CHAPATER – 1
INTRODUCTION

1.1 Background of the Study:

The history of banking in Nepal starts forms the establishment of Nepal bank Ltd 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 merchant supplying the fund to the peasant, trader 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 area.

Realizing the importance of banking sector for economic development, Nepal Bank LTD set up as a commercial bank in 1937 A.D. being a commercial bank NBL pain more attention to profit generating business.

Nepal Rastra Bank was therefore established in 1956 A.D. to control and monitor the operation of commercial bank as well as formulating the monetary policy or country. Since then it has been functioning as central bank or bank of banks and supervising the operation of various financial sectors. Nepal Rastra Bank is under responsibility to monitor and regulate there operation and manage the financial services of commercial banks, development banks, rural development banks, rural micro finance development banks, finance companies, saving and credit cooperative societies, non government organizations and everyone who deals in foreign exchange transaction also. Being a central bank Nepal Rastra bank has limitation in the area of profit generation. To get rid of these limitation, Government established the Rastriya Banijya Bank in 1966/01/23 A.D. as a fully government owned commercial bank. Since then Rastriya Banija Bank is very strong bank able to do the commercial transaction.

Today banking sector have dominantly contribution good effort to increase the GDP of Nepal. The economy of Nepal is heading toward prosperity due to high technological development

Commercial banks are the suppliers of fiancé for trade and industry. This plays vital role in the economic and financial life of the country. They help in the formation of capital by investing the saving in productive areas. Rural people of underdeveloped country like Nepal need various banking facilities to enhance its economies. In most of the countries the commercial banks generally concentrate in urban and semi urban sectors. They neglect rural sector due to heavy risk and low return, which is in fact the main key to economic development. Without which the other sector cannot be flourish.

Nepal Commercial Bank Act 2031 B.S. defines a commercial bank as "a commercial bank is a bank which deals on money exchange, accepting deposit, advancing loan and commercial transition except specific banking related to cooperative, agriculture, industry and other objective. Commercial banks pool the saving of community and arrange to lend to the entrepreneur in the forms of individual, firms, companies an the other organized sector as well. At present 25 commercial banks are operating across the county.

1.2 Focus of the Study

Capital Structure analysis of two commercial banks is the main focus of this study. Any entity/firm depends on the proper management of capital structure. Capital structure refers to the combination or mixture of long-term funds and share capital, namely inclusive of equity share capital, preference share capital, debentures, bonds and long – term debts. A prudent financial manager should use proper mixture of the fund so that his/her return on capital is maximum. Return in financial term indicates the increase in wealth of the investor. Capital structure management concentrates on the area of overall cost of capital, total value of firm and it's earning per share. Optimum capital structure refers to the combination of debt, preferred stock and equity maximize the total value of firm, earning per share & minimizes the cost of capital.

Capital structure affects the earning per share and value of firm but not operating income of the firm. Optimum capital structure is the most essential tool for the success of any organization. This study analyses the capital structure with the help of various parameters relating to the 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 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 .

1.3 Introduction of Banks Under Study

1.3.1 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. We provide a full range of commercial banking services through their seven branches established in Kathmandu, Birgunj, Biratnagar, Pokhara and Damak.

The environment of Nepalese banking sector is undergoing a rapid transformation. With liberalization in financial markets and integration of domestic market with external markets, bank operations have become more complex and dynamic. They are geared to meet the challenges and keep abreast with the changes.

The Vision statement of the Bank describes the core values and purposes that guide the Bank as well as an envisioned future. Fundamentally, in all dealings SBL earnestly believes in transparency, financial soundness, efficiency and better technology.

Vision:

SBL's vision is to be financially sound, operationally efficient and keep abreast with technological developments. The Bank firmly believes customer focus is a core value, shareholder prosperity is a prime priority, employee growth is a commitment and economic welfare is a sincere concern.

Mission:

The Bank wants to be a leader among the banks of its age in Nepal by fulfilling the interest of the stakeholders and also aims to provide total customer satisfaction by way of offering innovative product and by developing and retaining highly motivated and committed staff. It directs all its efforts to move ahead with increased profits. The following mission statement is a guide to meet the Vision of the Bank:

- As a first step, SBL will strive to be in a leading position amongst the banks of its age in terms of profitability, productivity and innovation
- SBL aims at total customer satisfaction by rendering efficient and diversified financial services through improved technology.
- SBL will build a highly motivated and committed team of staff by nurturing a good work culture to achieve superior individual performance aiming to enhance organizational effectiveness.
- SBL will be the place of pride to all its stakeholders.

Services

SBL has adopting innovative latest banking technology. The bank provides various services and facilities such as:

- Holyday Banking
- Internet Banking
- Evening Counter
- ATM/DEBIT Card
- L.C. Services
- Safe deposit locker
- Foreign currency transaction etc.
- Corporate Banking
- Personal and Retail Banking
- Remittance

Table No. - 1

The present capital Structure of SBL

Share Structure	Amount Rs. (in million)
Authorized Capital	**1000**
Issued Capital	**800**
Paid up Capital (6000000 Shares 100 each, full Paid)	**600**

Source : Annual Report of 2006/07

1.3.2 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 percent, Citizen Investment Trust holding 9.02 percent and the general public holding 35.56 percent. Promoters represent Nepal's leading business families with diversified business interests. The Bank's shares are listed and actively traded in the Nepalese Stock Exchange.

Laxmi Bank has grown with branches in Birgunj, Banepa, two in Pokhara, Biratnagar, Narayanghat, Pulchowk, Lalitpur, Teku, New Road, Janakpur, New Baneshwor and Damak. Following the merger with Hisef Finance Ltd., a decade old first generation finance company, its office in Hattisar, Kathmandu was converted to that of Laxmi Bank. This office was converted to a full branch and their corporate office in October 2005.

Under a professional management team, the bank has established itself as an emerging key player. Today the bank is recognized as an innovative and progressive bank geared to providing shareholders and customers with quality earnings and value-added services. Transparency, good governance, and sound business growth are our driving forces.

Mission

"We are committed to excellence in delivery of entire gamut of financial services in order to achieve sound business growth and maximize stakeholder values by embracing team spirit, progressive technology and good corporate governance."

Vision

- Provider of most integrated financial services
- Key player in consumer banking
- The best asset book
- Best IT capability
- Preferred employer in the financial sector

Over a period of time, Laxmi Bank foresees itself to be one of the leading banks in Nepal and eventually a niche player in the South Asian region.

Services

LBL has adopting innovative latest banking technology. The bank provides various services and facilities such as:

- SMS Banking
- ATM Card servies
- L.C. Services
- Safe deposit locker
- Foreign currency transaction
- ABBS
- Remittance Services
- Treasure Services
- Financial Advisory
- NRN Services

Table No. - 2

The present capital Structure of LBL

Share Structure	Amount Rs. (million)
Authorized Capital	**1000**
Issued Capital	**800**
Paid up Capital (7290700 Shares 100 each, full Paid)	**729.70**

Source : Annual Report of 2006/07

1.4 Statement of the Problems:

Every business firm can take advantage through making appropriate capital structure decision because long term runs profitability depends on its capital structure besides other factor financial institutions plays important role for the industrial development in under developed county like Nepal. We have been seeing the commercial bank have to shoulder more responsibilities and act as a key role models.

In Nepalese context, it has been observed that one of the reasons behind the loss in many organizations, the problem is not with the mobilization of capital, but the actual problem lies in good capital management. So it is essential to evaluate the management of capital structure in terms of different financial ratios. Therefore, the present study seeks to explore the answers of the following questions.

I. To what extent has the process of capital structure follows in Siddarth Bank Ltd & Laxmi Bank Ltd?
II. What are the main problems of Siddarth Bank Ltd & Laxmi Bank Ltd in developing & implement ion of capital structure plans?
III. What steps should be taken to improve the capital structure system in Siddarth Bank Ltd & Laxmi Bank Ltd?

1.5 Objectives of the Study:

The following are the specific objectives of the study.

I. To analyze the capital structure of the Siddarth 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.
III. To provide suggestion and recommendation on the basis of analysis to improve the financial weakness of Siddarth Bank Ltd & Laxmi Bank Ltd.

1.6 Significance of the Study:

Capital Structure has become the vital & important tool in the field of managerial decisions. Its study will very useful to decision maker & further researcher. The financial institutions, holding render & owner are more concern with the firm's long-term financial strength. To judge the long term financial position of firm capital structure is worthy to analysis. Capital structure analysis would help to indicate & to follow the appropriate mix of debt & owners equity in financing the firm's assets. A firm having god return & efficient management is considered to be better & 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.

1.7 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 interpreter results emerging from decision so the results depend on reliability of secondary.
II. The study period only covers fiscal years beginning 2059/60 to 2063/64
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.

1.8 Organization of the Study:

I. Chapter first deals with subject matter of the study consisting introduction, Historical background, problem of the study, significance of the study, objectives the study & limitations of the study.

II. Chapter second deals with review of literature. It consists of review of conceptual thoughts of the study.

III. Chapter third is all about the research methodology. Which offer the method of investigation followed by the objectives of the study.

IV. Chapter four deals with the presentation & Analysis of data by using Financial & Statistical Tools.

V. Lastly chapter five is of suggestive frame works, which is the output of the study & Presented in the form of major finding, strength, weakness & recommendations.

CHAPATER – 2
REVIEW OF LITERATURE

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 justify this research work and to show that need of current study on rational basis. This chapter tires 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 categorized 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 sources of funds such as debenture long-term debt, preference share capital and equity share capital. If companies do not plan their capital structure, they many face difficulties in rising 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 effect 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-ten credit" (Weston and Brigham, 1982:555)

'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 is 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 types of long term capital, financial structure = Proportions of all types of long term and short term capital. (Upadhaya, 1985:799)

Capital structure is composition of debt and equity that comprises a firm's financially of its assets. Both debt and equity are used in large organization. "the choice of the amount of debt and equity is made after a comparison of certain characteristics of each kinds of security of internal factor related to the firm's operations and of external factor that can affect the firm"(Hampton,1986:42)

As earlier stated, the financial or capital structure decision is a significant managerial decision as it influences the shareholder's return and risk. Consequently, whenever funds have to capital structure initially at the time of its promotion and subsequently, whenever funds have to be raised to finance in investments capital structure decision involved. (VanHone, 1991:10)

The term capital structure refers to the proportion of debt equity capital. "A company can finance its investment by variety of sources, such as debt, preference share capital and common share capital, including, reserves and surplus".(Pandey,1988:204)

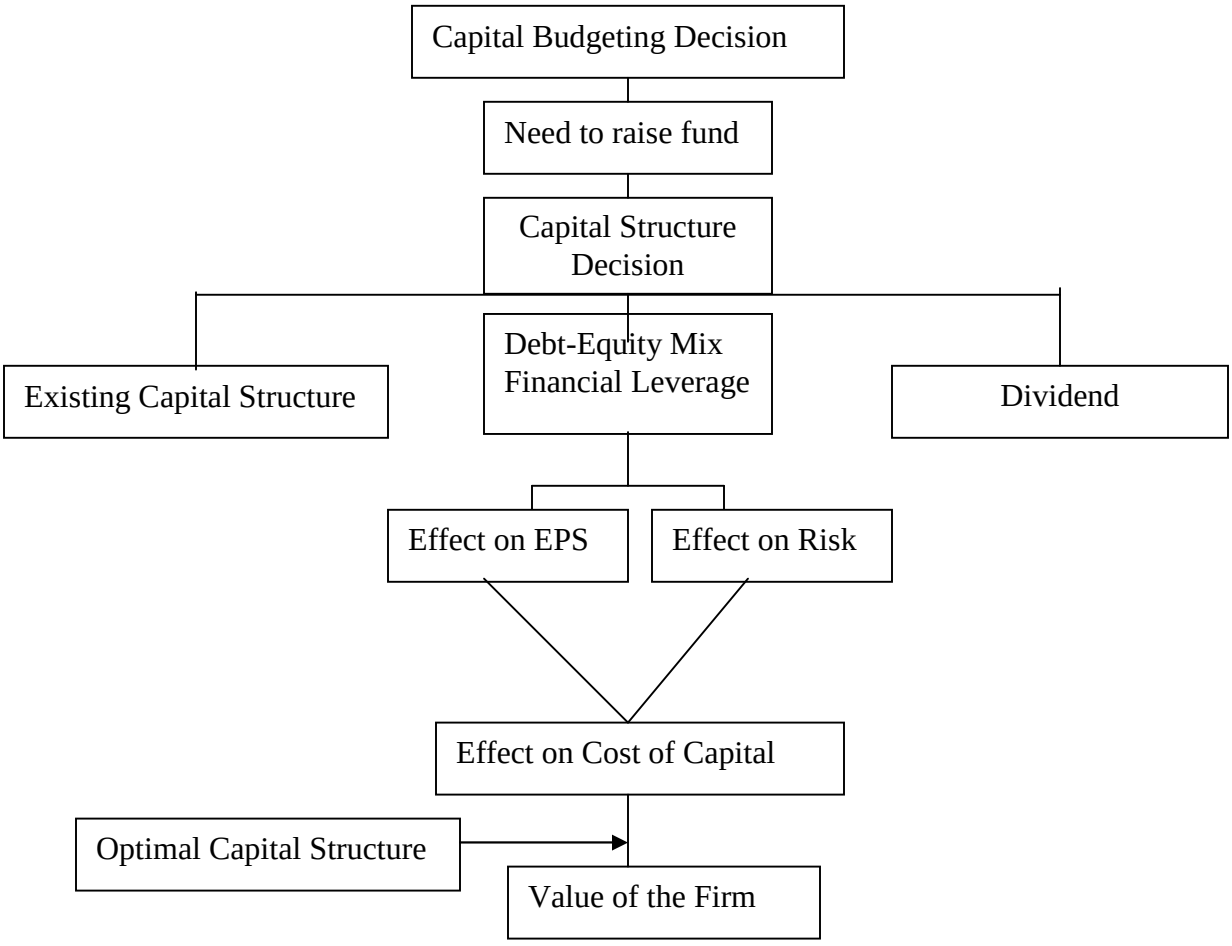
Capital structure known as financial plays refers to composition of long-term debt, preference share capital and equity share including reserve and surplus. The objective is to assess the capital structure of selected Nepalese Commercial banks in terms of debt and equity as well as determination of bank's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

The basic patter 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 them 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 deal with the three different levels of complexity.

Figure No. 1

The process of capital structure



(Source: Pandey, I.M. Financial Management, Vikas Publishing House, 204)

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 effects its debt equity mix. The debt equity mix has implications for the shareholders earning and risk, which in turn 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:

The capital structure concept has an important place in the theory of financial management. The term, capital structure, also known as financial structure or financial plan or leverage.

The optimal capital structure and its implication are more noticeable. “Argument between those whose believe that there is an optical capital structure for each firm and among those who believe in the absence of such optimal capital structure began in late 1950’s and there is yet no resolution of the conflict.”

To understand about the capital structure decision and concept under different theories, it is important to have some idea of major capital structure theories. The history presents several theories on capital structure management in order to analyze the capital structure of different joint commercial banks there have been considered.

The theories are:

Net Income (NI) Approach,

Net Operating Income (NOI) Approach,

Traditional Theory,

Modligliani and Miller Model.

2.1.2.1. Net Income (NI) 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 the 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,:228)

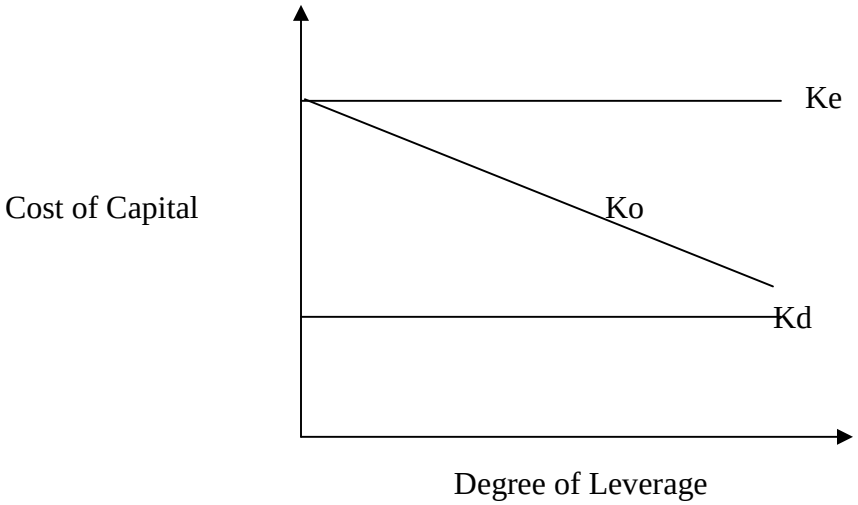
A change in the capital structure use will lead of corresponding changes in the overall cost of capital as well as the total value of firm. As the firm adds cheaper debt to its Capital structure, its cost of capital decline because debt is less risky than equity, on the other hand, the overall value 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 1985:49)

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

Figure No. 2

K_d, K_o and K_e under Net Income(NI) Approach



From the above figure, we know that 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 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 the 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 assumption of this approach are:-

- The use of debt does not change the risk perception of investors, as a result the equity capitalization rate Ke and the debt capitalization rate Kd 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:p678).
- The first assumption implies that, if K_d and K_e are constant. The second assumption indicated 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 serves the capacity of impact on the cost of capital, which further impact in shareholders' value and value of the firm symbolically.

K_0 =NOI/V

K_0 = Ke-(Ke-Kd)D/V

Where, K_0 = Cost of Capital of the Firm

K_e = Cost of equity

K_d= Cost of debt

D= Debt

V= Value of Firm

NOI = Net Operating Income

2.1.2.2 Net Operating Income (NOI) Approach

According to NOI approach the market value of the firm is not affected by the capital structure charges. 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 firm is determined as follows:

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

Or

NOI/Cost of Capital

Or

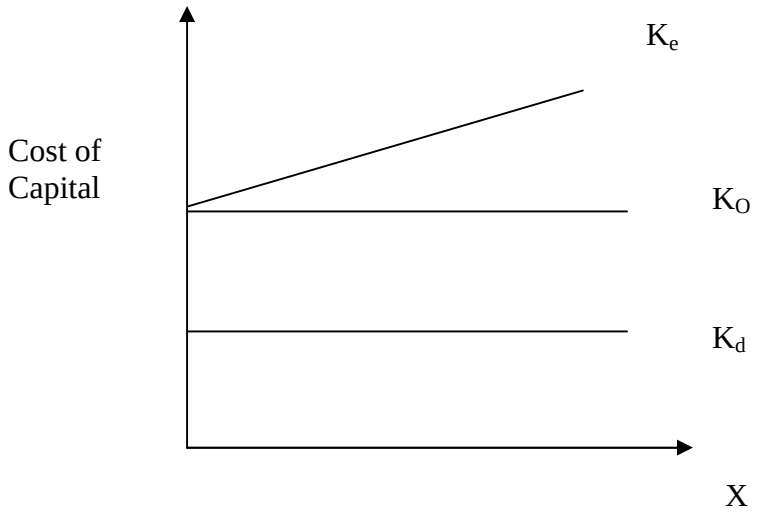
EBIT / Cost of Capital

Under the net operating income (NOI) approach, the cost of equity is assumed to increase linearly with leverage. As a result, the weighted average cost of capital remains constant and the total value of the firm also remains constant as leverage change. (Eugene and Hanson, 1976:236).

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 market price of 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 debt from total to obtain market value of equity. Note that the overall cost of capitalization rate and cost of debt remain constant but the cost of equity increases linearly with leverage. This approach can be expressed as:

Figure No. 3

K_d, K_o and K_e under Net Operating Income (NOI) Approach



Degree of Leverage

It can be expressed Ke = K_0 + (K_0 – K_d)B/S 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 cannot 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 cannot 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 K_0 to capitalize the net operating income depends on the business risk if the business risk is assumed to remain unchanged, K_0 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 $K_{e.}$
- The debt capitalization rate K_d is constant
- The corporate income taxes do not exits

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)

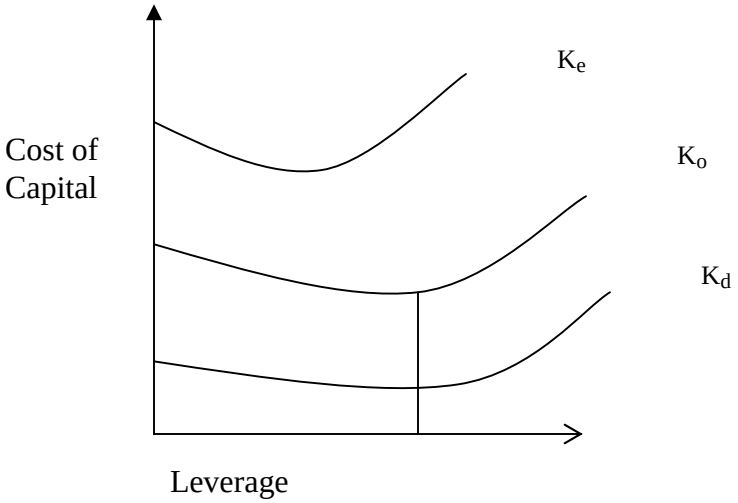
2.1.2.3. Traditional Approach

The traditional approach, popularized by Ezra Soloman, is also know is also known as an intermediate opportunity is a compromise between the net income approaches. The tradition 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 optional 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 the 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 optimum capital structures exist for every firm. This approach, which is known as intermediate approach, is comparison between the net income approach and net operating income approach. In this approach the cost of capital decreases with the reasonable limit of debt and than increase within the leverage. Following finger an illustrated these approach graphically.

Figure No. – 4

K_d, K_o and K_e under Traditional Approach of Capital Structure



The main assumptions of the trading approach are:

a. The cost of debt capital k_d remain more or less constant up to a certain degree of leverage but rises after at certain point.
b. The cost of equity capital K_e 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 moderate increase in leverage there after 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).

2.1.2.4. The Modiglani Miller Hypothesis

Till 1950, it has believed that judicious mix of debt and equity capital i.e. financial leverage of capital increase the value of the firm and helps in determination on optical structure. But 1958, Franco Modiglani and Merton H. Miller publish a research paper , "The cost of capital, Corporation finance and the Theory of Investment and added another milestone on the theory of Capital Structure".

This Theory propounded by these two researchers is later known as M-M theory. The M-M theory is based on some assumptions, which are mention below(Pandey, 1999:687)

- Perfect competition market environment where information relating investment is freely accessible there involves no transaction cost. In addition to this, investors are free to sell and buy the securities can borrow without any restriction at the same rate as corporation does. All investors are rational and no investor can influence the market.
- The individual investors may have the different views as to the shape of the probability distribution, but expected rate of return for all in is assumed the same.
- The division of the income between cash dividend and retained earnings in any periods is more detail or Dividend payout ratio is 100%.
- There are no income taxes. Modigliani and Miller remove this assumption latter.
- Homogeneous business risk.

Assumption of M-M hypotheses can be classified into two ways:

A. M.M. hypothesis with no taxes is identical to Net Operating Income approach, which has already explained.

B. **M-M Theory with taxes:**

M-M's hypothesis, that the firm is independent of its capital structure. But in relity, the corporate income taxes exit and interest paid to be debt holder is treated as a deductible expenses. So, debt financing is advantageous. In their 1963 article, "M-M shows that the value of the firm will increase with debt due to the deductibility of the interest charges for tax computation, and the value of levered firm will be higher than of the un-levered firm.[Miller and Modigliani 1966:128]

Proposition - I

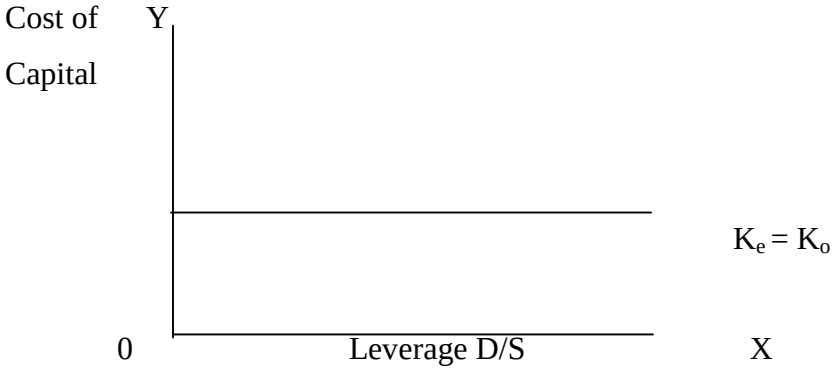
The value of levered firm is equal to the value of un-levered firm in the same risk class plus the gain from leveraged. The gain from leverage is the value of tax saving, found as the product of the corporate tax rate(T) times the amount of debt the firm uses(B).

Value of levered firm = Value when unleveled + tax shield

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

Figure No. 5

The cost of capital under M-M Proposition I



Here when corporate tax introduced the vale of levered firm exceed that of the unlevered 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 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.

$$V_u = S = \frac{EBIT(1 Z T)}{K_{eU}}$$

Where,

V_u = valued of un-levered firm, S = Market Value of Stock

T = Corporate tax rate

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

Proposition – II

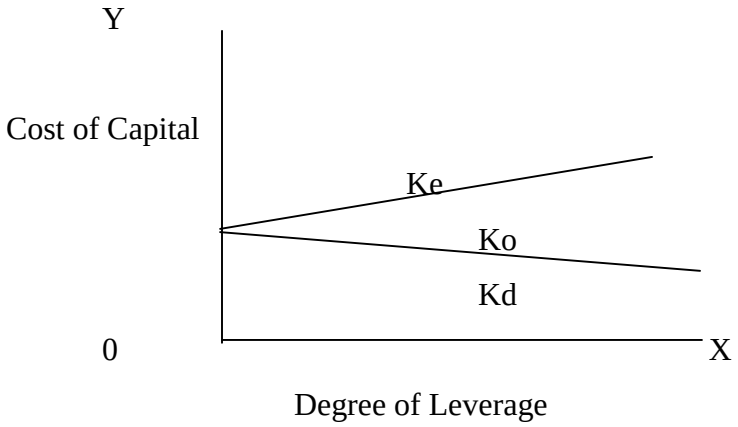
Under this proposition, the cost of equity of levered firm is equal to the cost of equity of an unlevered firm in the same risk class plus a risk premium whose size depends on the differential between the cost of equity and debt to and unlevered firm, the amount of financial leverage uses, and the corporate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

2.1.2.5 Risk Measure in Capital Structure

About the relationship between risk and leverage Weston and Brigham (1981) have presented a very clear view and have state risk as measure by standard deviation has a liner relationship to the debt to equity ratio measured at the book value but an upward curvilinear relationship to the debt to total assets ratio at book value.

Conversely, when risk is measure by the co-efficient of variation, the relationship to the book debt to total assets ratio in linear.

There is theoretical relationship between beta and leverage ratios for comparison with beta at 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 steam from the basic underlying theory of the computation involved but what is common to all of the six portrya's 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 higher the return and consequently the higher will be the risk. (Weston and Brigham, 1981:p563-64)

2.1.2.6 Financial Leverage and ROE

With financial leverage the advantage lies in the possibility that 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 borrowing 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.

2.1.2.7 Factors Affecting Capital Structure:

Capital Structure decision is not an easy task that a manager can handle individually some major factors that lay significant role form composite capital structure of firm are pointed below (Weston and Brigham, 1981:63-64).

(a) Growth Rate of Future Sales:

The expected future growth rate of sales is measure of the extent to which the earning per share of firm is likely to be magnifies 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 futures 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 ot 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 to expan both influence profit margin.

(d) Asset Structure:

Assets structure of the firm directly influences the financing. The firm having long lived fixed assets 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, relay 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 stockholders prefer issuance of more stocks, 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 its capital structure ignoring lender's attitude. Sometimes lender's 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 Reviews 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.

The Modigliani- Millers Study (1958)

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

In the first part of their work MM tested their proposition I, the cost of capital is irrelevant to the firm's capital structure by correlation to the firm's capital structure by correlation after tax cost of capital with leverage B/V. They found that the correlation coefficient is statistically insignificant and positive in sign.

In the second part of their study, they tested their proposition II the expected yield on common share is linear function of debt to equity ratio. The second part of their study is consistent with their 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 1963correctin 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 he leverage factor are significant only because of the tax advance involved.(Modigliani and Miller, 1966:333-391)

Dr. Manohar Krishna Shrestha(1985) : 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 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 goods result but 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.

Manohar Krishna Shrestha carried out next article in (1985). "Analysis of capital structure in selected public enterprises" he has found that the selected public enterprises under study have a very confusing capital structure, since the corporation are not guides

by objectives based financial plans and policies in many instances adocism became the basis of capital structure and most of them want to eliminate debt if possible to relieve financial obligation. He has further pointed out that there were neither, the public enterprises nor HMG developed criteria is determining capital structure and this is the reason as to why debt equity ratio should neither highly levered to create too much financial obligations that the beyond capacity to meet nor should it be much low levered to infuse operational strategy to by pass responsibilities without performance.

Biasis, Bruno and Casamatta 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 financial 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 decease in investment and output at the macroeconomic level. Moreover, aggregate leverage decreases with the risk shifting problems and increases with the effort problem.

The study has taken the conclusions some previous studies into consideration and stated that leverage is high for regulated firms and in low-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 decisions, the study found that 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 o side 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) on their article "Capital Structure and Corporate Control". The effect of anti take over statutes on firm Leverage" have stated as follows: It was found that firms protected by second generation state antitank over locals substantially reduced their use of debt and that unprotected firms to the reverse. This result supports recent models in which the threat of hostile take over 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 assumption 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.

Rima Devi Shresth Study (1999) : Rima Devi Shrestha conducted the study on the topic of "A study on the impact of capital Structure listed companies". She used data form 5 companies and covered the study different sectors manufacturing, hotel, trading and services industry to that all the 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 assts of the listed companies is negatively correlated with the dividends payout. The ratio of the market value to book value of the total assts 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 assts is negatively correlated with size. There has been negative correlation between co-efficient value and growth of the companies. Positive correlation coefficient between earning variability and value of the listed 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 pay out ratio and earning variability. There is positive correlation co-efficient of earning variability with market price but negative correlation coefficient with liquidity. Liquidity is negatively correlated with market price of stock.

Joshua Arbor (2005)

Joshua Arbor in his study, "The effect of capital structure on profitability" mentioned that the relationship between capital structure and firm has been the subject of 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 Berkely 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 the perceived profitability that the firm will default on financing is greater than zero. The bankruptcy profitability increases with debt level since it increases the fear that the interest and the company might not be able to generate 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 coats 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 shareholders and managers and those between debt holders and shareholdrers.

The need to balance gains and cost of debt financing emerged as a theory known as the static trade off theory by Myers. It values the company as the value of the present value of bankruptcy and agency costs.

The study made by **Fakher Buferna, Kenbata Bangassa and Lynn Hodgkinson (2005),** on the topic "Determinates of Capital Structure", contributes towards a better understanding of financing behavior in Libyan companies. Hypotheses, 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 Libyan companies' capital structure. The results suggest that both the static trade-ff 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 costs 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 of a for private companies and indeed the relationship supporting the agency cost theory were stronger for private companies.

2.2.2 Review of Previous Thesis

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

Udaya Lal Shresth Study(1999)

Mr. Udaya Lal Shrestha 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 suffer 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.

Padam pani Kafle Study(2001)

Mr. Padam pani kafle observe on his study " A comparative Analysis of Capital Structure between Lumbini Sugar Factory and Birgunj sugar Factory Limited", 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 indication more financial risk while Lumbini Sugar Mills has low debt equity ratio which indicates access dominance of equity holder might exit. Both the companies had unable to pay interest because they were operating at loss. As Birgunj Sugar Factory was highly levered Lumbini Sugar Factory was unlevered both the companies had defective capital structure. Mr. Kafle suggested that it should change the debt equity ratio for sount capital structure management to maintained in 1:1 ratio(Kafle, 2001).

Mukund Prasad Singh Study (2001)

In a study on " The Capital Structure decision and it's impact on Risk and Return of Hulas Steel industries Pvt. Ltd.", Mr. Mukuand Prasad 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.

Ms. Ajjana Shah (2004) 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 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 ais 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 Vanspati Udhyog has a fluctuating debt equity ratio. Its long term debt is decreasing and only creditors make a small share of finance.

Milan Raj Joshi Study (2008)

Mr. Joshi 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. His finding and suggestion are as follows.

- He found all bank were lack of the theoretical knowledge regarding the Capital structure. So, banks have should follow the theoretical aspects.
- All banks has 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 like LTD to Total debt ratio, capital employed ratio NIBL seems to be in the weaker.
- Interest Coverage ratio, return on total assets, return on shareholders equity seem better position. The banks are also recommended to minimize their financial and other expenses so that the interest coverage ratio could be improved.
- Bank weren't distributed regularly. So, they will provide dividend regularly.

CHAPATER –3

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 & activates in gathering, recording, analyzing, & interpreting the with the purpose of finding answers to the problem. The entire process by which we attempt to solve problems is called research. While methodology is the method used to list the

3.2 Research Design

Research design is the strategy for conduction any research work. It describes the methods of data collection, analysis and evaluation of data. It is a plan, structure and strategy of investigation conceived so as to obtain answer to reason questions and to control variance. Research design implies a definite procedure and technique, which guides in studying the issue. The main objective of the present study is analyzing capital structure of the two commercial banks of Nepal, descriptive research design and analytical study of collected data of various financial statements over the time period is being used. Descriptive research design makes the comparison and establishes relationship between two or more variables

3.3 Population and Sample

The large group about which the generalization is made is called population under study, of the universe and small portion on which the study made called the sample of the study.

To get the information about capital structure, more representative and comprehensive sample are selected of wide coverage of population. There are all together twenty-five commercial banks in Nepal out of them only two commercial bank (Siddarth Bank Ltd and Laxmi Bank Ltd) have been chosen for this study.

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., Center Bureau of Statistics and Ministry of Finance.

3.5 Data Collection Procedure

The Study is based on secondary data. For the secondary data and information, Publication of Nepal Rastrya Bank, Annual Reports of NRB, Annual Reports of Siddarth 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:

Different works are used to analysis for all conduction tools cannot be used effectively. Tools have been selected according to the nature of data as well as subject matter. The major tools employed in this study for the analysis of the data are the ratio analysis, which established the quantities or numerical relationship between two variables of the financial statement. Beside this statistical tools are also used.

3.6.1 Financial Tools:

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

I. Ratio Analysis:

Ratio analysis is a powerful tool of 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 form. Ratio helps to summarize the large quantities of financial data and to mark qualitative judgment about firm's financial performance.

Ratio analysis is defined as the systematic use of ratio to interpret the financial statement so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. Though there are many ratios, only those ratio have been covered in this study, which are related to the capital structure management of the banks, The required financial ratios for this study are enabled in detail as follows:

I. Leverage Ratio: Leverage ratio measure the funds supplied by owner as compared with the financing provided by the firm's creditors. It also provides some measures of a risk of debt financing by calculation by calculation the coverage of fixed charge. In this study, following leverage has been calculate:

a. Debt Equity Ratio: Long Term Debt/Shareholders Equity: A high debt equity ratio indicates that the claims of creditors are greater than that of the owners and vice versa.

b. Total Debt to Total Assets Ratio: The ratio of total debt to total assets, generally called the debt ration. 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 Ration: Total Debt/Total Assets.
   The ratio however gives some similar indication as debt-equity ratio.

c. Degree of Financial Leverage: 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.

Degree of Financing Leverage: EBIT/EBIT –R = EBIT/EBT

Where, R represents fixed financial leverage.

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

Interest coverage ration: EBIT/Interest

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

II. Profitability Ratio:

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

a) Return on Total Assets Ratio:

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 following formula.

ROA Ratio: Net income + Interest/Total Assets

b) Return on Net Worth:

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.
Return on Net Worth: Net Profit after tax/Share Holder's equity

c) Earning Per Share (EPS): EAT/ No of shares

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

EPS = Profit after tax/Total No. of Share.

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 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. This ratio is calculated by using following formula.

DPS = Dividend/No of Shares

III. Other calculated Financial Tool:

a) Overall Capitalization Rate
b) Equity Capitalization Rate

(Already mention in chapter II)

3.6.2 Statistical Tools:

Besides financial tools statistical tools are used to verify the relationship between the variables and also 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 are used in this study.

I. 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 ungrouped data and frequency.

$$\bar{X} \text{ X} \frac{\bar{X}}{N}$$

Where,

$\bar{X}$ = Mean Average

$\sum$ = Summation, N = No. of years

II. Standard Deviation

Standard deviation is the most popular and most useful measure of dispersion and gives uniform, correct and stable results. The main characteristics of standard deviation are that it is based on mean. Furthermore a standard deviation is always a positive number and it is superior to the mean deviation. A standard deviation is the positive square root of average sum of squares of deviations of observations from the arithmetic mean of the distribution.

$$\sigma = \sqrt{(X \text{ Z} \bar{X})^2 / N \text{ Z1}}$$

Where,

σ = Standard deviation

$\bar{X}$ = Average Mean, X = Sample Data, $\sum$ = Summation, N = No. of years

III. Coefficient of Variation (CV): " The Coefficient of variation is the measure of dispersion, comparable across distribution which is defined as the rate of standard deviation to the mean expressed in the percentage". Levin and David, (1994;114) In this study, CV is calculated in order to know and compare the variability of observed data between the banks. (i.e. SBL and LBL)

$$CV = CV \ X \frac{\pm}{X} B100$$

IV. Correlation Analysis: The correlation analysis refers to the techniques used in measuring the closeness of the relationship between the variables. This attempt to determine the degree of relationship between the variables. Among the various methods, Karl Pearson's Method is applied in this study. The result of correlation coefficient lies between +1 and -1 i.e. Correlation can either be positive or negative. If correlation between the variables is positive, it depicts the both the variables are moving the same direction. If the correlation is negative, this explains that the variables are moving in the opposite direction.

Correlation Coefficient is calculated as below:

$$R = \frac{dxdy}{\sqrt{(dx)^2 \quad (dy)^2}}$$

Where,

N = numbers of observation

X and Y are variables.

It is used to determine whether or not the relationship exists, whether it is significant and finally helps to show cause and effect of the variables

V. Coefficient of determination (r^2): The coefficient of determination is a measure of the degree of linear association or correlation between two

variables. It helps to indicate the percentage variations in independent variable due to the variation in dependent variable

VI. Probable Error (PE): The probable error of the coefficient helps to interpret its value with the help of probable error, it is possible t determine the accuracy or 'r' value to some extent, i.e. whether 'r' is significant. The probable error or the correlation coefficient is obtained as follows:

$$P.E.= 0.6745\frac{(1 Z r^2)}{\sqrt{N}}$$

Where,

R = Correlation coefficient, N = Number of observations

If the value of 'r' is less than P.E., there is no evidence of correlation and if the value of 'r' is more then 6 times, Coefficient of correlation is practically certain or the value of 'r' is significant.

CHAPTER – 4
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 applied 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 major 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 shareholder's 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 3.

Table 3

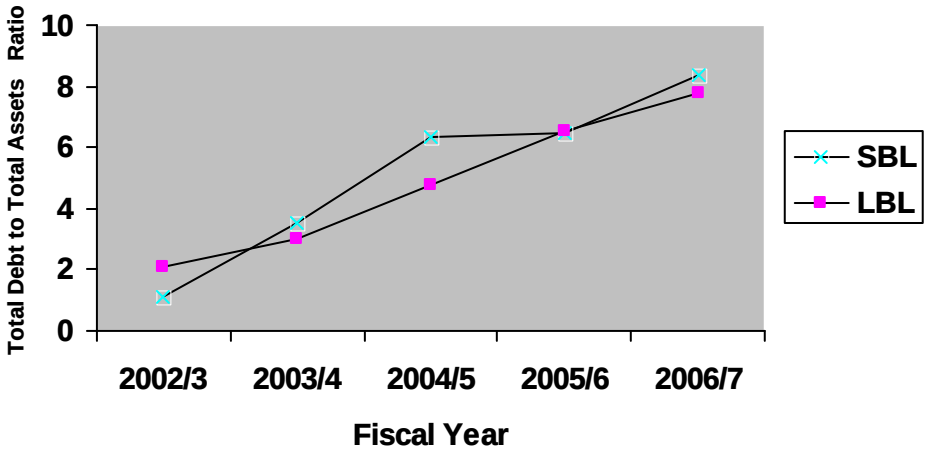
Debt Equity Ratio

FY	SBL			LBL		
	Debt(in Million)	Equity(in Million)	Ratio	Debt(in Million)	Equity(in Million)	Ratio
2002/3	391.68	348.7	1.12	691.81	326.00	2.12
2003/4	1291.31	366.20	3.53	1684.16	557.00	3.02
2004/5	2461.92	387.89	6.35	3051.76	643.57	4.74
2005/6	3918.08	603.14	6.50	4444.35	679.04	6.55
2006/7	6625.08	793.71	8.35	6711.65	864.40	7.76
	Average (x)		5.17			4.48
	Standard Deviations (σ)		2.54			2.11
	Coefficient of Variation (CV)		49.19%			43%

Debt to equity ratio of both banks at different fiscal year is also shown in graphical form in figure 7.

Figure No. 7

Debt Equity Ratio



According to the above table, 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 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 LBL 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.

Table 4

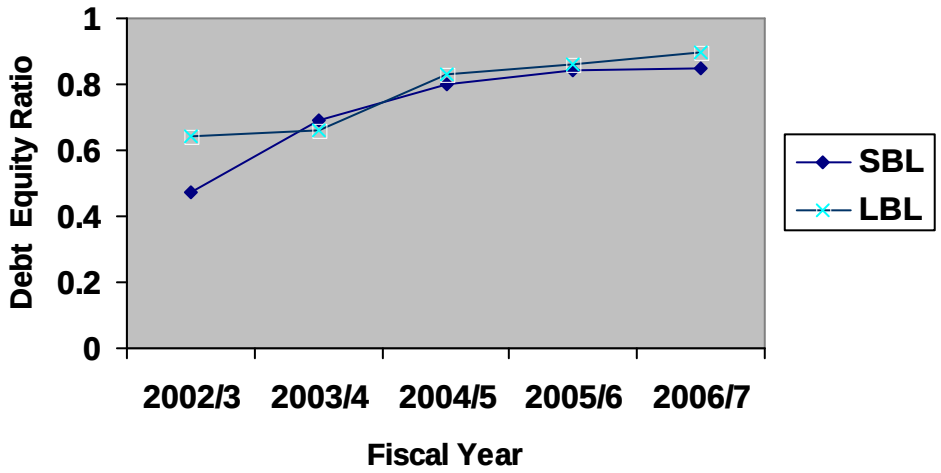
Total Debts to Total Assets Ratio

FY	SBL			LBL		
	Total Debt (in Million)	Total Assets (in Million)	Ratio	Total Debt (in Million)	Total Assets (in Million)	Ratio
2002/3	405.02	863.74	0.47	697.36	1094.18	0.64
2003/4	1325.84	1912.04	0.69	1709.89	2583.95	0.66
2004/5	2461.92	3091.10	0.80	3147.52	3809.78	0.83
2005/6	3972.65	4756.94	0.84	4496.40	5205.19	0.86
2006/7	6730.96	7954.66	0.85	7718.29	8582.69	0.90
	Average (x)		0.73			0.78
	Standard Deviations (σ)		0.14			0.11
Coefficient of Variation (CV)			19.28%			13.82%

Total Debts to Total Assets Ratio of SBL & LBL at different fiscal year is also shown in graphical from figure 8

Figure No. 8

Total Debts 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 SBL 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 lager the coverage, the greater the ability of the firm to make the payment of interest to creditors. This ratio helps find out organization's 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 claims. Interest coverage ratio has shown in table 5.

Table 5

Interest Coverage Ratio (In times)

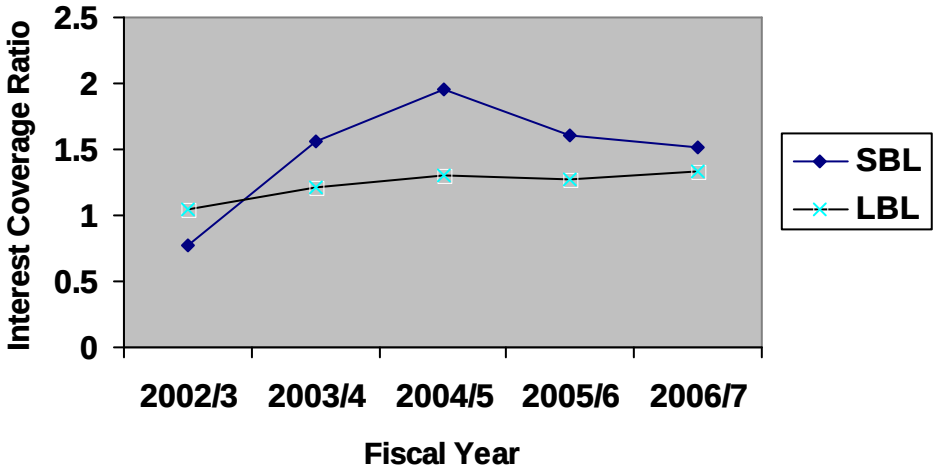
FY	SBL			LBL		
	EBIT (in Million)	Interest (in Million)	Ratio	EBIT (in Million)	Interest (in Million)	Ratio
2002/3	4.34	5.62	0.77	21	20	1.05
2003/4	71.02	45.51	1.56	76	63	1.21
2004/5	179.34	91.98	1.95	155.22	118.44	1.31
2005/6	245.25	153.71	1.60	241.23	190.59	1.27
2006/7	410.84	271.71	1.51	375.91	280.28	1.34
	Average (x)		1.48			1.23
	Standard Deviations (σ)		0.39			0.10
Coefficient of Variation (CV)			26.07%			8.34%

Note: EBIT= EBT + Interest (pretax profit + Interest)

Interest coverage ratio of both banks at different fiscal year is also shown in graphical from in figure 9.

Figure No. 9

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 is less than SBL. Coefficient of Variation of LBL is 8.34% 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 leverage indicates 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 following formula.

Degree of financial leverage = EBIT / EBT

The degree of financial leverage of two banks shown in table 6.

Table 6

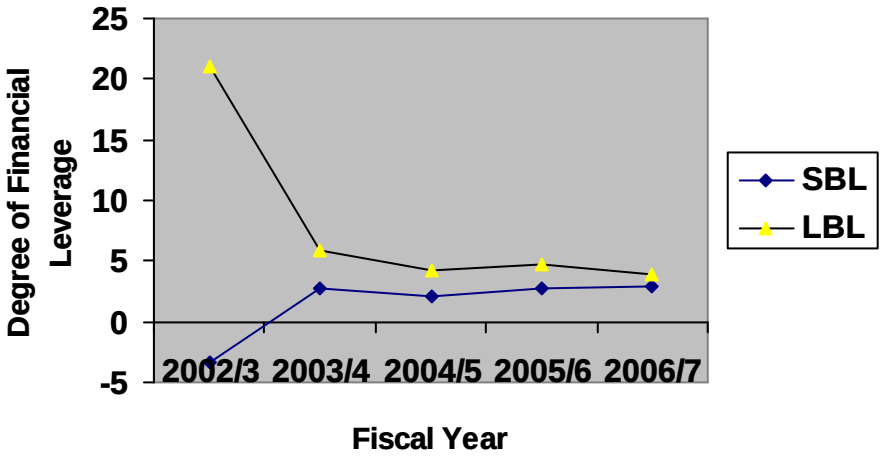
Degree of financial leverage

FY	SBL			LBL		
	EBIT (in Million)	EBT (in Million)	Ratio	EBIT (in Million)	EBT (in Million)	Ratio
2002/3	4.34	-1.28	-3.39	21	1	21.00
2003/4	71.02	25.51	2.78	76	13	5.85
2004/5	179.34	87.36	2.05	155.22	36.78	4.22
2005/6	245.25	91.54	2.68	241.23	50.64	4.76
2006/7	410.84	139.13	2.95	375.91	95.63	3.93
	Average (x)		1.42			7.95
	Standard Deviations (σ)		2.42			6.56
	Coefficient of Variation (CV)		171.11%			82.45%

Degree of financial leverage of different banks at different fiscal year is also shown in graphical from in figure 10.

Figure No. 10

Degree of financial leverage



The DFL of SBL is in increasing trend. Average DFL of SBL 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 2003/04, 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 following formula.

Return on total assets = Net profit/Total assets

Return on total assets is calculated by dividing net profit by total assets which is shown in table 7.

Table 7

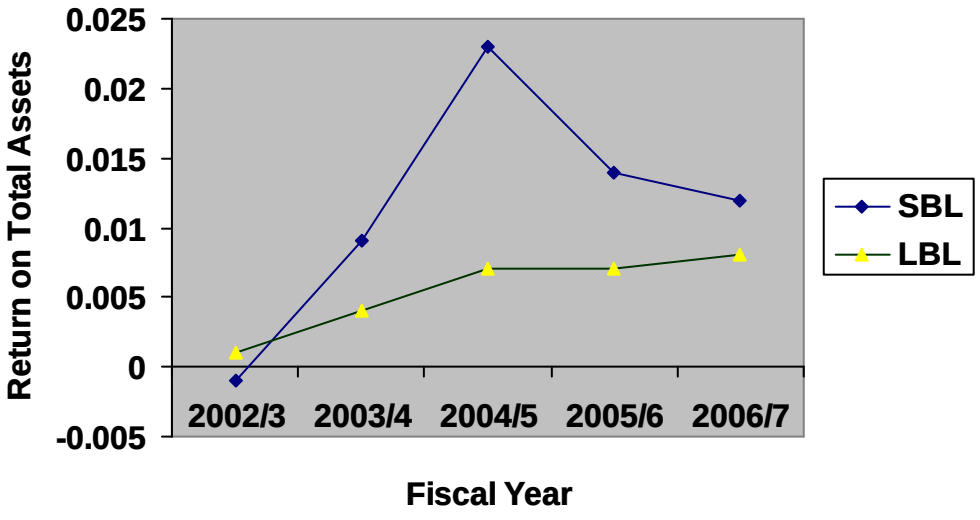
Return on Total Assets

FY	SBL			LBL		
	Net Profit (in Million)	Total Assets (in Million)	Ratio	Net Profit (in Million)	Total Assets (in Million)	Ratio
2002/3	(1.28)	863.74	-0.001	1	1094.18	0.001
2003/4	17.48	1912.04	0.009	10	2583.95	0.004
2004/5	70.28	3091.10	0.023	26.46	3809.78	0.007
2005/6	65.25	4756.94	0.014	35.39	5205.19	0.007
2006/7	95.31	7954.66	0.012	66.58	8582.69	0.008
	Average (x)		0.011			0.005
	Standard Deviations (σ)		0.008			0.003
Coefficient of Variation (CV)			69.65%			48.57%

Return on total asset of both banks at different fiscal year is also shown in graphical from in figure 11.

Figure No. 11

Return on total asset



Return on total assets of SBL at first increases for three year than in decreases. It has average ratio of 0.011 which is higher than LBL. SBL coefficient of variation (CV) is 69.65% which is higher 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 n 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' equity are the same which is shown in table 8.

Table 8

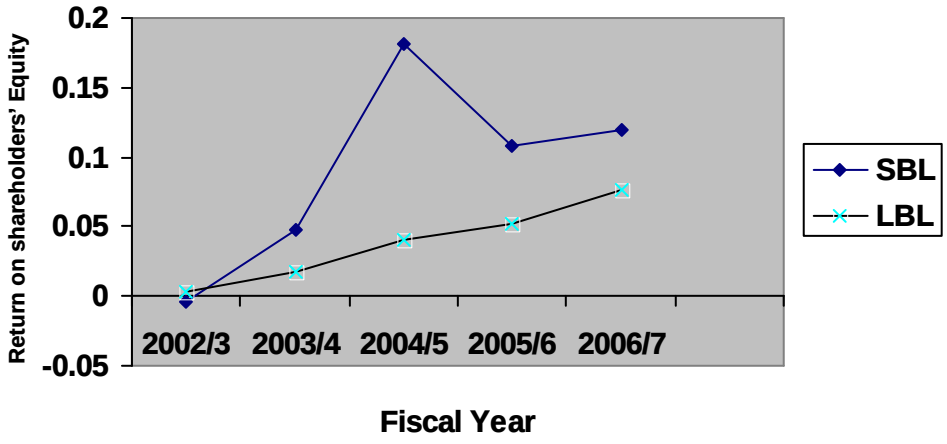
Return on shareholders' Equity

FY	SBL			LBL		
	Net Profit (in Million)	Share holders equity (in Million)	Ratio	Net Profit(in Million)	Share holders equity(in Million)	Ratio
2002/3	(1.28)	348.7	-0.004	1	326.00	0.003
2003/4	17.48	366.2	0.048	10	557.00	0.018
2004/5	70.28	387.89	0.181	26.46	643.57	0.041
2005/6	65.25	603.14	0.108	35.39	679.04	0.052
2006/7	95.31	793.71	0.120	66.58	864.40	0.077
	Average (x)		0.091			0.038
	Standard Deviations (σ)		0.063			0.026
	Coefficient of Variation (CV)		69.92%			67.70%

Return on shareholders equity of both banks at different fiscal year is also shown in graphical from in figure 12.

Figure No. 12

Return on shareholders equity



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

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

Table 9

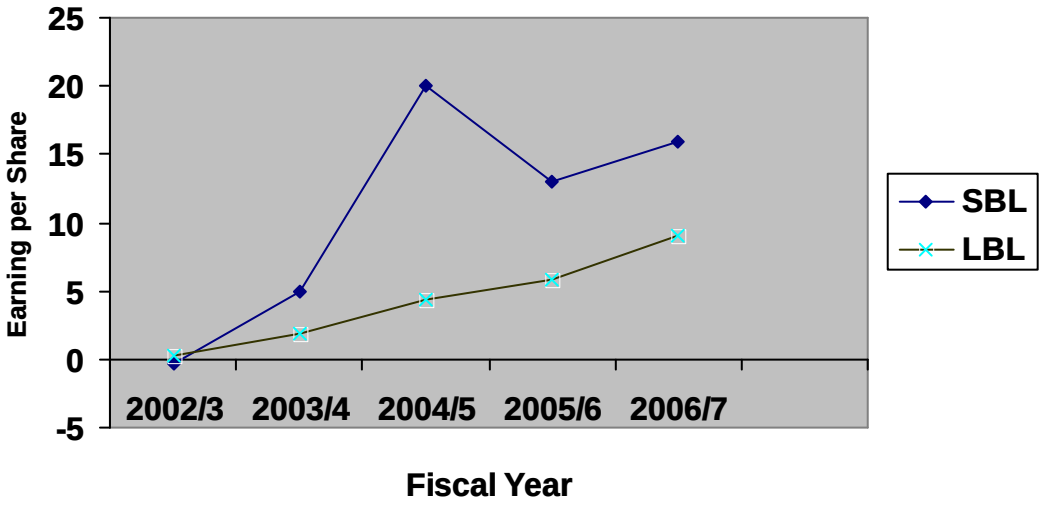
Earning per Share (EPS)

FY	SBL			LBL		
	Net Profit	Total No of Shares	EPS	Net Profit	Total No of Shares	EPS
2002/3	-1280000	3500000	-0.37	1000000	3300000	0.30
2003/4	17480000	3500000	4.99	10000000	5497890	1.82
2004/5	70280000	3500000	20.08	26460000	6098390	4.34
2005/6	65250000	5000000	13.05	35390000	6099170	5.80
2006/7	95310000	6000000	15.89	66580000	7296970	9.12
	Average (x)		10.73			4.28
	Standard Deviations (σ)		7.421			3.087
	Coefficient of Variation (CV)		69.17%			72.18%

EPS of both banks at different fiscal year is also shown in graphical from in figure 13

Figure No. 13

Earning per Share (EPS)



EPS of SBL is in fluctuating trend during the study period. EPS of SBL 2002/03 is negative, after that increasing satisfactory. EPS of SBL has 10.73 average ratios greater than LBL which is indicates that it has highest earning capacity and it has 69.17% coefficient of variation which is greater than LBL.

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 PES.

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 this five years period.

Both bank weren't disturbed 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 following formula.

Overall Capitalization = Net Operating Income/Value of Firm

Consider this implication the overall capitalization rate can be calculated and shown in table 10.

Table 10

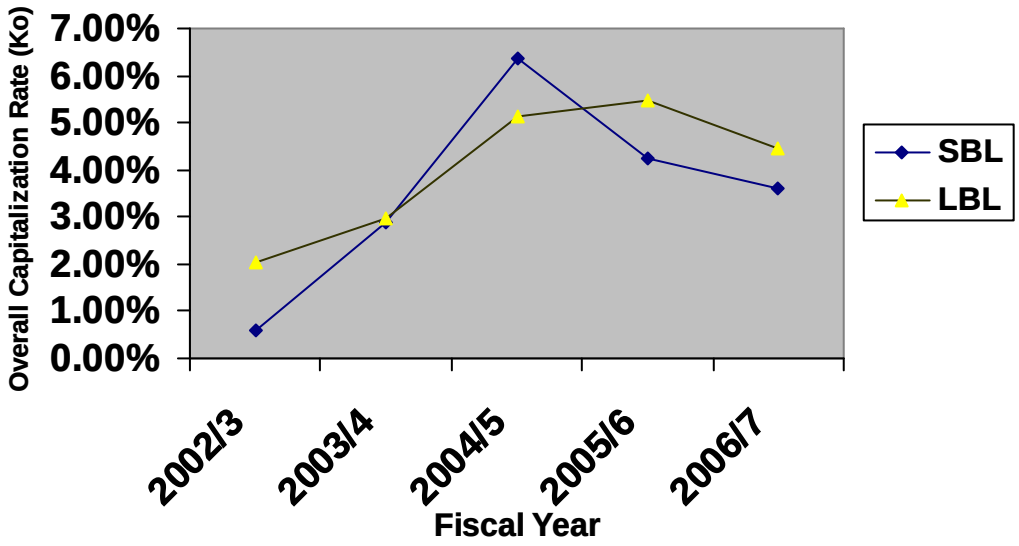
Calculation of Overall Capitalization Rate (K_O)

FY	SBL			LBL		
	EBIT (in Million)	Value of Firm (in Million)	K_O(%)	EBIT (in Million)	Value of firm (in Million)	K_O(%)
2002/3	4.34	755.02	0.575%	21	1027.36	2.044%
2003/4	71.02	1675.84	2.868%	76	2567.56	2.960%
2004/5	179.34	2811.92	6.378%	155.22	4885.56	5.136%
2005/6	245.25	5772.65	4.248%	241.23	6740.89	5.487%
2006/7	410.84	11398.96	3.604%	375.91	12753.20	4.439%
	Average ($\overline{X}$)		3.535%			4.013%
	Standard Deviations (σ)		1.887%			1.312%
Coefficient of Variation (CV)			52.57%			42.85%

Overall capitalization rate of both bans at different fiscal year is also shown in graphical from in figure 14.

Figure No. 14

Overall Capitalization Rate (K_O)



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

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

In conclusion, LBL has higher and SBL has lower overall 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 market value of equity.

Equity capitalization rate = Income before tax/Market value of the equity

Thus, under net operation income approach, the equity capitalization rate of bank is presented in table 11.

Table 11

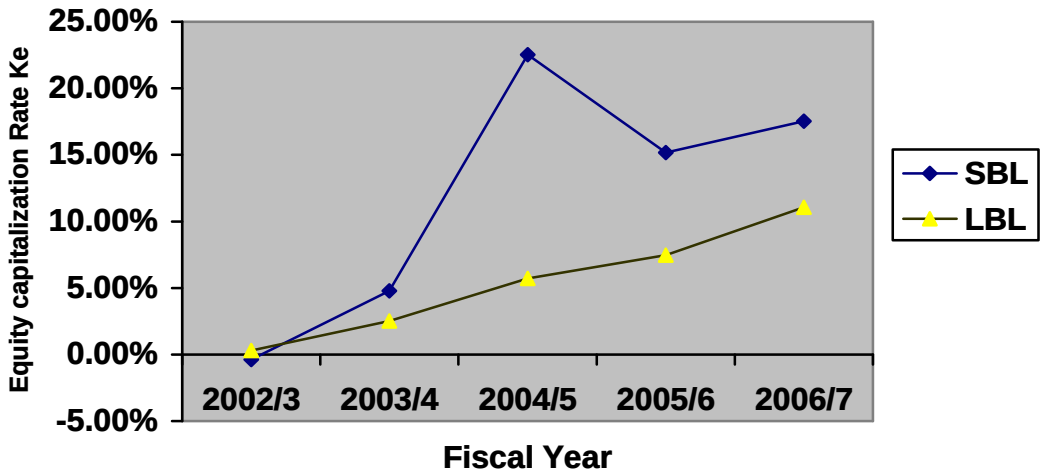
Net Operating Income Approach (Equity capitalization Rate K_e)

FY	SBL			LBL		
	EBT (in Million)	Equity (in Million)	K_e(%)	EBT (in Million)	Equity (in Million)	K_e(%)
2002/3	-1.28	348.7	-0.367%	1	326.00	0.307%
2003/4	17.48	366.20	4.773%	14	557.00	2.513%
2004/5	87.36	387.89	22.522%	36.78	643.57	5.715%
2005/6	91.54	603.14	15.177%	50.64	679.04	7.458%
2006/7	139.13	793.71	17.529%	95.63	864.40	11.063%
	Average (x)		11.927%			5.411%
	Standard Deviations (σ)		8.444%			3.760%
Coefficient of Variation (CV)			70.80%			69.48%

Equity capitalization Rate of both bans at different fiscal year is also shown in graphical from in figure 15.

Figure No. 15

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 Person's coefficient of correlation have been used to find 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 Person's Coefficient of correlation is widely used in practice to measure the degree of relationship two variables. Here we use this correlation to find out the relationship between Coefficient of Correlation Analysis 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 are 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

The Coefficient of Correlation Analysis between Outside Assets and Net Profit to measure the degree of relationship between two variables. Outside assets include loan and advance and all types of investment of a bank. In this analysis, total outside assets and net profit are assumed as independent variable(x) and dependent variable (Y) respectively. The main purpose of computing co-efficient of correlation is to justify whether the net profit is significantly correlation with respect to total outside or not. For this purpose, various calculations are made (detailed in appendix-3 &4). Following table shows the co-efficient of correlation® between the variable. PEr and Co-efficient of determination (r^2) of SBL and LBL during the study period.

Table 12

Coefficient of Correlation Analysis between Outside Assets and Net Profit

Bank	Evaluation Criterion			
	R	R^2	PEr	6PEr
SBL	0.911	0.830	0.051	0.307
LBL	0.975	0.951	0.015	0.089

On the basis of above table we can find the co-efficient of correlation between outside assets (independent variable) and Net Profit (depended variable) value of r is 0.911 in case of SBL shows the positive relationship between these two variables. However by application of co-efficient of determination (r^2), the value of r^2 is 0.830 only which represents that 83 percent of the variable in the dependent variable (total outside assets). Moreover by considering the probable error, since the value of r i.e. 0.911 is greater than six time of the PEr i.e. 0.307, we can further conclude that the value of r is significant in the case of SBL. There is significant relationship between total outside asset and net profit for the bank SBL. Thus we can say that SBL have significant correlation between proper utilization of funds and return i.e. net profit from mobilized funds.

On the other hands when we observe co-efficient of correlation between outside assets (independent variable) and Net Profit (depended variable) in case of LBL, it found that the value of r is 0.975 which denotes the positive relationship between these two variables. If we again consider the value of co-efficient of determination (r^2), it is found 0.951 only which represents that 95.1 percent of the variable in the dependent variable (total outside assets). Moreover on the basis of 6PEr and "r^2" we can say there is significant relationship between the outside assets and net profit because of the value of r is 0.975 which is greater than six times of the PEr i.e. 0.089.

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 degree of 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 co-efficient is to justify whether there is any relationship between these two variables or not. To find out the correlation various calculation are made for the reason (detailed in appendix- 5 & 6). The following table shows the co-efficient of correlation between total deposit and total investment i.e. PEr, 6PEr and Co-efficient of determination (r2) of two banks during the study period.

Table No. 13

Coefficient of Correlation Analysis between Total Deposit and Total Investment

Bank	Evaluation Criterion			
	R	R^2	PEr	6PEr
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 co-efficient of correlation between deposit (independent variable) and total investment (dependent variable) value or r is 0.9997 and

0.995 in the case of SBL and LBL respectively. However by application of coefficient of determination the value of r2 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. More ever, by considering the probable error, since the value of r is 0.9997 and 0.989 greater than six times of PEr i.e 0.0009 and 0.019 SBL and LBL respectively. We can say that the value of "r" is significant i.e. there is 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 firms from one year business. EPS has a 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 have been shown in the following table referred from appendix.

Table No. 14

Coefficient of Correlation Analysis between Long Term Debt and EPS

Bank	Evaluation Criterion			
	R	R^2	PEr	6PEr
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 PEr 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 0.977 it is positive. The 6PEr of respected correlation is 0.010, which is less than correlation coefficient (r). So, there is significant relationship between two variables.

4.3 Major Findings of the Study

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

- Debt-equity ratio calculated in relation to the proportion of total debt and shareholders' 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 banks have used high percentage of debt in the financial structure among the two banks,

- Total debt to total assets ratio of SBL & 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 LBL is 13.83%.

- Interest coverage ratio of SBL & 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 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 2003/04, 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 bank.

- Return on total assets of SBL at first increases for three year 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. Average RoA Ratio of SBL is 0.011 and LBL is 0.005.

- The return on shareholder's equity ratio of SBL and LBL in average is 0.091and 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 2002/03 is negative, after that increasing satisfactory. EPS of SBL has 10.73 averages greater than LBL average EPS 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 & LBL is zero. Both banks didn't distributed dividend during the study period. Which is indicates that shareholders are not satisfying the both bank. But both bank increasing capital by issue of right share.
- Overall capitalization rate (Ko) of both SBL and LBL is in fluctuating trend. At first 3 years increasing Ko 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 & 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 week than SBL.

- The co-efficient of correlation between outsides assets (independent variable) and Net Profit (depended variable) value of r SBL is 0.911 and LBL is 0.975. Here, both bank of coefficient of correlation is greater than 6PEr. 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 that both banks are able to earn more profit by utilizing its outside assets in productive projects.

- The co-efficient of correlation between deposit (independent variable) and total investment (dependent variable) value or 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 0.9997 and 0.995 greater than six times of PEr i.e 0.0009 and 0.019 respectively. We can say 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.

- In the basis of above table correlation coefficient between long terms debt (LTD) and EPS of SBL is 0.671 and 6 times Per 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 0.977 it is positive. The 6PEr of respected correlation is 0.010, which is less than correlation coefficient (r). So, there is significant relationship between two variables

CHAPATER – 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This research is concerned with the study of capital structure management of Siddrtha 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 the findings and conclusion desired form 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 the basis 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 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 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 capital structure of the Siddarth 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.
- To provide suggestion and recommendation on the basis of analysis to improve the financial weakness of Siddarth 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, 2002/03-2006/07, 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 & Joint Venture bank are coming here later 2010 A.D. So, Local Commercial bank will face more difficulties and competition. Nepal through a developing country couldn't deny the fact that 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 Banks has 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 owners 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. Both banks have used high percentage of debt in the financial structure among the two banks,

- Total debt to total assets ratio of SBL & 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 LBL is 13.83%.

- Interest coverage ratio of SBL & 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 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 2003/04, 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 bank.

- Average ROA Ratio of SBL is 0.011 and LBL is 0.005. Return on total assets of SBL at first increases for three year 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 & LBL is in fluctuating trend during the study period. EPS of SBL 2002/03 is negative, after that increasing satisfactory. EPS of SBL has 10.73 averages greater than LBL average EPS 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 & LBL is zero. Both banks didn't distributed dividend during the study period. Which is indicates that shareholders are not satisfying the both bank. But both bank increasing capital by issue of right share.

- Net income approach are the dependent hypothesis of capital structure which states that with the increased use of leverage, overall cost of capital declines and the total value of firm rise. According to this hypothesis the firm with the highest value and the least cost of capitalization rate is considered to have the best capital structure. The average Value of Firm of SBL and LBL 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 decreased. Average overall capitalization rate of SBL and LBL 3.535% and 4.013% respectively.

- Equity capitalization rate is 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 week than SBL.

- In the case of outsides assets and Net Profit the co-efficient of correlation are Positive and higher the 6Per which is significant relationship of both bank.

- Similarly, in the case of Total Deposit and total Investment the co-efficient of correlation are Positive and higher than 6Per which is significant relationship of both bank.

- The Correlation coefficient between LTD and EPS of SBL is positive and higher than 6Per which is significant relationship. The Correlation coefficient between LTD and EPS of SBL is positive and lower than 6Per which isn't significant relationship.

5.3 Recommendations

This title focuses on some selected actionable recommendations based on the findings of the analysis. After highlights on capital structure management of the commercial banks on the basis of financial and statistical analysis, following suggestions and recommendations can be advanced to overcome inefficiency and weakness to improve present capital structure of the banking business. The following suggestions are proposed and forwards.

- First of all from the study we can clearly say that Bank Management committee has lack of the theoretical knowledge regarding the capital structure. They have not significant attention to the capital structure matter. Capital Structure is a serious matter. It affects EPS, value of the firm, cost of capital etc.
- As there is no rule regarding proportion of debt to equity, it is suggested to issue of right share improvement in the capital structure. From this point of view, it is

suggested to reduce level debt gradually by increasing the level of equity in future years to compensate the capital of debt of both banks.

- NRB announced the all commercial bank increase their capital structure minimum paid up capital of Rs. 500 million. Hence the both bank should raise their capital as soon as possible.
- Both bank's 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 Bank are playing significant role in the modern banking system 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.

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Appendix No. 1

BLANCE SHEET & P/L ACCOUNT OF SIDDARTH BANK LIMITED

(Rs. In Million)

	Audited	Audited	Audited	Audited	Audited
	2059/60	2060/61	2061/62	2062/63	2063/64
	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
BLANCE SHEET					
Liabilities					
Issued and Paid up capital	350.00	350.00	350.00	500.00	600.00
Reserve & Surplus	(1.28)	16.20	37.89	103.14	193.71
Debenture	0.00	0.00	0.00	0.00	0.00
Borrowings	110.00	220.00	190.00	181.15	430.00
Deposits	391.68	1291.31	2461.92	3918.08	6625.08
Others	13.34	34.53	51.29	54.57	105.88
Total	863.74	1912.04	3,091.10	4,756.94	7,954.66
Assets					
Cash & Bank Balance	65.09	71.84	79.71	113.81	511.01
Investment	105.85	216.88	360.73	753.46	1111.01
Loan, advances & overdraft	622.73	1543.77	2570.78	3789.27	6222.59
Fixed Assets	21.82	28.41	30.22	39.69	46.67
Others	48.25	51.14	49.57	60.71	63.38
Total	863.74	1912.04	3,091.10	4,756.94	7,954.66
Profit and Loss Account					
Interest Income	23.89	113.63	198.18	305.56	481.52
Other operating income	2.69	6.87	22.71	35.53	53.08
Non operating income (Net)	2.25	9.26	19.37	0.00	0.04
Total Income	28.83	129.76	240.26	341.09	534.64
Expenditures:					
Interest Expenses	5.62	45.51	91.98	153.71	271.71
Overhead Expenses(Employees)	8.04	16.46	20.31	26.09	33.62
Operating expenses(office mgmt,)	10.16	21.67	30.90	44.12	55.72
Loan loss provision	6.29	17.77	0.00	16.47	20.54
Provision for bonus	0.00	2.84	9.71	9.15	13.91
Others					
Total Expenditure	30.11	104.25	152.90	249.55	395.51
Profit before tax	(1.28)	25.51	87.36	91.54	139.13
Tax provision	0	8.04	17.08	26.29	43.83

Net profit after tax	(1.28)	17.48	70.28	65.25	95.31

Appendix no. - 2

BLANCE SHEET & P/L ACCOUNT OF LAXMI BANK LIMITED

(Rs. In Million)

	Audited	Audited	Audited	Audited	Audited
	2059/60	2060/61	2061/62	2062/63	2063/64
	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
BLANCE SHEET					
Liabilities					
Issued and Paid up capital	330.00	549.79	609.84	609.92	729.70
Reserve & Surplus	(3.18)	7.27	33.73	69.12	134.70
Debenture	0.00	0.00	0.00	0.00	0.00
Borrowings	70.00	317.00	18.69	29.76	0.00
Deposits	691.80	1684.16	3051.76	4444.35	7611.65
Others	5.56	25.73	95.76	52.05	106.64
Total	**1094.18**	**2583.95**	**3,809.78**	**5,205.19**	**8,582.69**
Assets					
Cash & Bank Balance	95.53	259.58	364.76	198.98	443.13
Investment	168.99	515.00	573.23	595.45	1476.79
Loan, advances & overdraft	768.19	1733.42	2657.96	4202.36	6437.45
Fixed Assets	30.94	32.63	124.38	125.17	140.02
Others	30.53	43.32	89.44	83.22	85.30
Total	**1094.18**	**2583.95**	**3809.78**	**5205.19**	**8582.69**
Profit and Loss Account					
Interest Income	50.00	124.00	214.13	319.25	470.49
Other operating income	9.00	18.00	21.45	34.25	51.77
Non operating income (Net)	0.00	0.00	8.59	-3.83	-1.70
Total Income	**59.00**	**142.00**	**244.18**	**349.68**	**520.56**
Expenditures:					
Interest Expenses	20.00	63.00	118.44	190.59	280.28
Overhead Expenses(Employees)	14.00	19.00	29.93	37.64	48.79
Operating expenses(office mgmt)	17.00	36.00	37.12	50.12	63.55
Loan loss provision	7.00	10.00	18.23	15.63	22.76
Provision for bonus	0.00	1.00	3.68	5.06	9.56
Others					
Total Expenditure	**58.00**	**129.00**	**207.40**	**299.04**	**424.93**
Profit before tax	1.00	13.00	36.78	50.64	95.63

Tax provision	0.00	3.00	10.31	15.25	30.05
Net profit after tax	**1.00**	**10.00**	**26.46**	**35.39**	**65.58**

Appendix 3

Calculation of Coefficient of Correlation between Outside assets and Net profit

(SBL Bank)

FY	Outside Assets(X)	Net Profit(Y)	dx ($X-\bar{X}$)	dy ($Y-\bar{Y}$)	dx.dy	$(dx)^2$	$(dy)^2$
2002/3	391.68	-1.28	-2545.93	-50.69	129048.30	6481779.93	2569.27
2003/4	1291.31	17.48	-1646.30	-31.93	52563.19	2710316.86	1019.40
2004/5	2461.92	70.28	-475.69	20.87	-9928.69	226284.78	435.64
2005/6	3918.08	65.25	980.47	15.84	15532.54	961313.58	250.97
2006/7	6625.08	95.31	3687.47	745.90	169262.06	13597405.50	2106.99
	$\sum X=$ 14688.07	$\sum Y=$ 247.04	$\sum dx=0.0$	$\sum dY=0.0$	$\sum dx.dy=$ 356477.42	$\sum(dx)^2=$23977 100.65	$\sum(dy)^2=$ 6382.27

$$\bar{X}\ \mathrm{X}\frac{X}{N}\ \mathrm{X}\frac{14688.07}{5}\ \mathrm{X}\ 2937.614$$

$$\bar{Y}\ \mathrm{X}\frac{Y}{N}\ \mathrm{X}\frac{277.04}{5}\ \mathrm{X}\ 49.408$$

$$\mathrm{r} = \frac{dxdy}{\sqrt{(dx)^2\ \ (dy)^2}}\ \mathrm{X}\frac{356477.42}{\sqrt{23977100.63}\sqrt{6392.27}}\ \mathrm{X}0.911$$

$r^2 = 0.830$

P.E.r= $0.6745\frac{(1\,\mathrm{Z}r^{2})}{\sqrt{N}}\,\mathrm{X}0.6745\frac{(1\,\mathrm{Z}0.830)}{5}\,\mathrm{X}0.051$

6PEr = 0.307

Appendix 4

Calculation of Coefficient of Correlation between Outside assets and Net profit

(LBL Bank)

FY	Outside Assets(X)	Net Profit(Y)	dx (X- $\overline{X}$)	dy (Y- $\overline{Y}$)	dx.dy	$(dx)^2$	$(dy)^2$
2002/3	691.81	1.00	-2204.94	-26.89	59281.91	4861742.76	722.86
2003/4	1684.16	10.00	-1212.59	-17.89	21688.31	1470364.81	319.91
2004/5	3051.76	26.46	155.01	-1.43	-221.05	24029.34	2.03
2005/6	4444.35	35.39	1547.60	7.50	11613.22	2395078.14	56.31
2006/7	6711.65	66.58	3814.90	38.69	147613.90	14553492.53	1497.23
	∑X= 16583.73	∑Y= 139.43	∑dx= 2100.00	∑dY= 0.00	∑dx.dy= 239976.29	$\sum(dx)^2$= 23304707.58	$\sum(dy)^2$= 2598.34

$$\overline{X} = \frac{X}{N} = \frac{15586.73}{5} = 3316.745$$

$$\overline{Y} = \frac{Y}{N} = \frac{139.43}{5} = 27.886$$

$$r = \frac{dxdy}{\sqrt{(dx)^2 \quad (dy)^2}} = \frac{239976.29}{\sqrt{23304707.58}\sqrt{2598.34}} = 0.975$$

$r^2 = 0.951$

$$P.E.r = 0.6745\frac{(1 - r^2)}{\sqrt{N}} = 0.015$$

6PEr = 0.089

Appendix 5

Calculation of Coefficient of Correlation between Total Deposit and Total Investment

(SBL Bank)

FY	Deposit (X)	Investment(Y)	dx (X-$\overline{X}$)	dy (Y-$\overline{Y}$)	dx.dy	$(dx)^2$	$(dy)^2$
2002/3	391.68	626.51	-2545.93	-2775.29	7065715.35	6481779.93	7702256.79
2003/4	1291.31	1585.82	-1646.30	-1815.98	2989661.72	2710316.86	3297797.89
2004/5	2461.92	2931.51	-475.69	-470.29	223716.03	226284.78	221176.45
2005/6	3918.08	4542.24	980.47	1140.44	1118158.72	961313.58	1300594.27
2006/7	6625.08	7322.94	3687.47	3921.14	14459055.68	13597405.50	15375307.53
	∑X= 14688.07	∑Y= 17009.02	∑dx= 0.00	∑dY= 0.00	∑dx.dy= 25856307.52	$\sum(dx)^2$= 23977100.65	$\sum(dy)^2$= 27897132.92

$$\overline{X} \text{ X} \frac{X}{N} \text{ X} \frac{14688.07}{5} \text{ X } 2937.614$$

$$\overline{Y} \text{ X} \frac{Y}{N} \text{ X} \frac{17009.02}{5} \text{ X } 3401.804$$

$$r = \frac{dxdy}{\sqrt{(dx)^2 \quad (dy)^2}} \text{ X} \frac{25856307.52}{\sqrt{23977100.65}\sqrt{27897132.92}} \text{ X } 0.9997$$

$r^2 = 0.9995$

$$\text{P.E.r} = 0.6745 \frac{(1 \text{ Z } r^2)}{\sqrt{N}} = 0.0002$$

6PEr = 0.0009

Appendix 6

Calculation of Coefficient of Correlation between Total Deposit and Total Investment

(LBL Bank)

FY	Deposit (X)	Investment (Y)	dx ($X-\overline{X}$)	dy ($Y-\overline{Y}$)	dx.dy	$(dx)^2$	$(dy)^2$
2002/3	691.81	789.09	-2624.94	-2903.47	7621428.18	6890289.00	8430149.65
2003/4	1684.16	2028.53	-1632.59	-1664.03	2716675.35	2665337.05	2769002.50
2004/5	3051.76	3068.90	-264.99	-623.66	165261.70	70217.58	388954.29
2005/6	4444.35	4701.67	1127.60	1009.11	1137874.22	1271490.78	1018298.96
2006/7	6711.65	7874.62	3394.90	4182.06	14197685.43	11525373.17	17489609.12
	∑X= 16583.73	∑Y= 18462.81	∑dx=0.00	∑dy= 0.00	∑dx.dy= 25838924.87	$\sum(dx)^2$= 22422707.58	$\sum(dy)^2$= 30096014.51

$$\overline{X} \text{ X} \frac{X}{N} \text{ X} \frac{16583.73}{5} \text{ X} 3316.746$$

$$\overline{Y} \text{ X} \frac{Y}{N} \text{ X} \frac{18462.81}{5} \text{ X} 3692.56$$

$$r = \frac{dxdy}{\sqrt{(dx)^2 \quad (dy)^2}} \text{ X} \frac{25838924.87}{\sqrt{22422707.58}\sqrt{30096014.51}} \text{ X } 0.995$$

r2 = 0.989

$$\text{P.E.r} = 0.6745 \frac{(1 \text{ Z} r^2)}{\sqrt{N}} = 0.003$$

6PEr = 6 x P.E.r = 0.019

Appendix 7

Calculation of Coefficient of Correlation between Long Term Debt and EPS (SBL Bank)

FY	LTD(X)	EPS(Y)	dx $(X-\overline{X})$	dy $(Y-\overline{Y})$	dx.dy	$(dx)^2$	$(dy)^2$
2002/3	391.68	-0.37	-2545.93	-11.10	28254.78	6481779.93	123.17
2003/4	1291.31	4.99	-1646.30	-5.74	9446.49	2710316.86	32.92
2004/5	2461.92	20.08	-475.69	9.35	-4448.69	226284.78	87.46
2005/6	3918.08	13.05	980.47	2.32	2276.64	961313.58	5.39
2006/7	6625.08	15.89	3687.47	5.16	19034.70	13597405.50	26.65
	$\sum X=$ 14688.07	$\sum Y=$ 53.640	$\sum dx=0.00$	$\sum dY=$ 0.00	$\sum dx.dy=$ 54563.92	$\sum(dx)^2=$ 23977100.65	$\sum(dy)^2=$ 275.59

$$\overline{X} \text{ X} \frac{X}{N} \text{ X} \frac{14688.07}{5} \text{ X} 2937.614$$

$$\overline{Y} \text{ X} \frac{Y}{N} \text{ X} \frac{53.64}{5} \text{ X} 10.728$$

$$r = \frac{dxdy}{\sqrt{(dx)^2 \quad (dy)^2}} \text{ X} \frac{54563.92}{\sqrt{23977100.65}\sqrt{275.59}} \text{ X } 0.671$$

$r^2 = 0.451$

$P.E.r = 0.6745 \frac{(1 \text{ Z} r^2)}{\sqrt{N}} = 0.166$

6PEr = 6 x P.E.r = 0.994

Appendix 8

Calculation of Coefficient of Correlation between Long Term Debt and EPS (LBL Bank)

FY	LTD(X)	EPS(Y)	dx $(X-\overline{X})$	dy $(Y-\overline{Y})$	dx.dy	$(dx)^2$	$(dy)^2$
2002/3	691.81	0.3	-2624.94	-3.98	10436.75	6890289.00	15.81
2003/4	1684.16	1.82	-1632.59	-2.46	4009.63	2665337.05	6.03
2004/5	3051.76	4.34	-264.99	0.06	-16.96	70217.58	0.00
2005/6	4444.35	5.8	1127.60	1.52	1718.47	1271490.78	2.32
2006/7	6711.65	9.12	3394.90	4.84	16444.91	11525373.17	23.46
	$\sum X=$ 16583.73	$\sum Y=$ 21.38	$\sum dx=$ 0.00	$\sum dY=$ 0.00	$\sum dx.dy=$ 32592.80	$\sum(dx)^2=$ 22422707.58	$\sum(dy)^2=$ 47.63

$$\overline{X}\ \mathrm{X}\frac{X}{N}\ \mathrm{X}\frac{16583.73}{5}\ \mathrm{X}3316.746$$

$$\overline{Y}\ \mathrm{X}\frac{Y}{N}\ \mathrm{X}\frac{21.38}{5}\ \mathrm{X}4.276$$

$$\mathrm{r} = \frac{dxdy}{\sqrt{(dx)^2\ \ (dy)^2}}\ \mathrm{X}\frac{32592.80}{\sqrt{22422707.58}\sqrt{47.63}}\ \mathrm{X}\ 0.997$$

$r^2 = 0.995$

$$\text{P.E.r=}\ 0.6745\frac{(1\,\mathrm{Z}\,r^2)}{\sqrt{N}} = 0.002$$

6PEr = 6 x P.E.r = 0.010

Appendix 9

Value of Firm

Siddarth Bank Limited

FY	No of Share	MPS	Market value of Equity(S)	Value of Debt (B)	Value of Firm (V)
2002/3	3500000	*100	350000000	405020000	755020000
2003/4	3500000	*100	350000000	1325840000	1675840000
2004/5	3500000	*100	350000000	2461920000	2811920000
2005/6	5000000	360	1800000000	3972650000	5772650000
2006/7	6000000	778	4668000000	6730960000	11398960000

Source: Nepal Stock Exchange

Value of Firm

Laxmi Bank Limited

FY	No of Share	MPS	Market value of Equity(S)	Value of Debt (B)	Value of Firm (V)
2002/3	3300000	*100	330000000	697360000	1027360000
2003/4	5497890	156	857670840	1709890000	2567560840
2004/5	6098390	285	1738041150	3147520000	4885561150
2005/6	6099170	368	2244494560	4496400000	6740894560
2006/7	7296970	690	5034909300	7718290000	12753199300

Source: Nepal Stock Exchange

* Before Listing in NEPSE, Let Bank Market Value of Equity (MPS) = Face Value of Share Rs. 100