

CHAPTER I

INTRODUCTION

1.1 Background of the study

Financial decision must be very sensitive in misappropriate composition of debt equity in capital structure may lead to bankruptcy of the firm. The optimal capital structure is attaining at the level where the risk perception of shareholder is minimized and returns are maximized. As the return to shareholder is maximized automatically the market value of the firm is maximized. The capital structure affects the cost of the firm. The financial manager must be sensible while selecting the optimal capital structure for the firm.

The term capital structure refers to, the relationship between the various long terms forms of financing such as debentures, preference shares, capital and equity share capital. Financing the firm assets is a very crucial problem in every business and as a rule there should be a proper mix of a debt and equity capital financing the firm's assets. Though the capital structure cannot affect the total earning of a firm, it greatly affects the earnings of available equity holders. Managing the capital structure of a firm is an important aspect of corporate financing. The main issue with respect to source of financing is concerned with the nature of relationship between the debt-equity ratio and the market value of the firm.

Capital structure is concerned with qualitative aspects. To meet their requirements, companies generally issue three types of securities, such as: debenture, equity shares and preference shares. A decision about the proportion among these types of securities refers to the capital structure of an enterprise. Different authors have defined the capital structure in their own way, but for the common man point of

view we can say that, for the company to run funds are needed, if funds are inadequate and are not managed properly the entire organization will suffer badly.

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

Capital structure plays a vital role in accelerating the economic growth of nation, which in turns is basically determined, among others by saving and investment propensities. But the capacity of saving in the country is quite low with relatively higher marginal propensity of consumption. As a result developing countries are badly trapped into the vicious circle of poverty. The basic problem for the developing countries is raising the level of saving and investment. It will either be diverted abroad or used for unproductive consumption or speculative activities. In order to collect the enough saving and put them into productive channels, financial institution like banks is necessary.

One of the most important tasks in the management of any bank lies in managing appropriate capital structure. Capital structure reflects the manner of financing a company. The tax deductibility of interest in some tax environments make the use of the appropriate amount of debt beneficial to shareholders and share price. The use of the right amount of debt lowers the companies weighted cost of capital. Lowering the cost of financial resources improves net economic returns and increase share value consequently, an optimal capital structure exists.

Capital structure plays a vital role in the real life of an enterprise. Enterprises whether they are government owned or privately owned, have to make pertinent capital structure decision in identifying exactly how much capital is needed to run their operations smoothly. Generally, fund is acquired by the firm in two ways; equity and debt. Equity provides the ownership of the shareholders. On the other hand, the debt or borrowed fund has a fixed charge irrespective to the earnings of the firm and firm has to pay the fixed charge periodically to the debt provider.

1.2 Profile of Sample Bank

a) Machhapuchhare Bank Limited

Machhapuchhare Bank Limited was registered in 1998 as the first regional commercial bank to start banking business from the western region of Nepal with its head office in Pokhara. Today, with a paid up capital of **above** 1,314 million rupees, it is one of the full fledged commercial bank operating in Nepal; and it ranks in the topmost among the private commercial banks.

Machhapuchhare Bank Limited is striving to facilitate its customer needs by delivering the best of services in combination with the state of the art technologies and best international practices.

Machhapuchhare Bank Limited is the pioneer in introducing the latest technology in the banking industry in the country. It is the first bank in Nepal to introduce centralized banking software named Globus Banking System developed by Temenos NV, Switzerland. Currently it is using the latest version of Globus, referred as T-24 Banking System. The bank provides modern banking facilities such as Any Branch Banking, Internet Banking and Mobile Banking to its valued customers.

The bank in the last few years have really opened up with branches spread all around the country. The bank aims to serve the people of both the urban and rural areas.

b) Bank of Kathmandu Limited (BOKL)

Bank of Kathmandu limited (BOKL) established on 1993. The bank came into operation on March 1995. At the time of establishment BOK was established by a group of distinguished civil servants and renowned businessmen in collaboration with the SIAM Commercial Public co. limited (SCB) a leading bank of Thailand. The collaboration with SCB supported BOK to bring in the technical and managerial expertise in the Nepalese banking sector with the well acclaimed capabilities of the Nepalese management team. BOK has successfully enhanced its capital structure, profitability, reach to the customers and image in the market. It has created a positive in the industry in a shortest possible span of time. Nepalese managing team is handling the bank efficiently to increase the profit year by year.

Share Holding Patterns of BOK:

General Public	58%
Nepalese Promoter	42%

Provided Services are

-) Deposit A/C Services
-) Credit Facilities
-) Inwards\outwards remittance C
-) International trade centers
-) Business advices
-) Safe deposit locker
-) Foreign exchange center

) ATM service

1.3 Focus of the Study

The research is focused on the capital structure of Nepalese commercial banks specially two sample banks MBL and BOKL. The success of business organization depends upon proper composition of debt and equity in the capital structure. The proper composition helps to generate high return to the business organization and help in long-term solvency.

Capital structure decision directly affects the shareholders risk and market value of the share. As capital structure decision includes choice of debt and equity mix, which has implications for the shareholder's earning and risk, which in turn, will affect the cost of capital and market value of the firm.

The banks are such business organization, which deals with others about money and the capital structure in case of the bank are very crucial. This study mainly focuses on the capital structure management and its impact on profitability of MBL and BOKL.

1.4 Statement of the Problem

Capital structure has attracted intense debate and academic attention in corporate finance. However, in the context of Nepal it has received a scant attention. Today the function of commercial banks is not only confined to do its usual functions but also to do something for the development of the country. The development of the country depends upon the financial position of the country. The growth in financial sector is the base for country's development. In this regard, the commercial banks collect the scattered resources from different sectors and mobilize them in productive sectors.

“The effect of capital structure on the capital is not very clear. Conflicting opinions have been expressed on this issue. In fact, this issue is one of the most continuous areas in the theory of finance and perhaps more theoretical and empirical work has been done on this subject than on any other”, (*Pandey, 1992: 47*).

The study of the capital structure in banking business is very important as it deals with other money. The capital structure decision also impact upon long run profitability and solvency of the firm. Generally high debt–equity ratio is considered to be disadvantageous from owner's point of view, especially when the firm is earning higher rate of return to the capital employed. The financial manager must be able to maintain appropriate proportion of debt-equity to avoid financial risk. The proportion of debt in the banking business is obviously larger than in any other business. The banks accumulate deposit from various unit groups paying certain percent interest and mobilize in productive sector and earn high return. The banks are considered as mechanism to canalize the funds from the small saver to the productive sectors. The study of capital structure, in case of banking business very important of liquidation of one bank creates contagion effect over the economy of the country.

The banks are being highly sensitive business. NRB reforms their policy from time in favors of depositors and owners of the companies.

The problem area for the study is reflected in the following research questions:

-) Does the capital structure affect the cost of capital?
-) Are the sample bank capable to enhance the earning by its capital structure?
-) What is the relation between capital structure, profitability and EPS of the banks?

1.5 Objectives of the Study

The major objective of the study is to evaluate the capital structure of Machhapuchhare Bank Ltd. (MBL) and Bank of Kathmandu Limited (BOKL). It is the study about the capital structure & profitability of MBL and BOKL by taking the financial data. It tries to analyze the overall capital structure & profitability. The specific objectives are as follows.

-) To examine the capital structure of selected Commercial Banks.
-) To evaluate whether the capital structure affects the cost of equity of MBL and BOKL.
-) To analyze the relationship between capital structure, solvency and profitability, MBL and BOKL.

1.6 Significance of the Study

The capital structure affects on the profitability and long-term financial position of the organization. The earning nature of the organization helps to adopt appropriate mix of debt and equity in the capital structure. On account of this significance, the capital structure and profitability of the organization is justified as a specific matter for the study. In this situation, this study will be helpful to the companies to overview their capital structure management and formulate future strategies to do much better in their horizon. Further, the concerned scholars, academicians, investors, financial manager, researchers may also be benefited from this study. This study will also help to inform the decision makers about the importance of capital structure management for their further success.

1.7 Limitations of the Study

The study has been conducted with certain limitations. The time is the one factor of limitation. Besides it, the scope of the study is limited within the bank. Some more limitations are follows.

-) The study analyzes capital structure and profitability of a two banks MBL and BOKL.
-) Only secondary data is used for the present study. No attempt is done to examine the reliability of the secondary data.
-) Variation of data in itself is found when comparing with different sources.
-) The study covers only five years ranging from fiscal year 2006/07 to 2010/11.

1.8 Organization of the Study

The study has been organized into five chapters. The title of each of these chapters is as follows:

Chapter I: Introduction

Introduction chapter comprises background of the study, focus of the study, statement of problem, objectives of the study, significance of the study and limitation of the study.

Chapter II: Review Literature

This chapter deals with the review of available literature in the field of the study being conducted. This includes review of the theories of concerned topic, review of previous thesis, review of supportive text, review or different articles, books, bulletins and annual reports published by concerned organization

Chapter III: Research Methodology

Research methodology deals with the method of investigation and includes research design, nature of the data, data collection procedure and tools used.

Chapter IV: Presentation and Analysis of Data

Presentation and analysis of data deal with different statistical and the financial tools that used in the analysis of the data and findings.

Chapter V: Summary, Conclusion and Recommendation

Last chapter includes the summary, conclusion and recommendation of the study.

After the fifth chapter, bibliography and appendices follow.

CHAPTER - II

REVIEW OF LITERATURE

This chapter is about review of the literature; also this chapter deals with the review of the capital structure. The more details descriptive manner, for this study of various books journal and the articles as well as past thesis also reviews. This chapter tries to detail the conceptual theoretical concept regarding the definition of capital structure, theories of capital structure and factors of the capital structure. In the context of Nepalese organization, some of the literature reviews relating to these studies are presented below:

2.1 Conceptual framework

2.1.1 Concept of Capital Structure

Capital Structure of a company refers to the composition or make-up of its capitalization and it includes all long-term resources, like loans, reserves, shares and bonds. The term ‘Capital Structure’ means the proportion of different types of securities issued by firm. The optimal capital structure is the set of proportion that maximize the total value of the firm.

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

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

“Capital Structure’ should not be confused with ‘Capitalization’. Capitalization is a quantitative aspect of financial planning as it refers to the total amount of securities issued by a company, while capital structure is concerned with qualitative aspect as it refers to the kinds of securities and the proportionate amounts that make up capitalization. Capitalization = total of all types of long term capital: capital structure = proportions of all types of long term capital, financial structure = proportions of all types of long term and short term capital” (*Upadhaya: 1985, 799*).

2.1.2 Basis of Capital Structure

Capital Structure concept has important place in financial management theory. It is basically known as financial structure, financial plan or leverage. Financial decision of a firm, as the other financial decision is concerned with the shareholders wealth maximization. As capital structure refers to the proportion of debt and equity, a choice in proportion actually financial decision in case to fulfill

investment requirement. Therefore, it is a wise decision to select a financing mix, which maximizes shareholders wealth.

“The term capital denotes the long-term funds of the firm. The long-term funds of the firm are financed by two major components, i.e. debt capital and equity capital. Debt capital includes long-term borrowings incurred by the firm. Equity capital consist long-term funds provided by the firm’s owners. The mix of long-term debt and equity maintained by the firm is called capital structure. Capital structure shows, what percentage of the firm’s capital is in equity and what percentage of firm’s capital is in debt. Capital structure is one of the most complex areas of financial decision making due to its inter-relationship with other financial decision variables. A financial manager must understand the firm’s capital structure and its relationship to risk-return and value for attainment of its primary objective of wealth maximization.” (*Saxena & Vashist, 2002: B.5.1*)

“A financial manager must strive to obtain the best financial mix or optimum capital structure for his/her firm. The firm’s capital structure is optimum when the market value of share is maximized. The use of debt affects the return and risks of shareholders; this will increase the return on equity but also risk at the same time. When the shareholders’ return is maximized with the minimum risk, the market value per share will be maximized and firm’s capital structure would be optimum.” (*Van Horne, 1983:10*).

“Capital structure is permanent financing of the firm represented primarily by long-term debt, preferred stock and common stock, but excluding all short term credit” (*Weston & Brigham, 1982: 555*).

“The term of capital structure is used to represent the proportionate relationship between debt and equity. The debt and equity mix of a firm is called capital

structure. The capital structure decision is a significant financial decision since it affects the shareholders' return, risk and market value of shares" (*Pandey, 1992: 663*).

"The importance of an appropriate capital structure is the obvious. There is a viewpoint that strongly supports the close relationship between leverage and value of firm. There is an equally strong body of opinion, which believes that financing mix or the combination of debt and equity has no impact on the shareholders' wealth and the decision on financial structure is irrelevant. In other words, there is nothing such as optimum capital structure" (*Khan & Jain, 1999, 111*)

"Under the assumption that a firm will attempt to maximize the run market value of ownership shares; there exists an optimum capital structure for each individual firm. It varies in different industries because the typical assets structure and stability of earning, which determine inherent risks vary for different type of production" (*Kulkarni, 1983:368*).

"The concern of the financial decision is with the financing mix or capital or leverage. The financing decision of a firm relates to the choice of the proportion of these sources to finance the investment requirement. There are two aspects of the financing decisions. First, the theory of capital structure which shows the theoretical relationship between the employment of debt and the return to the shareholders. The use of debt implies a higher return to the shareholders and also the financial risk. A proper balance between debt and equity to ensure a tradeoff between risk and return the shareholders are necessary. A capital structure with reasonable proportion of debt and equity capital is called optimum capital structure" (*Khan & Jain, 1984: 10*).

2.1.3 Assumptions of Capital Structure

Capital structure theory has some assumptions which are as follows:

-) There are mainly two sources of funds used by a firm: Debt and Ordinary Shares.
-) There are no corporate taxes (this assumption is removed later).
-) The dividend payout ratio is 100% i.e. the total earnings are paid out as cash dividend to the shareholders and there is no retained.
-) The firm's total assets are given and do not change. The investment decisions are in the other words, assumed constant.
-) The firm's total financing remains constant. The firm can change its degree of leverage either by selling shares and use the proceeds to retire debentures or by raising more debt and reduce the equity capital.
-) The operating profits (EBIT) are not effect to grow.
-) All investors are assumed to have the same subjective probability of the future expected EBIT for a given firm.
-) The firm's business risk is constant over the time and it assumed to the independent of its capital structure and financial risk.

Perpetual life of the firm. (*Khan & Jain, 1999*)

2.1.4 Classification of Capital Structure

There are different classifications of capital structure.

Saxena & Vashist, (2002) have classified the capital structure are mentioned below:

2.1.4.1 Simple Capital Structure

(i) Balance Sheet as at

Equity	Rs.	Fixed	Rs.
Share	2,00,000	Assets	1,20,000
Capital		Current	80,000
	2,00,000	Assets	2,00,000

(ii) Balance Sheet as at

Equity	Rs.	Fixed	Rs.
Share	1,60,000	Assets	1,20,000
Capital	40,000	Current	80,000
Retained	2,00,000	Assets	2,00,000
Earnings			

2.1.4.2 Complex Capital Structure

(i) Balance Sheet as at

Equity	Rs.	Fixed	Rs.
Share	1,80,000	Assets	1,20,000
Capital	20,000	Current	80,000
Current	2,00,000	Assets	2,00,000
Liabilities			

(ii) Balance Sheet as at

Equity Share	Rs.	Fixed	Rs.
Capital	1,40,000	Assets	1,20,000
Preference	40,000	Current	80,000
Share Capital	20,000	Assets	
Retained	2,00,000		2,00,000
Earnings			

(iii) **Balance Sheet as at**

	Rs.	Fixed	Rs.
Equity Share Capital	80,000	Assets	1,20,000
Preference Share Capital	40,000	Current Assets	80,000
Retained Earnings	60,000		
Debentures and long-term loan	2,00,000		2,00,000

(iv) Mostly short-term liabilities are omitted in considering capital structure, but some authors have held the view that considering the importance of bank credit, etc. it is better to include all liabilities (long-term and short-term) in consideration of capital structure. The view is not common view. If this view is also considered, the capital structure will be shown as follows: (*J.R. Lindsay and A.W. Samtez*)

Balance Sheet as at

	Rs.	Fixed	Rs.
Equity Share Capital	80,000	Assets	1,20,000
Preference Share Capital	40,000	Current Assets	80,000
Retained Earnings	40,000		
Debentures and long-term loan	20,000		
Current Liabilities	2,00,000		2,00,000

Normally, current liabilities are considered only in working capital analysis and not in the analysis of sources of long-term funds.

2.1.4.3 Classification based on Sources

Under this category long-term funds can be financed from (i) Internal capital, and (ii) External capital. Internal capital includes bonus issue, capital reserve and reserves and surplus. External capital refers to share capital, share premium, forfeited share, debentures and long-term liabilities.

2.1.4.4 Classification based on Ownership

(i) *Ownership capital* comprises of equity share capital and retained earnings.

(ii) *Debt capital* includes debentures and long-term loans.

Preference share capital is treated both as part of ownership capital or as part of debt capital. It should be grouped based on the view taken by the management.

2.1.4.5 Classification based on Cost Behavior

Classification is also attempted based on cost behaviors of various sources of capital, i.e., fixed cost capital and variable cost capital.

Fixed cost capital includes preference share capital, debentures, long-term debt.

Variable cost capital includes equity share capital.

2.1.5 Theories of Capital Structure

The theory of capital structure is closely related to the firm's cost of capital. Many debates over whether an optimal capital structure exists are found in the financial literature. Argument between those who believe there is an optimal 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. Modigliani and Miller logically admitted that the value of the firm or the cost of capital is independent of capital structure decision of the firm. On the other hand, according to the traditionalist's view, the value of the firm or the cost of capital is affected by the capital structure change. So, in order to understand how firms should adhere the target capital

structure decision, it is important to have some idea of major elements of capital structure theory.

The history presents several theories on capital structure management. In order to analyze the capital structure of any company four theories are considered.

These theories are:

-) Net income (NI) approach.
-) Net operating income (NOI) approach.
-) Traditional approach; and
-) Modigliani-Miller (M-M) theory
 - Without taxes.
 - With taxes.

2.1.5.1 Net Income (NI) Approach

Two capital structure theories, i.e., the net income approach and the net operating income approach, were propounded by David Durand. According to NI approach, the firm can increase its total valuation (V), and lower its cost of capital (K_0) when it increases the degree of leverage (D/L). The optimum capital structure can be attained when the cost of capital of a firm is the lowest and the value of the firm is the greatest. The main feature of the NI approach is that a firm can lower its cost of capital continuously by use of debt capital and thus increase its total valuation. Reduction in the cost of capital (i.e., more and more use of debt and increase in the value of the firm) is possible when:

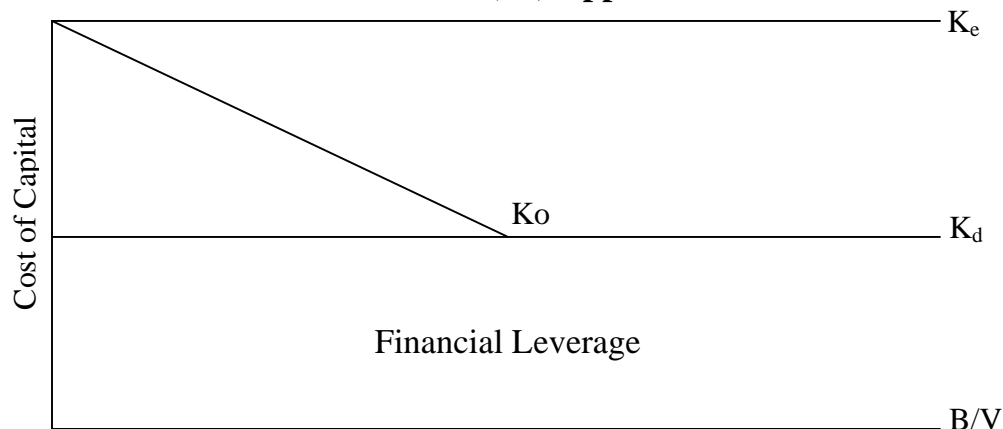
- i) Cost of debt (K_d) is less than cost of equity (K_e) and it remains constant;
- ii) The firm does not become more risky in the minds of investors and creditors consequent upon increase in the degree of leverage (*Saxena & Vashist, 2002: 45*).

“The financial leverage according to the NI approach is an important variable in the capital structure decision of the firm. With the judicious mixture of debt and equity, a firm can evolve an optimum capital structure which will be the one, at which value of the firm is the highest and overall cost of capital the lowest. At this structure the market price per share would be maximum. If the firm uses no debt, the cost of capital will be equal to the equity-capitalization rate. The weighted average cost of capital will decline and will approach the cost of debt as the degree of leverage reaches.” (Pandey, 1984: 412).

According to this approach, there is optimal capital structure when the market price per share of stock is maximum. The significances of this approach are that a firm can lower its cost of capital continually and increase its total valuation by the use of debt funds. This will increase use of leverage overall cost of capital declines and total value of the firm rises

Figure: 2.1

Net Income (NI) Approach



Source: (Khan & Jain, 1984: 411).

Graphically, the effect on the firm’s cost of capital and its total market value is shown in Figure 2.1. If cost of debt and cost of equity are constant as is assumed in the NI approach, then the proportion of cheaper debt fund in capital structure increases, the cost of capital decreases. Thus, under the NI approach the firm can

lower its cost of capital and raises its total market value through the addition of debt capital (*Gitman and Pinches, 1985: 710*).

Assumption of Net Income (NI) Approach

NI approach is based on the following three assumptions:

- a) The cost of debt is less the cost of equity.
- b) The debt content does not change the risk perception of the investors, as a result the capitalization rate K_e and the debt capitalization rate K_d remain constant with change in leverage.
- c) There are no corporate taxes. Therefore, as firm increases its leverage by increasing its level of debt relative to equity, the overall cost of capital declines (*Saxena & Vashist, 2002: 56*).

"As the portions of the cheaper debt funds in the capital structure, increases, the weighted average cost of capital decreases and approaches the cost of debt (K_d)". "Therefore as the firm increases its leverage by increasing its level of debt relative to equity, the overall cost of capital is that it increases the value of the firm" (*Van Horne, 1999: 380*).

Overall cost of capital can be expressed by following formula.

$$\text{Overall cost of capital (K}_o\text{)} = \frac{\text{Net Operating Income}}{\text{Total value of the firm}}$$

As per assumptions of NI approach, K_e and K_d are constant and K_d is less than K_e . Therefore, K_o will decrease as B/V increases. Also, ' K_e '= K_o when $B/V=0$.

2.1.5.2 Net Operating Income (NOI) Approach

NOI approach was also advocated by David Durand. This approach is diametrically opposite to the net income approach. The essence of this approach is

that the capital structure decision to the firm is irrelevant. Any change in leverage will not lead any change in the total value of the firm and the market price of shares, as the overall cost of capital is independent of the degree of leverage (Saxena & Vashist, 2002: 88)

Assumption of Net Operating Approach (NOI) Approach

NOI approach is based on the following assumptions:

-) The market capitalizes 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_o , to capitalize the net operating income. K_o , depends upon the business risk. If the business risk is assumed to remain unchanged, K_e is constant.
-) The use of less costly debt fund increases the risk to the 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 a constant.
-) The corporate income taxes do not exist.

Features of Net Operating Approach (NOI) Approach

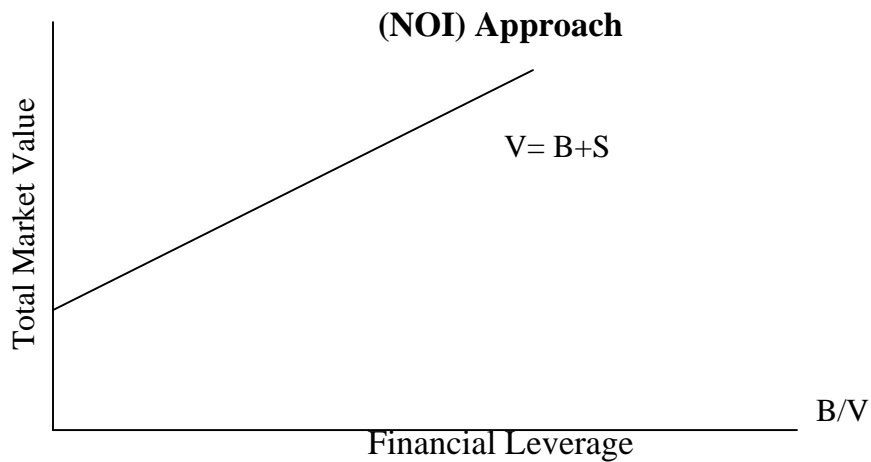
Total market value of the firm (V) is obtained by capitalizing net operating income (EBIT) at the overall cost of capital (K_e), which is constant.

Total value of the stock (S) is found by subtracting the value of debt from total market value of the firm.

The cost of equity $(EBIT - I)/S$ tends to rise in correspondence in the degree of leverage.

The overall cost of capital is an average of the cost of debt and equity.

Figure: 2.2



Source: Saxena & Vashist, 2002

Under the NOI approach, the capital structure selected is a “more detail” since the value of the firm is independent of the firm’s capital structure. If the firm increases its uses of financial leverage more debt directly offset by an increase in the cost of equity capital.

2.1.5.3 Modigliani-Miller’s (M-M) Hypothesis

Till 1950s, it was believed that judicious mix of debt and equity capital i.e. financial leverage in the capital structure decreases the overall cost of capital, increases the value of the firm and helps in determining an optimal capital structure.

But in 1958, Franco Modigliani and Metron H. Miller published 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 those two researchers is later known as M-M theory. The M-M theory is based on some assumptions, which are mentioned below" (*Pandey, 1999: 687*).

Assumptions of Modigliani-Miller's (M-M) Hypothesis

The M-M hypothesis is based on following assumptions relating to the capital market, behavior of investors, actions of the firm and tax environment.

- a. The securities are traded in perfect market. This means that investors are free to buy and sell securities. The investors can borrow from the market at the rate of interest at which firms can borrow.
- b. The investors have homogeneous expectations.
- c. It is possible to classify the firms into homogeneous risk classes. The firms in a given risk class are equally risky and their expected future earnings are capitalized at the same rate, i.e., in a given class, the firms have same expected and required rate of returns.
- d. The dividend payout ratio is 100% i.e. firms distribute all net earnings to shareholders.
- e. There is no corporate tax. This assumption was later on removed (*Saxena and Vashist, 2002: 98*).

Based on the **above** assumptions, the M-M hypothesis gave two propositions-proposition I and proposition II. These propositions are discussed below:

Proposition I : This proposition is identical to the NOI hypothesis. The M-M hypothesis argues that the market value of the firm (V), and its overall cost of capital (K_o) are independent of its capital structure. For a firm's risk class, the market value of the firm is established by capitalizing net operating income (NIO-EBIT) at an appropriate rate is follows:

$$V = S + D = \frac{EBIT}{K_o} \times \frac{X}{K_o} \text{ or } K_o \times \frac{EBIT}{V}$$

$$\text{or, } K_o = K_d (D/V) + K_e (S/V)$$

V = The market value of the firm.

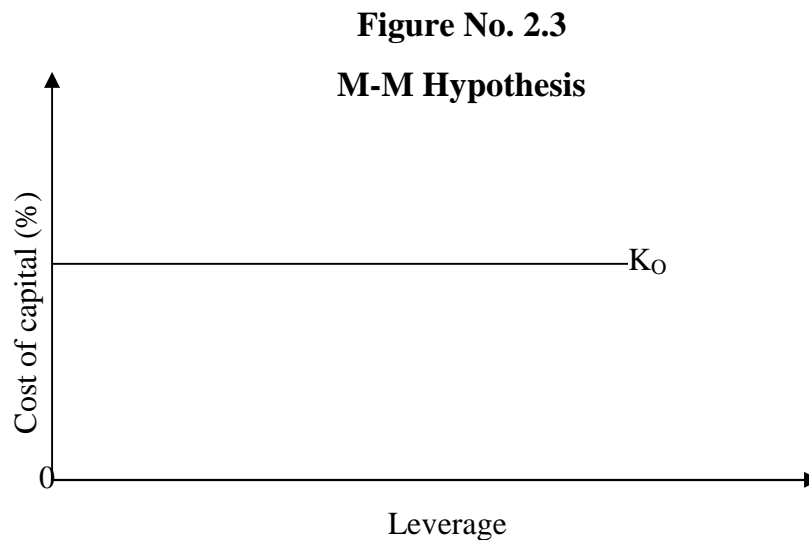
S = The market value of equity share.

D = The market value of debt.

X = Net operating income or earnings before interest.

K = The capitalization rate appropriate to risk class of the firm.

In the **above** formula, EBIT is calculated before interest and for this reason it is independent of capital structure of leverage. Cost of capital K_0 is equal to the capitalization rate appropriate to the risk class of the firm, and therefore, it is independent of capital structure, market structure, market value (V) must also be independent of capital structure or leverage. This is explained in the diagram given below:



Source: Saxena and Vashist, 2002

Effect of leverage on cost of capital (M-M Hypothesis- Proposition I)

The cost of capital function as hypothesis by M-M through proposition I is shown **above** in figure No.3. It is evident from this that average cost of capital is a constant and is not affected by leverage (*Saxena and Vashist, 2002: 112*).

Arbitrage process: M-M hypothesis does not accept the NOI approach as valid. It is held in this hypothesis that two identical in all respects except for their capital

structure cannot command different values nor have different cost of capital. M-M argues that if two firms differ only:

- a. In the way they are financed, i.e. capital structure are different, and
- b. In their total market values, investors will sell the share of over- valued firm and buy the shares of under- valued firm.

“This process will continue till the two firms have the same market value. This is called arbitrage or switching process. When the equilibrium is reached, the NOI condition will be fulfilled and the value of the firm and their average cost of capital will be the same. Thus, it is held that V and K_o are independent of capital structure” (*Saxena and Vashist, 2002: 118*).

Proposition II: The M-M hypothesis argues that cost of capital K_e is equal to constant average cost of capital K_o plus a premium for the financial risk. This can be written as follows:

$$K_e = K_o + \text{risk premium}$$

The premium for financial risk equals to the difference between equity capitalization rate K_e and cost of debt multiplied by the ratio of D/S , that is :

$$K_e = K_o + (K_o - K_d) \times D/S$$

In brief, the proposition II implies that firm’s cost of equity increases to offset the use by cheaper debt capital. Alternatively, the firm’s use of debt increases its cost of equity as well. Proposition II of M-M Hypothesis presumes a linear relationship between K_e and debt equity ratio (D/S) (*Saxena and Vashist, 2002: 167*).

2.1.5.4 Traditional Approach

The traditional approach to valuation and leverage is moderate approach of NI and NOI approach. This theory assumes that there is an optimal capital structure and that the firm can increase the total value of the firm through the

judicious use of leverage. This approach encompasses all the ground between the NI approach and NOI approach. This theory is also known as intermediate approach. The traditional view on the relationship between capital structure and the cost of capital is that the firm's cost of capital can be reducing by judicious mix of debt and equity capital and then an optimal capital structure exists for every firm.

“The approach justifies the view that debt capital is relatively cheaper than ordinary shares. So changing leverage i.e., using debt instead of equity capital obviously causes a decline in the overall cost of capital is minimum or raised further the firm would become financially more risky to the investors who whole penalize the firm by demanding a higher equity capitalization rate” (*Khan and Jain, 1992: 495*).

“Traditional approach is a compromise between two extremes, i.e. net income approach and net operating income approach. The advocates of this approach hold the view that the value of the firm, i.e. V , can be increased or the cost of capital can be reduced up to certain point by a judicious mix of debt and equity capital. Beyond that, the increase of equity more than offset the use of cheaper debt capital in the capital structure and average cost of capital begins to rise. The average cost of capital structure further rises, when cost of debt also begins to rise. The optimum capital structure is the point at which overall cost of capital is the minimum or value of the firm is maximum. The essence of the traditional approach is that a firm may, through judicious mix of debt and equity, reduce the cost of capital and increase its total value. Graphically, traditional approach can be depicted as follows.” (*Saxena and Vashist, 2002: 210*)

The main propositions of the traditional theory are:

STAGE-1

In this first stage, the cost of debt (K_d) remains more or less constant up to a certain degrees of leverage but rises thereafter at an increasing rate.

It means that cost of equity (K_e) remains constant or rises slightly with debt. But it does not increase fast enough offsets the advantage of low cost of debt. During this stage, the cost of debt (K_d) remains constant or rises negligibly. Since the market views the use of debt as a reasonable policy.

Thus, so long as debt is within acceptable limit and ' K_e ' and ' K_i ' remains constant, the value of the firm increases at a constant rate.

STAGE-2

In this stage, once the firm has reached a certain degree of leverage, increases in it have a negligible effect on the value of the firm. This is so because the increase in the cost of equity offsets the advantages of low cost of debt within that range or specific points, the value of the firm will be maximized or the cost of capital will be minimized.

STAGE-3

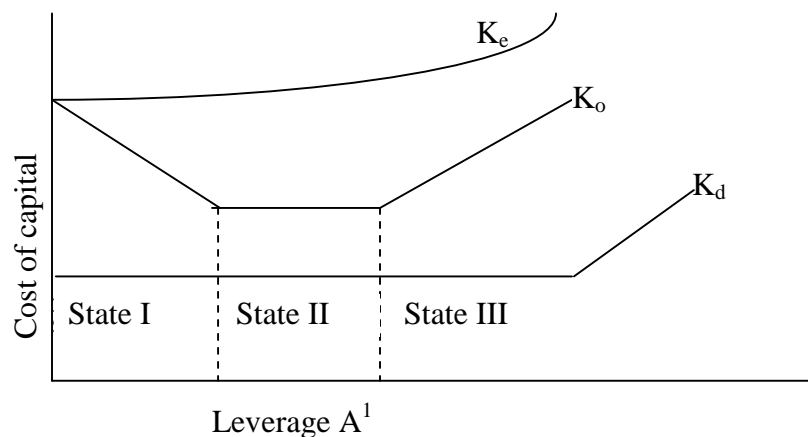
The overall cost of capital K_o as a consequence of the **above** behavior of K_e and K_d .

-) Decrease up to a certain point.
-) Remain more or less unchanged for moderate increase in leverage there after, and
-) Rises beyond a certain point.

After the certain level of leverage, the value of the firm increases with leverage or the overall cost of capital increases with leverage.

The cost of debt and equity will tend to rise as a result of increasing the degree of financial risks that will make to increase in the overall cost of capital.

Figure: 2.4
The Cost of Capital Behavior (Traditional approach)



Source: Saxena and Vashist, 2002: 223).

“The traditional theory implies that the cost of capital is not independent of the capital structure of the firm. The traditional theory holds that this is an optimum level of capital structure. For degree of leverage before this point marginal cost of debt is less than the marginal cost of equity. Beyond this point, the marginal cost of debt exceeds that of equity” (*Saxena and Vashist, 2002: 223*).

2.1.6 Related Concept of Capital Structure

a) Cost of Capital

“Cost of capital is the rate of return on the investment to be earned in order to satisfy the investor. Cost of capital may be defined as cost to the firm of obtaining funds or equivalently as the average rate of return that an investor or a firm would expect for supply capital. This would be the minimum rate of return that a project must yield to keep the value of the firm intact. Defined

cost of capital as the minimum acceptable rate or the required rate of return is a compensation for time and risk in the use of capital by the project.” (*Pandey 1995: 136*)

“The cost of each component of the capital structure is also said cost of capital. Capital components, which are shown in the left hand side of the balance sheet, include various types of debt, preferred stock, retained earnings and common stock. Every firm has to repay its borrowed funds with interest after certain period of time. Interest which it has to pay is called cost of capital. Cost of preference share is calculated as cost of debt because it is debt of capital. The cost of equity capital is defined as the minimum return of return that a firm must earn on the equity financed portion of its investment in order to leave unchanged the market price of its stock” (*Van Horne, 1999: 335*).

Cost of retained earnings is the opportunity cost to the shareholders because when the firm decides to retain the current earnings in the firm than shareholders give up their cash dividends. Thus, in the absence of flotation cost of retained earnings and the cost of common stock k is same. The cost of new common equity is the rate of return which is required by the stockholder. Due to flotation cost, the cost of common stock is greater than the cost of retained earnings. The weighted average or composition of cost of capital is the weighted average of the cost of several of capital weight in the proportion of the sources in the capital structure.

b) Common Stock

“Common stock is a security representing the residual ownership of a corporation. It guarantees only the right to participate in sharing the earnings of the firm if the firm is profitable. Common shareholders usually have the additional right to vote at stockholders meeting on issues affecting fundamental policies of the

corporation. Also, the shareholders have the right to select the members of their board of directors, the right to inspect the firm's books (only for the legitimate purpose of evaluating the performance of management), and the right to obtain a list of the names and address of other shareholders" (*Hampton, 1986: 38*).

"Common equity in a corporation or partnership interests in an unincorporated firm constitute the first source of funds to a new business and the base of support for borrowing by existing firms. The nature of equity ownership depends on the form of the business or organization. The central problems of such ownership revolve around an apportionment of certain rights and responsibilities among those who have provided the funds necessary for the operation of the business. The rights and responsibilities attached to equity consist of positive considerations (income potential control of the firm) and negative considerations (loss potential, legal responsibility, and personal liability)" (*Weston and Copeland: 1998, 931*).

c) Preferred Stock

"Shares whose holders are the first to receive dividends from available profit are preference shares. Preference shares are redeemed before ordinary shares when a company is liquidated" (*Microsoft Encarta: 2006, 304*).

"Preference stock is a source of capital that is part of shareholders equity. It has lower claim priority than the firm's debt but a higher priority than its common stock" (*Steven E. Bolten, Robert L. Com, 1981: 612*).

Accountants classify preferred stock as equity and generally list it in the equity portion of the balance sheet under the title "Preferred stock" or "preferred equity". However in financial analysis preferred is sometimes treated as debt and sometimes as equity, depending on the type of analysis being made. If the analysis is being made by a common stockholder's then key consideration is the fact that the preferred dividend is affixed charge, which must be paid ahead of common

stock dividends, so the common stock holder will view preferred stockholder's to the available income and if the firm fails, debt holder have prior claims to assets when the firm is liquidated. Thus, to the bondholder preferred stock is similar stock is similar to common equity. From management's perspective preferred lies between debt and common equity. Since the dividends on preferred stock are not a fixed charge in the sense that failure to pay them represents default on an obligation, preferred stock is safer to use than debt. On the other hand, if the firm is highly successful, then the common stockholders will not have to share that success with the preferred stockholders, because preferred dividends are fixed. We see then, that preferred stock has some characteristics of debt and some the characteristics of common stock and it is entirely appropriate (*Brigham, 1998: 510*).

d. Long Term Debt

If an existing obligation is not to be paid within one year or current operating cycle (whichever is longer) or placed by another current liability, It is properly classified as long term liability. The most frequently encountered long term liabilities are holds payable; long term notes payable, lease obligations, pension obligations, deferred taxes, other long term deferrals and occasionally contingent liabilities.

The use of borrowed funds is known as the trading on equity. The customary reason for using borrowed fund is the expectation of investing them in a capital project that will provide a return in excess of the cost of the acquired funds.

When additional funds are needed to expand the business or for current operations, a corporation has the choice of issuing debt or equity securities. There are four basic reasons why a company may wish to issue debt rather than equity securities.

- Bonds may be the only available source of funds.
- Debt financing has a lower cost.

- Debt financing offers a tax advantage.
- The voting privilege is not shared.

e) Retained earning

Retained earnings is also called reinvested earnings. It is increased in stockholders equity due to profitable operation. It may be capital reserve, revenue reserve etc.

f) Dividend

Dividend, in corporation finance, a fund appropriated out of the profits of a corporation and distributed among its stockholders; also the share of the fund received by a stockholder. Dividends are usually declared periodically (quarterly, semi-annually, or annually) by the directors of a corporation. The action of a board of directors with respect to the declaration or non-declaration of dividends is usually final and conclusive upon the stockholders and is subject to review by the courts only in the event that the action is arbitrary or capricious.

Dividends are distributed on a proportional basis; the fractional share of: the total dividend received by stockholders is equal to the proportional share of the stocks owned by them. Holders of the preferred stock of a company generally have a prior right to the payment of dividends over holders of common stock, and if their stock so provides, are paid at a fixed periodic rate. Preferred dividends may be cumulative or non-cumulative. Cumulative dividends are those that, if not paid for one or more periods, constitute charges on the profits of succeeding periods and must be paid at a future date before dividends may be distributed on common stock. Non-cumulative dividends, if omitted. Do not constitute charges on future profits. Dividends may take the form of additional shares of stock or of the right to purchase stock for a fixed sum per share; such dividends are called stock dividends and rights.

“The term dividend is applied also to the assets of a bankrupt or insolvent business that are distributed among its creditors during the course of its liquidation. The term is used in insurance to signify the sum appropriated out of profits for distribution among policyholders whose policies so provide; such dividends may be used to reduce the next premium” (Microsoft Encarta 2006).

“Dividend in the normal use of the word refers to that portion of retained earnings that is paid to stockholders. Dividend policy refers to the policy or guidelines that management uses in establishing the portion of retained earnings that is to be paid in dividend” (*Bhalla 1983: 167*).

2.1.7 Determination of Capital Structure

There are some elements of capital structure for decision. Without the study of these elements, the company cannot make appropriate capital structure and analysis of leverage may be incomplete. So it is necessary to study about the determinants of capital structure.

a) EBIT / EPS Analysis

In the study of leverage the EBIT-EPS, analysis is a must because it is a method of financing under various assumptions of EBIT that should raise its capital position in different situations. In that situation, they have to choose better capital source as per the profitability of the company in the near future. To make balanced and appropriate capital structure for better future, the company needs to select different alternatives from different source in different proportion. The EBIT-EPS analysis is one of the best ways by which, we can understand the exclusive use of equity capital, debt capital, Preference capital a combination of different proportion and so on. These are analytical instrument. which will be useful in planning the capital structure and increasing earnings before interest and taxes with greater value of EPS.

The main objective of any company is to maximize the market value of the firm as well as shareholder's wealth position. Keeping this in view, the EBIT-EPS analysis should be considered logically at the stage of designing capital structure. The EBIT-EPS analyses show the impact of various financial alternatives on EPS at various levels of EBIT. This method involves the comparison of alternative methods of financing under various assumptions as to EBIT. With these methods, the financial manager can make an appropriate financial decision.

b) Cost of Capital

Cost of capital is generally used in the sense of overall cost of capital. This overall cost of capital is comprised of the costs of various components of financing, i.e., the sources from which the capital has been raised. Each source has got own cost. All these costs are combined to compute overall cost of capital of a firm.

Cost of capital is a very widely used term in the literature of finance. It is defined as the minimum rate of return (or required rate of return), that a firm must earn on its assets in order to 'maintain its market value and attract needed funds. It is the rate of return at which the market value of a firm remains, unchanged. In capital investment proposals, cost of capital is used as discounting rate or hurdle rate, or cut-off rate that is applied to projects' cash flow stream to determine whether the project is worthwhile or not. One of the financial objectives of a firm is to earn more than cost of capital. It is the rate of return required by those who invest in the firm (*Saxena & Vashist, 2002: 267*).

c) Flexibility

Flexibility means the firm's ability to adopt its capital structure to the needs of changing conditions. The firm should keep flexible financial plan in order to economize use of funds by substituting one from financing other.

The restrictive covenants are commonly included in long-term loan agreement and debenture. The covenants in loan agreement may include restriction to distribute cash dividend, to purchase assets or to raise additional external financial. The firm also is required to maintain a certain ratio, as debt equity ratio or current ratio at certain ratio.

The firm having the discretion of refunding its debt and preference shares capital can enjoy' considerable degree of flexible. The financial plan of the firm should be flexible enough to change 'the composition of the capital structure as warranted by the firm's operating strategy and needs.

2.1.8 General Concept of Profitability

The term 'Profit' is being used in several senses. According to Prof.. Knight," Perhaps no term or concept in economic discussion is used with a more bewildering variety of well- established meaning that profit". "Some writers have defined it as the percentage returns on investment of capital while others have called it the reward of ownership. some have referred to it as reward for risk-taking, while others have called it as a reward for entrepreneurship' There are still others who have defined profit as the residual income which results after all tire three factors of production have been paid off. To get an accurate meaning of profit it appears necessary to, distinguish gross profit from net profit" (*Scth M.L., 1998: 438*).

Profitability is a deviation of the term profit which explains ability to make a profit is a primarily a measuring rod of success of business enterprise. It is the basic, test performance of any business simply stating. Profit is money excess of sale over the money spent but the term "Profit" is very controversial and there are several interpretations about it.

“An economist will say that profit is the reward of entrepreneurship for risk taking. A labour leader might say that it is a measure of how efficiently labour has produced and that it provides a base for negotiating a wage increase. And investor will view it is a gauge of the return on his/her money. An internal revenue agent might regard it as a base for determining income taxes. The accountant will define it simply as the excess of firm's revenue over expenditure of producing revenue in given fiscal period” (*Lynch & Williamson. 1989: 99*).

The profit and simply the money gained from a sale, which is more than the money spent. According to the dictionary of commerce, profit is termed as to describe the surplus resulting after a defined trading period but must be regarded as the first essential charge upon business' being a reward for engaging resources in conditions of speculative risk for the satisfaction of consumer resources of speculative risk for the satisfaction of consumer demand' It furnishes resources to invest in future operations and consequently its absence must result in a decline in effective capital resources and ultimately competitive extinction of the business.

The term 'profit' can be used in two senses. As a owner oriented concept it refer to amount and share of national income which is paid to the owners of business, that is those who supply equity capital as variant is described as profitability. In other word, profitability refers to situation where output exceeds input that is the value created by the use of resources is more than the total of input resource.

In this regard, American institute of Banking say's, "Under the free enterprise system like USA, the interest of the nation as well as those of the individual stockholders is supposed to be best served by vigorously seeking profit. But the profit cannot be a sole objective of an enterprise and an enterprise should not be evaluated just on the ground of the profit it earned. Neither bank nor the community will be the best served it the banker unreasonably sacrifices safety

funds of the liquidity of bank in an effort to increase income" (*American Institute of Banking, 1972: .i5*).

Every business firm has different types of goal. Profit maximization is the goal of business. Profit is very important for business firm. It is equally important as for is water. To cover cost of staying in business such as replacement of machines, furniture, obsolescence of machines, market or technical risks etc. Profit is essential in the sense to the self-financing principal. It provides structure and helps to minimize cost of capital. Profit of business is attraction for investors. So investors would invest their money where there is adequate profit. Hence profit is required to ensure and satisfy the entire expectation of management, shareholders, investors, employees and nation as whole

2.1.8.1 Traditional Approach towards Profit

"Profit is the measurement of the business firm's overall performance. A business firm can claim it to be successful if it can maintain maximum profit to justify the worth of return on investment. This helps business firm to save from shortage of funds and provide best opportunities to undertake the expansion of assets to enlarge business" (*Shrestha. 1980: 33-24*).

Profit maximization is the traditional approach of business environment and economic theory on the ground of profit for firm. In the economic theory, one of the assumptions is profit maximization. It always assumes that a firm sets a target to maximize the profit and is discretionary behavior of the firm, so in the managerial economics, to maximize profit is the central belief.

The promise of profit provides a strong incentive to owners and manager to act efficiently. Therefore, it is common in economic theory to hypothesis that the criteria for evaluating the action of the firm are profit maximization. The basic

incentives for business are to produce goods and services. The profit in this sense is revenue that remains after deducting both explicit and implicit costs, including nominal profit considered of the entrepreneur's services. "Profit is essential for every enterprise to survive in the long run as well as to maintain capital adequacy through retained earnings. It is also necessary to accept market for both and equity to provide funds for increased assistance to the productive sector" (*Robinson. 1951: 21-22*).

2.1.8.2 Modern Approach towards Profit

Business environment is totally different from past to today. In past time one of main objectives of firm was profit maximization. But today sales maximization is the main objective of the firm. So that firm's objective may be to maximize its growth rate or satisfaction shareholders' wealth maximization.

Today every business firms finance by equity owners, creditors. Professional management is related to customer, employee, government and society concerned with firm. Besides other objectives of business firm, wealth maximization of shareholders' is normal objective of firm or otherwise a firm should set a standard for reasonable profit.

There are threats given to profit maximization and the economists to the profitability concept of firm give so many alternatives. Though there are denials towards profitability Maximization model of a firm. Economists still do not have unified views to cover the alternative model when markets are perfect competitive, Monopolistic or oligopolistic form. Therefore, the profitability model is still in the existence. A business firm still prefers to maximize profit as far as possible. "Business has multiple goals and the needs of survival, goodwill, security and both commonly call for some sacrifice of short term profits. Most business does, However, rate profitability consistently high among their term objectives and it

could be argued short term goal such as security and growth rate subordinate to long term profitability."

2.2 Review of Journals and Articles

Pathak (2007) has carried out a study on "*capital structure and profitability: a comparative case study between the Nepal Indosuez bank Ltd (now Nepal Investment Bank Ltd) and then Nepal Grindlay Bank Ltd (now Standard Chartered Bank Ltd)*". The capital structures of both banks are highly levered, so it is difficult for them to pay interest and principal that may ultimately lead them to liquidity or for them to pay interest and principal that may ultimately dead them to liquidity or bankruptcy. There is no significant relationship between debt and equity ratio in terms of fixed deposits to net worth and overall capitalization rates of the banks. The ROE fluctuation is found to be influenced by the dividend payout ratio and interest margin in NIB Ltd. Both banks vary in the case of total assets, number of bank branches and volume of transactions. Both the banks are efficient and well established and doing well. He has suggested that NIB Ltd should expand assets and branches, which may ultimately affect the banks performance and increase the profitability more than ever.

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

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

Hutchison and Cox (2010), in their article, “*The Causal Relationship Between Bank Capital and Profitability*”, have demonstrated that for banks in the U.S. there is a positive relationship between financial leverage and the return on equity for both the 1996-2002 and the 2003-2009 periods. Furthermore, the proportionality of financial leverage to return on equity appears to have been more or less maintained between the later more regulated time period as opposed to the earlier freer period.

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

2.3 Review of Thesis

Giri (2006) had conducted a thesis on “*Capital Structure Management of Listed Joint Venture Commercial Banks*” He studied on two joint venture commercial banks: they are Standard chartered Bank Nepal Limited (SCBNL) and Nepal Bangladesh Bank Limited (NBBL). He found that JVBs have lack of theoretical and practical knowledge with regarding to capital structure theories. Nepalese

investors are not attracted by the theories' JVBs in Nepal have concentrated their business with big businessman and industrialists.

The objectives of the study are as follows:

-) To find out the capital structure of Joint Venture Commercial Banks.
-) To measure the relationship between debt equity capital.
-) To examine the relationship of leverage with different financial ratios.

The major findings of the study are as follows:

-) Their clients are mostly big manufacture; carpet and garment exporters, multinational companies, Large scale of industries, NGOs as well as INGOs, travel agencies. Cargo agencies, Housing companies etc. Therefore, the JVBs are suggested to open their doors to the small depositors and entrepreneurs also.
-) The capital structure of selected banks is highly levered. The proportion of debt and equity capital should be decided keeping in mind the efforts of tax advantage and financial distress. The banks, when they are in difficult to pay interest and principal, ultimately lead to liquidation or bankruptcy. For such, the banks should reduce the high use of debt capital. Return ratios like; return on total assets and return on shareholder's equity are not satisfactory in NBBL. SCBNL seems very good performing than NBBL in case of ROE.
-) The savings from rural communities are neglected by JVBs, without which they can't contribute much to the economic development of the country. So, JVBs recommended being cooperative and should expand the branches by covering all the five development regions of the country including rural areas to achieve geographically balanced approach. 'JVBs are basically not concentrated to mobilize their deposit funds in productive areas.

-)] Nepalese shareholders are very much concerned about the payment of cash dividend by the joint venture banks rather than their financial statement. He has suggested paying cash dividend consistently.

Kansakar (2007), in his study, “*Capital Structure of Joint Venture Banks of Nepal*”, has the main objective to analyze, examine and interpret the capital structure of selected three Joint Venture Banks.

The objectives of the study are as follows:

-)] To examine the solvency position of joint venture banks under study
-)] To evaluate the effect of capital structure on profitability of Joint venture banks under study
-)] To analyze the capital structure of sample banks
-)] To analyze the comparative capital structure of selected JVBs

The major findings of the study are as follows:

-)] All JVBs has used high percentage of total debt in raising the assets and finance its activities. There is the highest ratio of the outsiders’ claim in total assets than that of the owners claim. The implication of higher outsiders’ fund is computed as debt ratio analysis. In an average the highest debt ratio belongs to Standard Chartered Bank of 93.29% which means that it is exposed to the greatest financial risk.
-)] All the JVBs under study show the highest portion of debt in their capital structure. So they constantly face the burden of huge interest payments. The analysis shows that Standard Chartered Bank has the highest interest coverage ratio of 3.04 times on an average which indicates that it has been successful in generating sufficient income though the utilization of leverage. The lowest belongs to Himalayan bank of 1.71 times.

- J The ROA computed for the selected banks depicts the exact utilization of assets made by them. In comparison to all the other banks, Standard Chartered bank has the highest ROA which means that it is successful in the utilization of assets to generate more efficiency.
- J The results obtained through ROE calculation of all the selected JVBs shows the positive reflection of their efficiency of providing satisfactory returns to their shareholders. Standard Chartered bank has the highest ROE of 36.76% which means its capacity to utilize the shareholder's equity in an efficient way. All other remaining bank also shows the satisfactory result though the lowest ROE belongs to Himalayan Bank.

Bista (2010) In his MBS thesis "*Capital Structure Management of Selected Manufacturing Companies listed in NEPSE*" the specific objective were to examine the capital structure of selected companies, to assess the debt servicing capacity of the selected companies, to analyze cost of capital and return on capital in relation to the capital employed and to analyze the relationship between capital structure and cost of capital in selected Nepalese manufacturing companies. Researcher has used financial as well as statistical tools like: ratio analysis, leverage ratio, interest coverage ratio, Profitability ratio, Mean regression, correlation analysis. Almost all the ratio has been applied to cover analytical part and fulfill the objectives of this study. It involves more recent date of listed companies for five year (2004-2009).

The objectives of the study are as follows:

- J To analysis the capital structure of the sample companies.
- J To find out the relationship between debt and equity capital.
- J To examine the relationship of different financial ratios.

The major findings of the study are as follows:

-) Among all 38 listed manufacturing companies in NEPSE as total population, sample drawn from target population is two manufacturing companies -Nepal lube oil Limited (NLOL) and Bottlers Nepal Limited (BNL).
-) The study is based on secondary data. The raw secondary raw data are modified to some extent for the study purpose mostly; data are collected from the balance sheet, income statement and profit and Loss account, auditor general reports and various related journals in a management and other publications.
-) The major findings of the study with respect to capital structure of the manufacturing companies were the manufacturing companies has low debt equity ratio, it implies greater claims of owner than creditors. A high portion of equity provides a large margin of safety for them.
-) The researcher had concluded that the mix of capital structure, which leads to the maximum value and minimum cost of capital optimal capital structure. A high portion of equity provides a large margin of safety for them. The company should make such policy to earn high amount of profit from the sales revenue by increasing operation efficiency.

Shrestha (2010) has done a research on “*A study on capital Structure management of Nepal lube oil limited.*”

Main Objectives are as follows:

-) To examine the capital structure position of NLOL.
-) To examine the structure of working capital of NLOL
-) To assess the financial liquidity position of the NLOL.

Major Findings are as follows:

-) The company had lesser participation of fixed assets in total assets. cash holds of the company was relatively a small proportion total assets and inventory held largest portion indicating un sounded inventory management.
-) The company has insufficient in collecting receivable

Adhikari (2011) in his study entitled, “*capital structure management of Nepal Bank Limited*” has calculated and analyzed the different ratios by observing figures of balance sheets of Nepal Bank Limited for the period FY 2004/05 to 2009/10. He remarked that the bank is not found to have been able to utilize its fund effectively and efficiently for the development of the economy.

Main Objectives are as follows:

-) The collection of deposit and loan investment done by the commercial banks also to sustain themselves in the environment of competitions.
-) The deposit funds in productive sectors and to grants more priority to the local manpower.

Major findings are as follows:

-) Economic development of a country cannot be imagined without the development of commerce and industry
-) He has focused on utilization and mobilization of funds and resources of Nepal Bank Ltd.

Karki, (2012) has conducted a study on *Working capital Management of Himalayan Bank Ltd. “A Case Study of Himalayan Bank Ltd.*

The main objectives of the study are as follows:

-) To analyze the level of different types of working capital faced by Himalayan Bank Ltd.
-) To assess the financial performance of HBL through the help of financial ratios and standards.

The major findings of the study are as follows:

-) Proper policies, procedures, guidelines and tools have been developed with appropriate triggers.
-) That forms the guiding pillars for its operations.
-) The banks believe in corporate culture that emanates from the think Customers" philosophy at all levels of the banks.
-) Teamwork, camaraderie, sincerity, dedication, trust, respect, equality, dignity and valuing each contribution are key pillars on which the corporate culture of the banks thrives on.

Research Gap

This study is different from the **above** studies. The study revolves around the banking industry and the names of the selected banks are Machhapuchhare Bank Ltd and Bank of Kathmandu Limited. So far, **above** studies were concerned only with the capital structure and profitability analysis of various banks in a comparative way. But there was no detailed analytical study on Machhapuchchhre Bank Limited (MBL) and Bank of Kathmandu Limited (BOKL). This study is only concerned with to fill the gap of **above** and provide the real condition of capital structure, profitability, cost of equity and cost of debt etc. of this bank with the help of various financial and statistical tools. This study has been conducted

considering the data of five year from 2006/07 to 2010/11. This study attempts to analyze and evaluate the relationship of capital structure and various variables e.g. Profitability cost of equity and so on that will provide useful information for policy makers and the implementation of suggested findings.

The most of the studies has been considered many more objectives which made their study more complicated but in this research report only four objectives are taken into study. The researcher has tried best to fill up the gap created by previous studies. Even there are not enough study conducted on the topic of relationship between capital structure and cost of capital. Therefore, this study is also devoted to test the relationship and affect between structure and cost of capital in BOK and MBL. Most of the researcher did not use SPSS program and Microsoft excel formula so, I used that program and calculate the statistical tools which is used in Standard deviation and Covariance.

CHAPTER - III

RESEARCH METHODOLOGY

In this section, the methodology used for conducting the research has been explained. This section consists of research design, nature and sources of data, population and sample, data collection, statistical tools, financial tools, capital structure ratio, profitability analysis and expenses analysis.

3.1 Research Design

Research design is the plan, structure and strategy of investigation conceived so as to obtain and control variance. The study is evaluative and analytical type of study regarding the capital structure and profitability' the research design used in the study is descriptive and evaluative. The data relative to topics are collected through financial statement of the bank and other available sources.' The data for five years had been collected and various financial and statistical tools had been used to resolve the objectives.

3.2 Nature and Sources of Data

This study is based on secondary data. They are collected from Annual report of the concerned bank; supporting data and information are collected from the office of the concerned bank. The required data is extracted from the balance sheets, profit and loss Account, published annual reports. These crude data collected from will then be properly synthesized, arranged, tabulated and calculated to meet the objectives of this research.

3.3 Population and Sample

Nowadays a number of commercial banks have been emerging rapidly. Some have already been established and others are in the process of establishment. Currently,

there are 31 commercial banks in Nepal. In this study, all the commercial banks are population of the study. Among them Machhapuchhare Bank Limited and Bank of Kathmandu has been selected as samples for the present study on the basis of good financial performance. The population of the present study is listed as under, the commercial banks operating in the banking industry of Nepal.

3.4 Tools and Techniques of Analysis

As mentioned earlier' this study is confined to the single analysis of capital structure profitability of the private commercial bank. To reach the objectives, the collected data are computed and analyzed using statistical and financial tools.

3.4.1 Statistical Tools

For supporting the study, statistical tool such as Mean, Standard deviation, Coefficient of Variation, Correlation, Trend Analysis have been used under it.

a. Arithmetic Mean (Average)

Average is statistical constants which enables us to comprehend in a single effort the significance of the whole. It represents the entire data by a single value. It provides the gist and gives the bird's eye view of the huge mass of unwieldy numerical data. It is calculated as:

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

Where,

\bar{x} = Arithmetic Mean

N = Number of Observations

$\sum X$ = Sum of Observations

b. Standard Deviation (S.D.)

The standard deviation is the square root of mean squared deviations from the Arithmetic mean and denoted by S.D. or σ . It is used as absolute measure of Dispersion or variability. It is calculated:

$$\text{S.D.} (\sigma) = \sqrt{\frac{\sum x^2}{N} - \left(\frac{\sum x}{N}\right)^2}$$

Where,

σ = Standard Deviation

$\frac{\sum x^2}{N}$ = Sum of Squares of Observation

$\left(\frac{\sum x}{N}\right)^2$ = Sum of Square of Mean

c. Coefficient of Variation (CV)

Co-efficient of variance is the relative measure of dispersion comparable across distribution, which is defined as the ratio of the standard deviation to the mean express in percent (*Levin and Rubin; 1994: 144*).

Co-efficient of variance denotes by C.V. is given by:

$$\text{C.V.} = \frac{\text{S.D.}}{\text{Mean}} \times 100 = \frac{\sigma}{\bar{X}} \times 100$$

d. Correlation Coefficient (r)

Correlation analysis in the statistical tools generally used to describe the degree which our variable is related to another. This tools is used for measuring the intensity or the magnitude of linear relationship between two variable X and Y is usually denoted by 'r' can be obtained as:

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

Where,

N = no of observation in series X and Y

$\sum X$ = Sum of observation in series X

$\sum Y$ = Sum of observation in series Y

$\sum X^2$ = Sum of square observation in series X

$\sum Y^2$ = Sum of square observation in series Y

$\sum XY$ = Sum of the product of observation in series X and Y

e. Coefficient of Determination (r^2)

It explains the variation percent derived in dependent variable due to the any one specified variable; it denotes the fact that the independent variable is good predictor of the behaviour of the dependent variable. It is square of correlation coefficient.

f. Probable Error of Correlation

The probable error of the co-coefficient of correlation helps in interpreting its value; it is obtained the following formula.

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

It is used in interpretation whether calculated value of 'r' is significant or not.

1. If $r < P.E.$, it is insignificant. So, perhaps there is no evidence of correlation.
2. If $r > P.E.$, it is significant.
3. In other cases nothing can be concluded.

g. Trend Analysis

Trend analysis is very useful and commonly applied tool to forecast future event in quantitative term on the basis of tendencies in the dependent variable in the past period. The linear trend values from a series in arithmetic progression.

Mathematically,

$$Y = a + bX$$

Where,

Y = Value of dependent variable

a = Y- intercept

b = slope of trend line

X = value of the dependent variable i. e. time

Normal equation of the **above** are

$$\sum Y = Na + \sum X$$

$$\sum XY = a\sum X + \sum X^2$$

3.4.2 Financial Tools

1. Capital Structure Analysis

-) Fixed deposit analysis
-) Fixed deposit composition and index statement
-) Fixed deposit to total assets
-) Fixed deposit to total debt

2. Shareholders' Equity Analysis

-) Shareholders' composition' and index statement
-) Net worth as percentage of total liabilities

3. Analysis of Financial Mix

The financial analysis mix is performing by using ratio analysis. It is a powerful tool of financial analysis. Ratio analysis is assess enterprise efficiency and to help to find reason for inefficiency and also to see management ration.

Ratios reflect symptoms not causes. It is used to interpret the financial statement so that the strengths and weakness of a firm as well as its historical performance and current condition can be determined.

4. Capital Structure Ratio

The ratio indicates the proposition of debt and equity in financing the firm's assets. It is concerned with long term debt solvency of a firm. Capital structure ratios are calculated to measure the financial risk and firm's ability of using the debt for the benefit of the shareholders. The capital structure ratios are as follows:

-) Fixed deposit to net worth
-) Debt to net worth
-) Fixed deposit to capital employed
-) Debt to total assets adequacy
-) Debt competence ratio
-) Capital structure & capitalization rate

5. Profitability Analysis

This is performed by analyzing earning capacity of the assets, expenses analysis, return ratio, market related profitability ratios to arrive at the conclusion. Profitability analysis would be incomplete if these **above** aspects are not taken into considerations.

-) Earning capacity of assets analysis
-) Proportion of investment in assets
-) Income of assets as % of total income

6. Profitability ratio to investment or Return Ratio

-) Return on total deposit
-) Return on total assets
-) Return on capital employed
-) Return of shareholders' equity
-) Earning per share
-) Dividend per share
-) Earning and dividend yield
-) Price earning ratio
-) Market value per share
-) Book value per share

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

In this chapter effort has been made to analyze the capital structure of the MBL and BOKL. For this, presentation of data of the organization and classification of the data for analysis has been done. The data collected is to be presented for the detail analysis by examining it in tables and graphs. This chapter proceeds with financial analysis and tabulation and then with statistical analysis. The financial analysis is done through presentation of data and calculating various financial ratios that reflect the relationship of variables affecting capital structure. The major variable and the variable affecting capital structure used for analysis are long term debt, total debt, equity capital, EBIT, interest, total assets, net worth, current liabilities and current assets. Other related variable are also used when they are felt necessary.

4.1 Financial Analysis

4.1.1 Analysis of Shareholders' Equity

Paid up capital, reserve and funds are included in the shareholders' equity of the bank. The reserve and funds include accumulated profit/ loss, general reserve, capital reserve, share premium, exchange gain loss, proposed bonus share and other reserve. The researcher had taken shareholders' equity composition and net worth per share.

Table 4.1
Composition of Shareholders' Equity of MBL

(Rs. In Thousands)

Year	2006/07	2007/08	2008/09	2009/10	2010/11
Paid up Capital	715000000	821651300	901339300	1479269600	1627169560
Reserve and Funds	216091357	185640616	262007958	220829496	146314335
Total SHS Equity	931091357	1007291916	1163347258	1700099096	1773483895
No. of Shares	7150000	8216513	8216513	14792696	16271965
Net worth per share	130.22	121.74	141.59	114.93	10.9

Source: Annual Reports of MBL (2006/07 to 2010/11)

Table 4.1 shows that composition of shareholder equity of MBL. The paid up capital of MBL increased every year from 715000000 in 2006/07 to 1627169560 in 2010/11. So on the reserve and funds was in fluctuating trends. The total shareholders' equity is in increasing trend. But the net worth per share is in fluctuating trend.

Table 4.2
Composition of Shareholders' Equity of BOKL

Year	2006/07	2007/08	2008/09	2009/10	2010/11
Paid up Capital	463580900	603141300	603141300	844397900	1359480700
Reserve and Funds	376152981	390133544	738932488	897192263	714049039
Total SHS Equity	839733881	993274844	1342073788	1741590163	2073529739
No. of Shares	4635809	6031413	6031413	8443979	11821571
Net Worth per Share	181.14	164.68	222.51	206.25	175.40

Source: Annual Reports of BOKL (2006/07 to 2010/11)

Similarly the paid up capital of the BOKL is in increasing trends but reserve and funds is in fluctuating trends. So on total shareholders' equity is in increasing trends. But, the trend of the net worth per share is in fluctuating trends.

4.1.2 Leverage Ratio or Capital Structure ratio

Leverage ratio is also known as capital structure ratio. The capital structure ratio judges the long term financial position of the firm. This ratio indicates funds provided by owner and lenders. As the general rule there should be an appropriate mix of debt and owner's equity while financing the firm's assets. Leverage ratios have a number of implications. First, is between the debt and shareholders' equity. The company has legal obligation to pay the interest to debtors. Second, shareholders have advantages in employment of debt in two ways.

4.1.2.1 Debt to Equity Ratio

The relationship between lender's contributions is shown by equity ratio and it reflects the relative claims of creditors and shareholders against the assets of the company. This ratio is calculated by dividing total debt by net worth.

The debt-to-equity ratio (D/E) is a financial ratio indicating the relative proportion of shareholders' equity and long term debt used to finance a company's assets. The two components are often taken from the firm's balance sheet or statement of financial position.

Table 4.3
Debt to Equity Ratio

(Rs. In Thousand)

Bank	MBL			BOKL		
	Total Debt	Net Worth	Ratio (times)	Total Debt	Net Worth	Ratio (times)
2006/07	8138739	931091	8.74	11438596	839733	13.62
2007/08	9810066	1007291	9.74	13588142	993253	13.68
2008/09	11635202	1163347	10.00	16379876	1342049	12.21
2009/10	15790584	1700099	9.29	18754435	1741570	10.77
2010/11	18905280	1773483	10.66	21322688	2073503	10.28
Mean			9.69			12.11
S.D.			0.55			1.57
C.V.			5.71			12.99

Source: Appendix I

Table 4.3 shows the total debt to shareholders equity ratio of MBL and BOKL of the study period. The table enlightens that the usage of debt amount in MBL is in increasing trend during the study period, which means that the bank is depending more on outside fund in each fiscal year in financing the total assets. The long term debt of the bank has increased from Rs. 8138739 thousands in the fiscal year 2006/07 to Rs. 18905280 thousands in the fiscal year 2010/11. Similarly, the shareholders' equity of MBL has ranged from Rs. 931091 in the fiscal year 2006/07 to Rs. 1773483 thousands in the fiscal year 2010/11. With regard to the trend of both these variables, the debt equity ratio of the bank has increased during the study fiscal years and thus has ranged from 8.74 times in the fiscal year 2006/07 to 10.66 times in the fiscal year 2010/11. The debt equity ratio clarifies that in each fiscal year the usage of total debt is greater than the usage of

equity capital. Nonetheless, in average the debt equity ratio of the bank is 9.69 times and the variation in the ratio is 5.71%, indicating quite consistency.

So on in BOKL, it has been observed that the bank has increasing its total debt during the study period; it is ranged form 11438596 thousands to 21322688 thousands in the fiscal year 2006/07 to 2010/11 respectively. However, it is obtrusive in the increase in equity capital of the bank. The adoption of aggressive policy in financing the total assets has resulted the debt equity ratio of the bank **above** 10 times. In highest, the debt equity ratio is 13.68 times in the fiscal year 2007/08 and in lowest, the debt equity ratio of BOKL is 10.28 times in the fiscal year 2010/11. In average, the debt equity ratio of the bank is 12.11 times, and the coefficient of variation is 12.99%.

Comparing the banks on the basis of the debt equity ratio, it can be assumed that BOKL is more risk taker than MBL. Since, the debt equity ratio of BOKL is greater than that of MBL, and as a result the capital structure of BOKL is more dominated by the debt capital percentage than in MBL.

4.1.2.2 Long Term Debt to Total Debt

Debt capital should be limited up to a level, which the earning capacity of the firm can support. Otherwise, the company has to sell its assets and be forced to go into liquidation. The ratio of long term debt to total debt indicates what percentage of company's total debts is included in the form of long term debt.

Table 4.4
Long Term Debt to Total Debt Ratio

(Rs. In Thousand)

Bank	MBL			BOKL		
	Long Term Debt	Total Debt	Ratio (%)	Long Term Debt	Total Debt	Ratio (%)
2006/07	131,675	8138739	1.62	753,180	11438596	6.58
2007/08	228,504	9810066	2.33	930,000	13588142	6.84
2008/09	88,508	11635202	0.76	300,000	16379876	1.83
2009/10	-	15790584	0.00	300,000	18754435	1.60
2010/11	150,000	18905280	0.79	500,000	21322688	2.34
Mean			1.10			3.84
S.D.			1.01			2.64
C.V.			92.10			68.69

Source: Appendix I

The table 4.4 shows the long term debt to total debt ratio of the selected banks over the study period. The ratio in the table emblazons that both bank has the practice of borrowing long term debt extremely very lower than the short term debt to meet the fund requirement. The ratio of long term debt to total debt of MBL is in fluctuating trend during the study period. In average, long term debt has only met 1.10% of the total debt finance of the bank, and other 98.90% of the debt has been covered by short term debt.

Similarly, the ratio of long term debt to total debt of BOKL has also is in fluctuating trend, it is ranged from 1.60% in the fiscal year to 2009/10 to 6.84 in the fiscal year 2007/08. In average, BOKL has met 3.84% of the total debt fund financing through long term debt, and 96.16% of the total debt through short term debt.

On the basis of the long term debt to total debt, it has been ascertained that MBL is more risk taking than BOKL, since the usage of short term debt in total debt is higher in MBL, and thus ultimately the short term debt carries higher risk than long term debt.

4.1.2.3 Debt Ratio

Debt Ratio is a financial ratio that indicates the percentage of a company's assets that are provided via debt. It is the ratio of total debt (the sum of current liabilities and long-term liabilities) and total assets (the sum of current assets, fixed assets, and other assets such as 'goodwill').

Table 4.5
Total Debt to Total Assets Ratio

(Rs. In Thousand)

Bank	MBL			BOKL		
Year	Total Debt	Total Assets	Ratio (%)	Total Debt	Total Assets	Ratio (%)
2006/07	8138739	9069830	89.73	11438596	12278329	93.16
2007/08	9810066	10810330	90.75	13588142	14581395	93.19
2008/09	11635202	12798548	90.91	16379876	17721925	92.43
2009/10	15790584	17490782	90.28	18754435	20496005	91.50
2010/11	18905280	20678790	91.42	21322688	23396191	91.14
Mean			90.62			92.28
S.D.			0.64			0.94
C.V.			0.71			1.02

Source: Appendix I

The table 4.5 shows the practice of debt financing of MBL and BOKL during the study period. The practice of financing the total assets through debt capital has increased in the first two fiscal year and then decrease for one year and then again increases in final year in MBL. In average, 90.62% of the total assets of the bank

have been financed through total debt, indicating greater risk taking attitude of the bank, and the variation in the ratio is just 0.71%, indicating high stability.

Similarly, in BOKL, the debt capital to total assets ratio is in fluctuating trends through out the study period. It has ranged 91.14 in the fiscal year 2010/11 to 93.19% in the fiscal year 2007/08. In average, 92.28% of the total assets of BOKL have been financed through debt capital with the variation of 1.02% in the ratio.

Eventually, it has been derived from the analysis that the total assets of each bank bears greater risk. More specifically, the total assets of BOKL is slightly risky than that of MBL, since the debt coverage is slightly greater in BOKL than in MBL.

4.1.3 Analysis of Financial mix of the Bank

Using ratio analysis as financial tools for analyzing financial mix of bank, data available from bank was "Annual Report."

4.1.3.1 Debt to Equity Ratio in Term of Fixed Deposit to Net Worth

It shows the relationship between borrowed funds and owner's capital. This ratio reflects the relative claims of creditors and shareholders against the assets of the firm. This ratio measures the long-term financial viability of a firm and it is also an important tool to appraise the financial structure. It can be calculated in different ways:

Debt to Equity Ratio in Term of Fixed Deposit to Net Worth

$$DER X \frac{\textit{Fixed Deposit}}{\textit{Net worth}}$$

A higher ratio shows a large share of financing by the creditors relatively to owners. So that, there is a large claims against the assets of the company. It would be riskier to the creditors. Smaller ratio shows smaller claims of creditors which

imply sufficient safety margin and protection against shrink in assets. A high proportion of debt in the financial structure would land to inflexibility in the operation of the company because company must pay the interest still to the company.

Table 4.6

DER in Term of Fixed Deposit to Net Worth of MBL and BOKL

(Rs. In Thousand)

Bank	MBL			BOKL		
Year	Fixed Deposit	Net Worth	Ratio (%)	Fixed Deposit	Net Worth	Ratio (%)
2006/07	2604898	931091	279.77	2709753	839733	322.69
2007/08	2733359	1007291	271.36	3037170	993253	305.78
2008/09	2961140	1163347	254.54	3703175	1342049	275.93
2009/10	3681829	1700099	216.57	4474617	1741570	256.93
2010/11	6572089	1773483	370.58	6383581	2073503	307.86
Mean			278.56			293.84
S.D.			28.03			26.71
C.V.			10.06			9.09

Source: Appendix I

The table 4.6 shows DER in term of fixed deposit to net worth of the selected banks. This ratio is used to determine whether fixed deposit financing is sufficient to build up the profitability of the bank or not. The bank has more DER, so that the worth is less than creditors.

DER of MBL in fiscal year 2010/11 was 370.58 % which was greater proportion of fixed deposit over the study period. In fiscal year 2009/10 it was 216.57%, which was the least proportion of fixed deposit to net worth. In on average the

fixed deposit to net worth ratio was 278.56% and the standard deviation and C.V. was 28.03 and 10.06 respectively. Similarly, in BOKL the ratio is in fluctuating trends. It is ranged from 256.93 in the fiscal year 2009/10 to 322.69% in the fiscal year 2006/07. In an average the fixed deposit to net worth ratio was 293.84% and the C.V. of the ratio is 9.09. Every year both of the bank has 100% over claims of creditors than that of owners. The banks are highly leveraged because their business depended on the deposit rather net worth.

4.1.3.2 Debt to Total Capital Ratio (DCR)

This ratio indicates the relationship between creditors funds and owners capital. It states that the outsider's liabilities are related to the capitalization to the bank and not only to the shareholders' equity. These are calculated in this ways:

$$\text{Fixed deposit to total capital ratio} = \frac{\text{Fixed deposit}}{\text{Total capital employed}}$$

Where,

$$\text{Total capital employed} = \text{Shareholders' Equity} + \text{Fixed Deposit}$$

Table 4.7

Fixed Deposit to Total Capital Employed of MBL and BOKL

(Rs. In Thousand)

Bank	MBL			BOKL		
Year	Fixed Deposit	Capital Employed	Ratio (%)	Fixed Deposit	Capital Employed	Ratio (%)
2006/07	2604898	3535989	73.67	2709753	3549486	76.34
2007/08	2733359	3740650	73.07	3037170	4030423	75.36
2008/09	2961140	4124487	71.79	3703175	5045224	73.40
2009/10	3681829	5381928	68.41	4474617	6216187	71.98
2010/11	6572089	8345572	78.75	6383581	8457084	75.48
Mean			73.14			74.51
S.D.			2.35			1.78
C.V.			3.21			2.39

Source: Appendix I

Table 4.7 shows DCR in term of fixed deposit to total capital employed of MBL and BOKL. This ratio constituted 73.67% in fiscal year 2006/07. This means about 74% of permanent capital has contributed by fixed deposit, which indicates more than the satisfactory level of long-term debt. This ratio was decreased up to 68.41 in the fiscal year 2009/10 and increased up to 78.75 in the fiscal year 2010/11. On an average, fixed deposit to capital employed was 73.14%. Similarly, the ratio is in fluctuating over the study period in BOKL. The ratio has decreased for the first four year and then increased in the final year of the study period.

4.1.4 Analysis of Capital Sufficiency of the Bank

It is used in case of bank to assess the strengths of the capital, the sufficiency of the capital. Appropriate capital sufficiency ratio always been a controversial issue for the commercial banks, however very higher or lower capital sufficiency ratio is considered to be unfavorable in term of lowered return or lowered solvency respectively. Capital sufficiency is calculated as below:

$$\text{Capital sufficiency Ratio (CSR)} = \frac{\text{Capital Fund}}{\text{Total Deposit}}$$

Where, Capital fund = Paid up capital, general reserve and undistributed profit

Table 4.8
Capital Sufficiency Ratio of MBL and BOKL

(Rs. In Thousand)

Bank	MBL			BOKL			
	Year	Capital Fund	Total Deposit	Ratio (%)	Capital Fund	Total Deposit	Ratio (%)
	2006/07	931091	7893297	11.80	839733	10,485,359	8.01
	2007/08	1007291	9475451	10.63	993253	12,388,928	8.02
	2008/09	1163347	11102242	10.48	1342049	15,833,738	8.48
	2009/10	1700099	15596790	10.90	1741570	18,083,980	9.63
	2010/11	1773483	18535917	9.57	2073503	20,315,834	10.21
	Mean			10.67			8.87
	S.D.			0.59			1.00
	C.V.			5.52			11.26

Source: Appendix I

The table 4.8 shows capital sufficiency ratio of MBL and BOKL. There is positive capital sufficiency ratio in all study period of both banks. The capital sufficiency ratio was ranged between 9.57% in 2010/11 to 11.80% in 2006/07 of MBL whereas the ratio of BOKL is ranged from 8.01% in the fiscal year 2006/07 to 10.21% in the fiscal year 2010/11. Capital sufficiency ratio is fluctuating over the study period of MBL and is in increasing trend in BOKL. The average ratio and C.V. of the ratio of MBL is 10.67% and 5.52 respectively. Similarly, the average ratio and C. V. of BOKL is 8.87% and 11.26% respectively.

4.1.5 Analysis Solvency Position of Banks

For the analysis of solvency position of the bank, it has been calculated interest coverage ratio. It is one of the most conventional ratios, which measures the relationship between what is normally available from operation of the bank and claims of the outsiders. It is used to test bank's debt servicing capacity. It is calculated as below:

$$\text{Interest Coverage Ratio (ICR)} = \frac{EBIT}{\text{Interest}}$$

The ratio is too high or too low as well as unfavorable to company. High ratio implies that the bank is very conservative in using debt and low ratio implies that the bank is using excessive debt and does not have the ability to offer assured payment of interest to the creditors.

From the point of creditors the larger the coverage ratio the greater the ability of the bank to handle fixed charges and guarantee of the payment of interest to the creditors.

Table 4.9
Interest Coverage Ratio of MBL and BOKL

(Rs. In Thousand)

Bank	MBL			BOKL			
	Year	EBIT	Interest	Ratio (Times)	EBIT	Interest	Ratio (Times)
	2006/07	133996	288661	0.46	202439	308156	0.66
	2007/08	76799	397721	0.19	262387	339181	0.77
	2008/09	85016	407919	0.21	361496	417543	0.87
	2009/10	123251	580036	0.21	461735	563113	0.82
	2010/11	73312	1144808	0.06	509263	902927	0.56
	Mean			0.23			0.74
	S.D.			0.13			0.12
	C.V.			56.92			16.80

Source: Appendix I

The table 4.9 shows the interest coverage ratio of MBL and BOKL. The interest coverage ratios of MBL are 0.46, 0.19, 0.21, 0.21 and 0.06 times in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. The ratio was not so consistent because it was fluctuated 0.46 times to 0.06 times. On average the bank had 0.23 times interest coverage ratio, which could be considered as tight debt service capacity.

Similarly, the interest coverage ratio of BOKL also in fluctuating trend, ranging from 0.56 times in lowest in the fiscal year 2010/11 to 0.87 times in highest in the fiscal year 2008/09. In average, the interest coverage ratio of the bank is 0.74 times with 16.80% variation.

Comparing the banks, it can be conclude that of the BOKL has greater capacity to meet the interest expenses on long term debt then MBL to meet the interest expenses.

4.1.6 Overall Capitalization Rate (K₀)

The overall capitalization rate is calculated under net income approach, which measures the financial degree of leverage of the bank. This approach assumes that the cost of debt is less than cost of equity, if financial degree of leverage is increased the weighted average cost of capital will decline as a result value of bank will increase. The higher use of debt lowers the cost of increase in value. It is calculated as follow:

$$\text{Overall capitalization rate (K}_0\text{)} = \frac{\text{EBIT}}{\text{Value of Firm}}$$

Table 4.10
Overall Capitalization Rate of MBL and BOKL

(Rs. In Thousand)

Bank	MBL			BOKL			
	Year	EBIT	Total Value of Bank	K ₀	EBIT	Total Value of Bank	K ₀
	2006/07	133996	2629763	5.10	202439	3173334	6.38
	2007/08	76799	3426549	2.24	262387	3640311	7.21
	2008/09	85016	3634698	2.34	361496	4306316	8.39
	2009/10	123251	4440410	2.78	461735	5319015	8.68
	2010/11	73312	5309025	1.38	509263	7743061	6.58
	Mean			2.77			7.45
	S.D.			1.40			1.05
	C.V.			50.48			14.04

Source: Appendix I

The table 4.10 shows overall capitalization rate of MBL and BOKL which measures the financial degree of leverage of the bank. Overall capitalization rate of the MBL is in decreasing trend over the study period. The highest capitalization rate was 5.10% in 2006/07 and the lowest was 1.38 in 2010/11. On an average 2.77% was recorded over the study period. So on, the capitalization rate in the BOKL is in fluctuating trends. The ratios are increasing in the first four years and then decreases in final year of the study period. The average ratio of the BOKL is 7.45% which is higher then that of MBL.

4.1.7 Equity Capitalization Rate (K_e)

The net operating income approach is considered to find out and analyze the equity capitalization rate of MBL. This approach implies that the total valuation of the bank is unaffected by its capital structure. In this approach the equity capitalization rate has to be analyzed. It is calculated as follow.

$$\text{Equity capitalization rate } (K_e) = \frac{EPS}{MVPS}$$

Table 4.11
Equity Capitalization Rate of MBL and BOKL

Bank	MBL			BOKL			
	Year	EPS	MVPS	K_e	EPS	MVPS	K_e
	2006/07	18.74	320	5.86	43.67	850.00	5.14
	2007/08	9.02	620	1.45	43.50	1375.00	3.16
	2008/09	10.35	1285	0.81	59.94	2350.00	2.55
	2009/10	8.33	420	1.98	54.68	1825.00	3.00
	2010/11	4.96	282	1.76	43.08	840.00	5.13
	Mean			2.37			3.80
	S.D.			2.27			1.24
	C.V.			95.82			32.71

Source: Appendix I

The table 4.11 shows the equity capitalization rate of MBL and BOKL over the study period. In MBL the ratio is in fluctuating trend over the study period. There was highest cost of equity of 5.86% in fiscal year 2006/07 and the lowest cost of equity of 0.81% in fiscal year 2008/09. It was because earning per share was lower than market value per share. In an average the equity capitalization of the bank was 2.37 percentages only.

So on the equity capitalization rate of the BOKL is also in fluctuating trend during the study period. The equity capitalization rate of the BOKL is 5.14%, 3.16%, 2.55%, 3.00% and 5.13% in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. In an average the capitalization ratio of the BOKL is 3.80%.

4.1.8 Profitability of Banks

Profit is the ultimate goal of every business organization. Without it the organization cannot sustain in the long run. The bank should also need to accumulate profit to secure its position in the market and to meet the expectations of the investors. Thus, the profitability position of the banks has been measured using different financial tools.

4.1.8.1 Return on Total Deposit Ratio

Deposit collection and deposits are mobilized for loans and advances and other investments are major financial sources of the bank to earn profit. This ratio helps the bank either the bank is well efficient or not in mobilizing its total deposit so that corrective action could be forward to the concerned bank. This ratio is calculated as below:

Higher the ratio signifies better mobilization and utilization of deposits and vice versa. The ratio is decreasing trend of ROD represents the weak aspect of a bank because the major fluctuation of a bank is to utilize the deposit.

Table 4.12
Return on Total Deposit of MBL and BOKL

(Rs. In Thousand)

Bank	MBL			BOKL		
	Net Income	Total Deposit	Ratio (%)	Net Income	Total Deposit	Ratio (%)
2006/07	133994	7893297	1.70	202439	10485359	1.93
2007/08	76799	9475451	0.81	262387	12388928	2.12
2008/09	85016	11102242	0.77	361496	15833738	2.28
2009/10	123251	15596790	0.79	461735	18083980	2.55
2010/11	73312	18535917	0.40	509263	20315834	2.51
Mean			0.89			2.28
S.D.			0.45			0.26
C.V.			50.98			11.50

Source: Appendix I

The table 4.12 shows analysis of return on total deposit of the MBL and BOKL over the selected period. The ratios of the MBL are 1.70, 0.81, 0.77, 0.79 and 0.40 in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. Return on total deposit of MBL is in decreasing trend over the study period. The average return on total deposit ratio was recorded 0.89% over the study period. The standard deviation and CV of the bank are 0.45 and 50.99 respectively.

Similarly, the table reveals that the net profit in comparison to total deposit of BOKL has increased for the first four fiscal years and then it has decreased in the last fiscal year. Thus, the return on deposit has ranged from 1.93% in the fiscal year 2006/07 to 2.55% in the fiscal year 2009/10, while in the fiscal year 2010/11, it is 2.51. In average, BOKL has earned 2.28% of the total deposit and the

variation in such earning percentage is 11.50%, indicating more consistency than that of MBL.

Comparing the banks on the basis of return on deposit, it can be said undoubtedly that BOKL possess greater efficiency than MBL in mobilizing the total deposit to achieve high net profit. Further, there is high security in return on total deposit of BOKL than in that of MBL. Thus, the profitability position of MBL is just not enough in comparison to that of BOKL.

4.1.8.2 Return on Total Assets (ROA)

Return on total assets explains the contribution of assets to generating net profit. This ratio indicates efficiency towards of assets mobilization. In other words return on total assets ratio is an overall profitability rate, which measures earning power and overall operation efficiency of a firm. This ratio helps the management in identifying the factors that have a bearing on overall performance of the firm. The ratio explains net income for each unit of asset. Higher the ratio means efficiency in utilizing its overall resources and vice versa. It is computed as follow:

$$ROA \times \frac{\text{Net income}}{\text{Total assets}}$$

Table 4.13
Return on Total Assets of MBL and BOKL

(Rs. In Thousand)

Bank	MBL			BOKL		
Year	Net Income	Total Assets	Ratio (%)	Net Income	Total Assets	Ratio (%)
2006/07	133994	9069830	1.48	202439	12278329	1.65
2007/08	76799	10810330	0.71	262387	14581395	1.80
2008/09	85016	12798548	0.66	361496	17721925	2.04
2009/10	123251	17490782	0.70	461735	20496005	2.25
2010/11	73312	20678790	0.35	509263	23396191	2.18
Mean			0.78			1.98
S.D.			0.39			0.25
C.V.			50.20			12.83

Source: Appendix I

The table 4.13 shows analysis of return on total deposit of the MBL and BOKL over the selected study period. The ratios of the MBL are 1.48, 0.71, 0.66, 0.70 and 0.35 respectively. The highest return on total assets was 1.48% in 2006/07 and the lowest return on total assets was 0.35% in 2010/11 because at that time net income was lower than the assets. The average ratio and CV of the bank are 0.78 and 50.20 respectively.

So on, the return on total asset of BOKL is in increasing trend up to the fiscal year 2009/10 and decreased in final year. The ROA of BOKL is just 1.65% in the fiscal year 2006/07; however, it has been increased to 2.25% by the end of the fiscal year 2009/10 and then decreased to 2.18 in the fiscal year 2010/11. In average, the ROA of the bank is 1.98%, indicating generating of Rs. 1.98 net profit from Rs. 100 investment of total assets, and the coefficient of variation in the ratio is 12.83%, indicating quite consistency then MBL.

Comparing the banks on the ground of ROA, it can be concluded that BOKL is more efficient than MBL in effectively mobilizing the total assets, since the net profit generation from mobilizing equal amount of total assets is higher in BOKL than in MBL. Thus, it can be inferred that the profitability management of BOKL is much robust than that of MBL.

4.1.8.3 Return on Capital Employed

This is another type of return on investment, which is similar to ROI. The term “Capital employed” refers to the fund supply by creditor and owner of the firm. The higher the ratio the more efficient is the use of capital employed. It is computed as follow:

$$ROCE \times \frac{EBIT}{\text{Capital employed}}$$

Table 4.14
Return on Capital Employed of MBL and BOKL

(Rs. In Thousand)

Bank	MBL			BOKL		
Year	Net Income	Total Capital Employed	Ratio (%)	Net Income	Total Capital Employed	Ratio (%)
2006/07	133994	3535989	3.79	202439	3549486	5.70
2007/08	76799	3740650	2.05	262387	4030423	6.51
2008/09	85016	4124487	2.06	361496	5045224	7.17
2009/10	123251	5381928	2.29	461735	6216187	7.43
2010/11	73312	8345572	0.88	509263	8457084	6.02
Mean			2.21			6.57
S.D.			0.83			0.73
C.V.			37.69			11.15

Source: Appendix I

The table 4.14 shows the return on capital employed of MBL and BOKL. Return on capital employed of MBL and BOKL is in fluctuating trend over the study period. There was highest return on capital employed 3.79% in 2006/07 and the lowest return on capital employed was 0.88% in 2010/11 of MBL. In 2010/11, the return on capital employed was lowest because of the lowest income among the years. On an average the bank recorded 2.21% of ROCE. So on, the return on capital employed of BOKL are 5.70%, 6.51%, 7.17%, 7.43% and 6.02% in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. In an average the return on capital employed of BOKL is 6.57. The return of the BOKL is higher than that of MBL so BOKL is more efficient to use its capital.

4.1.8.4 Return on Shareholders' Equity (ROSE)

ROSE measures an available return for investor from their investment. According to this ratio of profitability can be measured by net profit after taxes before interest dividend by shareholders' equity. This ratio is calculated by dividing net profit by common shareholders equity. This ratio measures the return on shareholders investment in the bank. The higher ratio of return on equity is better for shareholders. It builds trustworthiness to the customers as well as reputation of the bank.

$$ROSE = \frac{\text{Net profit after tax}}{\text{Shareholders' equity}}$$

Table 4.15
Return on Shareholders' Equity of MBL and BOKL

(Rs. In Thousands)

Bank	MBL			BOKL		
Year	Net Income	Total SHS	Ratio (%)	Net Income	Total SHS	Ratio (%)
2006/07	133994	931091	14.39	202439	839733	24.11
2007/08	76799	1007291	7.62	262387	993253	26.42
2008/09	85016	1163347	7.31	361496	1342049	26.94
2009/10	123251	1700099	7.25	461735	1741570	26.51
2010/11	73312	1773483	4.13	509263	2073503	24.56
Mean			8.14			25.71
S.D.			3.50			1.28
C.V.			43.02			4.97

Source: Appendix I

The table 4.15 shows the return on shareholder equity of MBL. ROE of MBL was found highly decreasing trend over the study period. The ratios of MBL in the study period are 14.39%, 7.62%, 7.31%, 7.25% and 4.13% in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. In average, the bank has maintained 8.14% ROE in the last five consecutive fiscal years, which means that the bank has generated Rs. 8.14 net profit from Rs. 100 mobilization of shareholders' equity.

So on, in BOKL, the return on equity of the bank has followed fluctuating trend during the study period. The ROE of BOKL has thus ranged from 24.11% in the fiscal year 2006/07 to 26.94% in the fiscal year 2010/11. In average, the ROE of

the bank is 25.71%, indicating Rs. 25.71 net profit generated from Rs. 100 investment of equity capital.

Comparing the banks on the basis of ROE, it can be concluded that BOKL is more efficient in mobilizing the equity capital, as a result BOKL has earned more profit from same rupees of investment of equity.

4.1.8.5 Earnings Per Share (EPS)

Earnings per share (EPS) are the earnings returned on the initial investment amount. Earning per share refers the rupee amount earned per share of common stock outstanding. It measures the return of each equity shareholders. The higher earning indicates the better achievements of the profitability of the banks by mobilizing their funds and vice versa. It is computed as follow:

$$\text{Earning Per Share} = \frac{\text{Net Profit Available to Equity Shareholders}}{\text{Number of Share Outstanding}}$$

Table 4.16
Earnings per Share

Bank	MBL			BOKL			
	Year	EAC	No of Shares	Ratio (Rs)	EAC	No of Shares	Ratio (Rs)
	2006/07	133991000	7150000	18.74	202445779	4635809	43.67
	2007/08	74112947	8216513	9.02	262366466	6031413	43.5
	2008/09	85040910	8216513	10.35	361522895	6031413	59.94
	2009/10	123223158	14792696	8.33	461716772	8443979	54.68
	2010/11	80708946	16271965	4.96	509273279	11821571	43.08
	Mean			10.28			48.97
	S.D.			4.83			7.84
	C.V.			46.95			16.00

Source: Appendix I

The table 4.16 shows the trend of EPS of the selected banks. The EPS of MBL is in decreasing trend during the study period. The ratios are Rs. 18.74, Rs. 9.02, Rs. 10.35, Rs. 8.33 and Rs. 4.96 in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. In average, MBL has earned Rs. 10.28 per share. Also, the C.V. on EPS is 46.95.

However, the EPS in BOKL is found in fluctuating trend during the study period, i.e. Rs. 43.67, Rs. 43.5, Rs.59.94, Rs. 54.68 and Rs. 43.08 in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. In average, BOKL has earned Rs. 48.97 per share and the coefficient of variation on such EPS is 16.00%.

Higher average ratio indicates that BOKL is able to earn more profit per share to the common shareholders than that of MBL, EPS has been criticized as the measure of profitability, because it does not consider the amount of asset of capital required to generate that level of earning.

4.1.8.6 Dividend Per Share (DPS)

Dividend implies that portion of Net Profit, which is allocated to the shareholders as return on their investments on cash. The net profit after taxes belongs to shareholders. But the income, which they really receive, is the amount of earning distributed as cash dividends. The earning per share implies what the owner are theoretically entitled to get from the company while dividend per share is that portion of earning which is allocated to shareholders divided by total number of share outstanding. Thus, DPS is computed by dividing the total amount of dividend paid by the number of share outstanding.

Table 4.17
Dividend Per Share

Bank	MBL			BOKL		
Year	Earning Paid to SH	No of Shares	Ratio (%)	Earning Paid to SH	No of Shares	Ratio (%)
2006/07	114185500	7150000	15.97	83444562	4635809	18
2007/08	0	8216513	0	120628260	6031413	20
2008/09	8627338.7	8216513	1.05	12726281	6031413	2.11
2009/10	0	14792696	0	62232125	8443979	7.37
2010/11	0	16271965	0	177323565	11821571	15
Mean			3.40			12.50
S.D.			7.83			7.53
C.V.			229.90			60.29

Source: Appendix 1

The table 4.17 shows the dividend paid by the MBL and BOKL over the period. Over the study period MBL has paid dividend only in fiscal year 2006/07 and 2008/09. The ratio is in fluctuating trend it indicates that MBL is not able to pay dividend year by year.

But BOKL has paid Rs. 18, Rs. 20, Rs. 2.11, Rs. 7.37 and Rs. 15 as dividend in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. The average DPS of BOKL is Rs. 12.50 per share. On the basis of DPS, it can be concluded that BOKL remained more success to retain its existing shareholders and to attraction the potential shareholders toward it, by distributing dividend.

4.1.8.7 Price Earning Ratio (P/E Ratio)

P/E ratio refers to the price currently being paid by market for each rupee of currently reported EPS. In other words, it measures investors' expectation and the market appraisal of the performance of the firm. It is an indication of the way that the investors think the firm would perform better future. Lower the ratio indicates investors feel that earning is not likely to rise. It is computed as follow:

Table 4.18
P/E Ratio of MBL and BOKL

Bank	MBL			BOKL		
	EPS	MVPS	Ratio (Times)	EPS	MVPS	Ratio (Times)
2006/07	18.74	320	17.08	43.67	850	19.46
2007/08	9.02	620	68.74	43.5	1375	31.61
2008/09	10.35	1285	124.15	59.94	2350	39.21
2009/10	8.33	420	50.42	54.68	1825	33.38
2010/11	4.96	282	56.85	43.08	840	19.50
Mean			63.45			28.63
S.D.			44.81			8.81
C.V.			70.62			30.78

Source: Appendix 1

The table 4.18 shows price earning ratio of MBL and BOKL over the selected period. The P/E ratio of the MBL is increasing trend for first three years and decreases in 2009/10 and finally increases in 2010/11. It was ranged between 17.08 times in 2006/07 to 124.15 times in 2008/09. Similarly, the price earning ratio of BOKL is in fluctuating during the study period. The ratios are 19.46%, 31.61%, 39.21%, 33.38% and 19.50% in the fiscal year 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 respectively. In on average the price earning ratio

of the BOKL is 28.63 which is lower than that of MBL. So it can be conclude that MBL will perform better in future.

4.2 Major Findings

On the basis of **above** study of this study following findings are made.

-) The paid up capital of the MBL and BOKL is in increasing trends but reserve and funds and the net worth per share is in fluctuating trends.
-) The total shareholders' equity is in increasing trend. But the net worth per share is in fluctuating trend in the every year.
-) Comparing the banks on the basis of the debt equity ratio, it can be assumed that BOKL is more risk taker than MBL. Since, the debt equity ratio of BOKL is greater than that of MBL, and as a result the capital structure of BOKL is more dominated by the debt capital percentage than in MBL.
-) On the basis of the long term debt to total debt, it has been ascertained that MBL is more risk taking than BOKL, since the usage of short term debt in total debt is higher in MBL, and thus ultimately the short term debt carries higher risk than long term debt.
-) It has been derived from the analysis that the total assets of each bank bears greater risk. More specifically, the total assets of BOKL is slightly risky than that of MBL, since the debt coverage is slightly greater in BOKL than in MBL.
-) DER in term of fixed deposit to net worth of the both bank is more than 100%. Every year both of the bank has 100% over claims of creditors than that of owners. The banks are highly leveraged because their business depended on the deposit rather net worth.
-) Fixed deposit to total capital employed of MBL and BOKL. This ratio constituted 73.67% in fiscal year 2006/07. This means about 74% of

permanent capital has contributed by fixed deposit, which indicates more than the satisfactory level of long-term debt.

- J The capital sufficiency ratio was ranged between 9.57% in 2010/11 to 11.80% in 2006/07 of MBL whereas the ratio of BOKL is ranged from 8.01% in the fiscal year 2006/07 to 10.21% in the fiscal year 2010/11.
- J On the basis of interest coverage ratio, it can be conclude that of the BOKL has greater capacity to meet the interest expenses on long term debt then MBL to meet the interest expenses.
- J The overall capitalization rate of the BOKL is higher than that of MBL. So on the equity capitalization rate of the BOKL is also higher than that of MBL.
- J On the basis of return on deposit, it can be said undoubtedly that BOKL possess greater efficiency than MBL in mobilizing the total deposit to achieve high net profit.
- J There is high security in return on total deposit of BOKL than in that of MBL. Thus, the profitability position of MBL is just not enough in comparison to that of BOKL.
- J Comparing the banks on the ground of ROA, it can be concluded that BOKL is more efficient than MBL in effectively mobilizing the total assets, since the net profit generation from mobilizing equal amount of total assets is higher in BOKL than in MBL. Thus, it can be inferred that the profitability management of BOKL is much robust than that of MBL.
- J Highest return on capital employed 3.79% in 2006/07 and the lowest return on capital employed was 0.88% in 2010/11 of MBL. In 2010/11, the return on capital employed was lowest because of the lowest income among the years.
- J The ROE of BOKL has thus ranged from 24.11% in the fiscal year 2006/07 to 26.94% in the fiscal year 2010/11. In average, the ROE of the bank is

25.71%, indicating Rs. 25.71 net profit generated from Rs. 100 investment of equity capital.

-) On the basis of ROE, it can be concluded that BOKL is more efficient in mobilizing the equity capital, as a result BOKL has earned more profit from same rupees of investment of equity.
-) Higher average EPS indicates that BOKL is able to earn more profit per share to the common shareholders than that of MBL, EPS has been criticized as the measure of profitability, because it does not consider the amount of asset of capital required to generate that level of earning.

CHAPTER-V

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This chapter is important for the research because this chapter is the extract of all the previously discussed chapters. This chapter consists of three parts: summary, conclusion and recommendation. In summary part, revision or summary of all the four chapters had been made. In conclusion part, the result from the research is summed up and in recommendation part, suggestion and recommendation has been made based on the analysis. Recommendation is made for improving the present situation to the concerned parties as well as for further research.

5.1 Summary

Capital structure plays a vital role in the real life of an enterprise. Capital structure is the structure of financial management and cost of capital is touchstone of financing, investment decision and evaluation of financial performance of enterprises. The capital structure is the combination of long term debt and equity, it is a part of financial structure i.e., comprised to the total combination of preferred stock, common stock, long term debt and current liabilities: if current liabilities are removed from it, we get capital structure, similarly, the capital structure is the permanent financing of the firm, represent primary by long term debt, preferred stock and common equity but excluding all short- term credit. Basically the entire research work focuses on the study on capital structure and profitability management of MBL and BOKL.

The study is based on secondary data. All the data have been taken from the concerned banks' annual report, literature publication, balance sheet, profit and loss account previous thesis report, different website, related books and booklets,

journals, articles and primary data are collected through interviews observation and direct meeting with concerned persons.

Financial institution includes banks, finance companies, co-operative organizations and insurance companies. All of them do contribute something to the economy of the country. Financial institutions play a vital role in the proper functioning of an economy. Among them, banking sector plays an important role in the economic development of the country. Commercial banks are one of the vital aspects of this sector, which deals in the process of channeling the available resources in the needed sectors. It is the intermediary between the deficit and surpluses of financial resource.

Capital is a scarce sources and much more essential to maintain smooth operation of any firm. The available capital and financial sources should be utilized so efficiently that could generate maximum return. The term of capital structure is used to represent the proportionate relationship between debt and equity. The debt and equity mix of a firm is called capital structure. The capital structure design is a significant financial decision since it affects the shareholders return, risk and market value of shares. Both debt and equity are used in most large corporation. The choice of the amount of debt and equity is made after a comparison of certain characteristics of each kind of securities of interest factor related to the firm's and of external factors can affect the firm.

The main theories of capital structure are net income approach, net operating income approach, traditional approach and Modigliani- miller approach, EBIT/ EPS analysis cost of capital, flexible etc. are the determinant of capital structure. Without study of these elements the company can not make appropriate capital structure and analysis of leverage may be incomplete.

Profitability is basically an arc around which the ventures every business revolves. Profit is the main financial indicator of business firm, which is indeed a need to survive and grow the business environment. Profit is essential to raise the market price of shares and to attract additional capital investment. Profit is the outcome of good management, cost control, credit risk management, efficiency of operation etc. Profit is described in two ways, one is traditional approach (profit maximization) and another is modern approach (sales maximization).

5.2 Conclusions

On the basis of analysis and findings of this study following conclusion are made. The paid up capital of the MBL and BOKL is in increasing trends but reserve and funds and the net worth per share is in fluctuating trends. Comparing the banks on the basis of the debt equity ratio, it can be assumed that BOKL is more risk taker than MBL. Since, the debt equity ratio of BOKL is greater than that of MBL, and as a result the capital structure of BOKL is more dominated by the debt capital percentage than in MBL. Higher average EPS indicates that BOKL is able to earn more profit per share to the common shareholders than that of MBL, EPS has been criticized as the measure of profitability, because it does not consider the amount of asset of capital required to generate that level of earning.

On the basis of the long term debt to total debt, it has been ascertained that MBL is more risk taking than BOKL, since the usage of short term debt in total debt is higher in MBL, and thus ultimately the short term debt carries higher risk than long term debt. It has been derived from the analysis that the total assets of each bank bears greater risk. More specifically, the total assets of BOKL is slightly risky than that of MBL, since the debt coverage is slightly greater in BOKL than in MBL. DER in term of fixed deposit to net worth of the both bank is more than 100%. Every year both of the bank has 100% over claims of creditors than that of owners. The banks are highly leveraged because their business depended on the

deposit rather net worth. On the basis of interest coverage ratio, it can be conclude that of the BOKL has greater capacity to meet the interest expenses on long term debt then MBL to meet the interest expenses.

The overall capitalization rate of the BOKL is higher than that of MBL. So on the equity capitalization rate of the BOKL is also higher than that of MBL. On the basis of return on deposit, it can be said undoubtedly that BOKL possess greater efficiency than MBL in mobilizing the total deposit to achieve high net profit. Further, there is high security in return on total deposit of BOKL than in that of MBL. Thus, the profitability position of MBL is just not enough in comparison to that of BOKL. Comparing the banks on the ground of ROA, it can be concluded that BOKL is more efficient than MBL in effectively mobilizing the total assets, since the net profit generation from mobilizing equal amount of total assets is higher in BOKL than in MBL. Thus, it can be inferred that the profitability management of BOKL is much robust than that of MBL. On the basis of ROE, it can be concluded that BOKL is more efficient in mobilizing the equity capital, as a result BOKL has earned more profit from same rupees of investment of equity.

5.3 Recommendations

In this section of the study few points that can be helpful to stakeholders as well as to the banks are recommended based upon **above** calculations and drawn conclusions. These recommendations are guidelines which could be helpful in taking prompt and appropriate decision about capital structure. On the basis of analysis and findings of this study following recommendations are made.

-) MBL and BOKL is bearing high interest expenses since it used long- term debt on its capital structure. As a result, the return of the firm is not satisfactory. So both of the banks is recommended to minimize interest expenses by using short term debt as well as decrease other operating expenses to increase the return of the firm.
-) Return on shareholder equity and EPS are not satisfactory. So banks need to seek more profitable sectors in order to increase profit of the banks. And also need to maintain optimal capital structure considering cost of capital so that it helps to enhances the ROSE and profitability of the banks.
-) The capital structure of bank is highly leveraged. The proportion of debt and equity capital should be decided keeping in mind the effects if tax advantage. It is difficult to pay interest and principal, ultimately lead to liquidation or bankruptcy.
-) The capital structure position is not better. The bank requires maintaining improved capital structure by increasing equity i.e. issuing more capital, expanding general reserve and retaining more earning.
-) Capital investment should be increased to increase the return to equity shareholders by employing the equity capital so that the return would be greater than the overall cost of capital.
-) Due to the lack of theoretical knowledge regarding the capital structure, banks have not given significant attention to the capital structure that affects EPS, value of the firm, cost of capital etc.

So, it is recommended that it should try to adopt more cooperative approach and should expand its branches by covering all the inner parts of the country. So that all the Nepalese living in any nooks and corner of the country can enjoy the banking facility and can benefit from it.