. Nepal State Bank of India, Everest Bank Limited, Bank of Kathmandu Limited an Himalayan Bank Limited. To analyze the financial performance is respect to capital structure , various presentation and analysis have been present in this chapter according to analytical research design mention in the third chapter using various financial and statistical tools. For the sole purpose, the interpretations are categorized into two heading:

- Analysis using Financial Tools
- Analysis using Statistical Tools

4.1 ANALYSIS USING FINANCIAL TOOLS

Financial analysis is the process which will heave been identifying the financial strength and weakness of the firm properly establishing relation between the items of the balanced sheet. Financial tools analysis are used to examine the financial performance i.e. strength and weakness of bank.

Here, appropriate tools are calculate and proper interpretation is made. The analysis of financial tools verifies the performance of the concerned banks.

- ❖ Ration analysis
- ❖ Capital structure analysis
- ❖ Leverage analysis

4.1.1 Ratio Analysis

Ratio analysis is the technique of analyzing and interpreting financial statements to evaluate the performance of an organization b creating the ratios from the figure of different accounts consisting in balance sheet and income statement. Even though there are many ratios, only those ratios have been covered in this study which is related to investment operation of the bank

1. Long Term Debt to Total Debt Ratio

The long term debt to total debt ratio measures the percentage of long term debt to total deb used in the companies. So, it is the percentage of long term debt among the total debt employed by the company. The long term debt to total debt is calculated as:

$$\text{Long Term Debt to Total Debt Ratio} = \frac{\text{Long Term Debt}}{\text{Total Debt}}$$

It shows the contribution of long term debt in the total debt.

Table no. 4.1

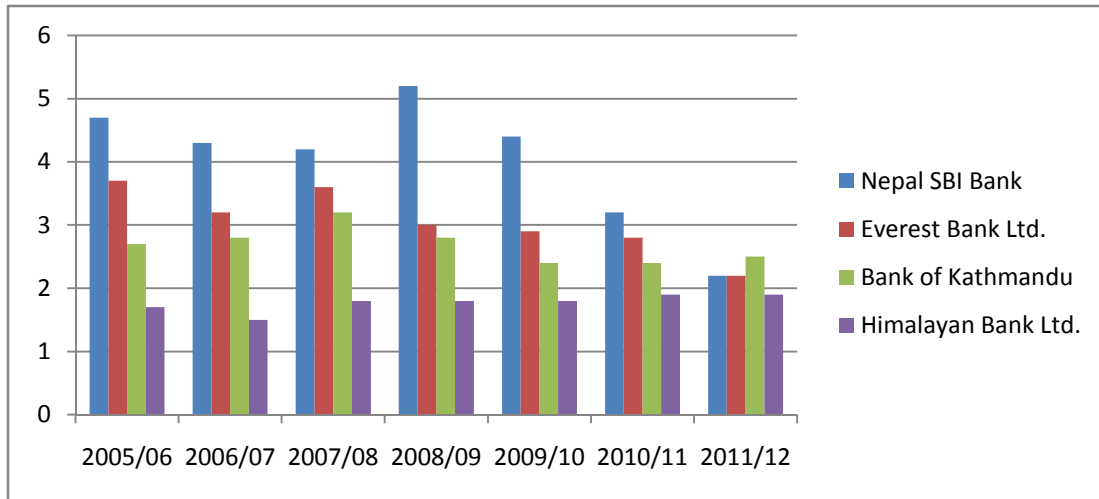
Long Term Debt to Total Debt

Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	47.70	37.57	29.0	16.34
2006/07	42.90	32.46	25.77	13.53
2007/08	42.32	33.60	31.51	17.25
2008/09	52.40	30.29	25.44	18.39
2009/10	44.89	29.29	23.82	16.81
2010/11	31.66	26.74	23.83	18.71
2011/12	20.97	21.12	24.25	18.27
Mean	41.26	30.15	26.23	16.67
Standard Deviation	9.31	4.87	2.72	1.60
Coefficient of Variation	22.57	16.16	10.38	9.54

(As per Annexure A1)

Above table can be presented in the figure as:

Figure no. 4.1 Long Term Debt to Total Debt



Above table and figure reveals that, the long term debt to total debt of NSBIL is in fluctuating trend over the study period. i.e. in FY 2005/06 it has 47.70; in FY 2006/07 it has 42.90. Similarly, In FY 2007/08, 2008/09, 2010/1, 2011/12 it has 42.3.2, 52.40, 44.89, 31.66, 20.97. The average rate is

41.29% which means that long term debt in total debt is 41.29% and the remaining portion is contributed by the current liabilities.

Similarly, ratio of EBL is in almost decreasing trend. Except from FY 2007/08, all in the FY, there in decreasing trend. Average rate of EBL is 30.15% which represents the percentage of long term debt is 30.15% and rest is current liabilities.

Again, BOKL has the average ratio is 26.23%. Its ratio is in the fluctuation trend. The long term debt in total debt is 26.23% and remaining portion is contribution by the current liabilities.

And, HBL Bank's long term debt to total debt ratio is in fluctuating trend over the study period. The average ratio is 16.29% which means that, the long term debt in total debt is 16.29% and rest is current liabilities.

The ratio of long term debt to total of three selected banks out of four banks under study period is in fluctuation trend.

NSBIL has the highest SD of 9.31 while HBL has the lower SB of 1.60 and SD of EB & BOKL is 4.87 & 2.72 respectively. Similarly, the highest CV is 22.57 for NSBIL and lower is 9.54 for HBL and CV of EBL & BOKL is 16.16 & 10.38 respectively.

2. Long Term Debt to Capital Employed Ratio

This ratio is used to express the relationship between long term debt and capital employed by the firm. It shows the proportion of long term and share holder's fund in the capital structure. The ratio is calculated as :

$$\text{Long Term Debt to Capital Employed} = \frac{\text{LongTermDebt}}{\text{CapitalEmployed}}$$

The higher ratio of long term debt to capital employed shows the higher contribution of long term debt in the capital structure and vice-versa.

Table- 4.2

Long Term Debt to Capital Employed Ratio

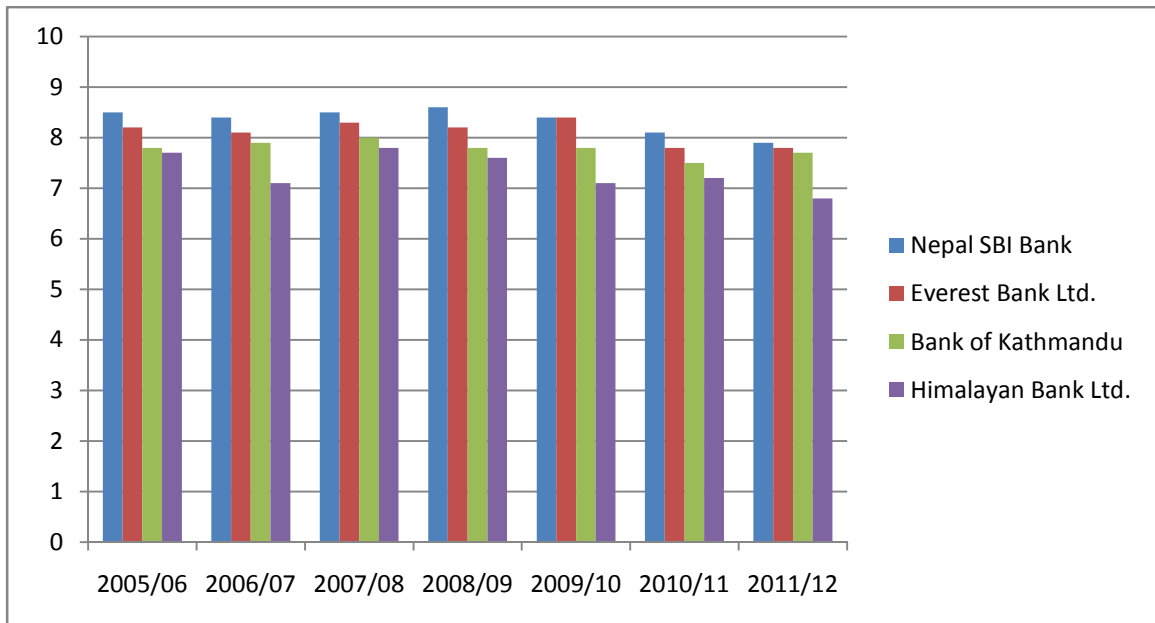
Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	85.42	82.02	77.47	78.05
2006/07	84.25	80.99	77.79	71.37
2007/08	85.57	82.80	79.98	75.36
2008/09	86.54	82.51	77.60	71.0
2009/10	83.09	83.14	76.73	71.59
2010/11	80.77	77.83	74.41	71.88
2011/12	78.15	76.93	72.86	67.15
Mean	78.15	80.89	76.69	72.91
Standard Deviation	2.78	2.30	2.18	3.28
Coefficient of Variation	3.33	2.85	2.85	4.49

(Ass per Annexure A2)

Above table can be presented in the figure as:

Figure no. 4.2

Long Term Debt to Capital Employed Ratio



Above table and figure reveals that, the long term debt to capital employed rate of NBIL is in fluctuating trend over the study period and the average ratio is 83.40% . It means that the contribution of LTD is 83.40% on capital employed. Similarly, the average rate of EBL is 80.89% and its long term debt to capital employed is also in fluctuating trend over the study period. Contribution of LTD on capital employed of EBL is 80.89%. Similarly, the rate of long term debt to capital employed of BOKL is also in fluctuating trend over the study period. Its average ratio is 76.69%. It is the portion of LTD on capital employed. And, the long term debt to capital employed ratio of HBL Bank is also in the fluctuating trend over the study period. Its average ratio is 72.91% which means that the contribution of LTD on capital employed is 72.91%

HBL has the highest SD which is 3.28 and lowest SD is 2.18 for BOKL. SD of NSBIL & EBL is 2.78 & 2.30 respectively. Similarly, the highest CV is 4.49 for HBL and lowest CV is 2.84 for EBL & BOKL. And CV of NSBIL is 3.33

3. Total Debt to Total Assets Ratio

This ratio measure the extent to which borrowed fund have been used to finance the company's assets. It is related to calculate to the total assets of the firm. The total debt includes long term debt and current liabilities The total assets consist of permanent assets and other assets. It is calculated as:

$$\text{Total Debt to Total Assets Ratio} = \frac{\text{TotalDebt}}{\text{TotalAssets}}$$

The lower total debt to total assets ratio indicates that the creditors claim in the total assets of the company is lower than the owner's claim and vice-versa

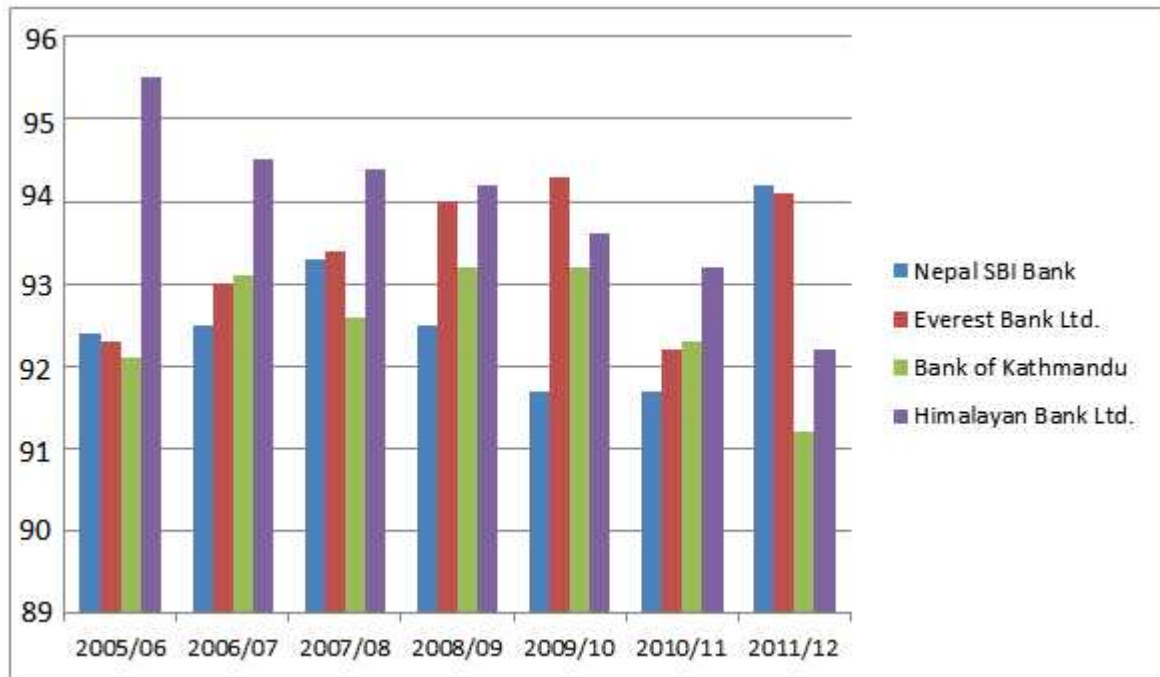
Table-4.3

Total Debt to Total Assets Ratio

Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	92.47	92.39	92.22	
2006/07	92.58	92.97	93.15	95.61
2007/08	93.34	93.47	92.69	94.85
2008/09	92.46	93.97	93.16	94.66
2009/10	91.63	94.39	93.26	93.74
2010/11	91.79	92.39	92.43	93.18
2011/12	94.46	94.03	91.50	92.21
Mean	92.68	93.45	92.63	94.10
Standard Deviation	0.90	0.67	0.60	1.05
Coefficient of Variation	0.97	0.72	0.61	1.12

(As per Annexure A3)

Above table can be presented in the figure as:

Figure- 4.3**Total Debt to Total Assets Ratio**

Above table and figure reveals that, total debt to total assets ratio of NSBIL is in fluctuation trend over the study period. Its average ratio is 92.68% which means that the proportion of debt capital finance for its assets is 92.68% and rest 7.32% is financed from share holder's equity. Similarly, total debt to total assets ratio of EBIL is in increasing trend over the study period. The average ratio of EBL is 93.45%. It represents that debt capital is financed 93.45% and share holder's equity if financed 6.55% for its total assets. Similarly, total debt to total assets of BOKL is in fluctuating trend over the study period. And its average ratio is 92.63%. Which represents the proportion of debt capital on total assets is 92.63% and rest is Share holder's equity. And the total debt to total assets of HBL is in decreasing trend over the study period. Its average ratio for total debt total assets is 94.10%. It means that financing of proportion of debt on total assets is 94.10% and rest is shareholder's equity.

HBL's has the highest SD i.e. 1.05. BOKL has the lowest SD i.e. 0.60. SD of NSBIL is 0.90 and SD of EBL is 0.67. All the banks are founded using higher debt capital to finance their assets. Similarly, the highest CV is 1.12 for HBL and lowest CV is 0.64 for BOKL CV of NSBIL & EBL is 0.97 & 0.72 respectively.

4. Debt to Equity Ratio

The debt to equity ratio measures the long term components of capital structure. Long term debt and share holder's equity are used in financing assets of the companies. So, it reflects the relative claims of creditors and shareholders against the assets of the firm. Debt to equity ratio indicates the relatives proportions of debt and equity. The relationship between outsiders

claim and owner's capital can be show by debt - equity ratio. It is calculated as:

$$\text{Debt to Equity ratio} = \frac{\text{Long Term Debt}}{\text{Share holder's Equity}}$$

This ratio is also known as debt to net worth ratio. A higher debt equity ratio indicates that the claims of the creditors are greater then that of shareholders of owners of the company. It is calculated as :

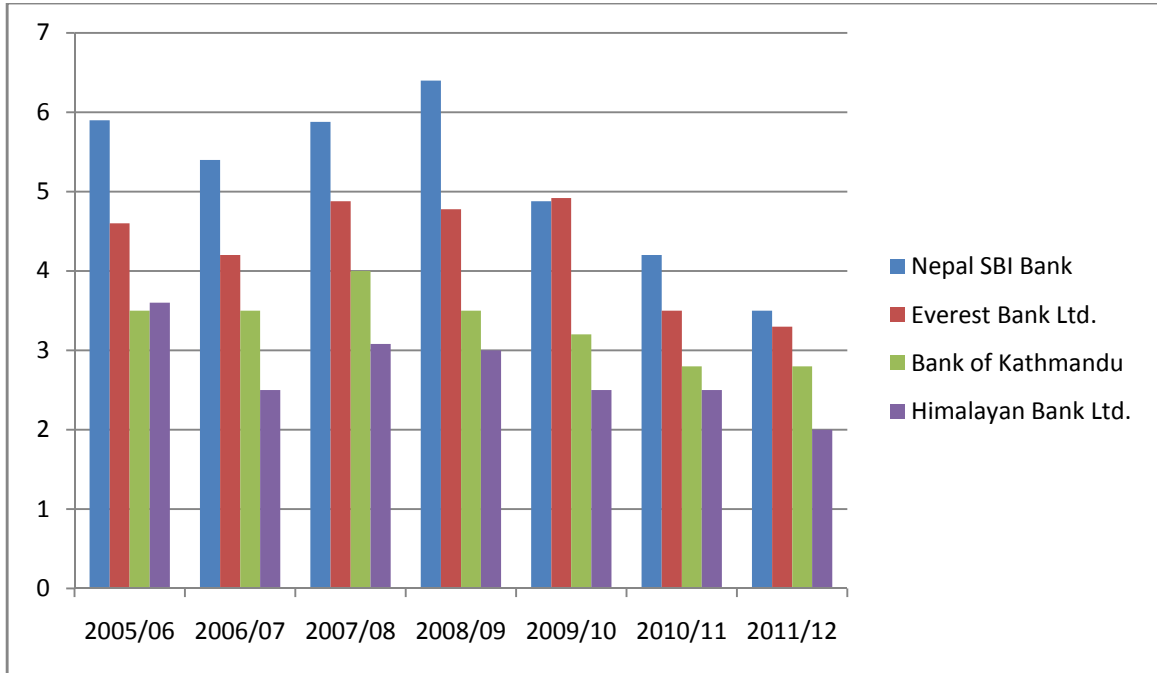
Table- 4.4
Debt to Equity Ratio

Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	5.86	4.56	3.44	3.56
2006/07	5.35	4.26	3.50	2.49
2007/08	5.93	4.81	3.996	3.06
2008/09	6.43	4.72	3.47	3.0
2009/10	4.91	4.93	3.30	2.52
2010/11	4.20	3.51	2.91	2.56
2011/12	3.528	3.34	2.68	2.04
Mean	5.18	4.30	3.33	2.75
Standard Deviation	0.94	0.60	0.40	0.46
Coefficient of Variation	18.29	13.75	11.88	16.70

(As Per Annexure A4)

Above table can be presented in the figure as :

Figure- 4.4
Debt to Equity Ratio



Above table and figure reveals that, debt to equity ratio of NSBIL is in fluctuating trend over the study period. It has the average rate is 5.18 times. That means debt capital financing is more than 5 times higher then share holder's equity within the bank. Similarly, debt to equity ratio of EBL is also fluctuating trend over the study period and average rate is 4.30 times. This means that the debt capital financing is more then 4 times higher then shareholder's equity. Similarly, debt to equity ratio of BOKL is also in fluctuating trend over the study period. The average rate of BOKL is 3.53 times. It means the debt financing is more than 3 times higher then equity. And debt to equity of HBL is also in fluctuating trend over the study period. Its average rate is 2.75 times. It is the indication of proportion of debt financing is more than 2 times higher then equity financing.

NSBIL has the highest SD i.e. 0.94 and BOKL has the lowest SD i.e. 0.40. Similarly SD of EBL & HBL is 0.60 & 0.46 resp. In all four banks, the creditor's margin of safety is very low which means that they have high risk. It reveals that all the four banks are highly levered. Thus, it can be concluded that all banks have lower rate of shareholder's equity over the claims of creditors. Similarly, the highest CV is 18.29 for NSBIL and lowest CV is 11.88 for BOKL. CV of EBL & HBL is 13.75 and 16.70 resp.

5. Interest Coverage Ratio

This ratio indicates the ability of the company to meet its annual interest costs of it measure the debt services capacity of the firm. It determined by using following formula,

$$\text{Interest Coverage Ratio} = \frac{\text{Earning Before Interest \& Taxes}}{\text{Interest}}$$

Hence, higher interest coverage ratio indicates the company's strong capacity to meet interest obligation. A firm always prefers interest coverage ratio because low interest coverage ratio is a danger signal. Lower interest coverage ratio means the firm is using excess debt & does not have an ability to offer assured payment of interest to the creditors.

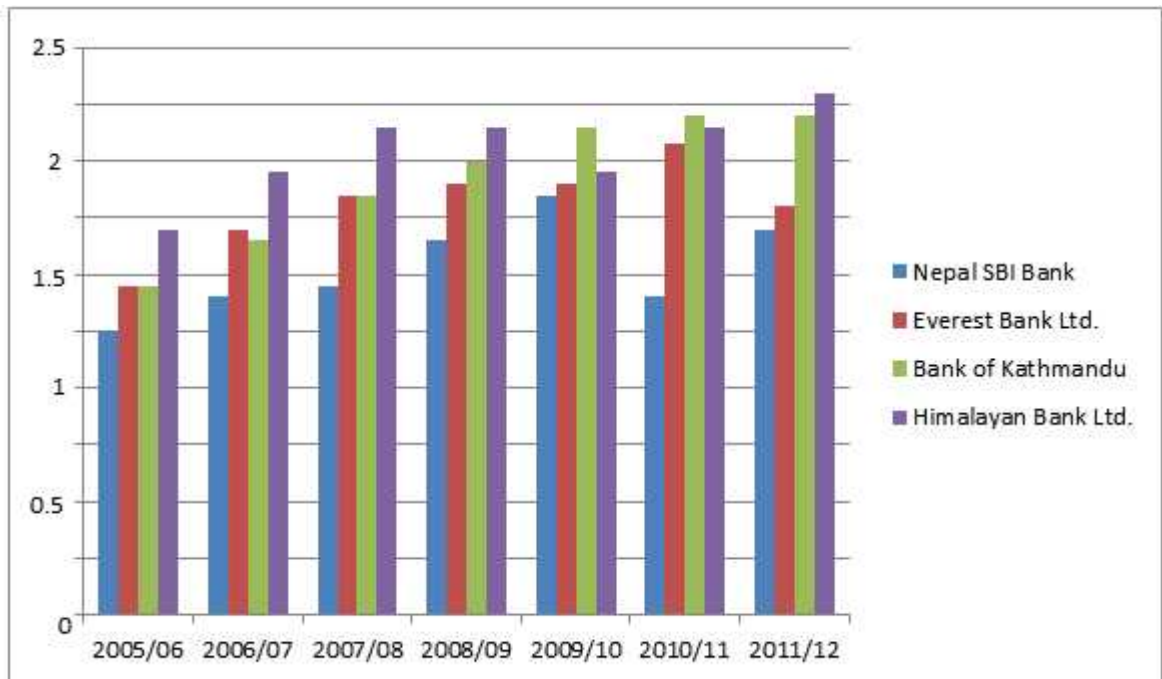
Table- 4.5
Interest Coverage Ratio

Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	1.24	1.44	1.44	1.65
2006/07	1.43	1.67	1.64	1.96
2007/08	1.48	1.84	1.85	2.05
2008/09	1.60	1.86	1.98	2.14
2009/10	1.84	1.88	2.13	1.91
2010/11	1.42	2.04	2.26	2.16
2011/12	1.73	1.88	2.17	2.24
Mean	1.53	1.80	1.92	2.02
Standard Deviation	0.19	0.18	0.08	0.18
Coefficient of Variation	12.34	9.90	4.01	9.09

(As per Annexure A5)

Above table can be presented in the figure as:

Figure- 4.5
Interest Coverage Ratio



Above table and figure reveals that, the average ratio of NSBIL is 1.53 times, which implies the number of times the interest covered by its EBIT. The interest coverage ratio of NSBIL shows in fluctuating trend over the study period. Similarly, in the case of EBL, interest coverage ratio is also fluctuating trend. The average rate is 1.8 times which implies the number of times the interest covered by its EBIT. Similarly, interest coverage ratio of BOKL is also in fluctuating trend over the period. Average rate of BOKL is 1.92 times. It means that the number of times interest covered by its EBIT. And, average interest covered ratio of HBL is 2.02 times. Its interest covered ratio is in also fluctuating trend over the study period.

Out of four banks, HBL bank's interest coverage ratio is higher i.e. 2.02 times. And the lowest ratio is 1.53 times for NSBIL. The coverage ratio of the banks are positive, the bank should make effort to improve the prevailing situation by improving their operating efficiency and to reduce amount of debt capital through refunding debt simultaneous.

The SD of NSBIL is 0.19, EBL is 0.18, BOKL is 0.08 & HBL is 0.18. The highest SD is 0.19 for NSBIL and lowest SD is 0.08 for BOKL. Similarly, the highest CV is 12.34 for NSBIL and lowest CV is 4.01 for BOKL. CV of EBL and HBL is 9.90 & 9.09 respectively.

6. Return on Total Assets

Return on total assets ratio measure the profitability of bank which explains that a firm is earning satisfactory return on all financial resources invested in the bank's assets. The ratio explains net income for each unit of assets. It is determined by using the following formula,

$$\text{Return on Total Assets} = \frac{\text{Net Profit after Tax}}{\text{Total Assets}}$$

Higher ratio indicates efficiency in utilizing its overall resources and vice-versa. From the point of view of judging operational efficiency rate of return on total assets is more useful measure.

Table- 4.5

Return on Total Assets

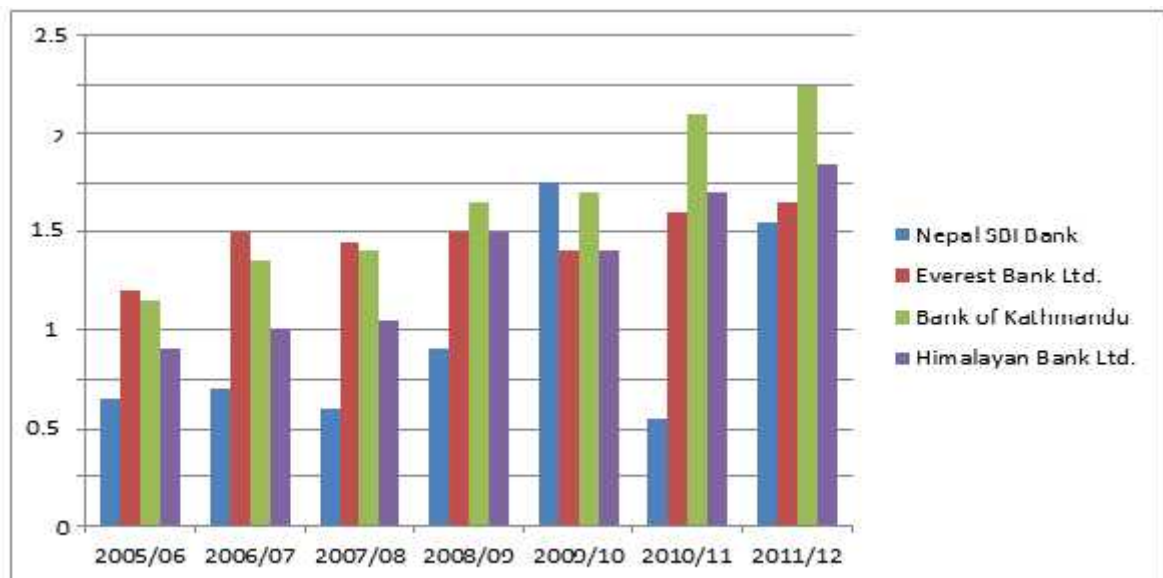
Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	0.64	1.17	1.10	0.88
2006/07	0.72	1.49	1.34	1.02
2007/08	0.55	1.45	1.42	1.07
2008/09	0.90	1.49	1.65	1.50
2009/10	1.82	1.38	1.80	1.43
2010/11	0.53	1.66	2.04	1.73
2011/12	1.53	1.73	2.25	1.88
Mean	0.96	1.48	1.66	1.36
Standard Deviation	0.48	0.17	0.38	0.35
Coefficient of Variation	49.51	11.73	22.61	26.10

(As per Annexure A6)

Above table can be presented in the figure as:

Figure- 4.6

Return on Total Assets



Above table and figure reveals that, the returns on total assets of NSBIL is in fluctuating trend over the study period. That means on all financial resources is fluctuation trend. The average ratio is 0.96 times. Similarly, ROA ratio of EBL is also in fluctuating trend over the study period. Its average ratio is 1.48 times. Similarly, ROA ratio of BOKL is in increasing trend over the study period. Which means that its earning on all financial resources is increasing over the study period. And in case of HBL, there is a continuous an abrupt fall in the FY 2006/07 and there is rise again. The average ratio of HBL is 1.36 times.

The standard deviation of NSBIL is 0.48, EBL is 0.17, BOKL is 0.38 and HBL is 0.35. The highest SD is 0.48 for NSBIL and lowest SD is 0.17 for EBL. Similarly, the highest CV is 49.51% for NSBIL and lowest CV is 11.73% for EBL. CV of BOKIL is 22.61 & HBL is 26.10.

7. Return on Shareholder's Equity

Shareholders are the owners of the company. To measure the return of shareholders, we use return on shareholder's equity. This ratio analyze whether the company has been able to provide the higher return on investment to the owner or not. This ratio is calculated as:

$$\text{Return on Shareholder's Equity} = \frac{\text{Net Profit after Tax}}{\text{Shareholder's Equity}}$$

A company's owner always prefer higher ratio of return on shareholder's equity. And higher ratio represents the high profitability of the firm and vice- versa.

Table-4.7

Return on Shareholder's Equity

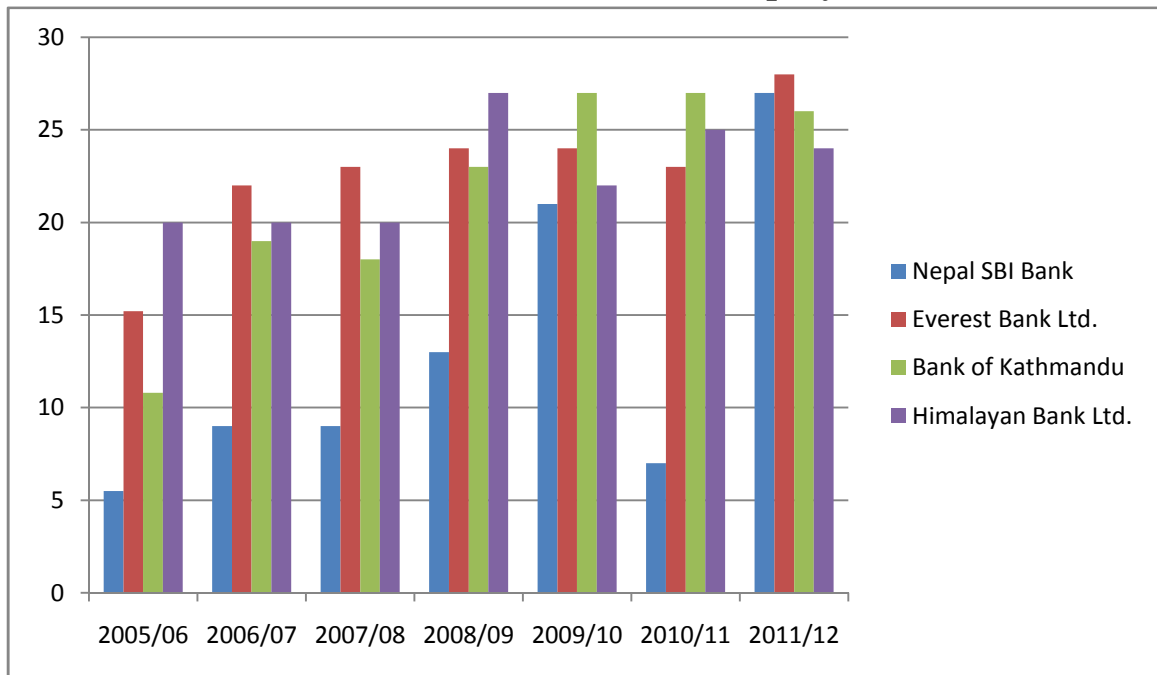
Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	8.55	15.37	14.18	19.95
2006/07	9.71	21.10	19.59	19.87
2007/08	8.33	22.19	19.36	20.0
2008/09	11.88	24.65	24.11	25.90
2009/10	21.92	24.67	26.72	22.91
2010/11	6.46	23.48	26.94	25.30
2011/12	27.59	28.89	26.51	24.23
Mean	13.49	22.91	22.49	22.60
Standard Deviation	7.47	3.83	4.53	2.45
Coefficient of Variation	55.13	16.73	20.15	10.86

(As per Annexure A7)

Above table can be presented in the figure as:

Figure- 4.7

Return on Shareholder's Equity



Above table and figure reveals that, the return on shareholder's equity of NSBIL is in fluctuating trend over the study period. Its average ratio is 13.49% which implies that investment of one rupee will earn by the shareholders equity is Rs.13.49 paisa per year. Similarly, there is a continuous rise return on shareholder's equity in the initial years of EBL. However, there is an abrupt fall in the FY 2010/11 and there is rise again. The average ratio of EBL is 22.91%. Similarly, return on shareholder's equity of BOKL is in increasing trend it means that return of investment is increasing over the study period. Its average ratio is 22.49%. And, return on shareholder's equity of HBL is in fluctuating trend over the study period. Its average ratio is 22.60%

SD of NSBIL is highest among all, which explains that the variability of return on shareholder's equity is higher than remaining banks the highest SD is 7.44. The lowest SD is 2.46 for HBL. SD of EBL is 3.83 & BOKL is 4.53. Similarly, the highest CV is 55.13 for NSBIL and lower CV is 10.86 for HBL. CV of EBL is 16.73 & BOKL is 20.15.

8. Earnings Per Share

The profitability of bank from the point of view of the ordinary shareholders is earning per share. The ratio explains net income for each unit of share. It is calculated as:

$$\text{Earning per Share} = \frac{\text{Net Income}}{\text{No. of Share Outstanding}}$$

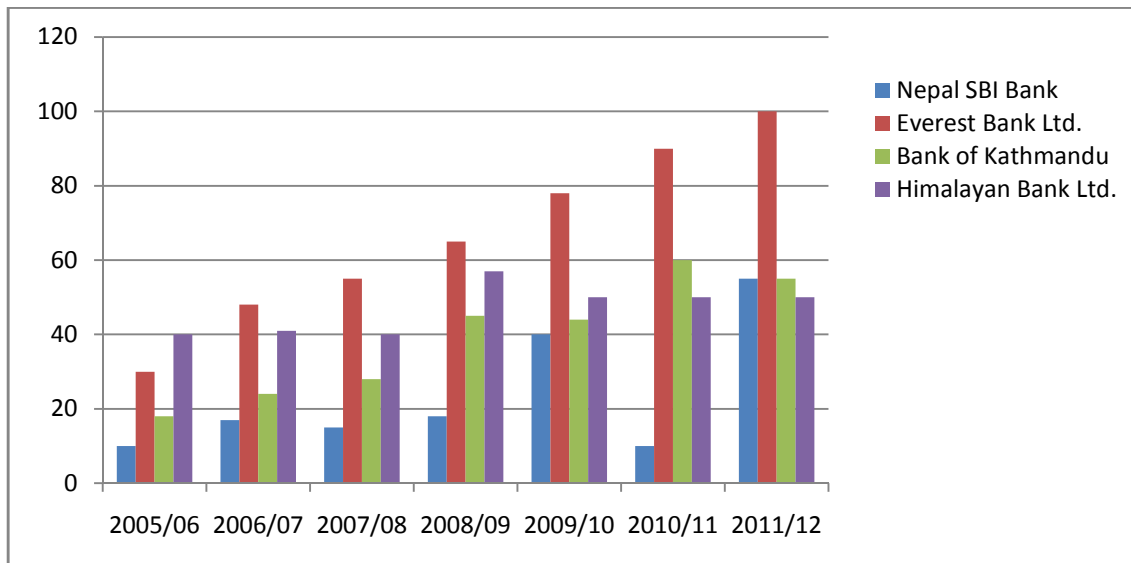
Earnings per share of an organization give the strength of the share in the market. It shows how much theoretically belongs to the ordinary shareholders.

Table-4.8
Earning Per Share

Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	11.67	29.90	17.93	39.56
2006/07	14.25	45.58	25.50	40.88
2007/08	13.29	54.23	30.23	39.92
2008/09	18.24	62.78	43.67	56.42
2009/10	39.36	78.42	43.50	48.53
2010/11	10.45	91.82	59.94	52.28
2011/12	54.04	99.99	54.68	47.05
Mean	23.04	66.19	39.64	46.38
Standard Deviation	15.63	23.29	14.02	6.08
Coefficient of Variation	67.85	35.24	35.38	13.12

(As per Annexure A8)

Above table can be presented in the figure as:



Above table and figure reveals that, the earning per share of NSBIL is in fluctuating trend over the study period. The average EPS is Rs.23.04.

Similarly, the EPS of EBL is increasing trend. EPS is continuously increasing. The average EPS is Rs.66.13. Similarly, there is a continuous rise EPS of BOKL till FY 2010/11. However, there is an abrupt fall of EPS in FY 2011/12. The average EPS of BOKL is Rs.39.64. And, EPS of HBL is in fluctuating trend over the study period. The average EPS of HBL is Rs.46.38

Regarding SD, EBL has highest than other banks, which is 23.29 and HBL bank has the lower SD that is 6.08. The SD of NSBIL is 15.63 & BOKL is 14.02. Similarly, the highest CV is 67.85 for NSBIL and lowest CV is 13.12 for HBL. CV of EBL is 35.14 & CV of BOKL is 35.38

9. Dividend Per Share (DPS)

Dividend per share is evaluated to know the share of dividend that the shareholders receive in relation to the paid up value of the share. Dividend per share is the earning distributed to ordinary shareholders divided by the number of ordinary shares outstanding. It is calculated as :

$$\text{Dividend per Share} : = \frac{\text{Total Dividend}}{\text{No. of Ordinary Share}}$$

Table- 4.9

Dividend per Share Analysis

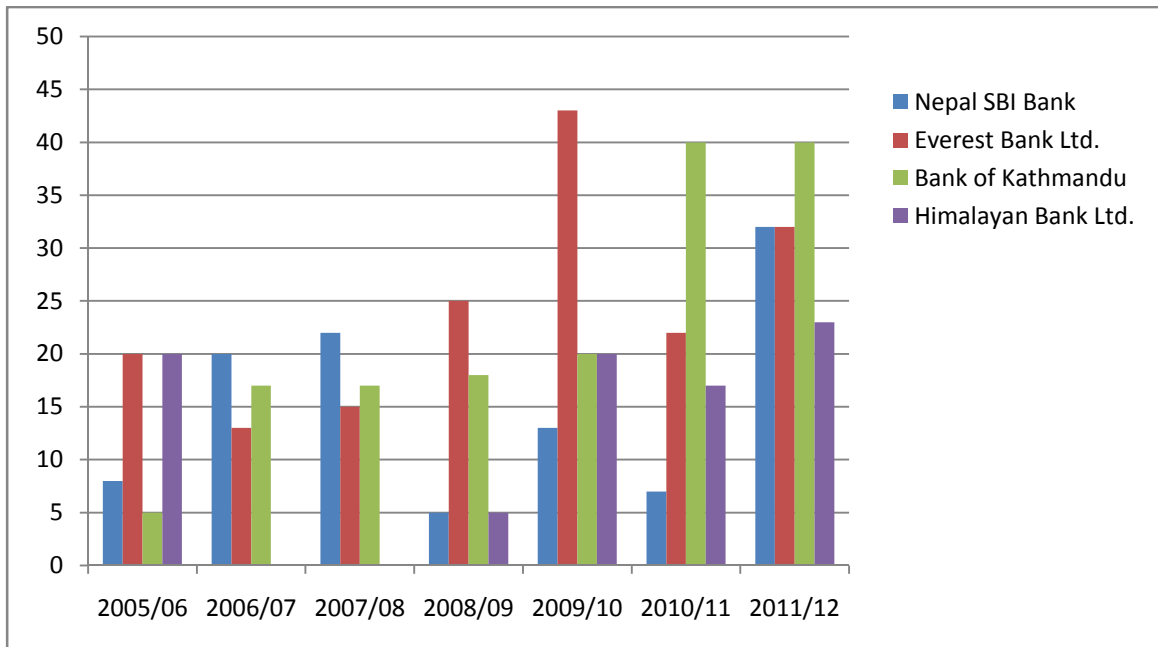
Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	8.0	20.0	5.0	20.0
2006/07	0.0	20.0	12.05	16.67
2007/08	0.0	21.05	15.0	16.67
2008/09	5.0	25.0	18.0	4.76
2009/10	12.59	41.93	20.0	20.0
2010/11	7.10	21.93	40.0	16.67
2011/12	31.48	31.58	40.0	23.99
Mean	9.17	25.93	21.44	16.97
Standard Deviation	10.0	7.55	12.55	5.57
Coefficient of Variation	109.05	29.11	58.44	32.81

(As per Annexure A9)

Above table can be presented in the figure as:

Figure- 4.9

Dividend per Share Analysis



Above table and figure reveals that, NSBIL had distributed dividend per Share in FY 2005/06 RS 8. But the bank could not distributed dividend in FY 2006/07 & 2007/08, Again, they can able to distributed dividend form FY 2008/09, 2009/10, 2010/11, 2011/12 which is Rs.5, Rs.12.59, Rs.7.10 & Rs.31.48 respectively. The average DPS of NSBIL is Rs.9.17. Similarly, the DPS of EBL is in fluctuating trend over the study period. The average DPS of bank is Rs.25.93. Similarly, EPS of the BOKL is increasing trend. Its average EPS is Rs.21.44. And EPS of HBL is in fluctuating trend. Its average EPS is Rs.16.97

The SD of four banks is 10.0, 7.55, 12.55 & 5.57 for NSBIL, EBL, and BOKL & HBL respectively. Similarly, the highest CV is 109.05 for NSBIL & the lowest CV is 29.11 for EBL. CV of BOKL is 58.54 & HBL is 32.81.

4.1.2 Capital Structure Analysis

Various approaches have been developed under the relevance of the capital structure, which helps to evaluate value of the firm, such as Net income approach (NI), Net operating income approach (NOI). Here, both NI & NOI approaches are considered to analysis the capital structure of the overall capitalization. The analysis of capital structure is the concept of vital important of this study.

4.1.2.1 Net Income (NI) Approach

According to the NI approach, net income is capitalized at an overall capitalization rate to obtain the total market value of the firm. Under this approach, the capital structure decision is relevant to the valuation of the firm.

Overall capitalization (KO) means the cost of overall capital collected by the company from different sources. In this study, KO is calculated as per the NI approach, which means KO is calculating Earning before Interest & taxes (EBIT) dividing by the value of the firm (V). Such formula for calculating KO is as follows:

$$KO = \frac{EBIT}{V}$$

Decreasing trend of overall capitalization rate indicates that the bank is able to increase the value of the firm and the overall capitalization rate by increasing debt portion in the capital structure.

Table-4.10

Overall Capitalization Rate (KO)

Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	2.09	4.03	5.16	4.71
2006/07	2.94	5.0	5.77	5.46
2007/08	2.77	4.64	5.10	5.02
2008/09	2.35	4.12	5.20	5.21
2009/10	2.98	3.48	3.94	2.99
2010/11	2.0	3.34	3.46	3.13
2011/12	2.82	4.26	3.60	3.36
Mean	2.56	4.12	4.60	4.27
Standard Deviation	0.38	0.55	0.85	0.99
Coefficient of Variation	14.85	13.26	18.42	23.12

(As per Annexure A11)

The overall capitalization rate (KO) of NSBIL is in fluctuating trend over the study period. Its average KO is 2.56 which is lowest rate among four

banks. Similarly, KO of EBL is also in fluctuating trend and its average rate is 4.12%. Similarly, BOKL's overall capitalization rate is also fluctuating trend. Its average rate is 4.60% which is highest rate among four banks. And, KO of HBL is also in fluctuating trend and its average rate is 4.27%. The highest SD among four banks is 0.99 for HBL and lowest SD is 0.38 for NSBIL SD of EBL is 0.55 & SD of BOKL is 0.85. Similarly, CV of four banks is 14.85, 13.26, 18.42 & 23.12 respectively.

4.1.2.2 New Operating Income (NOI) Approach

The net operating income approach is also known as the irrelevancy theory of capital structure implies that the market value of the firm is not affected by the capital structure change.

The NOI approach is considered to find out the equity capitalization rate of NSBIL., EBL BLK and HBL banks. Thus, table has been constructed to demonstrate the effect of equity capitalization rate under NOI approach. The formula for calculating Ke is as follow,

$$\text{Cost of Equity (Ke)} = \frac{\text{EAT}}{\text{S}}$$

where, EAT = Earning after Tax

S = Market value of firm's stock

Table- 4.11
Cost of Equity

Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	4.48	6.72	8.95	4.73
2006/07	4.64	6.70	9.32	4.87
2007/08	3.97	6.23	7.0	4.34
2008/09	2.98	4.55	5.14	5.13
2009/10	3.35	3.32	3.16	2.79
2010/11	0.69	2.93	2.55	2.64
2011/12	0.28	4.07	2.96	2.67
Mean	2.91	4.92	5.58	3.88
Standard Deviation	1.63	1.50	2.66	1.05
Coefficient of Variation	56.5	30.54	47.64	26.97

(As per Annexure 12)

There is decreasing trend of cost of equity over the study period of NSBIL. Its average cost of equity is 2.91. This Ke is lowest among four banks. Similarly, Ke of EBL, there is continuous fall of cost of equity of EBL till the FY 2010/11 but ke rises in FY 2011/12. The average cost of equity of EBL is 4.92. Similarly, Ke of BOKL is in fluctuating trend. Its average cost of debt ratio is 5.28 which are highest among four banks. And, Ke of HBL is also in the fluctuating trend. Its average Ke is 3.88.

SD of NSBIL is 1.63, of EBL is 1.50, BOKL is 2.66 & HBL is 1.05. Similarly, the highest CV is 56.5 for NSBIL and lowest CV is 26.97 for HBL. CV of EBL & BOKL is 30.54 & 47.64 respectively.

4.1.3 Leverage Analysis

In this analysis, we only study degree of financial leverage which is given below:-

1. Degree of Financial Leverage

The degree of financial leverage as a part of leverage analysis also reflects the leverage of the firm as similar as above ratios. The degree of financial leverage analyzes the burden of interest expenses and financial risk of the company. The degree of financial leverage (DFL) is defined as the percentage change EPS due to given percentage change in EBIT or this is a relationship between EBIT and EBT, In this study, the following relationship will be used. It is expressed as:

$$\text{Degree of Financial Leverage (DFL)} = \frac{\% \text{ change in FPS}}{\% \text{ change in EBIT}}$$

$$\text{DFL} = \frac{\text{EBIT}}{\text{EBT}}$$

Table- 4.12

Degree of Financial Leverage

Fiscal Year	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
2005/06	5.23	3.26	3.27	2.54
2006/07	3.34	2.50	2.55	2.30
2007/08	3.06	2.19	2.18	2.21
2008/09	2.68	2.16	2.02	2.07
2009/10	2.20	2.14	1.88	2.04
2010/11	3.37	1.96	1.79	1.87
2011/12	2.38	2.14	1.85	1.96
Mean	3.18	2.34	2.22	2.14
Standard Deviation	0.94	0.41	0.49	0.21
Coefficient of Variation	29.43	17.33	22.14	9.84

(As per Annexure A13)

Here in the above table, average degree of financial leverage (DLF) of NSBIL is highest among four banks which represent higher financial risk for the bank. DFL of NSBIL is in fluctuating trend over the study periods. Its average DLF is 3.18. Similarly, DFL of EBL is also in fluctuating trend. Its average DLF is 2.34. Similarly, DFL of BOKL is also in fluctuating trend. Its average DFL is 2.22. And, lowest average DFL is 2.14 for HBL which represents lower financial risk for the bank. Its DFL is in decreasing trends.

The highest SD is 0.94 for NSBIL and lowest SD is 0.21 for HBL. SD of EBL is 0.41 and SD of BOKL is 0.49. Similarly, CV of four banks i.e. NSBIL, EBL, BOKL & HBL is 29.13, 17.33, 22.14 & 9.84 respectively.

4.2 ANALYSIS USING STATISTICAL TOOLS

In order to achieve the objective of this study, some essential statistical tools are used such as mean, standard deviation, coefficient of variation and coefficient of correlation analysis.

4.2.1 Coefficient of Correlation Analysis

Correlation analysis enable us to have an ideas the degree and direction of the relationship between two or more variables. The correlation is a statistical tools which studies the relationship between two or more variables and correlation analysis involves various methods and techniques used for studying and measuring the extent. If the relationship between two or more variables. It is denoted by 'r'. However, it reflects upon the cause and effect relationship between the variables. Although there are three types of correlation based on 'Pearson's coefficient of correlation'. In the following section correlation between different variables are calculated and presented of the samples companies.

1. Coefficient of correlation between Long Term Debt and Earning Per Share

Long term debt is source of long term financing or long term funds. Company should pay interest for this debt capital. Whereas earning per share (EPS) is earning of a share of a company from one year business. EPS has positive relationship with company's earning. In this section the relationships between these two variables have been shown using Karl Pearson's correlation coefficient method. It tries to analyze that the increment in LTD leads to increment in the EPS are not. The calculated correlation coefficient and their respective probable error have been shown in the following table referred from appendix.

Table-4.13

Coefficient of Correlation between Long Term Debt and EPS

	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
r	0.52	0.98	0.90	0.69
r ²	0.27	0.96	0.81	0.48
P.E.	0.19	0.01	0.05	0.13
6P.E.	1.12	0.06	0.30	0.78

(As per schedule 1

Karl Pearson's correlation coefficient between long term debt and earning per share of Nepal SBI Bank is 0.52. It is positive correlation between long term debt ad EPS. The probable error 6(P.E.) of Nepal SBI Bank is 1.12 which is greater than correlation coefficient. Hence, there is insignificant relationship between Long Term Debt and EPS.

Similarly, incase of Everest Bank Ltd, the correlation coefficient between Long term debt and EPS each 0.98 it is positive and close to 1. The probable error 6 (P.E) of EBL is 0.06 which is less than correlation coefficient. Hence, there is significant relationship between Long term debt and EPS.

Incase of Bank of Kathmandu the correlation coefficient between long term debt and EPS is 0.90. It is positive and closer to 1. The 6 (P.E) of respected correlation is 0.3 which is less than correlation coefficient. Hence there is significant relationship between long term debt and EPS.

Incase of Himalayan Bank Ltd. the correlation coefficient between long term deb and EPS is 0.69. It is positive. The 6 (P.E.) of respected correlation is 0.78 which is greater than correlation coefficient. Hence, there is insignificant relationship between Long term and EPS.

2. Coefficient of Correlation between EBIT and Interest

Long term debt holders get the interest as return and EBIT is operating profit of the company. Here correlation coefficient of interest and EBIT has presented of concerned companies to analyze whether there is positive or negative correlation between interests and operating profit, these are calculated on the basis of Karl Pearson's correlation coefficient. Following table shows the relationship between these variables of sampled companies. And to check the significance of these calculated correlation, P.E. is also presented, which is referred from appendix.

Table-4.14

Coefficient of correlation between EBIT and Interest

	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
r	0.99	0.99	0.98	0.97
r ²	0.98	0.98	0.96	0.94
P.E.	0.005	0.005	0.01	0.02
6P.E.	0.03	0.003	0.06	0.12

(As per schedule 2

In the above table, correlation coefficient of Nepal SBI bank is found to be 0.99, i.e. there is positive correlation between Interest and EBIT. The probable error (P.E.) is respected correlation is 0.03 which is less than correlation coefficient. Hence, there is significant relationship between EBIT and interest.

In case of Everest Bank Ltd., the correlation coefficient between EBIT and interest is 0.99. i.e. there is positive correlation between interest and EBIT. The probable error (P.E.) is respected correlation is 0.03, which is less than correlation coefficient. Hence, there is significant relationship between EBIT and interest.

Similarly, in case of Bank of Kathmandu, the correlation coefficient between EBIT and interest is 0.98. It is positive and close to 1. The probable error (P.E.) is respected correlation is 0.06 which is less than correlation coefficient. Hence, there is significant relationship between EBIT and interest.

Similarly, in case of Himalaya Bank Ltd., the correlation coefficient between EBIT and interest is 0.97. It is positive and close to 1. The probable error (P.E.) is respected correlation is 0.12 which is less than correlation coefficient. Hence, there is significant relationship between EBIT and interest.

3. Coefficient of Correlation between EBIT and DPS

Shareholders get the dividend as return and EBIT is operating profit of the company. Here, correlation coefficient of EBIT and DPS has been presented of concerned banks to analyze whether there is positive or negative correlation between dividends and operating profit. Following table shows the relationship between these variables of sample banks. And to check the significance of these calculated correlation, P.E. is also presented, which is referred from appendix.

Table- 4.15

Coefficient of Correlation between EBIT and DPS

	Nepal SBI Bank	Everest Bank Ltd.	Bank of Kathmandu	Himalayan Bank Ltd.
r	0.012	0.45	0.95	0.24
r ²	0.20	0.90	0.902	0.058
P.E.	0.20	0.025	0.025	0.24
6P.E.	1.20	0.15	0.15	1.44

(As per schedule 3

In the above table, correlation coefficient of Nepal SBI bank is found to be 0.012, i.e. there is positive correlation between EBIT and DPS. The probable error 6(P.E.) is respected correlation is 1.5 which is greater than correlation coefficient. Hence, there is insignificant relationship between EBIT and DPS.

In case of Everest Bank Ltd, the correlation coefficient between EBIT and DPS is 0.45. i.e. there is positive correlation between interest and EBIT. The probable error 6(P.E.) is respected correlation is 1.20. Which is greater than correlation coefficient Hence, there is insignificant relationship between EBIT and DPS.

Similarly in case of Bank of Kathmandu, the correlation coefficient between EBIT and DPS is 0.95. It is positive and close to 1. The probable error 6(P.E.) is respected correlation is 0.15 which is less than correlation coefficient. Hence, there is significant relationship between EBIT and DPS

Similarly, in case of Himalaya Bank Ltd, the correlation coefficient between EBIT and DPS is 0.24. It is positive. The probable error 6(P.E.) is respected correlation is 1.44 which is greater than correlation coefficient. Hence, there of insignificant relationship between EBIT and DPS.

CHAPTER- 5

SUMMARY, CONCLUSION AND RECOMMENDATION

This is the concluding chapter of this study. This chapter is divided into three sections. Summary, Conclusion and Recommendations. In this chapter, we summarize the study in brief. In this last section of this chapter, some recommendations have given, which are useful to stakeholders and to concerned companies as well. They can use these recommendations to take some corrective actions to draw decisions.

5.1 SUMMARY

In this study to analyze about capital structure, four commercial banks have been chosen. These banks are Nepal SBI Bank, Everest bank, Bank of Kathmandu and Himalayan Bank Limited. All these banks are listed in NEPSE. To make the study more reliable, the whole study has been divided into five chapters. The summaries of each chapter are presented below.

First Chapter: First chapter starts with historical background of the study. In this chapter an introduction of banking industry in Nepal, introduction of the banks selected for the study, description of the capital structure is presented briefly. This study endeavors to evaluate capital structure of commercial banks with reference to Nepal SBI Bank, Everest Bank, Bank of Kathmandu and Himalayan Bank Limited. The main questions presented as the "focus of study" are what is the condition of capital structure of these commercial banks of Nepal? whether or not they are using an appropriate financial mix? If not, what may be the suggested to improve or to make appropriate capital structure? Does capital structure help to maximize the value of the firm in

the context of Nepalese firms? 'The statement of these problems' deals with the effect of the capital structure on the growth of the firm, the content to which the capital structure policy is followed by the commercial banks, and the main problems faced by the commercial banks in developing and implementing the capital structure.

The main objective of the study presented are evaluate the role of capital structure on the growth of the commercial banks in Nepal, to analyze the effectiveness and efficiency of capital structure of commercial banks of Nepal and to analyze the relationship of capital structure with variables such as earning per share, dividend per share and net worth.

Finally, 'significance of the study' and 'limitations of the study' are also presented in the first chapter.

Second Chapter: In this chapter various books, research studies and articles concerned in the capital structure have been reviewed and presented as the review of literature to make the concept of capital structure more clear. Capital structure theories such as NI approach, NOI approach, M-M approach and other theoretical approaches to establish approach capital structure are described in this chapter. Review of different Management Journal, articles as well as related Nepalese studies have been presented as well.

Third Chapter: In this chapter, the steps to adopt realistic study needed for the researches have been presented. The methodology, researcher can be use to get appropriate guidelines and knowledge about the various sequential steps to adopt a systematic analysis has been explained in this chapter. Most of data used in this study are secondary in nature that is annual reports

provided by concerned companies, seven years data are taken as samples years and are analyzed by using financial and statistical tools such as ratio analysis, capital structure, leverage analysis, correlation analysis etc. methods, which the study is going to use, are exhibited in this chapter.

Fourth Chapter: The data mentioned in the third chapter are presented and analyzed in this chapter using methods mentioned in the chapter third above such as ratios, capital structure analysis, leverage analysis, correlations and probable errors. Details calculations are presented in this chapter are shown as annexure which is presented after fifth chapter.

Fifth Chapter : In this chapter, summary of the study are presented in brief to understand the whole get about the study instantly after which conclusion of the study with recommendations are presented.

5.2 CONCLUSION:

In this study, comparison among concerned banks has been done taking data of these banks. To evaluate the capital structure different types of tools and techniques are used. Based on the major findings, conclusion of the study is presented here in this part of the study. The following conclusion can be drawn.

Under the study of ratio analysis, the long-term debt to total debt indicates what percentage of total debt is covered by long term debt of the firm. The long term ratio shows the long term position of NSBIL is stronger in comparison of EBL, BOKL and HBL. All of the sample banks have fluctuating trend of long term debt to total debts ratio. In average NSBIL has 41.26% of average long term debt to total debt ratio, which means that about 58.74% of the total debt is contributed by current liabilities. which

means that about 58.84% of the total debt is contributed by current liabilities. Similarly, EBL has average long term debt to total debt is 30.15%, likewise for BOKL average ratio is 26.23% and for HBL is 16.69%. Interest expenses is excess in more using of Long Term Debt, but it has low risk. Similarly using of excess current liabilities of high risk. Therefore proportion of using Long Term Debt indicates low risks and it is better. Under this assumption NSBIL has low risk in long term debt than HBL.

Long term debt to capital employed ratio highlights the portion of fund financed by long term debt in the capital employed by the firm. The total capital consists Long Term Debt and shareholder equity. The data shows NSBIL has the average ratio of 83.40% Similarly, EBL has the average ratio of 80.89%, similarly, BOKL has ratio of 76.69% and HBL has average ratio of 71.91%. We conclude that all the companies have appropriate ratio of long term debt to capital employed and among the four in average NSBIL employed more of the long term debt, but using of shareholder equity does not pay any interest. To achieve more operating profit bank used lower Long Term Debt. Under this assumption SBI bank could not achieved income in equal ratio to HBL. We can also conclude the firm has more risk which uses excess Long Term Debt

Total debt to total assets ratio expresses the relationship between creditors fund and total assets. All four selected banks have high debt to total assets ratio. Average ratio of NSBIL is 92.68%, EBL is 93.45%, BOKL is 92.68% and HBL is 94.10% which is the highest average ratio among three banks. The highest ratio 94.10% of HBL indicates 94.10% asses are purchased by creditors fund. Shareholders have only 5.90% contribution in the assets of the company. HBL has high risk among other three banks.

Debt to equity ratio is used to show the relationship between funds and owner's capital . Debt equity ratio shows in the HBL the creditors have 2.70% claims in the assets which is very lowest among the four banks. It also indicates that the company has lesser amount to be paid as interest on debt. In case of NSBIL, the claim of creditors is 5.18% which is highest. Similarly, in case of EBL the claim is 4.30% and in case of BOKL, the claim of shareholders is 3.33%.

Interest coverage ratio shows how many times the interest charges are covered by EBIT out of which they will be paid. The conclusion drawn by the study is the average interest coverage ratio of NSBIL is 1.53% which is lower among four banks. Average ratio of EBL is 1.80%, BOKL is 1.92 and HBL is 2.02 which is highest among four banks. It shows that all the sample banks are able to cover the interest but as the highest interest coverage ratio is better. No any banks among the them maintain the standard measurement. Interest coverage Ratio should be a least 7 times.

In regard of the comparative position of return on total assets the four commercial banks BOKL seems to have the highest return. 1.66% in comparison of 0.96% of NSBIL, 1.48% of EBL and 1.36% of HBL. ROA should be excess as much as possible. The comparative study among the banks, BOKL is better.

To measure the return earned by shareholders, return earned shareholders equity (ROSHE) is used. The study shows the increasing trend of ROSHE of four commercial banks. The average ratio of NSBIL is 13.49%. Similarly, the average ratio of EBL is 22.91%, in case of BOKL is 22.49% and HBL is

22.60% EBL has higher ROSHE but according to coefficient of variance HBL has more consistency in Return on Shareholder Equity.

Earning per share of an organization shows the strength of the share in the market. The overall trend of selected banks is in increasing trend. The average EPS of NSBIL Rs.23.04. Similarly, the average EPS of EBL is Rs.66.19, similarly, for BOKLs Rs.39.64 and the EPS of HBL is Rs.46.23

Dividend per share is the earning distributed to ordinary shareholders. The average DPS of NSBIL is Rs.9.17. Similarly, average DPS of EBL is Rs.25.923, Similarly, average DPS of BOKL is Rs.21.44 And average DPS of HBL is Rs.16.67

Similarly, under the capital structure analysis, the cost of overall capital for NSBIL has 2.56% on an overall capitalization rate which is lowest rate among four banks. Average overall capitalization rate of EBL is 4.12%. BOKL overall capitalization rate is 4.60% on an average which is highest rate among four banks. The average overall capitalization rate of HBL is 4.27%. NSBIL uses low cost sources in capital structures. Therefore, it is better among other three banks.

The equity capitalization rate of NSBIL is 2.91% on average which is lowest among four banks on an average cost of equity of EBL is 4.92%, BOKL has 5.58% which is highest and HBL has 3.88%.

Correlation coefficient and P.E. ratio shows of LTD and EPS explain about the relationship between long-term debt (LTD) and earning per share (EPS). If $>6PE$, it shows significant relation that means it has no any error, Correlation coefficient of EBL and BOKL are positive and $6PE$ of respected correlation is less than correlation coefficient. So, the relation is

significant. But, NSBIL and HBL are positive and 6PE of those banks are greater than correlation coefficient. So, the relation is insignificant between Long Term Debt and Earning per Share.

Likewise, in the cast of EBIT and interest the correlation coefficient of NSBIL, EBL, BOKL and HBL are positive and 6PE of respective correlation are less than correlation coefficient. So, the relation is significant between EBIT and interest.

In case of EBIT and DPS, the correlation coefficient of NSBIL, EBL and HBL are low degree positive and BOKL is high degree positive. 6PE of NSBIL, EBL, HBL are greater than correlation coefficient. So, the relationship is insignificant between EBIT and DPS, but in the case of BOKL, 6PE is less than correlation, so relation between EBIT and DPS is significant.

5.3 RECOMMENDATION:

In this section of the study, few points that can be helpful to stakeholders as well as to the company to are recommended based upon above calculations and drawn conclusions. These recommendation are guidelines which would be helpful in taking prompt and appropriate decision about capital structure. These recommendation are given below:

- i. First of all, the companies lack the theoretical as well as practical knowledge regarding the capital structure. They have not given significant attention to the capital structure matter. Capital structure is a serious matter. It affects EPS, value of the firm, cost of capital etc. So, it is recommended that these companies should follow the theoretical and practical aspects of the capital structure. Management

or give bit more attention in this matter and try to manage their activities accordingly.

- ii. The capital structure of four banks is highly leverage. The proportion of debt and equity capital should be decided keeping in mind the efforts of tax advantage and financial distress. The banks, when it is difficult to pay interest and principle, ultimately lead to liquidation or bankruptcy. For such, the bank should reduce the high use of debt capital.
- iii. Return ratio like: return on total assets, return on shareholders equity is slightly satisfactory in the selected banks, but NSBIL has lower ratio than other three banks. So, it is recommended to NSBIL bank to improve the situation.
- iv. All the banks suggested that try to reduce long term debt and increase to shareholder equity in future and balanced use of current liabilities which should not be exceed the current assets.
- v. Having geared up capital structure position and insufficient returns indicates the weak aspect of the banks. All the selected banks are suggested to use the resources into most profitable sector and be more concerned to get better return and be careful about their financial condition s that their returns would be depressed anymore.
- vi. Additionally, banks are required and recommended to expand assets and branches, which ultimately affect the banks- capital structure and expected to increase the profitability more than present. All the banks increase of total assets, number of bank branches and their volume of transactions.
- vii. It is visible that all the banks are granting significant role in the modern banking system to uplift the economical development of the

nation but they are not playing merchant banking role. Hence, selected banks are suggested to paly the role of financial intermediary and merchant banking like undertaking of securities, broker's development of capital, merchant and supportive role to the security exchange center which will consequently be helpful for the upliftment of the nation.

- viii. Nepalese shareholders are very much concerned about the payment of cash dividend bank rather than their financial statement. As such, banks are suggested to pay cash dividend consistently.
- ix. The banks should save continuity in providing both conceptual and practical training to the staff to enhance their knowledge, skill and competency level, they should remain consistently vigilant in enhancing their moral and motivation. The bank has to enhance effectiveness, efficiency and proper coordination of its departments tasks by continuously reviewing its structural design in accordance with the need of the changing time and situation.

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Financial Ratios

Long term debt to total debt ratio

Annexure A1

Nepal SBI Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	47.70	3,337.57	6,996.47
2006/07	42.90	3,352.27	7,813.77
2007/08	42.32	4,086.36	9,656.35
2008/09	52.40	6,316.17	12,052.46
2009/10	44.89	5,717.47	12,737.91
2010/11	37.66	5,940.63	15,772.82
2011/12	20.97	6,123.92	29,204.07
Mean	41.26		
Standard Deviation	9.31		
Coefficient of Variation	22.5		

Everest Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	35.57	2,794.94	7,439.38
2006/07	32.46	2,897.96	8,928.25
2007/08	33.60	3,703.96	11,022.51
2008/09	30.29	4,542.35	14,996.47
2009/10	29.29	5,926.66	20,231.05
2010/11	26.74	6,746.18	25,228.81
2011/12	21.12	7,349.99	34,713.27
Mean	30.15		
Standard Deviation	4.87		
Coefficient of Variation	16.16		

Bank of Kathmandu Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	29.00	1,990.93	6,865.68
2006/07	25.77	2,279.71	8,845.59
2007/08	31.51	2,878.86	9,136.39
2008/09	25.44	2,909.75	11,438.60
2009/10	23.82	3,237.17	13,588.12
2010/11	23.82	3,903.18	16,379.95
2011/12	24.25	4,674.62	18,754.45
Mean	26.23		
Standard Deviation	2.72		
Coefficient of Variation	10.33		

Himalayan Bank Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	16.34	3,781.33	23,134.84
2006/07	15.53	3,301.55	24,405.62
2007/08	17.25	4,717.66	27,329.59
2008/09	18.39	5,298.72	27,329.59
2009/10	16.81	5,408.72	28,813.63
2010/11	16.81	6,423.72	32,168.37
2011/12	18.71	6,377.13	36,926.81
Mean	17.27		
Standard Deviation	1.60		
Coefficient of Variation	9.54		

❖ Long term debt to capital employed ratio

Annexure A2
Nepal SBI Bank Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	85.42	3,337.57	3,907.42
2006/07	84.25	3,352.27	3,978.91
2007/08	85.57	4,086.36	4,775.38
2008/09	86.54	6,316.17	7,298.55
2009/10	83.09	5,717.47	6,880.76
2010/11	80.77	5,940.63	7,355.53
2011/12	78.15	6,123.92	7,836.53
Mean	83.40		
Standard Deviation	2.78		
Coefficient of Variation	3.333		

Everest bank Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	82.02	2,794.94	3,407.77
2006/07	80.99	2,897.96	3,578.28
2007/08	82.80	3,703.96	4,473.58
2008/09	82.51	4,542.35	5,506.16
2009/10	83.14	5,926.66	7,128.18
2010/11	77.83	6,746.18	8,667.18
2011/12	76.93	7,349.99	9,553.70
Mean	80.89		
Standard Deviation	2.30		
Coefficient of Variation	2.85		

**Bank of Kathmandu
(Amount in Millions)**

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	77.47	1,990.93	2,570.06
2006/07	77.79	2,279.71	2,930.45
2007/08	79.98	2,878.86	3,599.60
2008/09	77.60	2,909.75	3,749.48
2009/10	76.73	3,237.17	4,219.15
2010/11	74.41	3,903.18	5,245.25
2011/12	72.86	4,674.62	6,416.22
Mean	76.69		
Standard Deviation	2.18		
Coefficient of Variation	2.85		

**Himalayan Bank Ltd.
(Amount in Millions)**

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	78.05	3,781.33	4,844.46
2006/07	71.37	3,301.55	4,625.71
2007/08	75.36	4,714.66	6,256.41
2008/09	75.00	5,298.17	7,064.35
2009/10	71.59	5,408.72	7,555.22
2010/11	71.88	6,423.87	8,936.86
2011/12	67.15	6,377.13	9,497.02
Mean	72.91		
Standard Deviation	3.28		
Coefficient of Variation	4.49		

❖ **Total debt to total assets ratio**

Annexure A3
Nepal SBI Bank
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	92.47	6,996.47	7,566.32
2006/07	92.58	7,813.77	8,440.41
2007/08	93.34	9,656.35	10,345.37
2008/09	92.46	12,053.46	13,035.84
2009/10	91.63	12,737.91	13,91.20
2010/11	91.79	15,772.82	17,184.45
2011/12	94.46	29,204.07	30,916.68
Mean	92.68		
Standard Deviation	0.90		
Coefficient of Variation	0.97		

Everest Bank Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	92.39	7,439.38	8,052.21
2006/07	92.97	8,928.25	9,608.57
2007/08	93.47	11,022.51	11,792.13
2008/09	93.97	14,996.47	15,959.28
2009/10	94.39	20,231.05	21,432.57
2010/11	92.93	25,228.81	27,149.39
2011/12	94.03	34,713.27	36,917.10
Mean	93.45		
Standard Deviation	0.67		
Coefficient of Variation	0.72		

Bank of Kathmandu
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	92.22	8,865.68	7,444.81
2006/07	93.15	8,845.59	9,496.33
2007/08	92.69	9,136.39	9,857.13
2008/09	93.16	11,438.60	12,278.33
2009/10	93.26	13,5888.12	14,570.10
2010/11	92.43	16,379.95	17,722.02
2011/12	91.50	18,754.45	20,496.05
Mean	92.63		
Standard Deviation	0.60		
Coefficient of Variation	0.64		

Himalayan Bank
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	95.61	23,134.84	24,197.97
2006/07	94.85	24,405.62	25,729.78
2007/08	94.66	27,329.59	28,871.34
2008/09	94.22	28,813.63	30,579.81
2009/10	93.74	32,168.37	34,314.87
2010/11	93.18	34,344.63	36,857.62
2011/12	92.21	36,926.81	40,046.70
Mean	94.10		
Standard Deviation	1.05		
Coefficient of Variation	1.12		

❖ Debt to equity ratio

Annexure A4
Nepal SBI Bank Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	5.86	3,337.57	569.85
2006/07	5.35	3,352.27	626.64
2007/08	5.93	4,086.36	689.02
2008/09	6.43	6,316.17	982.38
2009/10	4.91	5,717.47	1,163.29
2010/11	4.20	5,940.63	1,414.65
2011/12	3.58	6,123.92	1,712.61
Mean	5.18		
Standard Deviation	0.94		
Coefficient of Variation	18.29		

Everest Bank Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	5.86	3,337.57	569.85
2006/07	5.35	3,352.27	626.64
2007/08	5.93	4,086.36	689.02
2008/09	6.43	6,316.17	982.38
2009/10	4.91	5,717.47	1,163.29
2010/11	4.20	5,940.63	1,414.65
2011/12	3.58	6,123.92	1,712.61
Mean	5.18		
Standard Deviation	0.94		
Coefficient of Variation	18.29		

Everest Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	4.56	2,794.74	612.83
2006/07	4.26	2,897.96	680.32
2007/08	4.81	3,703.96	769.62
2008/09	4.72	4,542.35	962.81
2009/10	4.93	5,926.66	1,201.52
2010/11	3.51	6,746.18	1,921.33
2011/12	3.34	7,349.99	2,203.71
Mean	4.30		
Standard Deviation	0.60		
Coefficient of Variation	13.75		

Bank of Kathmandu Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	3.44	1,990.93	579.13
2006/07	3.50	2,279.71	650.74
2007/08	3.99	2,878.86	720.74
2008/09	3.47	2,909.75	836.73
2009/10	3.30	3,237.17	981.98
2010/11	2.91	3,903.18	1,342.07
2011/12	2.68	4,674.62	1,741.60
Mean	3.33		
Standard Deviation	0.40		
Coefficient of Variation	11.88		

Himalayan Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	3.56	3,781.33	1,063.13
2006/07	2.49	3,301.55	1,324.16
2007/08	3.06	4,714.66	1,541.75
2008/09	3.00	5,298.17	1,766.18
2009/10	2.52	5,408.72	2,146.50
2010/11	2.56	6,423.87	2,512.99
2011/12	2.04	6,377.13	3,119.89
Mean	2.75		
Standard Deviation	0.46		
Coefficient of Variation	16.70		

❖ Interest coverage ratio

Annexure A5

Nepal SBI Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	1.24	360.87	291.82
2006/07	1.43	365.40	255.92
2007/08	1.48	383.62	258.43
2008/09	1.60	534.53	334.77
2009/10	1.84	756.85	412.26
2010/11	1.42	646.58	454.92
2011/12	1.73	1423.85	824.70
Mean	1.53		
Standard Deviation	0.19		
Coefficient of Variation	12.34		

Everest Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	1.44	443.53	307.64
2006/07	1.67	527.49	316.37
2007/08	1.84	552.29	299.57
2008/09	1.86	746.00	401.40
2009/10	1.88	971.88	517.17
2010/11	2.04	1291.29	632.61
2011/12	1.88	1904.14	1012.87
Mean	1.80		
Standard Deviation	0.18		
Coefficient of Variation	9.90		

Bank of Kathmandu Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	1.44	398.85	276.71
2006/07	1.64	470.95	286.30
2007/08	1.85	445.92	241.63
2008/09	1.98	609.37	308.16
2009/10	2.13	722.58	339.18
2010/11	2.26	945.45	417.54
2011/12	2.17	1224.37	563.11
Mean	1.92		
Standard Deviation	0.08		
Coefficient of Variation	4.01		

Himalayan Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Long term debt	Total debt
2005/06	1.65	914.15	554.13
2006/07	1.96	966.54	491.54
2007/08	2.05	1154.78	561.96
2008/09	2.14	1389.49	648.84
2009/10	1.91	1465.21	767.41
2010/11	2.16	1778.70	823.75
2011/12	2.24	2094.71	934.78
Mean	2.02		
Standard Deviation	0.18		
Coefficient of Variation	9.09		

**EBIT = Operating income + return of contingent loss fund +non
Operating income - operating expenses - salary and bonus –
non Operating expenses - employees provident fund**

❖ **Return on total assets**

Annexure A6
Nepal SBI Bank Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Net Profit	Total assets
2005/06	0.64	48.75	7566.32
2006/07	0.72	60.85	8440.41
2007/08	0.55	57.39	10345.37
2008/09	0.90	116.76	13035.84
2009/10	1.82	254.97	13901.84
2010/11	0.53	91.40	17187.45
2011/12	1.53	472.59	30916.68
Mean	0.96		
Standard Deviation	0.48		
Coefficient of Variation	49.51		

Everest Bank Ltd.
(Amount in Millions)

Fiscal Year	Ratio (%)	Net Profit	Total assets
2005/06	1.17	94.18	8052.21
2006/07	1.49	143.57	9608.57
2007/08	1.45	170.59	11792.13
2008/09	1.49	237.29	15959.28
2009/10	1.38	296.41	21432.57
2010/11	1.66	451.22	27149.39
2011/12	1.73	638.74	36917.10
Mean	1.48		
Standard Deviation	0.17		
Coefficient of Variation	11.73		

Bank of Kathmandu Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Net Profit	Total assets
2005/06	1.10	82.13	7444.81
2006/07	1.34	127.48	9496.33
2007/08	1.42	140.13	9857.13
2008/09	1.65	202.44	12278.33
2009/10	1.80	262.38	14570.10
2010/11	2.04	361.52	17722.02
2011/12	2.25	461.73	20496.05
Mean	1.66		
Standard Deviation	0.38		
Coefficient of Variation	22.61		

Himalayan Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Net Profit	Total assets
2005/06	0.88	212.12	24197.97
2006/07	1.02	263.06	25729.78
2007/08	1.07	308.28	28871.34
2008/09	1.50	457.46	30579.81
2009/10	1.43	491.82	34314.87
2010/11	1.73	635.87	36857.62
2011/12	1.88	752.83	40046.70
Mean	1.36		
Standard Deviation	0.35		
Coefficient of Variation	26.10		

❖ **Return on shareholder's equity**

Annexure 47

Nepal SBI Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Net Profit	Total assets
2005/06	8.55	48.75	569.85
2006/07	9.71	60.85	626.64
2007/08	8.33	57.39	689.02
2008/09	11.88	116.76	982.38
2009/10	21.92	254.97	1163.29
2010/11	6.46	91.40	1414.65
2011/12	27.59	472.59	1712.61
Mean	13.49		
Standard Deviation	7.44		
Coefficient of Variation	55.13		

Everest Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Net Profit	Total assets
2005/06	15.37	94.18	612.83
2006/07	21.10	143.57	680.32
2007/08	22.19	170.81	769.62
2008/09	24.65	237.29	962.81
2009/10	24.67	296.41	1201.52
2010/11	23.48	451.22	1921.33
2011/12	28.89	638.74	2203.71
Mean	22.91		
Standard Deviation	3.83		
Coefficient of Variation	16.73		

Bank of Kathmandu Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Net Profit	Total assets
2005/06	14.18	82.13	579.13
2006/07	19.59	127.48	650.74
2007/08	19.36	140.13	720.74
2008/09	21.11	202.44	839.73
2009/10	26.72	262.38	981.98
2010/11	26.94	361.52	1342.07
2011/12	26.51	461.73	1741.60
Mean	22.49		
Standard Deviation	4.53		
Coefficient of Variation	20.15		

Himalayan Bank Ltd.

(Amount in Millions)

Fiscal Year	Ratio (%)	Net Profit	Total assets
2005/06	19.95	212.12	1063.13
2006/07	19.87	263.06	1324.16
2007/08	20.00	308.28	1541.75
2008/09	25.90	457.46	1766.18
2009/10	22.91	491.82	2146.50
2010/11	25.30	635.87	2512.99
2011/12	24.23	752.83	3119.89
Mean	22.60		
Standard Deviation	2.45		
Coefficient of Variation	10.86		

❖ **Earning per share**

Annexure A8
Nepal SBI Bank Ltd.

Fiscal Year	EPS	Net Profit	Total assets
2005/06	11.67	48,750,000	4,251,600
2006/07	14.25	60,850,000	4,268,800
2007/08	13.29	57,390,000	43,187,000
2008/09	18.24	116,760,000	6,402,400
2009/10	39.36	254,970,000	4,478,000
2010/11	10.45	91,400,000	8,745,300
2011/12	54.04	472,590,000	8,745,300
Mean	23.04		
Standard Deviation	15.63		
Coefficient of Variation	67.85		

Everest Bank Ltd.

Fiscal Year	EPS	Net Profit	Total assets
2005/06	29.90	94,180,000	3,150,000
2006/07	45.58	143,570,000	3,150,000
2007/08	54.23	170,810,000	3,150,000
2008/09	62.78	237,290,000	3,780,000
2009/10	78.42	296,410,000	3,780,000
2010/11	91.82	451,220,000	4,914,000
2011/12	99.99	638,740,000	6,388,000
Mean	66.10		
Standard Deviation	23.29		
Coefficient of Variation	35.24		

Bank of Kathmandu Ltd.

Fiscal Year	EPS	Net Profit	Total assets
2005/06	17.93	82,130,000	4,635,800
2006/07	27.50	127,480,000	4,635,800
2007/08	30.23	140,130,000	4,635,800
2008/09	43.67	202,440,000	4,635,800
2009/10	43.50	262,380,000	6,031,400
2010/11	59.94	361,520,000	6,031,400
2011/12	54.68	461,730,000	8,444,000
Mean	39.64		
Standard Deviation	14.02		
Coefficient of Variation	35.38		

Himalayan Bank

Fiscal Year	EPS	Net Profit	Total assets
2005/06	39.56	212,120,000	5,362,500
2006/07	40.88	263,060,000	6,435,000
2007/08	39.92	308,280,000	7,722,000
2008/09	56.42	457,460,000	8,108,200
2009/10	48.53	491,820,000	10,135,100
2010/11	58.28	635,870,000	12,162,100
2011/12	47.05	752,830,000	16,000,100
Mean	46.38		
Standard Deviation	6.08		
Coefficient of Variation	13.12		

❖ Dividend Per Share

Annexure A9**Nepal SBI Bank Ltd.**

Fiscal Year	DPS	Total Dividend to Shareholders	No. of Share outstanding
2005/06	8.0	34,020,000	4,251,600
2006/07	0.0	0.0	4,268,800
2007/08	0.0	0.0	4,318,700
2008/09	5.0	32,010,000	6,402,400
2009/10	12.59	81,550,000	6,478,00
2010/11	7.10	62,120,000	8,745,300
2011/12	31.48	275,270,000	8,745,300
Mean	9.17		
Standard Deviation	10.0		
Coefficient of Variation	109.05		

Everest Bank Ltd.

Fiscal Year	DPS	Total Dividend to Shareholders	No. of Share outstanding
2005/06	20.00	63,000,00	3,150,000
2006/07	20.00	63,000,000	3,150,000
2007/08	21.05	66,310,000	3,150,000
2008/09	25.00	94,500,000	3,780,000
2009/10	41.93	158,500,000	3,780,000
2010/11	21.93	107,770,000	4,914,000
2011/12	31.58	201,730,000	6,388,000
Mean	25.93		
Standard Deviation	7.55		
Coefficient of Variation	29.11		

Bank of Kathmandu Ltd.

Fiscal Year	DPS	Total Dividend to Shareholders	No. of Share outstanding
2005/06	5.00	23,180,000	4,635,800
2006/07	12.05	55,860,000	4,635,800
2007/08	15.00	69,540,000	4,635,800
2008/09	18.00	83,440,000	4,635,800
2009/10	20.00	120,630,000	6,031,400
2010/11	40.00	241,260,000	6,031,400
2011/12	40.00	337,760,000	8,444,000
Mean	21.44		
Standard Deviation	12.55		
Coefficient of Variation	58.54		

Himalayan Bank Ltd.

Fiscal Year	DPS	Total Dividend to Shareholders	No. of Share outstanding
2005/06	20.00	107,250,000	5,362,500
2006/07	16.67	107,250,000	6,435,000
2007/08	16.67	128,700,000	7,722,000
2008/09	4.76	38,610,000	8,108,200
2009/10	20.00	202,700,000	10,135,100
2010/11	16.67	202,700,000	12,162,100
2011/12	23.99	383,790,000	16,000,100
Mean	16.97		
Standard Deviation	5.57		
Coefficient of Variation	32.81		

Capital Structure Analysis

❖ **Value of the firm**

Annexure A10**Nepal SBI Bank Ltd.**

Fiscal Year	No. of Share	Closing Marketing price	Marketing value of equity	value of debt	value of the firm
2005/06	4,251,600	256	1,088,409,600	3,337,570,000	4,425,979,600
2006/07	4,268,800	307	1,310,521,600	3,352,270,000	4,662,791,600
2007/08	4,318,700	335	1,446,764,500	4,086,360,000	5,533,124,500
2008/09	6,402,400	612	3,918,268,800	6,316,170,000	10,234,438,800
2009/10	6,478,000	1176	7,618,128,000	5,711,7470,000	13,335,598,000
2010/11	8,745,300	1511	13,214,148,300	5,940,630,000	19,154,778,300
2011/12	8,745,300	1900	16,616,070,000	6,123,920,000	22,739,990,000

Everest bank Ltd.

Fiscal Year	No. of Share	Closing Marketing price	Marketing value of equity	value of debt	value of the firm
2005/06	3,150,000	445	1,401,750,000	2,794,740,000	4,196,490,000
2006/07	3,150,000	680	2,142,000,000	2,897,960,000	5,039,960,000
2007/08	3,150,000	870	2,740,500,000	3,703,960,000	6,444,460,000
2008/09	3,780,000	1379	5,212,620,000	4,542,350,000	9,754,970,000
2009/10	3,780,000	2430	9,185,400,000	5,926,660,000	15,112,060,000
2010/11	4,914,000	3132	15,390,648,000	6,746,180,000	22,136,828,000
2011/12	6,388,000	2455	15,682,540,000	7,349,990,000	23,032,530,000

Bank of Kathmandu Ltd.

Fiscal Year	No. of Share	Closing Marketing price	Marketing value of equity	value of debt	value of the firm
2005/06	4,635,800	198	917,888,400	1,990,930,000	2,908,818,400
2006/07	4,635,800	295	1367,561,000	2,279,710,000	3,647,271,000
2007/08	4,635,800	430	1993,394,000	2,878,860,000	4,872,254,000
2008/09	4,635,800	850	3940,430,000	2,909,750,000	6,850,180,000
2009/10	6,031,400	1375	8293,175,000	3,237,170,000	11,530,345,000
2010/11	6,031,400	2350	14173,790,000	3,903,180,000	18,076,970,00.
2011/12	8,444,000	1825	15410,300,000	4,674,620,000	20,084,920,000

Himalayan Bank Ltd.

Fiscal Year	No. of Share	Closing Marketing price	Marketing value of equity	value of debt	value of the firm
2005/06	5,362,500	836	8,483,050,000	3781330000	8,264,380,000
2006/07	6,435,500	840	5,405,400,000	3301550000	8,706,950,000
2007/08	7,722,000	920	7,104,240,000	47146960000	11,818,900,000
2008/09	8,108,200	1100	8,919,020,000	5298170000	14,217,190,000
2009/10	10,135,100	1740	17,635,074,000	5408720000	23,043,794,000
2010/11	12,162,100	1980	24,080,958,000	6423870000	30,504,828,000
2011/12	16,000,100	1760	28,160,176,000	6,377,130,000	34,537,306,000

❖ **Cost of overall capitalization rate (KO)**

Annexure A11
Nepal SBI Bank Ltd.

(Rs In Millions)

Fiscal Year	KO	Operating Profit	Value of the firm
2005/06	2.09	92.33	4,425.98
2006/07	2.94	137.30	4,662.79
2007/08	2.77	153.06	5,533.12
2008/09	2.35	240.43	10,234.43
2009/10	2.98	394.15	13,335.60
2010/11	2.0	383.11	19,154.78
2011/12	2.82	641.03	22,739.99
Mean	2.56		
Standard Deviation	0.38		
Coefficient of Variation	14.85		

Everest bank Ltd.

(Rs In Millions)

Fiscal Year	KO	Operating Profit	Value of the firm
2005/06	4.03	169.23	4,196.49
2006/07	5.0	252.95	5,039.96
2007/08	4.64	298.95	6,444.46
2008/09	4.12	401.44	9,754.97
2009/10	3.48	526.35	15,112.06
2010/11	3.34	739.02	22,136.83
2011/12	4.26	980.99	23,032.53
Mean	4.12		
Standard Deviation	0.55		
Coefficient of Variation	13.26		

Bank of Kathmandu

(Rs In Millions)

Fiscal Year	KO	Operating Profit	Value of the firm
2005/06	5.16	150.15	2908.82
2006/07	5.77	210.48	2647.27
2007/08	5.10	248.71	4872.27
2008/09	5.20	355.95	6850.18
2009/10	3.94	454.23	11530.18
2010/11	3.46	625.29	18076.97
2011/12	3.60	722.49	20084.92
Mean	4.60		
Standard Deviation	0.85		
Coefficient of Variation	18.42		

Himalayan Bank Ltd.

(Rs In Millions)

Fiscal Year	KO	Operating Profit	Value of the firm
2005/06	4.71	389.26	8,264.38
2006/07	5.46	475.0	8,706.95
2007/08	5.02	592.82	11,818.90
2008/09	5.21	740.65	14,217.19
2009/10	2.99	688.80	23,043.79
2010/11	3.13	954.95	30,504.83
2011/12	3.36	1159.93	34,537.31
Mean	4.27		
Standard Deviation	0.99		
Coefficient of Variation	23.12		

❖ Cost of Equity

Annexure A12
Nepal SBI Bank Ltd.

(Rs In Million)

Fiscal Year	KO	Operating Profit	Value of the firm
2005/06	4.48	48.75	1,088.41
2006/07	4.64	60.85	1,310.52
2007/08	3.97	57.39	1,446.76
2008/09	2.98	116.76	3,918.27
2009/10	3.35	254.97	7,618.13
2010/11	0.69	91.40	13,214.15
2011/12	0.28	472.59	16,616.07
Mean	2.91		
Standard Deviation	1.63		
Coefficient of Variation	56.05		

Everest bank Ltd.

(Rs In Millions)

Fiscal Year	KO	Operating Profit	Value of the firm
2005/06	6.72	94.19	1,401.75
2006/07	6.70	143.57	2,142.0
2007/08	6.23	170.59	2,740.50
2008/09	4.55	239.29	5,212.62
2009/10	3.23	296.41	9,185.40
2010/11	2.93	451.22	15,390.65
2011/12	4.07	638.74	15,682.54
Mean	4.92		
Standard Deviation	1.50		
Coefficient of Variation	30.54		

Bank of Kathmandu Ltd.

(Rs In Millions)

Fiscal Year	KO	Operating Profit	Value of the firm
2005/06	8.95	82.13	917.89
2006/07	9.32	127.48	1,367.56
2007/08	7.00	140.13	1,993.39
2008/09	5.14	202.44	3,940.43
2009/10	3.16	262.38	8,293.18
2010/11	2.55	361.52	14,173.79
2011/12	2.96	461.73	15,410.30
Mean	5.58		
Standard Deviation	2.66		
Coefficient of Variation	47.64		

Himalayan Bank Ltd.

(Rs In Millions)

Fiscal Year	KO	Operating Profit	Value of the firm
2005/06	4.73	212.12	4,483.05
2006/07	4.87	263.06	5,405.40
2007/08	4.34	308.28	7,104.24
2008/09	5.13	457.46	8,919.02
2009/10	2.79	491.82	17,635.07
2010/11	2.64	635.87	24,080.96
2011/12	2.67	752.83	28,160.18
Mean	3.88		
Standard Deviation	1.05		
Coefficient of Variation	26.97		

Leverage Analysis

❖ Degree of Financial Leverage

Annexure A13
Nepal SBI Bank Ltd.

(Rs in Million)

Fiscal Year	DFL	EBIT	EBT
2005/06	5.23	36.87	69.05
2006/07	3.34	365.40	109.53
2007/08	3.06	383.62	125.19
2008/09	2.68	534.53	199.52
2009/10	2.20	756.85	344.65
2010/11	3.37	646.85	191.66
2011/12	2.38	1,423.95	599.25
Mean	3.18		
Standard Deviation	0.94		
Coefficient of Variation	29.43		

Everest bank Ltd.

(Rs in Millions)

Fiscal Year	DFL	EBIT	EBT
2005/06	3.26	443.53	135.90
2006/07	2.50	527.49	211.12
2007/08	2.19	552.29	252.90
2008/09	2.16	746.00	344.60
2009/10	2.14	971.88	454.71
2010/11	1.96	1291.29	658.68
2011/12	2.14	1904.17	891.32
Mean	2.34		
Standard Deviation	0.41		
Coefficient of Variation	17.33		

Bank of Kathmandu Ltd.

(Rs. In Millions)

Fiscal Year	DFL	EBIT	EBT
2005/06	3.27	398.85	122.14
2006/07	2.55	470.95	184.65
2007/08	2.18	445.92	204.89
2008/09	2.02	609.37	301.21
2009/10	1.88	722.58	383.40
2010/11	1.79	945.45	527.91
2011/12	1.85	1224.37	661.26
Mean	2.22		
Standard Deviation	0.49		
Coefficient of Variation	22.14		

Himalayan Bank Ltd.

(Rs In Millions)

Fiscal Year	DFL	EBIT	EBT
2005/06	2.54	914.15	360.02
2006/07	2.30	966.54	420.58
2007/08	2.21	1154.78	522.55
2008/09	2.07	1389.49	672.40
2009/10	2.04	1465.21	717.40
2010/11	1.87	1778.70	948.84
2011/12	1.96	2094.24	1,066.60
Mean	2.14		
Standard Deviation	0.21		
Coefficient of Variation	9.84		