CHAPTER - I

INTRODUCTION

1.1 Background of the Study

Banking sector plays a vital role in economic development of every country. Without banking industry, development of a country is impossible. An active banking industry can change the economical pattern of the country as a whole.

A bank is the institutions which accepts deposits from the public and inturn advances loans by creating credit. In other words, banks are the institutions offering deposits subject to withdrawal on demand and making loans of a business nature.

Bank generates income by different ways; they collect money from savers and lend it to the borrowers by charging more to lending and less to savings. Bank also generates income by providing other services for which they charge fees and commissions.

The history of banking in Nepal starts from the establishment of Nepal Bank Limited in 1937 A.D. Before the inception of this bank, the traditional ways of banking seemed to be in existence. Still today we find the local merchants supplying the fund to the peasants, traders and intermediaries on the basis of so- called ' Tamsuk' in the society, which have no registration. The premise of which is the trust and faith. Even though a lot of commercial banks have come into existence, nonetheless the role of non- banking system is equally significant particularly in the rural areas.

Any firm or organization depends on the proper management of capital structure. The term Capital Structure refers to the relationship between the various long term forms of financing such as debentures, long term debt, preference share capital and equity share capital including reserves and surpluses. Financing the firm's assets is very crucial problem in every business and as a rule there should be a proper mix of debt and equity capital financing the firms' assets. A prudent financial manager should use proper mixture of the fund so that his/her return on capital is the maximum. Return in financial term indicates the increase in the wealth of the investor.

Capital structure management concentrates on the overall cost of capital, total value of the firm and it earning per share. Theoretically, a financial manager should plan an optimum capital structure for his/her company. The optimum capital structure is obtained when the market value per share is the maximum. Optimum capital structure refers to the combination of debt, preferred stock and equity that maximize the total value of the firm, earning per share and minimizes the cost of capital. Though the capital structure can not affect the total earning of the firm, it greatly affects the earning available to equity holders. Managing the capital structure of a firm is an important aspect of corporate finance. The main issue with respect to source of financing is concerned with the nature of relationship between the debt- equity ratio and the market value of the firm.

Capital structure is concerned with qualitative aspects. To meet their requirements, companies generally issue three types of securities such as: debentures, equity shares and preference shares. A decision about the proportion among these types of securities refers to the capital structure of an enterprise. Different authors have defined the capital structure in their own way, but for the common man point of view we can say that, for the company to run funds are needed, if funds are inadequate and are not managed properly the entire organization will suffer badly.

Massive mobilization of country's domestic resources and their investment in productive sector is the key factors for the progress and prosperity of any country. So, for the bank specifically the commercial banks should formulate the sound capital structure management policies that automatically contribute to the economic development/ growth of a country.

Capital structure affects the earning per share and value of the firm but not the operating income of the firm. Optimum capital structure is the most essential tool for the success of any organization. This study analyzes the capital structures with the help of various parameters relating to balance sheet, income and expenditure statement and other related parameters. Various financial tools are used to evaluate the appropriateness of optimal capital structure used by the firm. So to measure the contribution Siddhartha Bank Ltd. and Laxmi Bank Ltd. in the national development

this study focuses to evaluate the capital structure of Siddhartha Bank Ltd. and Laxmi Bank Ltd.

1.2 Introduction of Banks Under Study

1.2.1 Siddhartha Bank Limited (SBL)

Siddhartha Bank Limited (SBL) commenced operations in 2002. The bank was promoted by a group of highly reputed Nepalese dignitaries having wide commercial experience. It provides a full range of commercial banking services through their nineteen branches established in New Road, Tripureshwor, Old Baneswor, Thamel, Hattisar, Patan, Birgunj, Biratnagar, Pokhara, Damak, Narayanghat, Tikapur, Mahendranagar, Dhangadhi, Bhairahawa, Butwal, Tulsipur, Ghorahi

Table No. 1.1

The present capital structure of SBL

Share Structure	**Amount Rs. (in million)**
Authorized capital	1000
Issued capital	800
Paid up capital (600000 shares 100 each full paid)	600

Source: Annual Report of 2008/09

Laxmi Bank Limited(LBL)

Laxmi Bank Limited was incorporated in April 2002 as a commercial bank. The current shareholding constitutes of promoters holding 55.42%, Citizen Investment Trust holding 9.02% and the general public holding 35.56%. Promoters represent Nepal's leading businesses families with diversified business interest. The bank's shares are listed and actively traded in the Nepal Stock Exchange.

Laxmi Bank has grown with branches in Hattisar, Pokhara, Birgunj, Banepa, Pokhara Industrial Area, Biartnagar, Narayanghat, Pulchowk, Teku, New Road, New Baneswor, Janakpur, Damak, Bhatbhateni, Maharajgunj, Itahari, Bhairahawa, Lagankhel, Parsa, Nepalgunj, Butwal and Sukedhara.

Table No. 1.2

The present capital structure of LBL

Share Structure	**Amount Rs. (in million)**
Authorized capital	1000
Issued capital	800
Paid up capital (729700 shares 100 each full paid)	729.70

Source: Annual Report of 2008/09

1.3 Statement of the Problem

Although banking industry in Nepal is making remarkable progress and growth it's not without the problems. At the present context the main problems faced by the business sector as well as banking sector is the unstable political situation and poor economic growth of the country.

But besides these common problems another problem faced by the banking industry is the lack of optimal structure in the commercial banks. The success and prosperity of a bank relies heavily on the maximization of the wealth of the shareholders return on equity. In Nepalese banks, the capital structure is not proportionate which in turn affects the value maximization of the bank.

The present study focuses on the existing capital structure management of two banks. More specifically this study seeks to solve the answer of the following questions.

I. What is the process, composition of capital structure of Siddhartha Bank Ltd. and Laxmi Bank Limited?

II. What is the repationship of the capital structure with various important variables sush as Earning Per Share, Dividend Per Share & Net Worth of Siddhartha Bank Land Laxmi Bank Ltd.?

III. What steps should be taken to improve the capital structure system in Siddhartha Bank Ltd. & Laxmi Bank Ltd ?

1.4 Objectives of the Study

The main objective of this study is to analyze the capital structure and its affect on the risk and returns of the sampled commercial banks in the context of Nepal. The following are the specific objectives of the study.

I. To analyze the composition of capital structure of the Siddhartha Bank Ltd. & Laxmi Bank Ltd.
II. To analyze the relationship of the capital structure with various important variables such as Earning per Share, Dividend per share & Net Worth of Siddhartha Bank Ltd. & Laxmi Bank Ltd.
III. To provide suggestion and recommendation on the basis of analysis to improve the financial weakness of Siddhartha Bank Ltd. & Laxmi Bank Ltd.

1.5 Significance of the Study

Capital structure has become the vital and important tool in the field of managerial decisions. Its study will very useful to decision maker and further researcher. The financial institutions are more concerned with the firm's long term financial strength. To judge the long term financial position of firm's capital structure is worthy to analysis. Capital structure analysis would help to indicate and to follow the appropriate mix of debt and owners equity in financing the firm's assets. A firm having good return and efficient management is considered to be better and brighter in future. Therefore, to these significances on account, this study on behalf of firm's capital structure is justified as a specific subject matter.

1.6 Limitations of the Study

There are limitations, which we can generalize, e.g. inadequate coverage of industries, period taken & reliability of statistical tools used and other variables. This study is simply partial requirement of MBS program. So, this study will be limited by following data.

I. Only secondary data analyzed to interpret the results emerging from decision so the results depend on reliability of secondary data.
II. The study period only covers fiscal years beginning 2061/62 to 2065/2066.
III. There are many factors that are including in capital structure of bank. However only those factors related with comparative capital structure will be taken in consideration in this study.

1.7 Organization of the Study

The whole study will be divided into 5 chapters. The titles of the each chapter will be as follows:

Chapter 1: Introduction

The first introduction chapter will be dealt with the introductory framework of the study. This will include background, history, objectives of study, problem of study, significance of study, Limitation of the study and Organization of the study itself.

Chapter Two: Review of Literature

This chapter includes the review of relevant studies, journals and books and unpublished dissertations related to the study have been reviewed.

Chapter Three: Research Methodology

It contains the presentation of how the study is done or the research methodologies. For this purpose, various financial tools and statistical tools are defined. These will be used for the analysis of the presented data.

Chapter Four: Presentation and Analysis of Data

It is the main part of the study; presentation and analysis of relevant data are included in it according to the objective of the study.

Chapter Five: Summary, Conclusion and Recommendation

It contains the summary of the study, findings, conclusions and recommendation. Recommendation is given on the basis of the data analysis and findings drawn from the analysis.

CHAPTER - II

REVIEW OF LITERATURE

This chapter deals with review of literature. Review of literature means reviewing research studies or other relevant propositions in the related area of the study so that all the past studies, their conclusions and deficiencies may be known and further study can be conducted.

In this section related literature has been reviewed thoroughly. This chapter includes the review of underlying literature from textbooks, journals, reports and previous thesis. The main objectives of this chapter are justified this research work and to show that need of current study on rational basis. This chapter tries to clarify the conceptual and theoretical concept regarding the definition of capital structure, theories of capital structure, determinant of capital structure, review of literature from reports and review of previous thesis. Thesis and journal provides valuable dimension for the research. The review of relevant literature has been categorizes in the following headings.

- Conceptual Review
- Review of Related studies

2.1 Conceptual Review

2.1.1 Concept of Capital Structure

Capital structure refers to the mix of long- term funds such as debenture, long-term debt, preference share capital and equity share capital. If companies do not plan their capital structure, they may face difficulties in raising funds to finance their activities. Thus, the firms can not achieve their goal. The capital structure decision affects the overall cost of capital, total value of the firm and earning per share. The financial manager should plan optimal capital. The optimal structure refers the combination of debt, preferred stock and equity, which maximize value of the firm and EPS and

minimize the cost of capital. Thus, the capital structure does not affect the total operating earning of a firm but it affects the earning per share and value of the firm.

"Capital structure is the permanent financing of the firm, represented primarily long-term debt, preferred stock and common equity, but excluding of all short- term credit." (Weston and Brigham, 1992: 555)

"Capital structure should not be confused with "capitalization". Capitalization is a quantities aspect of financial planning as it refers to the total amount of securities issued by company, while capital structure is concerned with qualitative aspect as it refers to the kings of securities and the proportionate amounts that make up capitalization. Capitalization = total of all types of long- term capital structure = proportions of all types of long term capital, financial structure = propositions of all types of long- term and short term capital. (Upadhaya, 1995: 799)

As earlier stated, the financial or capital structure decision is a significant managerial decision as it influences the shareholder's return and risk. Consequently, when ever funds have to be raised to finance in investment capital structure decision involved. (Van Horne, 1991: 10)

The term capital structure refers to the proportion of debt equity capital. "A company can finance it's investment by variety of sources, such as debt, preference share capital and common share capital, including reserves and surpluses." (Pandey, 1999: 204)

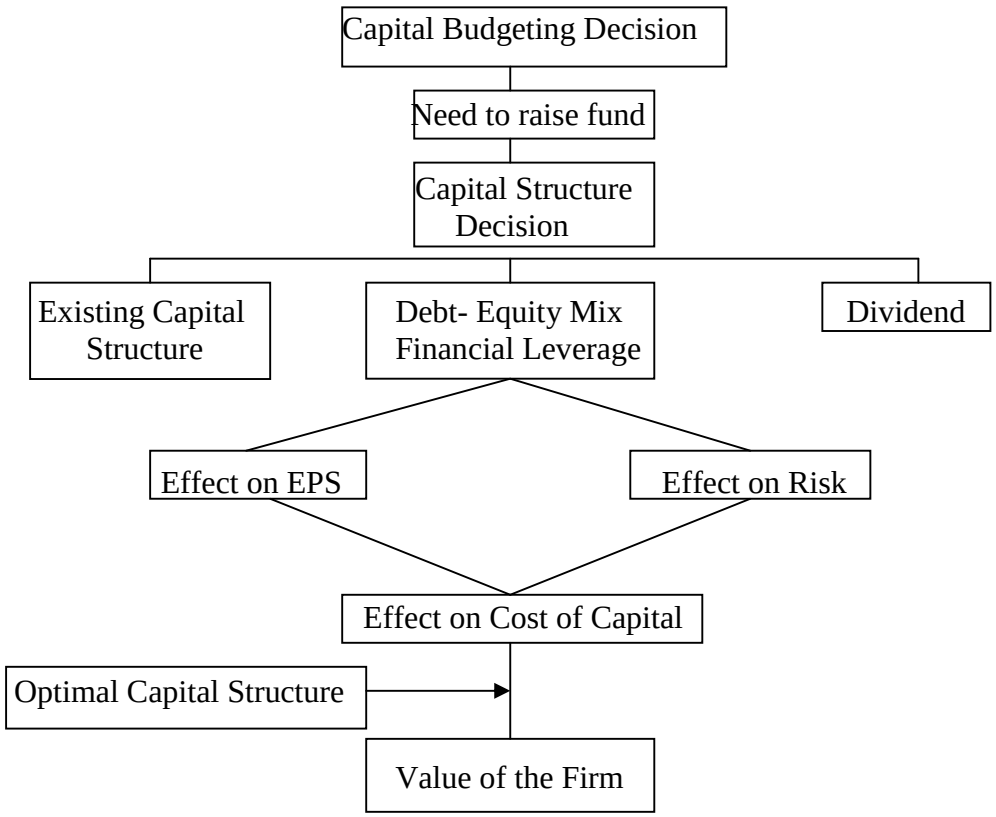
Capital structure known as financial play refers to the composition of long- term debt, preference share capital and equity share including reserve and surplus. The objective is to assess the capital structure of selected Nepalese commercial banks in terms of debt and equity as well as determination of bank's financial position.

The basic pattern of capital structure can be simple or complex. A simple capital structure consists of equity share and preference shares. But a complex capital structure consists of multi securities as equity shares, preference shares, debenture, bonds etc.

The capital structure has many relevant dimensions. The financing mix is one of the other dimensions involve the investment decisions of the firm and optimal use of leverage, within the constraints imposed by the internal and external environmental conditions. These conditions, in turn affect the decision of the firm with respect to the timing of investment and financing transactions as well as the acceptable levels of risk and liquidity. Capital structure can be dealt with the three different levels of complexity.

Figure No. 2.1

The process of capital structure



(*Source: Pandey, I.M. Financial Management, Vikas Publishing House, 2004*)

According to the above capital structure decision chart demand for funds generates a new capital structure, since a decision has to be made as to the quality and forms of financing; this decision will involve an analyzing of the existing capital structure and the factors which will govern the decision at present. The dividend decision bearing on the capital structure may affect its debt equity mix. The debt equity mix has

implications for the shareholders earning and risk, which in tern will affect the cost of capital structure. The important categories are:

1. Common Stock
2. Debenture
3. Retained Earning

2.1.2 Theories of Capital Structure

Capital structure is an important subject, especially for firms. A bad capital structure is more expensive than good capital structure.

Firms raise investment funds in number of different ways. A firm's mix of these different sources of capital is referred to as its capital structure.

Basically, the theories of capital structure are distinguished into six different groups:

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

2.1.2.1 Traditional Theory

The first theory is called the "traditional theory" supporters of this theory believe that the lowest weighted average cost of capital (WACC) will maximize the firm's market value. This means the existence of an optimum relation between debts and equity but it is very difficult to reach that point. (Gitman, 1998: 82)

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

2.1.2.2 Modigliani- Miller Theory

In 1958, two prominent financial researchers, Franco Modigliani and Merton Miller (MM), showed that under certain assumptions, a firm's overall cost of capital, and therefore, its value is independent of the capital structure. (Van Horne 1995 :111)

The Modigliani- Miller theorem states that it the capital structure decision has no effect on the cash flows generated by a firm, the decision also will have no effect in the absence of transaction costs on the total value of the firms debt and equity. This means that there is no relationship between a firm's market value and the capital structure. Profitability of firm's activities is the only factor that determines the market value.

This theory is based on the perfect capital market. The only market imperfections they admit are corporate taxes. (Van Horne, 1995:112)

The assumptions of the Modigliani- Miller (1998) theorem are:

1) Capital markets are perfect.
2) Information is free of costs and widely available.
3) There are no transaction costs of buying and selling securities.
4) All investors behave rationally and have homogeneous expectations of a firm's earnings.
5) Every firm has perpetual flows of money with equal time values.
6) All investors can borrow or lend at the same time.
7) There are no personal or corporate taxes.

2.1.2.3 Trade off Theory

The third theory is called trade off theory. The trade off between the costs and return of debt financing determines the optimum debt ratio. Firms consider this ratio as a target debt ratio, because this ratio will maximize the market value of the firm corporation. Myers assumes that firms need to adapt their capital structure to reach that ratio. But an adaptation of the capital structure needs time and costs money.

Therefore, it is possible that present temporary debt ratios differ from the target ratios. (Barger, 1997:145)

Or as Myers formulated it: "A static trade off framework in which the firm is viewed as setting debt to value ratio and moving gradually towards it in much the same way that a firm adjusts dividend to move towards a target payout ratio" (Myers, 1997:576)

2.1.2.4 Free Cash Flow Theory

In the contrary of the trade off theory, in which a firm strives after a maximization of the market value, the free cash flow theory presumes that there are enormous conflicts of interest between shareholders and stakeholders. This implies that manager's decisions don't always maximize the market value of the firm. (Jensen, 1995:324)

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

2.1.2.5 Pecking Order Theory

Pecking order is also known as a ladder or class structure of financing. It was first suggested by Myers and Majluf in 1994. It is also known as pecking order theory for capital structure. This theory is preference theory because the fund sources are selected in preference.

The first preference is given to the internal financing that is retained earnings. It is because it avoids the outside scrutiny of suppliers of capital and there is no flotation costs associated with the use of retained earnings. The next preference is also given to the straight debt. As explained in the previous section it is a good signal to the investors and help to raise the market price. Moreover, debt results in less intrusion into management by suppliers of capital and flotation costs are less than those with other types of external financing. Next in order of financing preference is preferred stock which has some of the feature of debt. This is followed by the various hybrid securities, like convertible bonds. Finally, the least desirable security to issue is

straight equity. It is not only a method of financing but it is also likely to have an adverse signaling effect.

This story is mainly a behavioral explanation of why certain companies finance the way they do. It is consistent with some rational arguments, such as asymmetric information and signaling, as well as flotation costs. The sequence of investment resources is restricted by problems caused by asymmetrical information between managers and potential investors. The following assumptions are made by this theory. (Myers, 1994:592)

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

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

When this cost exists, a firm doesn't always choose to finance projects with a positive net present value. Not a positive net present value determines whether a firm finance a project or not, but the way in which a firm is able to finance their projects.

Baskin researched the validity of this theory in 1999 and he made the following conclusion:

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

2.1.2.6 Stakeholders Theory

Cornell and Shapiro (1997) assume that only investors have an interest in a firm. There are different groups of non- investor stakeholders and some of them have a lot of influence in the financial policy of a firm. Or as Cornell and Shapiro wrote: financial structure may also depend on a firm's net organizational capital and on the nature of its stakeholders (Cornell and Shapiro, 1997:215)

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

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

2.1.3 Approaches to Capital Structure

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

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

2.1.3.1 Traditional Approach

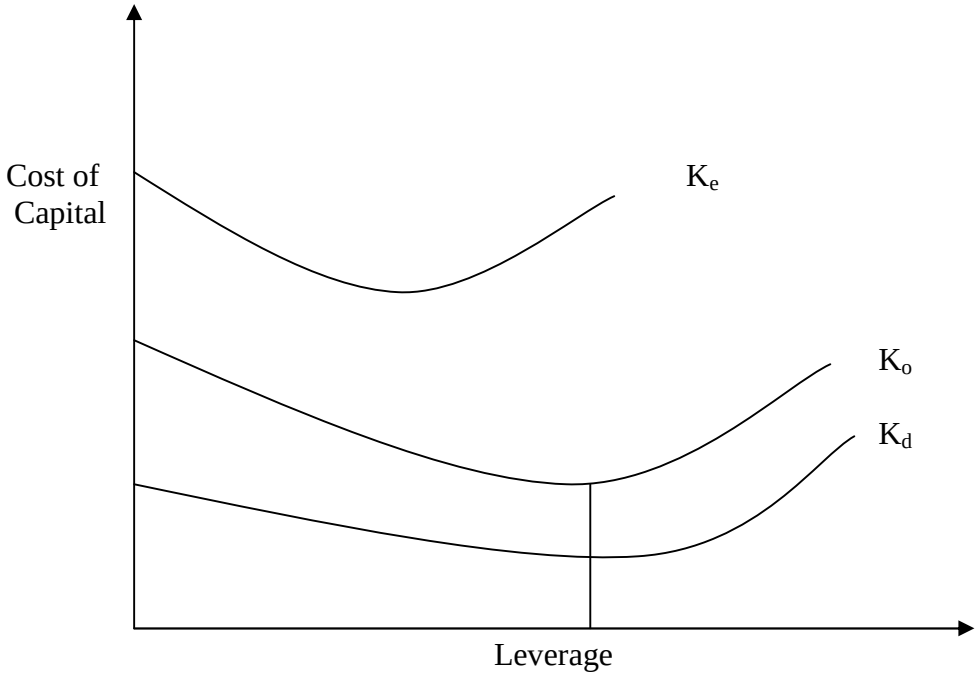
The traditional approach, popularized by Ezra Solomon, is also known as an intermediate opportunity is a compromise between the net income approaches. The traditional approach to evaluation and leverage assumes that there is an optimal capital structure and the company can increase the total value of the company through the judicious use of leverage. The traditional presumption is that a company's value is a concave function of its financial leverage and that an optimal financial leverage exists where the slope of the function is zero.

According to traditional position, the manner which the overall cost of capital reacts to change in degree of leverage can be divided into three stages.

According to I.M. Pandey, the traditional view is a compromise between the net income approach and the net operating income approach. According to this view, the value of the firm can be increased or judicious mix of debt and equity capital can reduce the cost of capital. The traditional view on the relationship between the capital structure and the cost of capital is that the firm's cost of capital can be reduced by the judicious mix of debt and equity capital and that optimal capital structure exist for every firm. In this approach the cost of capital decreases with the reasonable limit of debt and that increases within the leverage.
Following figure can illustrate this approach graphically.

Figure No. 2.2

Kd , ko and ke under Traditional Approach of Capital Structure



The main assumptions of the traditional approach are:

a. The cost of debt capital k_d remain more or less constant up to a certain leverage but rises after a certain point.
b. The cost of equity capital ke remains more or less constant or rises only gradually up to a certain degree of leverage and rises sharply thereafter.
c. The average cost of capital k_o as a consequence of the above behavior of k_e and k_d (1) Decrease up to certain point (2) remains more or less unchanged for more moderate increase in leverage thereafter and rise beyond a certain point.

The traditional approach is not as sharply defined as the net income approach. Several shapes of k_d, k_e and k_o are constant with this approach. (Chandra, 1994:613)

2.1.3.2 Net Income (NI) Approach

David Durand proposed the Net Income Approach. The essence of the NI approach is that the firm can increase its value or lower the overall cost of capital by increasing in the proportion of debt in the capital structure. Under this approach, the cost of debt (k_d) and cost of equity (k_e) are assumed to independent of the capital structure. The weighted average cost of capital declines and the total value of the firm rise with increased use of leverage. (Pandey, 1992: 228)

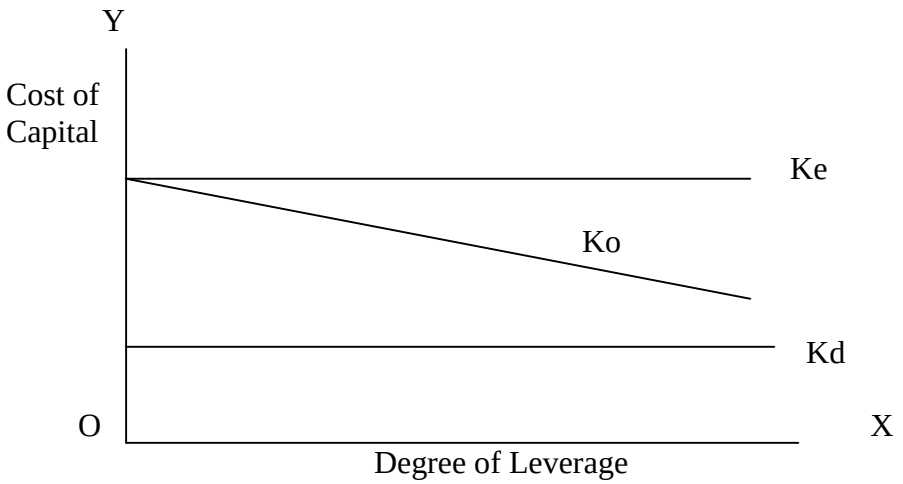
A change in the capital structure use will lead of corresponding changes in the overall cost of capital as well as the total value of the firm. As the firm adds cheaper debt to its capital structure, its cost of capital decline because debt is less risky than equity, on the other hand, the overall value of the firm increases. Thus, as the firm increases its leverage by increasing debt in capital structure, the overall cost of capital declines which ultimately increases the value of the firm.

The emphasis is an EBIT is to measure how the degree of leverage changes in the valuation of the firm. Assuming a constant equity capitalization rate, the increase in cheaper debt funds lower the weighted average cost of capital and there by raising the value risky. (Shrestha, 1995:49)

The degree of leverage and the value of the firm are shown as follows:

Figure No. 2.3

Kd , ko and ke under Net Income Approach



From the above figure, we know that the degree of leverage k_e and k_d are assumed constant with leverage. As the portion of debt is increased in the capital structure being less costly, it causes weighted average cost of capital to decrease and approach the cost of debt. The optimal capital structure would occur at the point where the value of the firm is the maximum and overall cost of capital is minimum. Under this approach the firm will have the maximum value and the lowest cost of capital when it is all most debt finance.

The essence of net income approach is that the firm can increase its value or lower the cost of capital by increasing the portion of debt in the capital structure. The crucial assumptions of this approach are:-

- The use of debt does not change the risk perception of investors, as a result the equity capitalization rate k_e and the debt capitalization rate k_d remain constant with changes in leverage.

- The debt capitalization rate is less than the equity capitalization rate. (i.e. $k_d < k_e$)
- The corporate income tax does not exist. (Pandey, 1999:678)

The first assumption implies that, k_d and k_e are constant. The second assumption indicates that the increased use of debt magnifies the shareholders' earnings. As, there is no corporate tax increased value of the equity ultimately increases the value of the firm. Hence, capital structure decision deserves the capacity of impact on the cost of capital, which further impact in shareholders' value and the value of the firm.

Symbolically,

$K_o = NOI / V$

$K_o = k_e - (k_e - k_d) D / V$

Where,

K_o= Cost of Capital of the Firm

K_e= Cost of Equity

K_d= Cost of Debt

D= Debt

V= Value of the Firm

NOI= Net Operating Income

2.1.3.3 Net Operating Income (NOI) Approach

According to NOI approach the market value of the firm is not affected by the capital structure changes. The market value of the firm is found out by capitalizing the net operation income at the overall or the weighted average, cost of capital this is constant. The market value of the firm is determined as follows:

Value of firm= Market value of debt+ Market value of common share

Or, NOI/ Cost of Capital

Or, EBIT/ Cost of Capital

Under the net operating income approach, the cost of equity is assumed to increase linearly with leverage. As a result, weighted average cost of capital remains constant

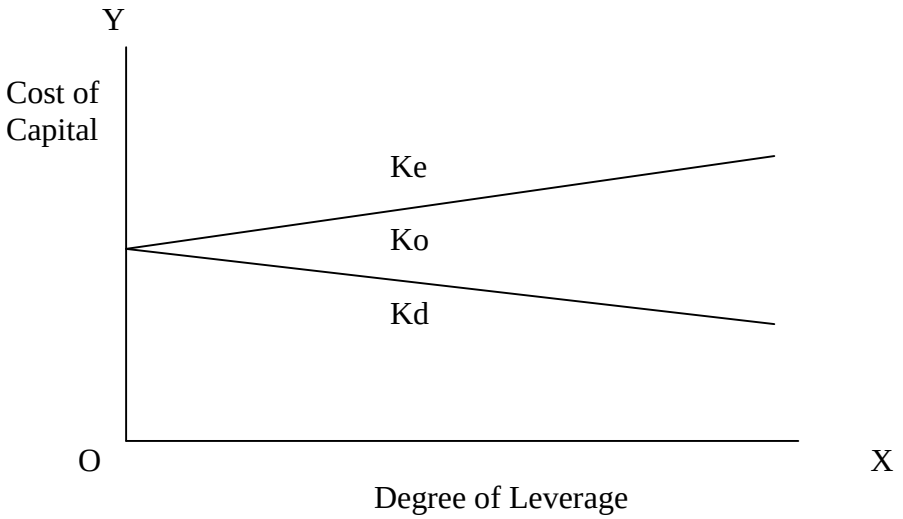
and the total value of the firm also remains constant as an leverage change. (Eugene and Hanson, 1996:236)

This approach is opposite to the net income approach, any changes in leverage with not lead to any changes in the total value of the firm and the market price of the share as well as the overall cost of capital remains constant. According to the net operating income approach, Net operating income is capitalized at an overall capitalization rate to calculate the total market value of the firm and deduct market value of the debt from total to obtain market value of equity. Note that the overall coat of capitalization rate and cost of debt remain constant but the cost of equity increases linearly with leverage. This approach can be expressed as:

$$K_e = k_o + (k_o - k_d)\, B / S$$

Figure No. 2.4

Kd , ko and ke under Net Operating Income (NOI) Approach:



Under the net operating income approach, the capital structure can be presumed as independent of the value of the firm remains constant. The change in the degree of leverage employed by a firm can not change underlying factors. It merely changes the distributing of income and risk between debt and equity without affecting the total

income and risk, which influence the market value of the firm. Hence, the degree of leverage can not influence the market value or equivalently the average cost of capital of the firm.

The critical assumption of net operating income approach is as:

- The market capitalized the value of the firm as a whole. Thus, the split between debt and equity is not important.
- The market uses an overall capitalization rate ko to capitalize the net operating income depends on the business risk if business risk is assumed to remain unchanged, ko is constant.
- The use of less costly debt funds increases the risk of shareholders. This causes the equity capitalization rate to increase. Thus, the advantage of debt is offset exactly by the increase in the equity capitalization rate ke.
- The debt capitalization rate kd is constant.
- The corporate income tax do not exists.

As stated above, under NOI approach the value of the firm is found out by dividing the net operating income by overall cost of capital. (Pandey, 1999:681)

2.1.3.4 Modigliani – Miller Approach

The Modigliani- Miller theory, (Franco Modigliani and Merton H. Miller," The cost of capital, corporate finance and The Theory of Investment", American Economic Review, XLVIII June 1958) relating to the relation is akin to net operating approach. MM approach, supporting the net operating income approach, argues that, in the absence of taxes, total market value and cost of capital of the firm remain invariant to the capital structure changes. They make a formidable attach on the transitional position by offering behavioral justification for having the cost of capital, k, remain constant through all degree of leverage (ibid: 272) MM contended that cost of capital is equal to the capitalization rate of pure equity stream of income and the market value is ascertained by capitalizing its expected income at the appropriate discount rate at its risk class. MM position is based on the idea that no matter how you drive up

the capital structure of a firm among debt equity and other claims, there is a conversion of investment value (ibid: 273). However, the following assumptions regarding the behavior of the investors and the capital market, the actions of the firms and the tax environment are crucial for the validity of the MM hypothesis.

1) Perfect capital market: The implication of perfect capital market is that securities are infinitely divisible. Investors are free to buy and sell securities, investors can borrow without restrictions on the same terms and condition as firms can, there are no transaction costs and investors are rational and behave accordingly.
2) Firms can be grouped into homogeneous risk classes. Firms would be considered to belong to a homogeneous risk class as their expected earnings, adjust firm scale differences have identical risk characteristics. The share of the homogeneous firm would be perfect substitute for one another.
3) Firms distributed all net earning to the shareholder. i.e., dividend payout ratio is 100 percent.
4) There are no taxes. This assumption is removed later.
5) The assumption of perfect information and rationality, all investors has the same exception of firm's net operating income with which to evaluate the value of any firm.

The MM cost of capital hypothesis can be best expressed in terms of their proposition I and II. (Modigliani and Miller, 1999: 261- 279)

Propositions

The theorem was originally proven under the assumption of no taxes. It is made up of two propositions which can also be expected to a situation with taxes.

Consider two firms which are identical except for their financial structures. The first (Firm U) is unlevered: that is, it is financed by equity only. The other (Firm L) is levered: it is financed partly by equity and partly by debt. The Modigliani- Miller theorem states that the value of the two firms is the same.

Proposition I

The value of levered firm is equal to the value of un-levered firm in the same risk class plus the gain from leverage. 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 of un- levered firm + tax shield

$V_L = V_U + T \times B$

Figure No. 2.5

The cost of capital under M-M Proposition I

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

$V_U = S = EBIT\ (1- T)/K_{eU}$

Where,

V_U = Value of un- levered firm

S = Market Value of Stock

T = Corporate tax rate

K_{eU} = Cost of equity of Un- levered firm

Proposition II

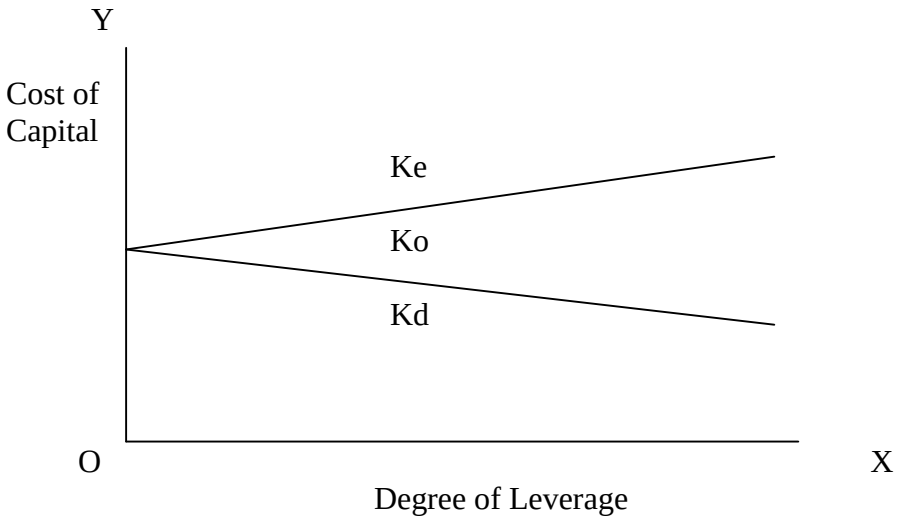
Under this proposition, the cost of equity of levered firm is equal to the cost of equity of a un- levered firm in the same risk class plus a risk premium whose size depends on the differential between the cost of equity and debt to and un- levered firm, the amount of financial leverage uses, and the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

$K_{eL} = K_{eU} + (K_{eU} – K_d) (1- T) (B/S)$

Where, K_{eL} = Cost of equity of levered firm.

Figure No. 2.6

The cost of capital under M-M Proposition II



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 levered. Thus the optimal capital structure is reached when the firs employ 100%

debt in its capital structure. But the observed expenditure does not entirely support this view. In practice firm do not employ large amount of debt, nor are lenders ready to lend beyond certain limits. M-M suggests that firms would adopt a target debt ratio so as not to violate the limit of debt level imposed by lenders.

2.1.4 Risk Measure in Capital Structure

About the relationship between risk and leverage Weston and Brigham (1999) have presented a very clear view and have stated risk as measured by standard deviation has a linear relationship to the debt to equity ratio measured at the book value but an upward curvilinear relationship to the debt to total assets ratio st book value.
There is theoretical relationship between beta and leverage ratios for comparison with beta market values. At market value, the relationship between beta and debt to equity ratio is linear and between beta and the ratio of debt to total value of the firm is curvilinear upward. The different shapes of relationship stream from the basic underlying theory of the computation involved but what is common to all of the six portrays of the relationship between risk and leverage is that to obtain the higher expected earnings (whether measured by earning per share of return on shareholders' equity) that go with increased leverage the firm incur more risk.

To sum up, there is a positive relationship between return and risk as well as between risk and degree of leverage employed. Thus, the higher the leverage the return and consequently the higher will be the risk. (Weston and Brigham, 1999: 563- 564)

2.1.5 Financial Leverage and ROE

With financial leverage the advantage lies in the possibility that the funds borrowed as a fix interest rate can be used for investment opportunities earning a rate of return higher than the interest paid. The difference of course as profit to the owners' business, thus, additional profit earned is the leverage effects generated by the employment of low cost fund.

Given the ability to make investment, that consisting proves returns above the going rate of interest; it will be to a company's advantage to engage in "Trading on Equity".

This means borrowings as much as prudent debt management will permit and there by boosting the return on owners' equity by the difference between the rates of return achieved and the rate of interest paid.

2.1.6 Factors Affecting Capital structure

Capital structure decision is not an easy task that a manager can handle individually. Some major factor that lay significant role on affecting the capital structure of firm are pointed as under.

a) Growth Rate of Future Sales

The expected future growth rate of sales is measure of the extent which the earning per share of firm is likely to be magnified by leverage. However, the common stock of a firm whose sales and earning are increasing at favorable rate commands a high price, thus it sometimes appears that equity financing is desirable. The firm must weight the benefits of using leverage against the opportunities of broadening its equity base when it chooses between future financing alternative.

b) Sales Stability

With greater stability in sales and earning, a firm can incur the fixed charge of debt with less risk than when its sales and earning are subject to periodic. It will have difficult to meet its obligation. Thus sales stability and debt ratio are directly related.

c) Competitive Structure

Debt servicing capacity is not only dependent on sales volume but also on the profitability. Loss (week) entry barriers and ability of competing firms influence profit margin.

d) Asset Structure

Assets structure of the firm directly influences the financing. The firm having lived fixed asset and having much assumed demand for its outputs uses long- term debt extensively. The firms have their assets mostly in receivables and in inventory, as in wholesale and retail trade, rely less on long term debt.

e) Management Attitude

Choice of financing is influenced by management attitude about risk and control. Large firms having wide spread common stock holders prefer issuance of more stock, because it does not influence on control of the firm significantly, in contrast, the owners of small firms may prefer to avoid issuing the manager of small company is comparative on account of risk taking.

f) Lender Attitude

The management can't individually determine it's capital structure ignoring lender's attitude. Sometimes lenders attitude can be the most influencing factor. They emphasize that excessive debt reduces the credit standing of the borrower and the credit rating the securities previously issued.

2.2 Review of Previous Studies

2.2.1 Review of Journals

Under this heading efforts have been made to examine and review of some related articles published in different economic journals, magazines, newspapers and other related books.

In their first study 1998, MM used the previous work 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 of the years 1998 and 1999, 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 co- efficient 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 views 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 1999 correcting their original hypothesis for corporate income taxes and expected cost of capital to be affected by leverage for its advantages or not.

For this they conducted the mathematical analysis regarding the effect of leverage and other variable on the cost of capital, they found that the leverage factors are significant only because of tax advantage involved. (Modigliani- Miller, 1999: 333-391)

Shrestha (1985), conducted his study on performance of public enterprises in Nepal. An analysis of assets and capital turnover observed fact that turnover of public enterprises is subjected to wide fluctuations in the sample chosen. Many of the problems of lower turnover are attributable to some deficiencies of management and government policies. The empirical analysis reveals that the mixed assets turnover is lowest for all public enterprises while accounts receivable turnover is not much deteriorating. Cash turnover is no doubt good but it needs to be looked from loss of sales from conservation credit policy of public enterprises. The net worth turnover has not improved so much and there exists very varying results of net working capital turnover. The inventory turnover records good result bit it also needs to be overlooked from the problem of having excessive stock billing given the constraint of main policy

issue. It becomes crucial to develop a more positive approach and pragmatic outlook between public enterprises and government ministries. This is the only possible solution to overcome the decaying performance of lower turnover in public enterprises.

Shrestha (1993), conducted a study on "Focus on Capital Structure of selected and listed Public Companies". The study used data from 19 companies, which covered different sectors such as manufacturing, finance, utility service and other allied areas. It was found that most of these companies have debt capital relatively very high than equity capital. Consequently most of them are operating at loss to the extent that payment of interest on loan which has been a serious issue. Most of these losses are after charging interest on loan. It has suggested that the government has to consider the public enterprises in evaluating the relationship between use of debt and its impact on overall earning of public enterprises. So government should be sure in knowing how to use debt capital which will maximize return. It should develop a suitable capital structure guideline to make public enterprises aware of its responsibility and to repay the debt schedules. Government has to analyze cost and risk return trade off. Thus capital structure needs to be made more determined by realistic analysis of cost. Lastly, she concluded that policy makers have to be careful in developing the suitable capital structure guidelines in making public enterprises as well as listed companies to be aware of financial accountability.

Biasis, Bruno and Catherine (1999), performed a research on "Optimal Leverage and Aggregate Investment" and tested different models. The researcher analyzed the optimal financing or investment projected when managers must expert unobservable effort and can switch to less profitable riskier venture. As per their findings, optimal financing contracts can be implemented by a combination of debt and equity. The risk- shifting problem is the most severe while stock options are also needed when the effort problem is the most severe. Further finding of the study was that worsening of the moral hazard problems lead to decrease in investment and output at the macro economic level. Moreover, aggregate leverage decreases with the risk shifting problems and increases with the effort problem.

The study has taken the conclusions of some previous studies into consideration and stated that leverage is high for regulated firms and low in tech. industries and it can low in high tech. industries. Similarly, leverage decreases with research and development expenditure i.e. in innovative industries.

To determine the investment decision, the study found there is tension between two moral hazards problems. To induce the manager to exert effort one has to promise large payoffs, when the cash flow generated by the firm is large. Unfortunately, this can make risk taking too attractive for the manager when this tension is too strong it can lead to credit rationing.

The researchers concluded that if the risk shifting problems is dominated the optimal financing scheme is a combination of debt and equity when the effort problem is the major source of moral hazard; stock options awarded to the manager must be assed to the array of financial instruments.

Garvey and Hanka (1999), in their article "Capital Structure and Corporate Control; the effect of anti takeover statutes on Firm Leverage" have stated as follows: It was found that the firms protected by second generation stake anti takeover locals substantially reduces their use of debt and that unprotected firms to the reserve. This result supports recent models in which the threat of hostile takeover motivates managers to take on debt, they would otherwise avoid. An implication is that legal barriers to takeovers may increase corporate stock.

Corporate managers have discretion over capital structure choices, as the firm's founding shareholders cannot write a comprehensive ex- ante contract specifying all future financing decisions. Most capital structure models make the simplifying assumptions that managers choose capital structure in the interest of shareholders. Examples of this approach range from the classic static trade off between tax benefits and expected casts of financial distress to Leland Toffas (1996) dynamic analysis that allows for agency problems between debt holder and shareholders increasingly. However research into capital structure has explicitly recognized that managers self interest can lead to financial policies that do not maximize shareholder wealth. An

early example is Donaldson's (1969) field study of financing choices, which emphasizes goals such organizational survival and growth.

Shrestha (1999), conducted a study on "A Study on ht impact of Capital Structure of selected on listed Companies". She used data from 5 companies and covered the study from different sectors as manufacturing, hotel, trading and service industry to that all relationship between dividends payout and value of the listed companies is not satisfactory. The empirical testing of the data reveals that the ratio of the market value to the total assets of the listed companies is negatively correlated with the dividend payout. The ratio of the market value to book value of the total assets is negatively correlated with leverage. The cause for having such negative correlation coefficient may be lack of understanding in the deployment of debt capital among the listed companies; it is found that the ratio of market value to total assets is negatively correlated with size. There has been negative correlation between coefficient value and growth of the companies. Liquidity has negative correlation with market value of the company size is positively correlated with growth, liquidity and market price but it is negatively correlated with dividend payout ratio and earning variability. There is positive correlation coefficient of earning variability with market price but negative correlation coefficient with liquidity. Liquidity is negatively correlated with market price of stock.

Arbor (2005), studied, "The Effect of Capital structure on Profitability" and mentioned that the relationship between capital structure and firm has been the subject of considerable debate. 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. Berkley 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 maximizes 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 directly incurred when 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 profits to pay back the interest and the loans. The potential costs of the bankruptcy may be both direct and indirect. Examples of indirect bankruptcy costs are the loss in profits incurred by the firm as a result of the unwillingness of stakeholders to do business with them.

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

The need to balance gains and costs of debt financing emerged as a theory known as the static trade odd theory by Myers. It values the company as the value of the firm if un-levered plus the present value of the tax shield minus the present value of bankruptcy and agency costs.

The study made by **Buferna, Bangassa and Hodgkinson (2005),** on "Determinants of Capital Structure", contributes towards a better understanding of financing behavior in Libyan companies. Hypothesis, based on comparing the relationships between long and short term debt and four explanatory variables that represent profitability, growth, tangibility and size, were development to test which capital structure theories best explained by Libyan companies capital structure. The result suggests that both the static trade off theory and the agency cost theory are pertinent theories whereas there was little evidence to support the information asymmetry theory. The lack of a secondary market may have an impact on agency cost as shareholders, who are unable to offload their shares, might exert pressure on management to act in their best interests. It is likely that equity agency costs, arising due to conflict between debt holders and shareholders, will be more for private companies and indeed the relationship supporting the agency cost theory were stronger for private companies.

2.2.1 Review of Previous Thesis

Prior to this thesis, several theses have been conducted by different researchers. Some of them are supposed to be relevant for this study is presented below.

Prashai (1999), has carried out a study on," Capital Structure of Nepal Bank Ltd.". The basic objective of his study is to analyze the interrelationship and trends among some of the components parts of capital and assets structure.

From the study, it is known that the bank is composed of its capital with the major portion of deposit. The total assets of the bank are the composition of loan and advances, cash investment and other assets. Among these all component loan and advances are the major portion. During the study, total component are different and the interrelationship of the components is fluctuating. The average growth rate of net profit and total expenses are not under control of the bank, and the net profit is only 40.64% of the total income.

He has recommended that the bank showed total income as well as expenditure and suggested that total deposited and investment must also be controlled by the bank. The bank needs to reduce its expenses and control fluctuation in the earning per share to improve its market price per share.

Shrestha (1999), in his comparative evaluation of capital structure between selected manufacturing and trading companies of Nepal, concluded that there was not return to pay interest, debt and dividend for both types of companies although maintaining a high risk of debt. He also observed that manufacturing companies had a higher risk with higher return on the interest and debt and low dividend. The study further indicated that the amount of profit earned could only meet the interest and because of that had suffered losses. And he finally recommended for a regular check up of the lever of debt, EBIT, EBT and EPS by monitoring authority, so that the companies would not fall into a weaker position.

Kafle (2001), on his study, "A Comparative Analysis of Capital Structure between Lumbini Sugar Mills and Birgunj Sugar Factory Limited", revealed that both the companies were facing serious deterioration in earnings according to the net operating income approach. He noted down both the companies had defective capital structure as debt equity ratio were not so much satisfactory. Birgunj Sugar Factory has high debt

equity ratio indicates more financial risk while Lumbini Sugar Mills has low debt equity ratio which indicates access dominance of equity holder might exist. Both the companies had unable to pay interest because they were operating in loss. As Birgunj Sugar Factory was highly levered, Lumbini Sugar Mills was un levered both the companies had defective capital structure. Mr. Kafle suggested that it should change the debt equity ratio for sound capital structure management to maintain in 1: 1 ratio.

Pandey (2007), studied on, "The Study on Capital Structure of Standard Chartered Bank and Nepal Bangladesh Bank Ltd.". The basic objective of her study was to analyze the interrelationship of capital structure with various important variables such as earning per share, dividend per share and net worth of the joint venture banks and to provide suggestions to overcome 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 percentage of total debt in raising the assets and all the banks are able to pay the interest. The study suggested that the bank must control total deposit and the bank must also control investment, banks need to reduce its expenses and control fluctuations in the earnings per share to improve its market price per share.

Shah (2007), has made the study with a purpose to access the debt serving capacity of the mentioned manufacturing companies examining the relation between return on equity and total debt, earning after tax and total debt and interest and earning before interest and tax.

Both the financial tools such as ratio analysis as well as statistical tools such as correlation coefficient and regression analysis have been used as the methodology.

The study revealed that Nepal Lever Ltd. is fully equity based and has not been using long term debt because of improved cash flows and effective management. The Sri Ram Sugar Mill has 66.33% of assets financed with debt and hence there is less flexibility to the owners. The degree of financial leverage analysis of Jyoti Spinning Mills shows the

failure of the company to gain expected profits. And the Arun Vanaspati Udhyog has a fluctuating debt equity ratio. Its long term debt is decreasing and only creditors make a small share of financing.

Singh (2008), studied on, "The Capital Structure decision and its impact on Risk and Return of Hulas Steel Industries Pvt. Ltd.". He derived that the debt equity ratio was lower than standard. As the company has used more short- term debt, total debt to total assets ratio was also high. And the interest coverage ratio was in increasing trend. He suggested taking the corrective measures for the proper capital structure.

Koirala (2008), 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 un-levered since four years. The debt equity ratio in terms of long term debt and shareholders equity of DNL is higher than NNL.

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 case of NNL, to consider long term 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 debt in its capital structure. As a result, the return of the firm is not satisfactory. So, he has recommended both the companies to minimize interest expenses by using cheaper debt as well as other operating expenses to the return of the firm.

Joshi (2008), has made a study on," Capital Structure Management of Commercial Banks of Nepal (NIBL, BOK, HBL and EBL)". He had analyzed all the variables in the form of ratio analysis, statistical analysis. He tried to analyze Capital Structure of commercial banks in Nepal.

He found all bank were lack of the theoretical knowledge regarding the capital structure. All banks have used high percentage of total debt in raising the assets. The higher ratio constitute that the outsider claim in total assets of the banks is higher than owners claim. By looking at some of the aspects of capital structure management kike long term debt to

total debt ratio, capital employed ratio NIBL seems to be in weaker position. Interest coverage ratio, return on total assets, return on shareholders equity seems better position. Banks are recommended to minimize their financial and other expenses so that the interest coverage ratio could be improved.

The review of the above journals and thesis has undoubtedly helped me to strengthen analytical ability to pursue my thesis in right way and direction. There are variable inputs which I could go as to look problems more critically. Having done the literature review, now I proceed to research methodology which is necessary for my analysis in the following chapter.

2.3 Research Gap

The view of above relevant literature has contributed to enhance the fundamental understanding and knowledge. There are various researchers conduced on capital structure analysis of various commercial banks. In order to perform ===== analysis researchers have to used various ratios analysis. In this research ratios are systematically, analytically, analyzed generalized and categorized according to ……

Capital structure involves long term loans, financial decisions or choice between debt and equity capital. The cost of capital and value of the firm varies with changes in capital structure. Capital structure represents the relationship among different kinds of long term sources of capital and their amount.

There is very limited study on capital structure management of listed commercial banks. Most of the studies are concern with the research title "Capital Structure Analysis of Commercial Bank of Nepal". Some researcher have selected varies banks for the research and some have concentrated in only the banks.

So, the research has chosen this topic throw light on capital structure of Commercial Banks. Researcher has used financial as well as statistical tools like: ratio analysis, leverage ratio, interest coverage ratio, profitability ratio, mean regression, correlation analysis. Almost all ratio has been applied to cover analytical part of fulfill the objectives of this study. It involves more recent date of listed Banks for five year (2004- 2009) probable this study may be first research of its kind in the area.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Introduction

Research Methodology is the way to solve systematically about the research problem (Kothari, 1990: 39). It is composed of two words "Research & Methodology" the process of investigation in values a series of well thought and activates in gathering, recording, analyzing and interpreting with the purpose of finding answers to the problem. The entire process by which we attempt to solve problems is called research methodology.

3.2 Research Design

A research design is the specification of methods and procedures for acquiring the information needed. It is the overall operational pattern of framework for the project that stipulates what information is to be collected, from which sources and by what procedures. On this regard the research design followed for the study is historical, descriptive and analytical.

3.3 Population and Sample

To get the information about capital structure, more representative and comprehensive sample are selected of wide coverage of population. There are altogether twenty- five commercial banks in Nepal out of them only two commercial banks (Siddhartha Bank Ltd. and Laxmi Bank Ltd.) have been chosen for this study. In Nepal, twenty nine commercial banks are operation till this study period. Presently study is considered 29 commercial banks as the total population. They are:

Sample space of population

S.N.	Name of Commercial Bank
1.	Nepal Bank Limited
2.	Rastriya Banijya Bank
3.	Nabil Bank Ltd.
4.	Nepal Investment Bank Ltd.
5.	Standard Chartered Bank Ltd.
6.	Himalayan Bank Ltd.
7.	Nepal SBI Bank Ltd.
8.	Nepal Bangaladesh Bank Ltd.
9.	Everest Bank Limited
10.	Bank of Kathmandu Limited
11.	Nepal Credit & Commercial Bank Ltd.
12.	Nepal Industrial and Commercial Bank Ltd.
13.	Lumbini Bank Ltd.
14.	Machhapuchhre Bank Ltd.
15.	Kumari Bank Ltd.
16.	Laxmi Bank Ltd.
17.	Siddhartha Bank Ltd.
18.	Agricultural Development Bank Ltd.
19.	Global Bank Ltd.
20.	Citizen Bank Ltd.
21.	Prime Bank Ltd.

22.	Sunrise Bank Ltd.
23.	Bank of Asia Ltd.
24.	Development Credit Bank Ltd.
25.	NMB Bank Ltd.
26.	Kist Bank Ltd.
27.	Mega Bank Ltd.
28	Janata Bank Ltd.
29	Hamro Bank Ltd.

3.4 Nature and Sources of Data

This study used the secondary data like balance sheet, profit and loss account, publication of security board and other related document like unpublished thesis of T.U and different annexes are brought from the bank's office. Other essential information is supplemented from various publications of Nepal Stock Exchange Ltd., Central Bureau of Statistics and Ministry of Finance.

3.5 Data Collection Procedure

Mainly, this study is conducted on the basis of secondary data. The required data are extracted from the publication of Nepal Rastra Bank, Annual Reports of NRB, Annual Reports of Siddhartha Bank and Laxmi Bank Ltd., Annual Reports of Security board, various publications. Apart from these various books, Journal, Seminar Paper available in the Library and related articles, Unpublished Master Degree Thesis.

3.6 Method of Data Analysis

Data collected from various sources are managed, analyzed and presented in proper tables and formats. To analyze the collected data various financial, accounting and statistical tool have been used to achieve the objective of study, which are as follows:

3.6.1 Financial Tools

Financial tools are used to examine the financial performance i.e. strength and weakness of the banks. In this study, financial tools like ratio analysis, leverage analysis, EBIT- EPS analysis and other analysis have been used.

A. Ratio Analysis

Ratio analysis is powerful tool of a financial analysis. It shows the relationship between two accounting figures expressed mathematically. In financial analysis, ratio is used as an index or yards stick for evaluation of the financial position of a firm. Ratio helps to summarize the large quantities of financial data and to mark qualitative judgment about firm's financial performance.

Ratio analysis is a technique of analyzing and interpreting financial statements to evaluate the performance of an organization by creating the ratios from the figures of different accounts consisting in balance sheet and income statements. Even though there are many ratios, only those ratios which are related to this study have been covered. The study contains following ratios.

I. Leverage Ratio

Leverage ratio measures the funds supplied by owner as compared with the financing provided by the firm's creditors. In this study, following leverage has been calculated.

a) Debt Equity Ratio

The debt equity ratio measures the long term components of capital structure. Long term debt and shareholders equity are used in financing assets of the companies. So it reflects the relative claim of creditors and shareholders against the assets of the firm. The relationship between outsiders claim and owner's capital can be shown by debt equity ratio. It is calculated as:

Debt Equity Ratio = Long term debt/ Shareholder's Equity

This ratio is also known as debt to net worth ratio. A high debt- equity ratio indicates that the claims of the creditors are higher than that of the shareholders of the company.

b) Total Debt to Total Assets Ratio

The ratio of total debt to total assets is generally called the debt ratio. It measures the percentage of total fund provided by creditors. Debt includes current liabilities and all the bonds. This can be calculated as:

Total Debt to Total Assets Ratio = Total Debt/ Total Assets

The ratio however gives some similar indication as debt- equity ratio.

c) Degree of Financial Leverage (DFL)

The degree of financial leverage at a particular EBIT level is measured by the percentage change in earning per share relative to the percentage change in EBIT. The following equation can be used to determine the degree of financial leverage.

DFL = EBIT/ EBIT- R = EBIT/ EBT

Where, R represents fixed financial leverage.

d) Interest Coverage Ratio (ICR)

Interest coverage ratio is also known as time interest earned ratio. This ratio measures the debt servicing capacity of the firm, so far a fixed interest on long term loan can earn. It can be calculated as

Interest Coverage Ratio= EBIT/ Interest

Larger the coverage ratio greater the firm ability to handle fixed charge and more assured the prompt payment of interest to the creditors**.**

II. Profitability Ratio

Profitability ratio gives final answer about how effectible is firm being managed. In this study, following profitability ratios are calculated.

a) Return on Total Assets

Return on total assets measures the overall profitability of the banks with respect to each financial resources investment in the bank's assets. If the bank's working fund is well managed and efficiently utilized, than returns on such assets will be higher and vice- versa. It can be calculated as,

ROA = Net Profit after Tax/ Total Assets

b) Return on Net Worth

The ratio of net profit to owner's equity reflects the extent to which objectives have been accomplished. This ratio has great perspective to the present as well as future also. The shareholder's equity includes common share capital, preference share capital, reserves and surpluses.

It is calculated by dividing return (NPAT) by shareholders equity (Net Worth). Here return means net profit after tax. Net worth includes paid up capitals, general reserve and provision of loan losses.

Return on Net Worth = Net Profit after tax / Shareholder's Equity

c) Earning per Share (EPS)

Earning per share is the relationship between earning after tax and number of common equity. EPS is calculated by dividing profit after tax (EAT) by total number of shares.

EPS = EAT / No. of Shares

Higher earning per share enhances the value of the shareholder's wealth. Higher profitability of the bank results in higher earning per share.

d) Dividend per Share (DPS)

The net profit after tax belongs to the shareholders. But the income which they really receive is the amount of earnings distributed as cash dividend. Therefore, a large number of potential investors may be interested in DPS rather than EPS. This ratio is calculated as;

DPS = Dividend / No. of Shares

III. Other Calculated Financial Tools

a) Overall Capitalization Rate [$K_o = K_e-(K_e-K_d)D/V$]

b) Equity Capitalization Rate [$K_e=K_o+(K_o-K_d)B/S$

(Already Mentioned in Chapter II)

3.6.2 Statistical Tools

Besides financial tools statistical tools are used to verify the relationship between the variables and used to identify the difference between the variable of one bank to other. Statistical tools i.e. Percentage, mean, standard deviation, coefficient of variation, correlation coefficient, and probable error is used in this study.

1. Arithmetic Mean

Arithmetic mean also called 'the mean' or 'average arithmetic mean' is the most popular and widely used method of central tendency. It is the ratio of sum of all observations. It is calculated from under grouped data and frequency.

Mean = $\sum X / N$

Where, X = variable used

N = No. of observations

2. Standard Deviation

The standard deviation measures the absolute dispersion or variability of distribution. The greater the amount of dispersion or variability the greater and standard deviation, for the greater will be the magnitude of the deviation of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of series: a large standard deviation means just the opposite.

Standard deviation (S.D.) is defined as the positive square root of the mean of square of deviations takes from the arithmetic mean. It is denoted by ∃

Symbolically, $\exists \; X\sqrt{\frac{(X\ Z\overline{X})^2}{N}}$

Where, ∃ = Standard Deviation

X = Values

$\overline{X}$ = Arithmetic Mean Returns

N = time period

3. Coefficient of variables (C.V.)

Standard deviation is the absolute measure of dispersion. The relative measure of dispersion based on standard deviation is knows as coefficient of S.D. The coefficient of dispersion based on standard deviation multiplied by 100 is known as the coefficient of variation.

Symbolically,

$$C.V = \frac{\exists}{\overline{X}} \text{ X } 100$$

Where, C.V. Coefficient of variation

$\exists$ = Standard Deviation

$\overline{X}$ = Arithmetic mean Return

4. Correlation coefficient (r)

Another statistical tool, correlation coefficient can be used to analyze the relation between two variables. Two variables are said to have correlation. When they are so related that the change in the value of one variable is accompanied by the change in the value of other measure of correlation is called correlation coefficient summarized in one figure, the degree out direction of movement.

Among the various method of studying correlation, we can take the help of Karl Persons' correlations coefficient. It is known as Pearson's correlations coefficient and it is denoted by (r_{xy}) or Simply (r)

$$r = \frac{N \quad xy Z \quad x \quad y}{\sqrt{N \quad x^2 Z(\quad x)^2}\ \sqrt{N \quad y^2 Z(\quad y)^2}}$$

The value of r lies between (-1) to (+1) when r = 1, there is perfectly positive correlations and when r = -1 there is perfectly negative correlations.

5. Probable error (PE)

Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r.

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

The coefficient of correlation shall be interpreted based on probable error. If the value of correlation coefficient is greater than 6 times the value of P.E, the correlation coefficient is deemed as significant and reliable.

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Financial Analysis

In this chapter, to achieve the objectives which are set in introduction chapter, the relevant data and information on capital structure management of joint ventures banks are presented and analyzed comparatively. It is notable that all types of financial ratio are not studied under this chapter. Only those ratios are calculated and analyzed which are very significant to pasteurize the real capital structure of commercial banks.

Capital structure is concerned with qualitative aspect of financial management. It is the composition of debt and equity i.e. debenture, preference and ordinary shares. A decision about the proportion among these types of securities refers to the capital structure of the banks. In the study period, debentures have been issued but only the equity shares by the selected commercial banks. Financial analysis is done through presentation of data and calculating various financial ratios, which reflect the relationship among different variables.

The research methodology as mentioned in the previous chapter. The following ratios are applies for the study purpose:

- Leverage Ratio
- Profitability Ratio
- Capital Adequacy Ratio

4.1.1 Leverage Ratio

Capital structure or leverage ratio shows the proportion of debt and equity financing in the firm's asset mix. Long term debts like debenture are a measure source of financing. Following capital structure has been analyzed.

4.1.1.1 Debt Equity Ratio

The relationship describing the lenders contribution for each rupee of the owners' contribution is called D/E ratio. This ratio is calculated dividing total debts by shareholders' equity.

High ratio of total debt enhances its return on total fund. However, a very high debt to shareholder fund is not always favorable because debts are considered more risky than equity fund. Therefore, there should be proper balance in the ratio of debt and net worth. Debt equity ratios of the selected banks are shown in table-4.1.

Table no. 4.1

Debt Equity Ratio

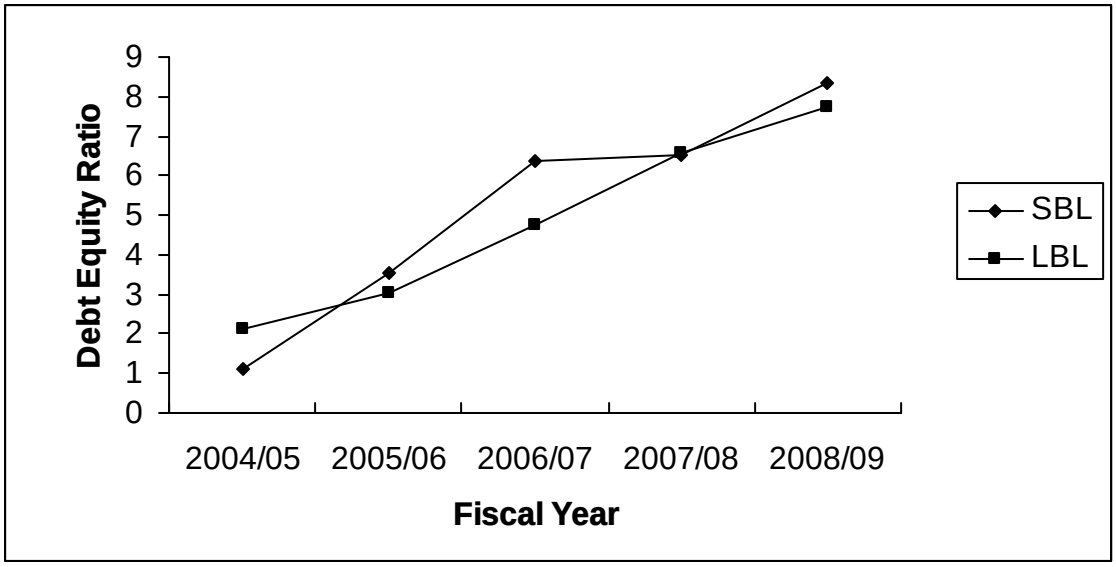
FY	SBL	LBL
	Ratio	Ratio
2004/05	1.12	2.12
2005/06	3.53	3.02
2006/07	6.35	4.74
2007/08	6.50	6.55
2008/09	8.35	7.76
Average	5.17	4.48
Standard Deviation	2.54	2.11
Coefficient of variation (CV)	49.19%	43%

Source: Appendix a.

Debt equity ratio of both banks at different fiscal year is also shown in graphical form in figure 4.1.

Figure No. 4.1

Debt Equity Ratio



According to the above table, total debt, total debt to shareholders' equity ratio of SBL is in increasing trend. The average ratio of SBL is 5.17 which is higher than LBL. Coefficient of variation of SBL is 49.19% which is greater than LBL.

According to the above table, total debt, total debt to shareholders' equity ratio of LBL is in fluctuating trend. The average ratio of LBL is 4.48 which is less than SBL. Coefficient of variation of SBL is 43% which is less than SBL.

It can be concluded that both banks ratio are increasing over the study period. Both banks have used high percentage of debt in the financial structure.

4.1.1.2 Total debts to Total assets Ratio

Total debt to total assets ratio implies how much debt capital has contributed to the total company's assets. Total debt to total assets ratio has shown in table 4.2.

Table no. 4.2

Total Debt to Total Assets Ratio

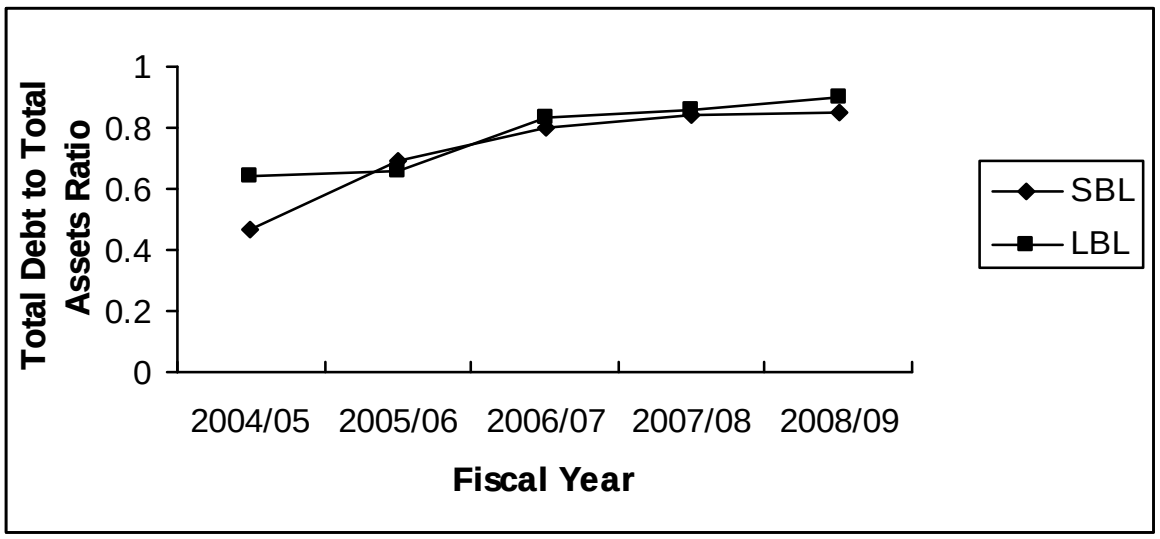
F/Y	SBL	LBL
	Ratio	Ratio
2004/05	0.47	0.64
2005/06	0.69	0.66
2006/07	0.80	0.83
2007/08	0.84	0.86
2008/09	0.85	0.90
Average (X)	0.73	0.78
Standard Deviations (	0.14	0.11
Coefficient of variation (CV)	19.28%	13.82%

Source: Appendix b.

Total Debt to Total Assets Ratio of SBL and LBL at different fiscal year is also shown in graphical form in figure 4.2.

Figure No 4.2

Total Debt to Total Assets Ratio



According to the above table, total debt to total assets ratio of SBL is in increasing trend. The average ratio of SBL is 0.73 which is less than LBL. Coefficient of variation of LBL is 19.28% which is greater than LBL.

According to the above table, total debt to total assets ratio of LBL is in increasing trend. The average ratio of LBL is 0.78 which is less than SBL. Coefficient of variation of LBL is 13.83% which is less than SBL.

4.1.1.3 Interest Coverage Ratio

The ratio measures the debt servicing capacity of a firm. It is computed by dividing Net profit before interest and tax by interest. This ratio is also known as times-interest- earned ratio. A high ratio is sign of low burden of borrowing of the business and lower utilization of borrowing capacity. From point of view of the creditors, the larger the coverage, the greater the ability of the firm to make the payment of interest to the creditors. This ratio helps to find out the organizational ability to meet its interest obligation and test firm's debt servicing capacity. It is one of the conventional coverage ratios, which measures relationship between what is normally available from operation of the firm the clams. Interest coverage ratio has shown in table 4.3.

Table no. 4.3

Interest Coverage Ratio (In times) Ratio

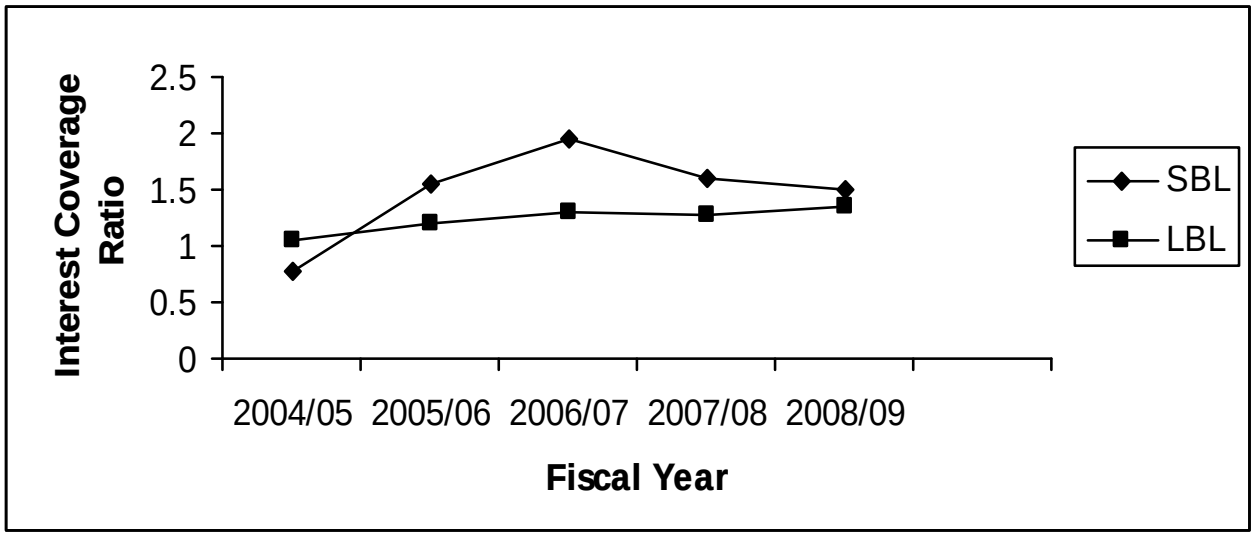
F/Y	SBL	LBL
	Ratio	Ratio
2004/05	0.77	1.05
2005/06	1.56	1.21
2006/07	1.95	1.31
2007/08	1.60	1.27
2008/09	1.51	1.34
Average (X)	1.48	1.23
Standard Deviations (	0.39	0.10
Coefficient of variation (CV)	26.07%	8.34%

Source: Appendix c.

Interest coverage ratio of both the banks at different fiscal year is also shown in graphical form in figure 4.3.

Figure No. 4.3

Interest Coverage Ratio



According to the above table, Interest coverage ratio of SBL is in fluctuating trend. The average ratio of SBL is 1.48 times which is greater than LBL. Coefficient of Variation of SBL is 26.07% which is greater than LBL.

According to the above table, Interest coverage ratio of LBL is in fluctuating trend. The average ratio of LBL is 1.23 times which less than SBL is. Coefficient of Variation of LBL is 8.23% which is less than SBL.

In conclusion, this ratio is said that SBL has been success to obtain higher interest coverage ratio. Both the banks are able to maintain to pay interest on their debt capital financing more than one times.

4.1.1.4 Degree of Financial Leverage

Financial leverage refers to the use of interest bearing debts is preferred stock along with debt capital. The degree of financial risk i.e. higher the value of DFL, higher the degree of financial risk and vice- versa. This ratio is calculated by using the following formula.

Degree of Financial Leverage = EBIT/ EBT

The degree of financial leverage of two banks is shown in table 4.4.

Table no. 4.4

Degree of Financial Leverage Ratio

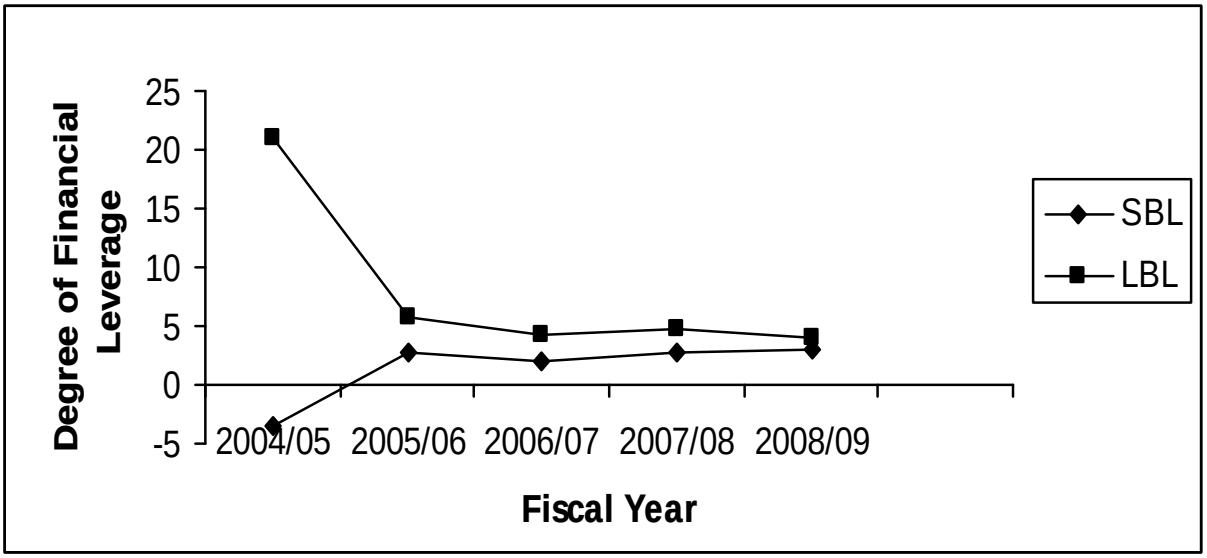
F/Y	SBL Ratio	LBL Ratio
2004/05	-3.39	21.00
2005/06	2.78	5.85
2006/07	2.05	4.22
2007/08	2.68	4.76
2008/09	2.95	3.93
Average (X)	1.42	7.95
Standard Deviations (	2.42	6.56
Coefficient of variation (CV)	171.11%	82.45 %

Source: Appendix d.

Degree of Financial Leverage of both the banks at different fiscal year is also shown in graphical form in figure 4.4.

Figure No 4.4

Degree of Financial Leverage



The DFL of SBL is in increasing trend. Average DFL of SBL is 1.42 and coefficient of variation is 171.11%.

The DFL of LBL is in fluctuating trend. Average DFL of LBL is 7.95 and coefficient of variation is 82.45%.

It can be concluded that both the banks are in financial risk position. Decreasing trend shows that risk is decreasing. In FY 2005/ 06, DFL of LBL decrease after that increasing. SBL has low risk than LBL.

4.1.2 Profitability Ratio

Profitability ratio measures how effectively the company manage their funds to earn profit or it ratios are calculated to measure the operating efficiency of banks. The main objectives of commercial banks operating in Nepal are the maximization of the profit. It is regarding as the most essential element in Nepal is the maximization of the profit.

Profit is the difference between revenue and expenses over a period of a time. A company should earn profit to survive and grow over a long period of time. Commercial banks' main objective is to earn profit by providing different types of banking services to its customers. To meet various objectives like to have a good liquidity position, meet fixed interest obligation overcome the future contingencies hidden investment opportunities, expand banking transaction in different places etc. Following ratios are calculated, evaluated and analyzed of the study purpose.

4.1.2.1 Return on Total Assets (ROA)

Return on total assets ratio measures the overall profitability of the banks with respect to each financial resources investment of the bank's assets. If the bank's working fund is well managed and efficiently utilized, than return on such assets will be higher and vice- versa. This ratio is calculated by using the following formula.

Return on total assets = Net Profit/ Total assets

Return on total assets is calculated by dividing net profit by the total assets which is shown in table 4.5.

Table no. 4.5

Return on Total Assets Ratio

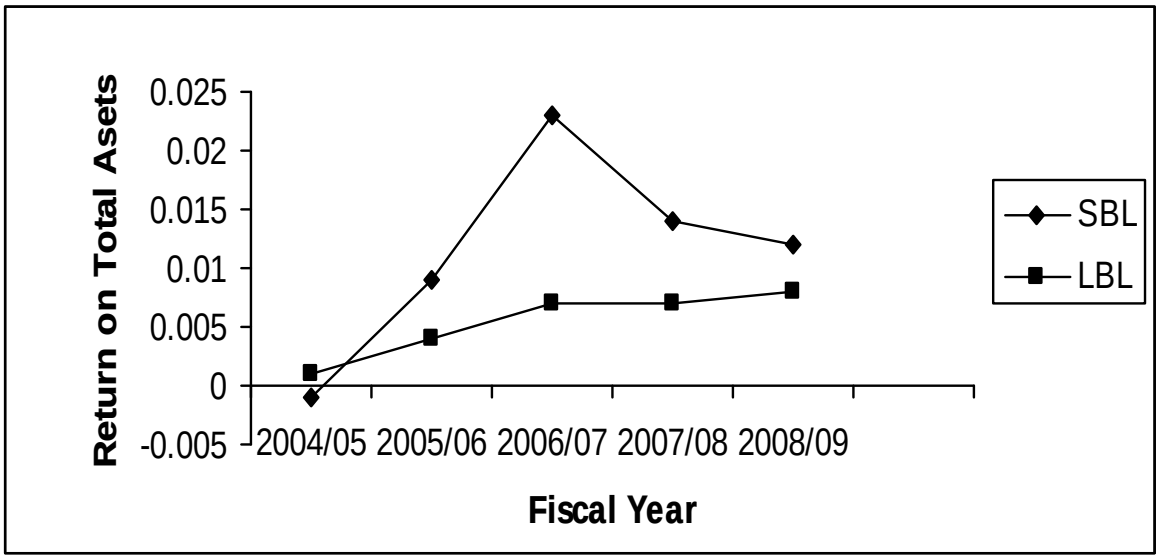
F/Y	SBL	LBL
	Ratio	Ratio
2004/05	-0.001	0.001
2005/06	0.009	0.004
2006/07	0.023	0.007
2007/08	0.014	0.007
2008/09	0.012	0.008
Average (X)	0.112	0.005
Standard Deviations (	0.008	0.003
Coefficient of variation (CV)	69.65%	48.57%

Source: Appendix e.

Return on total assets of both the banks at different fiscal year is also shown in graphical form in figure no. 4.5

Figure No 4.5

Return on Total Assets



Return on total assets of SBL at first increases for three years than decreases. It has average ratio of 0.011 which is higher than LBL. SBL coefficient of variation (CV) is 69.65% which is greater than LBL.

Return on total assets of LBL increases. It has average ratio of 0.005 which is lower than SBL. LBL coefficient of variation (CV) is 48.57% which is lower than SBL>

From the above analysis, SBL's return is some satisfactory level than LBL. SBL capacity to gain profit seems attractive due to proper mobilization of available resources. LBL is unable to generate more because of the lack of proper utilization of its available resources.

4.1.2.2 Return on Shareholder's Equity (ROE)

The ratio of net profit to owners' equity reflects the extent to which objectives have been accomplished. This ratio has great perspective to the present as well as future also. The shareholder's equity includes common share capital, preference share capital, reserve and surplus. But selected banks have not issued preference share capital.

It is calculated by dividing return (NPAT) by shareholder equity (Net Worth). Here return means net profit after tax. Net worth includes paid up capitals, general reserve P&L and provision of loan losses.

Thus, for the banks, both ratio of return on net worth and return on common shareholder's equity are the same which is shown in table 4.6.

Table no. 4.6

Return on Shareholder's Equity Ratio

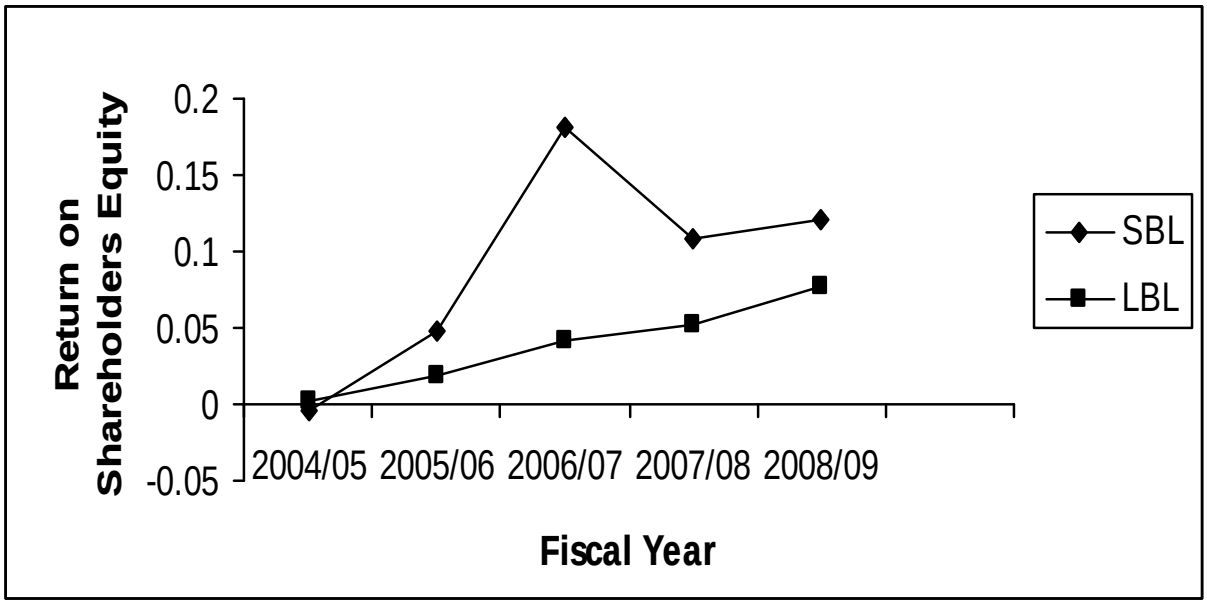
F/Y	SBL	LBL
	Ratio	Ratio
2004/05	-0.004	0.003
2005/06	0.048	0.018
2006/07	0.181	0.041
2007/08	0.108	0.052
2008/09	0.120	0.077
Average (X)	0.091	0.038
Standard Deviations	0.063	0.026
Coefficient of variation (CV)	69.92%	67.70%

Source: Appendix f.

Return on shareholder's equity of both the banks at different fiscal year is also shown in graphical form in figure no.4.6.

Figure No. 4.6

Return on Shareholder's Equity



The above table and figure show the ratio of return on shareholder's equity of SBL in increasing trend during the study period. It has average ratio of 0.091 which is greater than the LBL. Coefficient of Variation is 69.92% which is also greater than LBL. The

above table and figure show the ratio of return on shareholder's equity of LBL in increasing trend during the study period. It has average ratio of 0.038 which is less than the SBL. Coefficient of Variation is 67.70% which is also less than LBL.

On the basis of average SBL has high average ratio than LBL during the five year period. SBL efficiently utilizing its shareholder fund in generating profit. High ratio indicates better utilization of its fund. Comparatively, the rate of return of SBL on shareholder's fund is greater than LBL.

4.1.2.3 Earning per Share (EPS)

Earning per share is the relationship between earning after tax and number of common equity. EPS of selected banks are shown in table 4.9. EPS is calculated by dividing profit after tax by total number of shares.

EPS = Profit after tax/ Total No. of shares

Higher earning per share enhances the value of the shareholder's wealth. Higher profitability of the banks results in higher earning per share. EPS of SBL and LBL is presented below.

Table no. 4.7

Earning per Share (EPS)

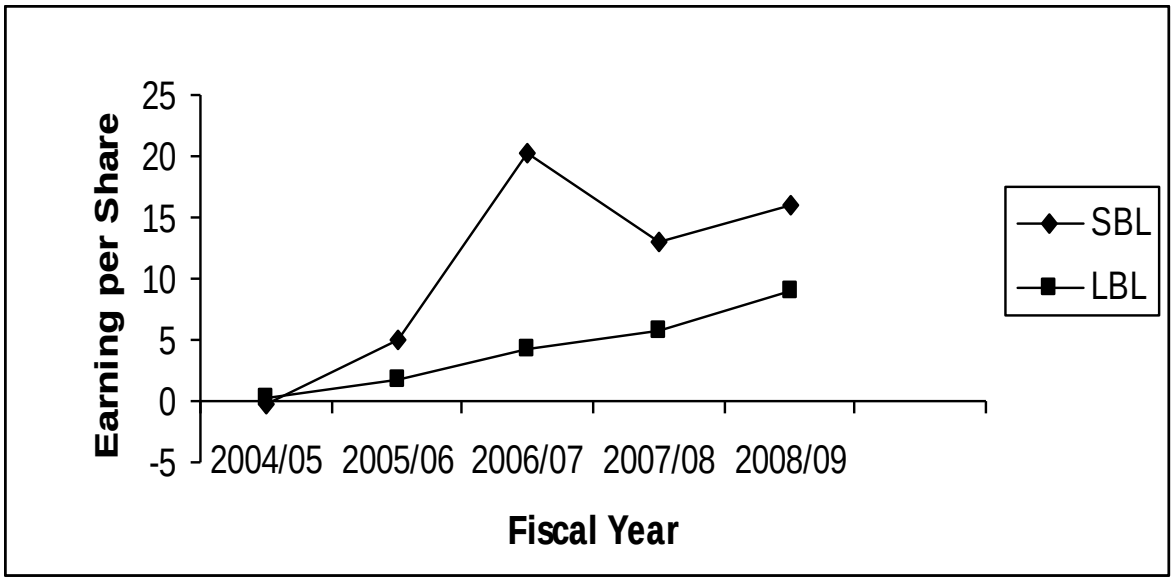
F/Y	SBL	LBL
	EPS	EPS
2003/04	-0.37	0.30
2004/05	4.99	1.82
2005/06	20.28	4.34
2006/07	13.05	5.80
2008/09	15.89	9.12
Average	10.73	4.28
Standard Deviation	7.421	3.087
Coefficient of Variation	69.17%	72.18%

Source: Appendix g

EPS of both banks at different fiscal year is also shown in graphical form in figure no. 4.7.

Figure no. 4.7

Earning per Share (EPS)



EPS of SBL is in fluctuating trend during the study period. EPS of SBL 2004/05 is negative, after that increasing satisfactory. EPS of SBL has 10.73 average ratios greater than LBL which indicates that it has highest earning capacity and it has 69.17% coefficient of variation.

On other hand, EPS of LBL is in increasing trend during the study period. It has 4.28 average ratios which is less than SBL and it has 72.18% coefficient of variation which is less than SBL.

From the above analysis, conclusion can be drawn that SBL is able to maintain higher EPS during the study period, LBL has lower ratio which is least efficient in terms of EPS.

4.1.2.4 Dividend per Share (DPS)

The net profit after taxes belongs to shareholders. But the income which they really receive is the amount of earnings distributed as cash dividend. Therefore, a large number of present and potential investors may be interested in DPS, rather than EPS.

Those banks didn't provided dividend to the shareholders, during the five years period.

Both banks weren't distributed cash dividend. So, shareholders aren't satisfied from the both bank.

4.1.3 Analysis of Capital Structure

4.1.3.1 Net Income Approach (Overall Capitalization Rate)

The net income approach is focused on overall capitalization rate and measures the degree of leverage of the firm. This approach shows that the increase in trend in debt may not increase risk. The higher use of cheaper debt lowers the cost and consequently increases value. Proper mix of debt and equity maximize the value of the firm. Overall capitalization rate is calculated by using the following formula.

Overall Capitalization = Net Operating Income/ Value of the Firm

Thus, under net income approach, the overall capitalization rate of both the banks is presented in table 4.8.

Table no. 4.8

Calculation of Overall Capitalization Rate (K_O)

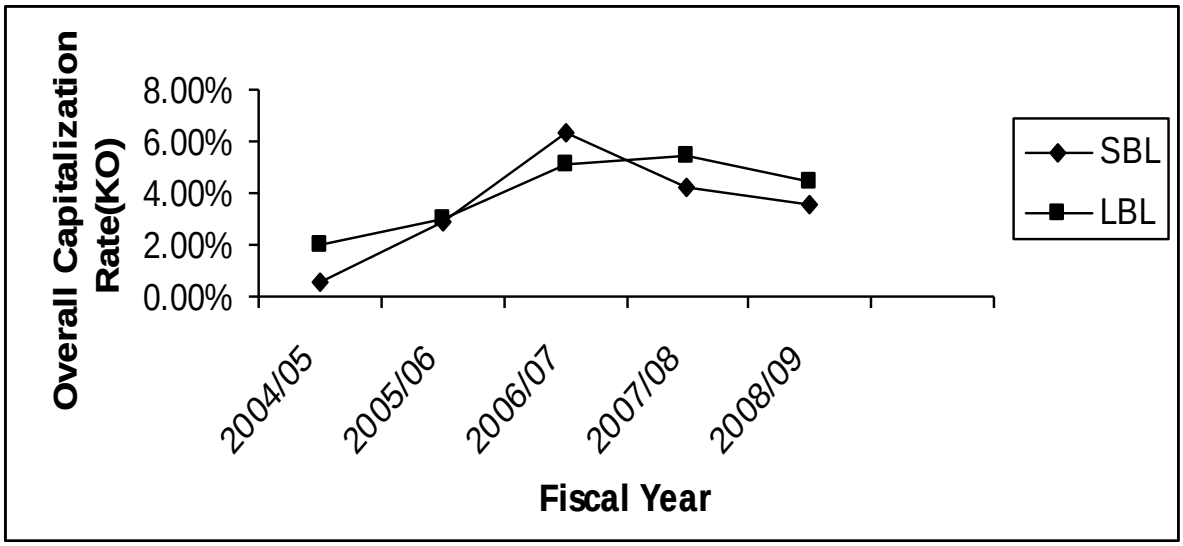
F/Y	SBL	LBL
	$K_{O\ (\%)}$	$K_{O\ (\%)}$
2003/04	0.575%	2.044%
2004/05	2.868%	2.960%
2005/06	6.378%	5.136%
2006/07	4.248%	5.487%
2008/09	3.604%	4.439%
Average	3.535%	4.013%
Standard Deviation	1.887%	1.312%
Coefficient of Variation	52.57%	42.85%

Source: Appendix h

Overall capitalization rate of both the banks at different fiscal year is shown in graphical form.

Figure No. 4.8

Overall Capitalization Rate (K_O)



The average overall capitalization rate of SBL is 3.535% which is lower than LBL. This rate is at first increasing 3 years and last two year in decreasing trend. SBL has 52.57% coefficient of variations which is greater than LBL.

The average overall capitalization rate of LBL is 4.013% which is greater than SBL. This rate is at first increasing 4 years and last year in decreasing trend. LBL has 42.85% coefficient of variations which is less than SBL.

In conclusion, LBL has higher and SBL has lower capitalization rate.

4.1.3.2 Net Operating Income Approach (Equity Capitalization Rate)

The net operating income approach focuses on the equity capitalization rate and appears as irrelevant theory of capital structure. However, the equity capitalization rate is obtained simply by dividing the earning before tax by market value of equity.

Equity capitalization rate = Income before tax/ Market Value of Equity

Thus, under net operation income approach, the equity rate of both the bank is presented below in table 4.9.

Table no. 4.9

Calculation of Equity Capitalization Rate (K_e)

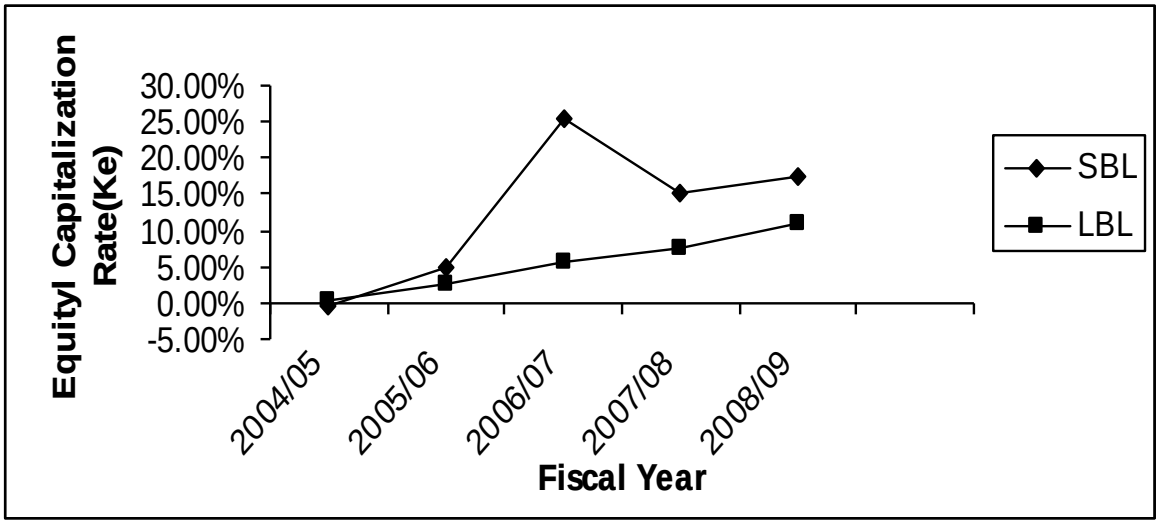
F/Y	SBL	LBL
	$K_{e\ (\%)}$	$K_{e\ (\%)}$
2003/04	-0.367%	0.307%
2004/05	4.773%	2.513%
2005/06	25.522%	5.715%
2006/07	15.177%	7.458%
2008/09	17.529%	11.063%
Average	11.927%	5.411%
Standard Deviation	8.444%	3.76%
Coefficient of Variation	70.80%	69.48%

Source: Appendix i

Equity capitalization rate of both the banks at different fiscal year is also shown in graphical firm in figure no. 4.9.

Figure No. 4.9

Equity Capitalization Rate



Equity Capitalization rate is fluctuating trend of SBL and having average rate 11.927% which is greater than LBL. Coefficient of variation of SBL is 70.80% which is greater than LBL.

Equity Capitalization rate is increasing trend of LBL and having average rate 5.411% which is less than SBL. Coefficient of variation of LBL is 69.48% which is less than SBL.

In conclusion, SBL has higher and LBL has lower equity capitalization rate.

4.2 Statistical Analysis

Statistical analysis are presented in this section to find out either there is a relationship between certain selected variables or Karl Pearson's coefficient have been used out the direction and correlation of the variables. Then the significance of correlation coefficient between the variables has been tested with the help of probable error.

Under this heading some statistical tools are analyzed which are related to the capital structure, correlation coefficient and trend value of different variables are applied to achieve the objectives of the study.

4.2.1 Co-efficient of Correlation Analysis

Karl Pearson's Coefficient of Correlation is widely used in practice to measure the degree of relationship between two variables. Here we use this correlation to find out the relationship between outside assets and net profit, coefficient of correlation analysis between total deposit and total investment and coefficient of correlation analysis between long term debt and EPS.

In correlation analysis, the value of coefficient of correlation 'r' between 0 and 1 indicates the goodness of fit. The higher value of 'r' denotes better fit. The value of $r_{XY= +1,}$ $r_{XY= -1}$ and $r_{XY= 0}$,which indicate perfect positive, perfect negative and no relationship between the variables respectively.

4.2.1.1 Coefficient of Correlation Analysis between Outside Assets and Net Profit

In this portion, the degree of relationship between outside assets and net profit has been shown using the Karl Pearson's Correlation Coefficient method. In correlation analysis of outside assets and net profit, outside assets is independent variable (X) and net profit is independent variable (Y).

To find out the correlation various calculations are made for the reason (detailed in Appendix 3&4). The following table shows the coefficient of correlation between outside assets and net profit i.e. $P.E_r$, 6 $P.E_r$ and coefficient of determination (r^2) of the two banks during the sampled period.

Table no. 4.10

Coefficient of Correlation Analysis between Outside Assets and Net Profit

Bank	Evaluation Criterion			
	r	r^2	$P.E_r$	6 $P.E_r$
SBL	0.911	0.830	0.051	0.307
LBL	0.975	0.951	0.015	0.089

On the basis of above table, it is obvious that the coefficient of correlation between outside assets and net profit (dependent variable), value of 'r' is 0.911 and 0.975 in case of SBL and LBL respectively. However, the coefficient of determination value (r^2) is 0.830 and 0.951 which indicates that 83 percent and 95.1 percent of the variation in the dependent variable (net profit) has been explained by the independent variable (outside assets) with respect to SBL and LBL. Moreover, the probable error, since the value of 'r' is 0.911 and 0.975 greater than six times of $P.E_r$ i.e. 0.307 and 0.089 of SBL and LBL respectively. Thus, we can say that, the value of 'r' is significant i.e. there is a significant relationship between outside assets and net profit.

4.2.1.2 Coefficient of Correlation Analysis between Total Deposit and Total Investment

Coefficient of correlation analysis between total deposit and total investment is to measure the relationship between two variables. In correlation analysis of total deposit and total investment, total deposit is independent variable (X) and total investment is dependent variable (Y). The main purpose of computing correlation coefficient is to justify whether there is any relationship between these two variables or not. To find out the correlation coefficient various calculations are made for the reason (detailed in Appendix- 5&6). The following table shows the coefficient of correlation between total deposit and total investment i.e. $P.E_r$, 6 $P.E_r$ and coefficient of determination (r^2) of the two banks during the sampled period.

Table no. 4.11

Coefficient of Correlation Analysis between Total Deposit and Total Investment

Bank	Evaluation Criterion			
	r	r^2	$P.E_r$	6 $P.E_r$
SBL	0.9997	0.9995	0.0002	0.0009
LBL	0.995	0.989	0.003	0.019

From the above table, it is obvious that the coefficient of correlation between deposit (independent variable) and total investment (dependent variable), value of 'r' is 0.9997 and 0.995 in case of SBL and LBL respectively. However, the coefficient of determination value (r^2) is 0.9995 and 0.989 only which indicates that 99.95 percent and 98.9 percent of the variation in the dependent variable (total investment) has been explained by the independent variable (total deposit) with respect to SBL and LBL. Moreover, by considering the probable error since the value of 'r' is 0.9997 and 0.995 greater than six times of $P.E_r$ i.e. 0.0009 and 0.019 of SBL and LBL respectively. Thus, we can say that, the value of 'r' is significant i.e. there is a significant relationship between deposit and total investment in the case of SBL and LBL.

4.2.1.3 Coefficient of Correlation Analysis between Long Term Debt and EPS

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

Table no. 4.12

Coefficient of Correlation Analysis between Long Term Debt and EPS

Bank	Evaluation Criterion			
	r	r^2	$P.E_r$	6 $P.E_r$
SBL	0.671	0.451	0.166	0.994
LBL	0.997	0.995	0.002	0.010

In the basis of above table, correlation coefficient between long term debt (LTD) and EPS of SBL is 0.671 and 6 times $P.E_r$ greater than correlation coefficient (r), so there is no significant relationship between these two variables.

In the case of LBL, correlation coefficient between long term debt (LTD) and EPS is 0.997 it is positive. The $6P.E_r$ of respected correlation is 0.010, which is less than correlation coefficient (r), so there is significant relationship between these two variables.

4.3 Major Findings of the Study

The major findings of this study as evaluated and found in analysis are summarized as follows.

- Debt- equity ratio calculated in relation to the proportion of debt and shareholder's equity shows that the percentage of debt is high in financing the company. The average debt- equity ratio of SBL and LBL is 5.17 and 4.48, which indicates SBL has higher average than LBL. SBL has the highest CV percentage, which indicates that, its risk is more than LBL. It can be concluded that both banks ratio are increasing over the study period. Both the banks have used high percentage of debt in the financial structure.

- Total debt to total assets ratio of SBL and LBL are in increasing trend during the study period. The average ratio of LBL is greater than SBL. The average ratio is 0.73 and 0.78. Coefficient of Variation of SBL is 19.28% and the LBL is 13.83%.
- Interest coverage ratio of SBL and LBL is in fluctuating trend. The average ratio of SBL is 1.48 times which is greater than LBL of 1.23 times. Coefficient of variation of SBL is 26.07% which is greater than LBL of 8.34%.In conclusion, this ratio is said that SBL has been success to obtain higher interest coverage ratio. Both the banks are able to maintain to pay interest on their debt capital financing.
- The DFL of SBL is in increasing trend. Average DFL of SBL is 1.42 and coefficient of variation is 171.11%. The DFL of LBL is in fluctuating trend. Average DFL of LBL 7.95 and coefficient of variation is 82.45%. It can be concluded that both bank are in financial risk position. Decreasing trend shows that risk is decreasing. In FY 2005/06, DFL of LBL decrease after that increasing. SBL has low risk than LBL. Higher DFL means large amount of interest has to pay to the creditors by the bank.

- The return on shareholder's equity ratio of SBL and LBL in average is 0.091 and 0.038 respectively. The productivity of shareholders fund is fluctuating during the study period. SBL efficiently utilizing its shareholder fund in generating profit. High ratio indicates better utilization of its fund. Comparatively, the rate of return of SBL on shareholder's fund is greater than LBL.

- EPS of SBL & LBL is in fluctuating trend during the study period. EPS of SBL 2004/05 is negative, after that increasing satisfactorily. EPS of SBL has 10.73 averages greater than LBL average EPS of 4.28. From the above analysis, conclusion can be drawn that SBL is able to maintain higher EPS during the study period, LBL has lower ratio which is least efficient in terms of EPS.

- DPS of SBL and LBL is zero. Both the banks didn't distribute dividend during the study period. This indicates that shareholders are not satisfied from both the bank. But both bank increasing capital by issue of right share.

- Overall capitalization rate (K_o) of both SBL and LBL is in fluctuating trend. At first 3 years increasing K_o after that decreasing trends, which indicates that both bank increasing the debt financing. Average overall capitalization rate of SBL and LBL 3.535% and 4.013% respectively. Higher average of LBL indicates proper mix of debt and equity.

- Equity capitalization rate is fluctuating trend of SBL and increasing trend of LBL. Under net operating income approach the average equity rate of SBL and LBL are found 11.927% and 5.411% respectively. LBL average equity capitalization rate is lower than SBL this indicates that the earning power is weak than SBL.

- The Coefficient of correlation between deposit (independent variable) and total investment (dependent variable) value of 'r' is 0.9997 and 0.995 in the case of SBL and LBL respectively. Moreover, by considering the probable error, since the value of 'r' is 0.9997and 0.995 greater than six times of P.Er i.e. 0.0009 and 0.019 respectively. We can say that there is significant relationship between deposit and total investment in the case of SBL and LBL. SBL and LBL are able to mobilize their deposit on proper investment.

- The coefficient of correlation between outside assets (independent variable) and net profit (dependent variable), value of 'r' of SBL and LBL is 0.911 and 0.975. Here, in both the banks, the correlation of coefficient is greater than 6 $P.E_{r.}$

Hence, both banks have significant (positive) correlation relationship between these two variables. Both banks have significant correlation between proper utilization of funds and return i.e. net profit mobilized funds which indicate both banks are able to earn more profit by utilizing its outside assets in productive projects.

In the basis of above table, correlation coefficient between long term debt (LTD) and EPS of SBL is 0.671 and 6 times $P.E_r$ greater than correlation coefficient 'r', so there is no significant relationship between two variables. In the case of LBL correlation coefficient between long term debt (LTD) and EPS is 0.997 it is positive. The $6P.E_r$ of respected correlation is 0.010, which is less than correlation coefficient 'r'. So, there is significant relationship between these variables.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATION

This research is concerned with the study of capital structure management of Siddhartha Bank Limited and Laxmi Bank Limited.

This concluding chapter deals with the findings in a logical manner to the problem of research within the framework stated in introduction chapter, the relevance of related ratios to the capital structure and their contribution to analysis are described in this chapter. Similarly, this chapter is also related with findings and conclusions desired from the study of the two commercial banks SBL and LBL. This chapter is composition of three sections, firstly, the summary of the study, secondly conclusion of the study and lastly, some practical recommendation are suggested to help to solve the problems observed on the basic findings.

5.1 Summary

Capital structure is the composition of debt and equity that comprise a firm's financing of its assets. Capital structure plays a vital role to increase the profitability, to ensure the minimum cost of capital and the maximum return to equity holder. The financial soundness and strengths of a bank depend to a large extent on the composition of capital and assets. A company can finance its investment by a variety of sources such as debt, share capital, including reserves and surpluses.

The Nepalese financial sector is composing of banking sector and Non- banking sector. As shown by the study of NRB, the commercial bank is simply a business corporation organized for the purpose of maximizing the value of shareholder's wealth invested in the bank at an accepted level risk. Financing the firm's assets is very crucial problem in every business and as a general rule there should be a proper mix of debt and equity capital. The basic objectives of the study are:

- To analyze the components of capital structure of the Siddhartha Bank Ltd. & Laxmi Bank Ltd.

- To analyze the relationship of the capital structure with various important variables such as Earning per share, Dividend per share & Net Worth of Siddhartha Bank Ltd. & Laxmi Bank Ltd.

- To provide suggestion and recommendation on the basis of analysis to improve the financial weakness of Siddhartha Bank Ltd. & Laxmi Bank Ltd.

Various financial and statistical tools have been used to achieve the objectives of the study. For this purpose, statistical tools such as Karl Pearson's coefficient of correlation have been calculated to show the relationship between various variables.

This study is based on secondary data with regard to the secondary data; there are 25 commercial banks in Nepal, for the purpose of the study only two banks have been selected. The necessary data on capital structure average cost of capital, cost of equity, and other related variables were collected for the period, 2005/06- 2008/09, from the published annual report of the bank and Securities Board of Nepal.

5.2 Conclusion

It is a fact, the globalization of Joint Venture Bank is reality the growth and increasing integration of the world economic has been paralleled by expansion of global banking activities. Nepal is a member of WTO. So, many International Commercial and Joint venture bank are coming here in the future. So, local commercial will face more difficulties and competition. Nepal though a developing country couldn't deny the fact that the commercial banks has running potentiality, which is responded by extending loans and developing new highly innovative financial techniques that laid the foundation for totally new approaches to the provision of banking services. This study is mainly concluded on the basis of secondary data, processed and analyzed. On the basis of entire study, some conclusion has been deduced.

- Both the banks have used high percentage of total debt in raising the assets. The higher ratio constitutes that the outsider's claim in total assets of the banks is higher than owner's claim.

- The average debt- equity ratio of SBL and LBL is 5.17 and 4.48, which indicates SBL has higher average than LBL. SBL has the highest CV percentage, which indicates that its risk is more than LBL. It can be concluded that both banks ratio are increasing over the study period.

- Total debt to total assets ratio of SBL and LBL are in increasing trend during the study period. The average ratio of LBL is greater than SBL. The average ratio is 0.73 and 0.78 of SBL and LBL respectively. Coefficient of variation of SBL is 19.28% and LBL is 13.83%.

- Interest coverage ratio of SBL and LBL is in fluctuating trend. The average ratio of SBL is 1.48 times which is greater than LBL of 1.23 times. Coefficient of variation of SBL is 26.07% which is greater than LBL of 8.34%. In conclusion, this ratio is said that SBL has been success to obtain higher interest coverage ratio. Both the banks are able to maintain to pay interest on their debt capital financing.

- The DFL of SBL is in increasing trend. Average DFL of SBL is 1.42 and coefficient of variation is 171.11%. The DFL of LBL is in fluctuating trend. Average DFL of LBL is 7.95 and coefficient of variation is 82.45%. It can be concluded that both banks are in financial risk position. Decreasing trend shows that risk is decreasing. In FY 2005/06, DFL of LBL decrease after that increasing. SBL has low risk than LBL. Higher DFL means large amount of interest has to pay to the creditors by the bank.

- Average ROA ratio of SBL is 0.11 and LBL is 0.005. Return on total assets of SBL at first increases for three years after that decreases and return on total assets ratio of LBL increases during the study period. SBL has average ratio higher than LBL. SBL capacity to gain profit seems attractive due to proper

mobilization of available resources. LBL is unable to generate more because of the lack of proper utilization of its available resources.

- The return on shareholder's equity ratio of SBL and LBL in average is 0.091 and 0.038 respectively. The productivity of shareholders fund is fluctuating during the study period. SBL efficiently utilizing its shareholder fund in generating profit. High ratio indicates better utilization of its fund. Comparatively, the rate of return of SBL on shareholder's fund is greater than LBL.

- EPS of SBL and LBL is in fluctuating trend during the study period. EPS of SBL 2004/05 is negative, after that increases satisfactorily. EPS of SBL has 10.73 averages greater than LBL average EPS 4.28. From the analysis, conclusion can be drawn that SBL is able to maintain higher EPS during the study period, LBL has lower ratio which is least efficient in terms of EPS.

- DPS of SBL and LBL is zero. Both the banks didn't distributed dividend during the study period, which indicates that shareholders are not satisfied from both the bank. But both bank increasing capital by issue of right share.

- Net income approach are the dependent hypothesis of capital structure which state that with the increased use of leverage, overall cost of capital declines and the value of firm rise. According to this hypothesis the firm with the highest value and least cost of capitalization rate is considered to have the best capital structure. The average value of the firm of SBL and LBL is 4482.88 and 5594.92. From the calculation, we can say that this approach is well acquainted with the study as the value of banks has increased as the cost of capital has declined. Average overall capitalization rate of SBL and LBL 3.535% and 4.013% respectively.

- Equity capitalization rate is in fluctuating trend of SBL and increasing trend of LBL. Under net operating income approach the average equity rate of SBL & LBL are found 11.927% and 5.411% respectively. LBL average equity

capitalization rate is lower than SBL this indicates that the LBL earning power is weak than SBL.

- In case of outside assets and Net Profit the coefficient of correlation are positive and higher than 6 $P.E_r$ which is significant relationship of both the bank.

- Similarly, in the case of Total deposit and total investment the correlation coefficient are positive and higher than 6 $P.E_r$ which is significant relationship of both the bank.

- The correlation coefficient between LTD and EPS of SBL is higher than 6 $P.E_r$ which is significant relationship. The correlation coefficient between LTD and EPS of LBL is lower than 6 $P.E_r$ which isn't significant relationship.

5.3 Recommendations

In this section of the study few points that can be helpful to stakeholders as well as to the banks are recommended based upon above calculations and draw conclusions. These recommendations are guidelines which could be helpful in taking prompt and appropriate decision about capital structure. These recommendations are given in point wise form below.

- First of all from the study we can clearly say that the banks lack the theoretical 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 both the banks should follow the theoretical aspects of the capital structure management or give some seriousness in this matter and try to manage their activities accordingly.

- As there is no rule regarding proportion of debt and equity, it is suggested to issue the right share for the improvement in the capital structure. From this point of view, it is suggested to reduce level of debt gradually by increasing

the level of equity in future years to compensate the capital of debt of both banks.

- Both banks' net profit and earning per share are not in satisfactory level. They are fluctuating nature due to the decreased interest rate of loan and investment. So, in this scenario, the bank should explore the new ways of marketing and invest in the most profitable big projects.

- In the scenario where a large number of banks and financial institutions are operating in modern and fast growing urban area, to operate efficiently and to build strong liquidity position, the bank should explore the different areas for operation. The bank should expand its branches in proper areas all over Nepal.

- It is obvious that commercial banks are playing significant role in the modern banking system to uplift the economic development of the nation but they are not so much a financial intermediary and engage in merchant banking activities like underwriting of securities, broker development of capital market.

- Nepalese shareholders are very much concerned about the payment of cash dividend by the commercial banks rather than their financial statement. As such banks are suggested to pay cash dividend regularly. A higher payout attracts both the existing and potential investors lending to increase in market price of the share.

Bibliography

A. BOOKS

Barger, Alexander (1963). *The Effect of Capital Structure on Cost of Capital*. New Delhi: Prentice Hall of India.

Bhandari, K.P.(2002). *Research Methodology.* Kathmandu: M. K Publishers & Distributors.

Brealey, R. and S. Myers (2003). *Principles of Corporate Finance*. London: McGraw-Hill.

Chakraborty, S.K.(1997). *Corporate Capital Structure and Cost of Capital.* Calcutta: ICWA

Gitman, L. (1998). *Principles of Managerial Finance*. New York: Harper Collins Publishers.

Joshi, P.R. (1999). *Research Methodology*. Kathmandu: Buddha Academic Enterprises.

Khan, M.Y. and Jain P.K. (1992). *Financial Management*. New Delhi: Tata Mc-Graw Hill.

Kothari, C.R. (1990). *Research Methodology Methods and Techniques.* New Delhi: Vikas Publishing House.

Michael, V.P (2000). *Research Methodology in Management.* New Delhi: Himalaya Publishing House.

Pandey, I.M (1998). *Financial Management*. New Delhi: Vikash Publishing House.

Pradhan, R.S. (1994). *Financial Management*. Kathmandu: Educational Enterprises

Pradhan, S. (1992). *Basics of Financial Management*. Kathmandu: Educational Enterprises.

Shrestha, M.K. (1980). *Financial Management Theory and Practices*. Kathmandu: Curriculum Development Center, T.U.

Solomon, Ezra (1969). *The Theory of Financial Management.* New York: Columbia University Press.

Van Horne, J.C. (2002). *Financial Management and Policy*. New Delhi: Pearson Education.

Weston, J.F. and Copeland T.E. (1992), *Managerial Finance*, New York: The Dryden Press.

Weston, J.F., Besley S. and Brigham E.F. (1996). *Essential of Managerial Finance*. San Diego: The Dryden Press.

B. JOURNALS AND ARTICLES

Abor, Joshua (2005). *The Effect of Capital Structure on Profitability*. *The Journal of Risk Finance*. Vol. 38, pp 438-445.

Bruno, Biais and Catherine (1999). *Operating Leverage and Aggregate Investment*. *Journal of Finance*. Vol 42. p. 239-245

Buferna, F., Bangassa, K., and Hodkinson, L. (2005). Determinates of Capital structure. *Research Paper Series.* Management School, University of Liverpool, London.

Garvey, G.T. and Hanka, G.(1998). Capital Structure and Corporate Control, the Effect of Anti takeover Status on Firm Leverage. *Journal of Finance*. Vol: 36 p.p. 326-329.

Jensen, M.C. (1986). *Agency Costs of Free Cash Flow: Corporate Finance and Takeovers. American Economic Review*.

Laxmi Bank Limited, Annual Report, 2004- 2009

Modigliani, F. and M. Miller (1958). The Cost of Capital, Corporate Finance and the Theory of Investment", *American Economic Review XLVIII,* pp. 261-297.

Modigliani, F. and Miller, M. (1966). "Estimates of the Capital to Electric Utility Industry Investment", *American Economic Review*, Vol. 56, pp. 333-391.

Myers, S.C. (1984). "The Capital Structure Puzzle", *Journal of Finance*, Vol. 39, pp. 575–592.

Shrestha, R. D. (1993). "Focus on Capital Structure", *Pravha Journal of Management*, Nepal Commerce Campus, Kathmandu.

Siddhartha Bank Limited, *Annual Report*, 2004- 2009.

C. THESIS

Joshi, M.R. (2008). *Capital Structure Management of Commercial Banks of Nepal (NIBL, BOK, HBL and EBL).* An Unpublished Master's Degree Thesis. Faculty of Management, Tribhuvan University Kathmandu.

Kafle, P.P. (2001). *A Comparative Analysis of Capital Structure between Lumbini Sugar Factory and Birgunj Sugar Factory Limited*. An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Koirala, U.K. (2008). *A Comparative Evaluation of Capital Structure between Dabur Nepal Pvt. Ltd. and Nepal Lever Ltd*. An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Pandey, M.K. (2007). *The Study on Capital Structure of Standard Chartered Bank and Nepal Bangladesh Bank Ltd.* An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Prashai, S.R. (1999). *A Study on Capital Structure of Nepal Bank Ltd*. An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Shah, A. (2007). *Debt Serving Capacity of the Manufacturing Companies*. An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Shrestha, U.L. (1999). *The Study on Comparative Evaluation of Capital Structure between Selected Manufacturing and Trading Companies of Nepal*. An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Singh, M.P. (2008). *The Capital Structure Decision and its Impact on Risk and Return of Hulas Steel Industries Pvt. Ltd.* An Unpublished Master's Degree Thesis, Kathmandu: Faculty of Management, Tribhuvan University.

Appencices

a. Debt Equity Ratio

FY	SBL			LBL		
	Debt (in Million)	Equity (in Million)	Ratio	Debt (in Million)	Equity (in Million)	Ratio
2004/05	391.68	348.7	1.12	691.81	326.00	2.12
2005/06	1291.31	366.20	3.53	1684.16	557.00	3.02
2006/07	2461.92	387.89	6.35	3051.76	643.57	4.74
2007/08	3918.08	603.14	6.50	4444.35	679.04	6.55
2008/09	6625.08	793.71	8.35	6711.65	864.40	7.76
	Average (X)		5.17			4.48
	Standard Deviations (		2.54			2.11
	Coefficient of variation (CV)		49.19%			43%

b. Total Debt to Total Assets Ratio

FY	SBL			LBL		
	Total Debt (in Million)	Total Assets (in Million)	Ratio	Total Debt (in Million)	Total Assets (in Million)	Ratio
2004/05	405.02	863.74	0.47	697.36	1094.18	0.64
2005/06	1325.84	1912.04	0.69	1709.89	2583.95	0.66
2006/07	2461.92	3091.10	0.80	3147.52	3809.78	0.83
2007/08	3972.65	4756.94	0.84	4496.40	5205.19	0.86
2008/09	6730.96	7954.66	0.85	7718.29	8552.69	0.90
	Average (X)		0.73			0.78
	Standard Deviations (		0.14			0.11
	Coefficient of variation (CV)		19.28%			13.82%

c. Interest Coverage Ratio (In times)

FY	SBL			LBL		
	EBIT (in Million)	Interest (in Million)	Ratio	EBIT (in Million)	Interest (in Million)	Ratio
2004/05	4.34	5.62	0.77	21	20	1.05
2005/06	71.02	45.51	1.56	76	63	1.21
2006/07	179.34	91.98	1.95	155.22	118.44	1.31
2007/08	245.25	153.71	1.60	241.23	190.59	1.27
2008/09	410.84	271.71	1.51	375.91	280.28	1.34
	Average (X)		1.48			1.23
	Standard Deviations		0.39			0.10

d. Degree of Financial Leverage

FY	SBL			LBL		
	EBIT (in Million)	EBT (in Million)	Ratio	EBIT (in Million)	EBT (in Million)	Ratio
2004/05	4.34	-1.28	-3.39	21	1	21.00
2005/06	71.02	25.21	2.78	76	13	5.85
2006/07	179.34	87.36	2.05	155.22	36.78	4.22
2007/08	245.25	91.54	2.68	241.23	50.64	4.76
2008/09	410.84	139.13	2.95	375.91	95.63	3.93
	Average (X)		1.42			7.95
	Standard Deviations (		2.42			6.56
	Coefficient of variation (CV)		171.11%			82.45 %

e. Return on Total Assets

FY	SBL			LBL		
	Net Profit (in Million)	Total Assets (in Million)	Ratio	Net Profit (in Million)	Total Assets (in Million)	Ratio
2004/05	(1.28)	863.74	-0.001	1	1094.18	0.001
2005/06	17.48	1912.04	0.009	10	2583.95	0.004
2006/07	70.28	3091.10	0.023	26.46	3809.78	0.007
2007/08	65.25	4756.94	0.014	35.39	5205.19	0.007
2008/09	95.31	7954.66	0.012	66.58	8582.69	0.008
	Average (X)		0.112			0.005
	Standard Deviations (		0.008			0.003
	Coefficient of variation (CV)		69.65%			48.57%

f. Return on Shareholder's Equity

FY	SBL			LBL		
	Net Profit (in Million)	Shareholders Equity (in Million)	Ratio	Net Profit (in Million)	Shareholder Equity (in Million)	Ratio
2004/05	(1.28)	348.7	-0.004	1	326.00	0.003
2005/06	17.48	366.2	0.048	10	557.00	0.018
2006/07	70.28	387.89	0.181	26.46	643.57	0.041
2007/08	65.25	603.14	0.108	35.39	679.04	0.052
2008/09	95.31	793.71	0.120	66.58	864.40	0.077
	Average (X)		0.091			0.038
	Standard Deviations (		0.063			0.026
	Coefficient of variation (CV)		69.92%			67.70%

g. Earning per Share (EPS)

	SBL			LBL		
	Net Profit	Total No. of Shares	EPS	Net Profit	Total No. of Shares	EPS
2003/04	-1280000	3500000	-0.37	1000000	3300000	0.30
2004/05	17480000	3500000	4.99	10000000	5497890	1.82
2005/06	70280000	3500000	20.28	26460000	6098390	4.34
2006/07	65250000	5000000	13.05	35390000	6099170	5.80
2008/09	95310000	6000000	15.89	66580000	7296970	9.12
	Average (X)		10.73			4.28
	Standard Deviation		7.421			3.087
	Coefficient of Variation(CV)		69.17%			72.18%

h. Calculation of Overall Capitalization Rate (K_O)

	SBL			LBL		
	EBIT (in Million)	EBT (in Million)	$K_{O\ (\%)}$	EBIT (in Million)	EBT (in Million)	$K_{O\ (\%)}$
2003/04	4.34	755.02	0.575%	21	1027.36	2.044%
2004/05	71.02	1675.84	2.868%	76	2567.56	2.960%
2005/06	179.34	2811.92	6.378%	155.22	4885.56	5.136%
2006/07	245.25	5772.65	4.248%	241.23	6740.89	5.487%
2008/09	410.84	11398.96	3.604%	375.91	12753.20	4.439%
	Average (X)		3.535%			4.013%
	Standard Deviation		1.887%			1.312%
	Coefficient of Variation (CV)		52.57%			42.85%

i. Calculation of Equity Capitalization Rate (K_e)

	SBL			LBL		
	EBT (in Million)	Equity (in Million)	$K_{e\ (\%)}$	EBT (in Million)	Equity (in Million)	$K_{e\ (\%)}$
2003/04	-1.28	348.7	-0.367%	1	326.00	0.307%
2004/05	17.48	366.20	4.773%	14	557.00	2.513%
2005/06	87.36	387.89	25.522%	36.78	643.57	5.715%
2006/07	91.54	603.14	15.177%	50.64	679.04	7.458%
2008/09	139.13	793.91	17.529%	95.63	864.40	11.063%
	Average (X)		11.927%			5.411%
	Standard Deviation		8.444%			3.76%
	Coefficient of Variation (CV)		70.80%			69.48%

Curriculum Vitae

PERSONAL DETAILS

Name	**: Prem Chandra Mali**
Date of Birth	: 2038/08/15
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Level	University/ Board	Year	Major Subject
MBS	T.U. (Lumbini Banijya Campus)	Thesis Submitted	Finance
BBS	T.U. Rammani Multiple Campus, Manigram	2004	Account & Finance
I.Com	T.U. Rammani Multiple Campus, Manigram	2001	Math & Account
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Training

- One month General Banking Training.
- 6 months basic computer training.

Skill

- Typing both Nepal and English.
- Computer Proficiency: MS- Word, Excel, Power Point and Tally.

References

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