

CHAPTER - I

INTRODUCTION

1.1 Background of Study

Nepal is a least developed, landlocked country situated in south Asia occupying 147,181sq. Km. It is located between 26⁰22' to 30⁰27' North latitude and 80⁰4' to 88⁰12' East longitude. The average length being 885km east to west and average breath is about 193km north to south. It is an independent country that lies between two powerful countries, China and India.

According to survey of 2001, total population of Nepal is 23,151,423. Out of the total population, female covers 11,587,502(50.05%) and males cover 11,563,921(49.95%). Population growth rate of our county is 2.24%. The urban population is 14.20% and rural population is 85.80%.

It has taken free economy policy and has entered in WTO. The country is taking momentum towards industrial and commercial development. Its economy is mainly agriculture based. Large population is still dependent on traditional agriculture. Recently, the agriculture is being slowly replaced by other sectors also. The per capita income of country is about 253U.S.doller.

Bank is a resource mobilizing institution through the prudential combination of investment. Bank is a business institution that accepts deposit from the public and provides loan to others . Bank is considered as the backbone of country.

For the economic development of a country, banking sector plays a vital role. The economic reforms initiated by the Government more than a decade ago, have changed the landscape of several sectors of the Nepalese economy. The Nepalese banking sector is no exception. This sector is going through major changes as a consequence of economic reforms. The changes affect the ownership pattern of

banks, regulatory aspects, availability of funds, the cost of funds as well as opportunities to earn, range of services (fee-based and fund-based), and management of priority sector lending.

The Nepalese banking sector is at an existing point in its development. The opportunities to enter new business and new markets and to deliver higher levels of customer service are immense. As the Nepalese banks position themselves as financial service providers, banking business is getting redefined. Technology is unsettling the earlier business processes and customer behavior is undergoing considerable changes. As compared to earlier regime, Nepalese banks have adopted better operational strategies and upgrade their skills. They have withstood the initial challenges and have become more adaptive to the changing environment.

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 channelizing the available resources in the needed sectors. Thus, Bank is only one institution which is operated with aim of collecting the idle funds, mobilizing them into productive sector and causing an overall economic development.

In Nepal , goldsmith and money lenders are ancestors of bank. Although they charge high interest rate, people lend money from them because they have no choice. Modern bank transaction started in the country just before the second world war but when the transaction of money and banking started, was not sure about proper time and place of establishment due to lack of information.

Towards the end of 11th century during the time of Jayasthithi Malla, different caste were divided. "Tankadhari" a caste group who used to perform banking activities lending money to the public, So "Tankadhari" is regarded as a traditional type of bank in Nepal.

During 1933 "Tejaratha Adda" used to perform banking activities. They used to provide loan to the government office but they did not accept deposit from public.

In 1994 B.S. when Nepal Bank LTD. was established as a commercial bank, in a real sense only then, banking activities started in the country. Being a commercial bank, it focused on income generation and profit maximization. As it was only one commercial bank in the beginning, it has to look the economic condition of country as well as income generating. Only one Nepal Bank LTD was not sufficient to look all sectors of country. So, in 2013 B.S. another bank namely "Nepal Rastra Bank" was established as a central bank of the government. After this, NRB diverted its attention towards development of banking system by formulating relevant policies and procedures.

In 2021 B.S. Rastriya Banijya Bank Act 2021 was determined and Nepal Rastriya Banijya Bank was established in 2022 B.S. Under the Nepal Banijya Bank Act 2021. this bank was fully government secured bank, whose branches were opened all over the country. In this way, the number of commercial bank increased rapidly in Nepal when the government adopted open economic policy and allowed to open joint venture banks with different countries. After that, international bankers also started to invest in the country and established under the joint venture act in 2041 B.S. At present, there are twenty five commercial banks which have taken approval from Nepal Rastra Bank to operate their institute in the country.

Commercial Banks are the heart of the economic system. They hold the deposit of million persons, government and business units. They exchange money, accept deposits, grant loan and operate commercial transaction. They make funds available through their lending and investing activities to borrowers, individuals, business firms and government. In doing so, they assist both the flows of goods and services from the government. In modern time, commercial banks which are facilitated, regulated and supervised by the central bank, confine and concentrate them in their activities of fulfilling the financial needs of their customers. To

fulfill financial needs, optimal capital structure of firm plays a vital role. Capital structure refers the proportion of debt, preferred stock and equity in a company's balance sheet. There should be perfect balance between debt and equity to ensure trade-off between risk and return.

In order to boost up the economy and social life of any country, optimal capital structure of the firm is essential. Optimal capital structure means the capital structure having reasonable mix of debt and equity. The optimal capital structure is that structure which maximizes the value of a firm and minimizes the overall cost of capital.

1.2 Introduction of Selected Commercial Banks

Everest Bank Ltd.

Everest Bank Limited (EBL) was established in 18th October 1994 in collaboration with Punjab National Bank (PNB) of India, under the company act 1964 and the Commercial Bank Act 1974. PNB is one of the largest commercial bank of India having 110 years of banking history with more than 4500 offices all over India , of which 1400 branches are interconnected. Drawing its strength from its joint venture partner, EBL has been steadily growing its size and operation and also established itself as a leading Private Sector Bank. EBL is ranked as No.2 bank by NRB as per CAELS.

This bank is providing its services through a wide network of 18 branches across the nation and over 250 correspondents across the globe. All the major branches of the bank are connected through Anywhere Branch Banking System, which enables a customer to do banking transaction from any of the branches irrespective of their having accounts in other branch.

EBL is also providing ATM services to its customer through association with Smart Choice Technology. This bank is also managing SCT ATM at Tribhuvan International Airport and it is the first bank which is placing ATM outlet in Airport for convenience of the customer.

Bank of Kathmandu Limited

Incorporated in 1993, Bank of Kathmandu started its operation in March 1995 with the objectives to stimulate the Nepalese economy and take it to newer heights. It is a culmination of a comprehensive vision of the promoters. Promoters own 42% of total share of the bank and general public owns the other 58%.

BOK has become a prominent name in the Nepalese banking sector due to its committed to delivering quality service to customers, generating good return to shareholders, providing attractive incentives to employees and serving the community through stronger corporate social responsibility endeavor.

BOK has today become a landmark in Nepalese banking sector by being among the few commercial banks which is entirely managed by Nepalese professionals and owned by the general public.

Bank of Kathmandu is one of the first banking products to be JAVAtised to enable to operate effectively, provides better customer services challenges of the internet paradigm. Bank of Kathmandu also received "The Banker Technology Award 2004" for using Finale Banking Application Software. It is also certified by Information Technology Association of using certified processes and methods. This bank has opened its branches in different cities. Among them four branches in Kathmandu and other nine branches outside the cities

1.3 Focus of Study

The area of this proposed study is "Capital Structure Management of Commercial Banks". This study is made to highlight the capital structure policy of commercial banks expecting that the study can bridge the gap between equity and debt capital used by the commercial banks. On the other hand, the study would provide information to management of the bank that would help them to take collective action to maximize the value of bank by using optimal capital structure.

1.4 Statement of Problem

It has been well understood that the banking plays a significant role in the economic development of the country. Like other institutes, it is also not free from the problem. Banking system suffers from different types of problems. The major problem of banking system are inefficiency, inadequate financial discipline, as well as political and other influences in decision making which result poor loan quality, high spreads and high lending rates to borrowers and increasing non-performing assets. Besides this, lack of optimal capital structure is another problem faced by commercial banks. The capital structure of the firm is also an important factor in determining the success of the firms, but commercial bank in Nepal has no satisfactory result about capital structure which affects the value of the firm.

In the present study, the practice of capital structure in the commercial banks in Nepal will be analyzed and examined. This study especially will try to give the answers of following questions:

-) To what extent, the capital structure has affected the growth of commercial bank ?
-) To what extent, the process of capital structure is followed in commercial bank?
-) What are the main problems of commercial bank in developing and implementing of capital structure plan?

1.5 Objective of Study

The main objective of this study is to analyze, examine and interpret the capital structure of related commercial bank i.e. Everest Bank and Bank of Kathmandu. The specific objectives of this study are as follows:

-) To study and analyze the existing capital structure of financial position of the commercial banks and its impact on profitability.
-) To examine and analyze the relationship of capital structure with different ratio related to it.
-) To analyze the relationship of capital structure with variables: earning per share and dividend per share .
-) To analyze the effect of capital structure in the value of companies.

1.6 Limitation of Study

The following limitations are observed during the preparation of this study.

-) This study is conducted to fulfill the requirement of Masters Degree in Business (MBS) so the study has not covered all dimensions of the subject matter.
-) Due to the lack of time and financial resource only two companies are selected as sample for the study.
-) Since this study was confined to two commercial banks i.e. Everest Bank and Bank of Kathmandu, the result drawn from the study may or may not be applicable to other commercial banks of Nepal.
-) This study is based mainly on the secondary data.
-) This study has observed and analyzed the data of 7 Fiscal years only i.e. from 2001/02-2007/08.

1.7 Organization of Study

The study has been organized as follows:

1. Introduction: The first chapter deals with the background of the study, introduction of the selected commercial banks, focus of the study, statement of the problems, objectives of the study, limitation of the study and organization of the study.

2. Review of Literatures: The second chapter deals with the conceptual framework like concept, types, policy, review of related studies and research gaps.

3. Research Methodology: The third chapter contains research methodology employed in the study. It includes research design, nature and sources of data, tools of analysis and definition of key terms.

4. Presentation and Analysis of Data: The fourth chapter deals with presentation and analysis of data. In this chapter, data collected from financial statement of concerned commercial banks are presented in tables and thereafter analysis and interpretation of data have been performed

5. Summary, Conclusions and Recommendations: The fifth chapter contains summary and conclusions of the study. Based on the conclusions necessary recommendations are presented.

The list of bibliography and appendix are given at the last for references.

CHAPTER – II REVIEW OF LITERATURES

The purpose of reviewing literature is to develop some expertise in one's area, to see what new contribution can be made, and to receive some ideas for developing a research design. No previous studies can be ignored because previous studies gives us lots of ideas about the topic which we are selected and provides us guide lines to go further depth of the study. In other words, there has to be continuity in research. This continuity in research is ensured by linking present study with the past study. Thus, the purpose of reviewing of literatures is to find out what research studies have been conducted in one's chosen field and what remains to be done to improve their financial position.

This chapter explains the concept of Capital Structure and gives a review of relevant studies. Thus, this chapter is broadly discussed under the heading:

-) Conceptual Framework
-) Related Studies
-) Research Gaps

2.1 Conceptual Framework

This section is developed to briefly discuss the theoretical concept regarding the theories of capital structure and financial leverage.

2.1.1 Capital Structure Theories

Capital structure is made up of debt and equity securities which comprise a firm's finance of its assets. It is the permanent financing of the firm , represented by long-term debt plus preferred stock plus net worth. The term capital structure means like proportion of the different type of the securities issued by firm. The optimal capital structure is the set of the proportion maximized the total value of the firm. The

theory of capital structure deals with the relevance of the proportion of debt and equity to the value and cost of capital. Different approaches have been developed under the relevancy of capital structure to value of firm and cost of capital. Net income and traditional theories of capital structure claims that there is the existence of the optimal capital structure. They contend that proper mix of debt and equity can maximize the value of shares and minimizes the overall cost of capital. Whereas, Net Operating Income (NOI) Approach and Modigliani-Miller(MM) hypothesis contend that capital structure is irrelevant to the value and cost of capital of the firm. According to the NOI approach, a change in the amount of debt in capital structure doesn't affect the value of firm and the overall cost of capital. Likewise, MM hypothesis states that there is no level of optimal capital structure. Optimal capital structure exists at the lower cost of capital. The MM position changes when corporate taxes are assumed.

In this regard, the basic assumption that are constantly applied in the theories of the capital are:

-) Firms use only two sources of capital i.e. debt capital and equity capital.
-) There are no corporate or personal income taxes.
-) There are no bankruptcy costs.
-) The ratio of debt to equity of a firm can change many times but the total assets remain constant.
-) There are no transaction costs.
-) Operating earnings of the firm remain constant,i.e. growth rate is equal to zero.
-) Investors have the same subjective probability distributions of expected future operating earnings for a given firm.

In this analysis of capital structure theories, following notations are used:

S = Market Value of Common Stock Outstanding

B = Market Value of Debt

V = Total Market Value of Firm

K_d = Before-tax Cost of Debt

K_e = Cost of Equity

K_o = Weighted Average Cost of Capital or Overall Cost of Capital

I = Total Amount of Interest

NI = Net Income Available to Common Stockholder

EBIT = Earning before Interest and Taxes or NOI

2.1.1.1 Net Income [NI] Approach

Net income approach is also known as relevant theory of capital structure. According to this approach, the capital structure decision is relevant to the valuation of the firm and the overall cost of capital. With the increase in the ratio of debt in the capital structure, the weighted average cost of capital will decline and the value the firm as well as the market price of ordinary shares will increase. In contrast, a decrease in the debt ratio will cause an increase in the overall cost of capital and decline both in the value of the firm as well as the market price of equity shares. In other word, the increased use of debt results the lower overall cost of capital (K_o) and higher market value of share. The crucial assumption of this approach are as follows:

-) The corporate income taxes do not exist.
-) The use of debt does not change the risk perception of investors, as a result the equity-capitalization rate (K_e), and the debt-capitalization rate (K_d) remains constant with changes in leverage.
-) The debt-capitalization rate is less than the equity-capitalization rate or the cost of equity. ($K_d < K_e$)
-) Overall cost of capital decreases as leverage increases.

The overall cost of capital(K_o) can be measured as:

$$K_o = \text{NOI} / V \quad \text{or,} \quad K_o = \text{EBIT} / V$$

$$\text{Or, } K_o = K_e - (K_e - K_d)D / V$$

The assumption of NI shows that K_e and K_d are constant and K_d is less than K_e . Therefore, K_o will decrease as D/V increases.

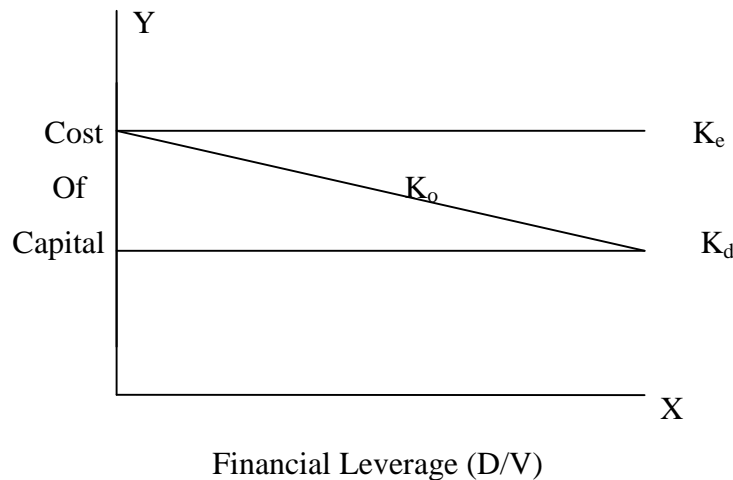


Figure 2.1 : The Effect of Leverage on the Cost of Capital under NI Approach

2.1.1.2 Net Operating Approach

Net operating approach is an irrelevant theory of capital structure as the capital structure decision is irrelevant to the value of firm and the overall cost of capital. According to this approach, change in the amount of debt in capital structure doesn't affect the value of firm and the overall cost of capital. Under this approach the overall capitalization rate, K_o as well as the cost of debt, K_d , stays the same regardless of the financial leverage employed. However, the required return on equity, K_e increases linearly with financial leverage measured as D/S . The market value of the firm is found out by capitalizing the net operating income at the overall cost of capital, K_o which is constant.

The market value of the firm is determined as:

$$V = D + S \quad \text{or,} \quad V = \text{EBIT} / K_o$$

Where, K_o is the overall capitalization rate depends on the business risk of the firm. It is independent of financial mix. If NOI and K_o are independent of financial mix, V will be a constant and independent of capital structure changes.

The crucial assumptions of this approach are as follows:

-) The overall capitalization rate, K_o remains constant.
-) The market capitalizes the value of a firm as a whole. Thus, the split between debt and equity is not important.
-) The required return on equity increases linearly with an increase in debt ratio.
-) Cost of debt is less than cost of equity.
-) The corporate income taxes don't exist.
-) The market uses an overall capitalization rate, K_o to capitalize the net operating income.

The market value of equity can be determined as:

$$S = V - D$$

The cost of equity can be determined as:

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

The equation indicates that if K_o and K_d are constant, K_e increases linearly with debt equity rate, D/S .

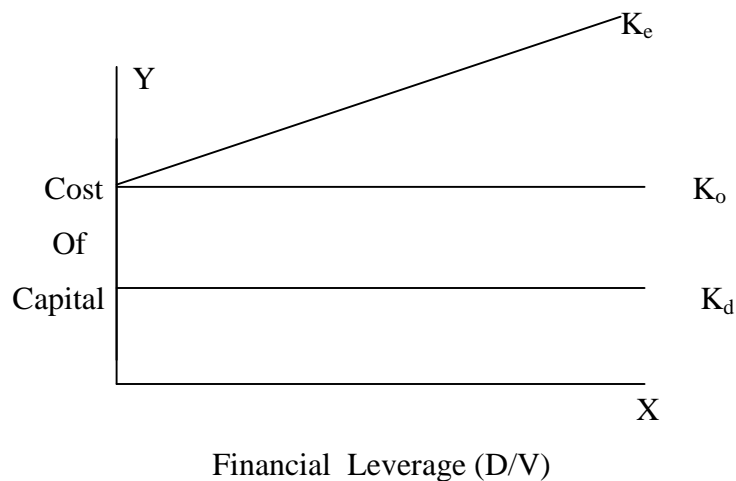


Figure 2.2 : The Effect of Leverage on the Cost of Capital

It shows that K_o and K_d are constant and K_e increases with leverage continuously. As the average cost of capital, K_o is constant, this approach implies that there is not any unique optimum capital structure. In other word, this means that every capital structure is optimum as the cost of capital is the same at all capital structure.

2.1.1.3 Traditional Approach

Traditional approach strikes a balance between the net income approach and the net operating approach. Thus, it is also known as intermediate approach. This approach says that the value of a firm can be increased or overall cost of capital can be reduced by the judicious mix of debt and equity capital. In additional the cost of capital decreases within the reasonable limit of debt and raise its total value through leverage. Thus, there is an optimum capital structure when the cost of capital is minimum or the value of the firm is maximum. According to traditional approach, debt fund are lowest than equity fund. In other words, the cost of debt plus the cost of equity, together on a weighted basis, will be less than the cost of equity, which existed on equity before debt financing.

According to the traditional approach, the manner in which the overall cost of capital reacts to changes in capital structure can be divided into three stages.³

First Stage: Increasing Value

At first, the cost of equity, K_e remains constant or rise slightly with debt and it does not increase fast enough to offset the use of cheaper debt funds. The cost of debt, K_d remains constant or rise negligibly. Thus, the value of the firm, V increases and the overall cost of capital declines with increase in debt ratio.

Under the assumption, K_e remains constant within the acceptable limit of debt, so the value of the firm will be:

$$V=S+D$$

Thus, as long as K_e and K_d are constant, the value of the firm, V increases at a constant rate. $(K_e - K_d)/K_e$ as the amount of debt increases.

$$K_o = X/V = K_e - (K_e - K_d)D/V$$

This implies that with $K_e > K_d$, the average cost of capital will decline with leverage.

Second Stage: Optimum Value

Once the firm has reached a certain degree of leverage, increases in leverage have a negligible effect on the value or the cost of capital of the firm. This is so because the increase in the cost of equity due to the added financial risk exactly offsets the advantages of low cost debt. Thus, within that range or at the specific point, the value of the firm will be maximum or the cost of capital will be minimum.

Third Stage: Decline Value

If the amount of debt is increased further beyond the acceptable limit of leverage the value of the firm decreased with leverage or the cost of the capital increase with leverage. This happens because investors perceive a high degree of financial risk and demand a higher equity-capitalization rate, which offsets the advantages of low-cost debt.

The overall effect of these three stages implies that the cost of capital is function of leverage. At first, the overall cost of capital declines with increase in debt ratio and after reaching to a minimum level it starts rising. The relation between cost of capital and leverage is graphically shown in fig2.3, where the overall cost of capital curve, K_o is saucer-shaped with a horizontal range. This implies that there is a range of capital structures in which the cost of capital is minimized. K_e is assumed to increase slowly at first and then at faster rate.

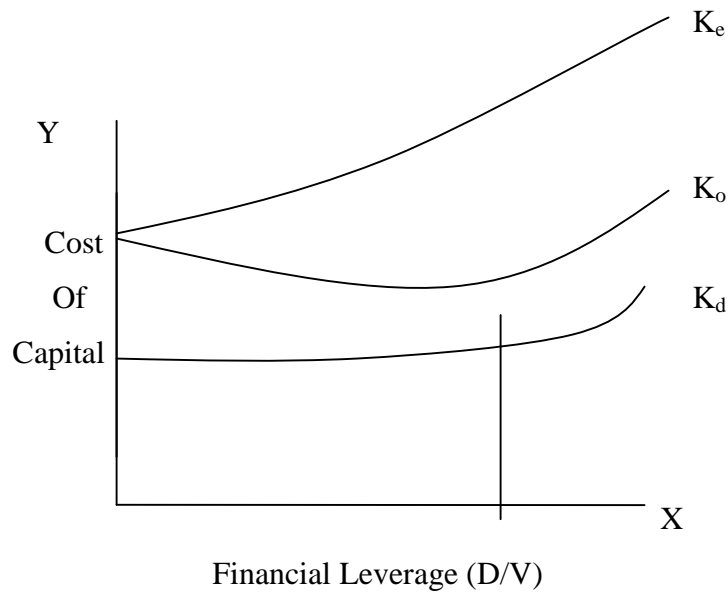


Figure 2.3 : The Cost of Capital Behavior (Traditional View)

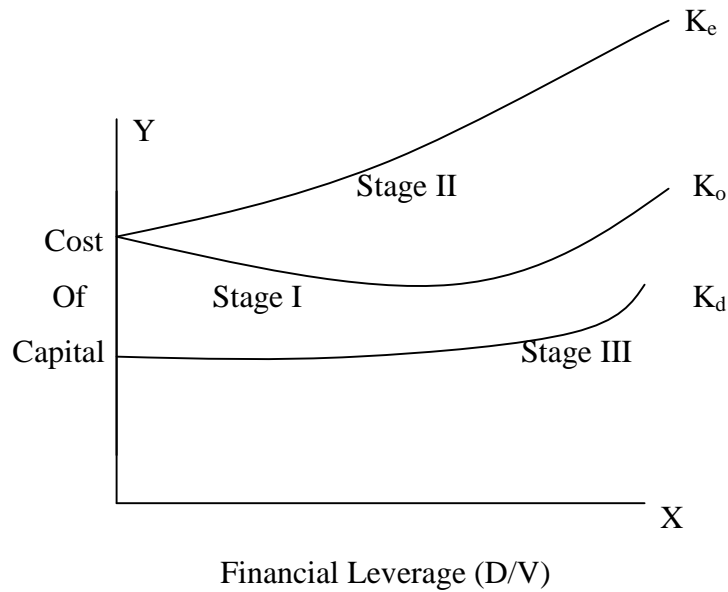


Figure 2.4 : The Cost of Capital Behavior (Traditional View-A Variation)

2.1.1.4 The Modigliani- Miller Approach (Without Tax)

MM theory asserts that capital structure decision is irrelevant and there is no level of optimum capital structure. MM argue that, in the absence of taxes, the value and overall cost of capital of a firm is independent to its capital structure. Further, it

states that cost of capital is the expected net operating income divided by the total market value of the firm and it is equal to the capitalization rate of a pure equity stream of its risk class. In their 1958 article, they provide analytical sound and logically consistent behavioral justification in favor of their hypothesis and reject any other capital structure theory as incorrect.

The MM hypothesis can be best explained in terms of their Propositions I and II. Their Proposition are based on certain assumptions.

-) Securities are traded in the perfect capital market situation. This specially means that(a) investors are free to buy or sell securities b) they can borrow without restriction at the same terms as the firm do c)they behave rationally and the transaction costs do not exist.
-) Firms can be grouped into homogeneous risk classes. It is generally implied that firms within same industry constitute a homogeneous class.
-) The risk of investors is defined in terms of the variability of the net operating income.
-) There are no personal or corporate income taxes.
-) Firms distribute all net earnings to the shareholders, i.e. 100% payout.

Proposition I

MM argue that, for firms, in the same risk class, the total market value is independent of the debt-equity mix and is given by capitalizing the expected net operating income by the rate appropriate to that risk class.

Proposition I can be defined as:

$V = S + D = X / K_0 = \text{NOI} / K_0$ Where,

V= the market value of the firm

S= the market value of the firm's ordinary equity

D= the market value of debt

X = the expected net operating income on the assets of the firm

K_o = the capitalization rate appropriate to the risk class of the firm

The case can be stated in terms of the firm's average cost of capital, which is the ratio of the expected earnings to the market value of all its securities. That is:

$$X/S+D=X/V=K_o$$

If K_d and K_e are defined as the expected return on the firm's debt and equity respectively, then expected net operating income is:

$$X=K_o V=K_e S+K_d D$$

By definition,

$$K_o =X/V$$

$$\text{Or, } K_o = K_e S/V + K_d D/V$$

Since, MM concludes that the total market value of the firm is unaffected by the debt-equity mix, it follows that the cost of capital is completely independent of its capital structure and is equal to the capitalization rate of a pure-equity-stream of its class. The cost of capital function, as hypothesized by MM is presented in Figure 2.5.

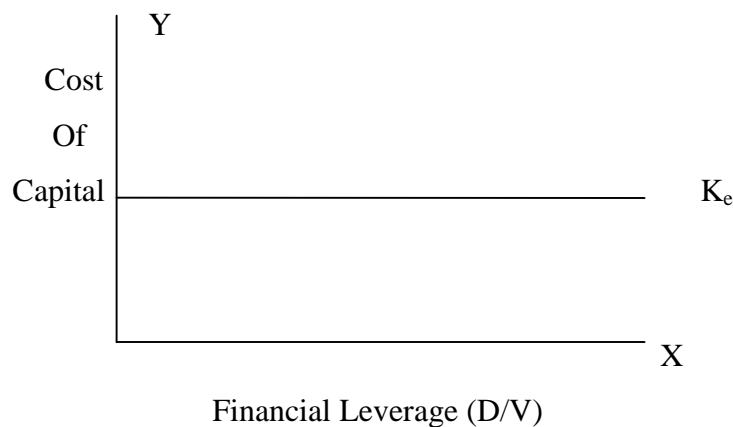


Figure 2.5 : The Cost of Capital under MM Proposition I

Thus, two firms identical in all respects except to the capital structure have the same value and cost of capital. In this case, arbitrage will take place enable investors to engage in personal leverage as against the corporate leverage to restore equilibrium in the market.

Proposition II

MM’s proposition II states that the cost of equity rises proportionately with the increase in the financial leverage in order to compensate in the form of premium for bearing additional risk arising from the increasing leverage. MM formulated proposition II which defines the cost of equity is the linear function of the leverage. The expected yield on equity can be defined as:

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

MM proposition could be valid, if K_d remains constant for any degree of leverage. But in practice, K_d increase with leverage beyond a certain acceptable level of leverage. However MM maintains that even if K_d is increasing, K_o will remain constant. They argue when K_d increase, K_e will increase at a decreasing rate and may even turns down eventually

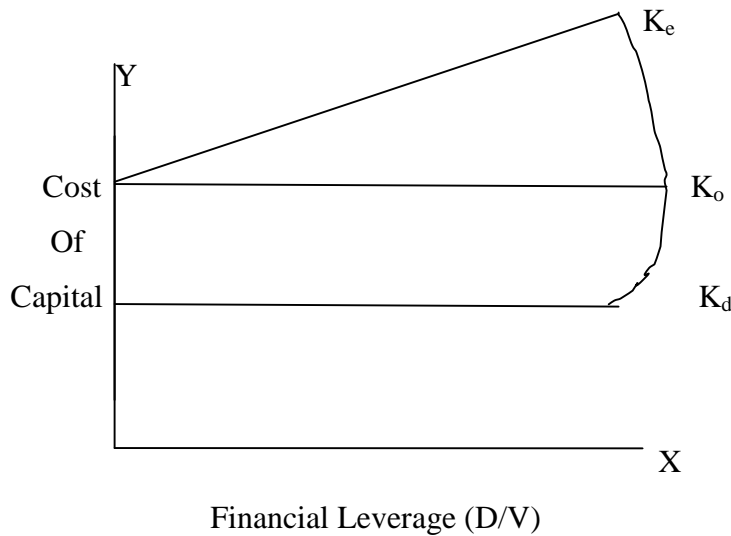


Figure 2.6 : The Cost of Equity under the M-M Proposition II

2.1.2 Financial Leverage

Financial Leverage results from the presence of fixed financial cost in the firm income statement. The use of fixed charges sources of funds, such as debt and preference share capital along with the owner's equity in the capital structure is described as financial leverage or 'trading on equity'. The term trading on equity is derived from the fact that it is the owner's equity measured by ordinary share capital and reserve and surplus that is used as a basis to raise debt and preference capital, the equity that is traded upon. The supplier of debt has limited participation in the company's profit and therefore, debt holder will insist on protection in values represented by ownership capital. Financial Leverage can also be defined as a ratio of total debt to total assets or the total value of the firms.

2.2 Review of Related Studies

2.2.1 Review of Journals and Articles

Weston (1963) has made research work on "A test of cost of capital proposition". In this research some important improvement in the cost of capital models are made where size and growth of firm are included as additional explanatory.

By using MM model this study found that the regression co-efficient of leverage is positive and significant. However when the multiple regression was run, this study found that the correlation coefficient is significant and the regression co-efficient of leverage is negative and significant, and when the influence of growth is isolated , leverage is found to be negative correlation with the cost of capital. This study concluded that due to the negative correlation of leverage with earning growth, there is apparent lack of influence of leverage on the overall cost of capital.

Sharma and Rao (1969) conducted the test of MM hypothesis on the influence of debt on the value of a firm to a non-regulated industry. They argued that when their hypothesis on debt and dividend are correct only then the estimate of cost of capital arrived at through this model will be accurate, this is an essential condition for the employment of the model. Variables were calculated in the same ways as done by MM model with two exceptions. They experimented with total assets and sales for deflecting the variables and the result were meaningful when fixed of total assets was used as the deflector. They argued that when the growth rate of fixed assets was used as the growth variable, the results were somewhat inconsistent with economic reasoning. They also included that debt has non-tax advantages. Thus, this paper supports that the investors prefer corporate to personal leverage and therefore the value of a firm rises up to a leverage rate considered prudent.

Rao and Litzaberge (1970) conducted a study on the effect of capital structure in the cost of capital in less developed and less efficient capital market (India) and in a highly developed and efficient capital market (US). They used 28 Indian utilities and 77 American utilities and conducted the study for five cross section years 1962-1966. They found that the result for the American utilities are constant to the MM proposition that except for the advantages of debt financing, the cost of capital is independent of capital structure and result also supported that the MM hypothesis that investors are different for the firm's dividend policy whereas in case of Indian utilities, the result are inconsistent to the MM approach and support the traditional belief, the judicious use of financial leverage will lower the firms cost of capital and investors have a reference for current dividends. Thus, they concluded that the MM approach after allowing for the tax advantage of debt, the firm's cost of capital is independent of capital structure does not appear to be applicable in the case of a developing economy.

Wipper (1990) conducted a study to test the empirical relationship between financial structure and the value of the firm. The researcher tried to eliminate the principal problem of empirical study on the leverage and attempted to offer what were hoped to be more fruitful alternatives in determining the relationship between leverage and cost of capital. The researcher used different measures of leverage viz. $I/E=25$ where I is the current level of fixed charges, E is the most recent year cash flow operating income determined from a logarithmic regression of income on time over ten years period, 25 is equal to two standard error around the regression line. The researcher also found that the shareholder's wealth can be enhanced by judicious use of debt financing.

2.2.2 Review of Thesis

Khatri (1998) had conducted a thesis on “Capital structure and cost of capital of Nepalese listed companies”. The main objective of this study is to test the relationship between cost of capital and capital structure and between cost of equity and capital structure in selected listed companies. This study used five years data of four banking and finance companies and eight manufacturing and trading companies . This study also used simple as well as multiple regression model as tool of study. The researcher had found that regression co-efficient of leverage against cost of capital were negative on manufacturing and trading sector, and positive on banking and finance sector. T-value showed beta co-efficient were not statistically significant to both sectors. Finally, the researcher concluded that they were not strong enough to establish relationship between cost of capital and capital structure, and the capital structure composition of Nepalese listed companies were confusing and determined without considering the capital structure theories.

Aryal (2001) had conducted the thesis on “ An Evaluation of Capital Structure of Bottlers Nepal Limited”. The main objective of this study is to evaluate the capital structure of Bottlers Nepal Ltd. This study concluded that all the calculation shows the bad performance of the company due to the inefficient capital structure management. Thus, this study suggested that the management must bring about a satisfactory compromise among these conflicting factors of cost, risk, control and timing to design suitable pattern of capital structure for the company. This study recommended that company should use equity capital instead of debt capital when EPS is high.

Khanal (2002) had submitted a thesis on “Capital Structure Management of Industrial Public Enterprises”. The main objective of this study is to analyze the capital structure management of industrial enterprises. The researcher had found that capital investment and earning were not co-related. Most of public enterprises were in loss position. Debt-equity ratio was not satisfactory, financial performance of these companies were not good. Thus, the researcher recommended that the management should reduced the government subsidy and donation and should improve their performance efficient.

Sharma (2005) had submitted the thesis on “ A Study of Capital Structure Management of Manufacturing Companies listed in NEPSE- Jyoti Spinning Mills Ltd., Nepal Lever Limited and Nepal Lube Oil”. The main objective of this study is to analyze the capital structure of selected companies and to analyze return on equity and assets. This study found that among manufacturing companies, there is a vast difference in the degree of operating leverage and capital structure. This study recommended that the companies should reduce tax by taking long term debt and management should try to maintain capital structure problem.

The review of the above literatures undoubtedly has helped to get valuable and analytical feedback to complete this thesis. On the basis of these reviews, the research methodology has done to analyze this thesis in the following chapter.

2.3 Research Gap

All the above studies are concerned with the research title "Capital structure". But the research gap among the previous studies and this current study lies firstly in the difference in the fiscal years Secondly, some researchers have selected various companies for the research and some have concentrated in only one institution. But this current study, however is a comparative study on the capital structure of two commercial banks to cover the analytical part and fulfill the objectives of the study. Possibly this study may be the first of its kind in the area as the study is concentrated in only two commercial banks.

CHAPTER – III

RESEARCH METHODOLOGY

This chapter looks into the research design, nature and source of data, data collection procedure and tools and technique of analysis.

A research methodology helps us to find out accuracy, validity and suitability of the study. For the purpose of achieving the objectives of the study, the applied methodology will be used. The research methodology used in the present study is briefly mentioned below.

This chapter consists of methods applied in the process of analyzing capital structure management of selected commercial banks. Research is a scientific and systematic search for pertinent information on a selected topic. Whereas research methodology refers to the various sequential steps adopted by researcher to study a problem with certain objective.

3.1 Research Design

Research design is the conceptual structure within which the research is performed. It is the arrangement of condition for collection and analysis of data in such a manner that helps to combine relevance to research purpose with economy in procedure. The analysis of this study is based on certain research design keeping in mind on the objective of the study. The main objective of the study is to analyze the capital structure of selected commercial banks i.e. on a case study of Everest Bank Limited and Bank of Kathmandu Limited. It has emphasized on descriptive as well as analytical study of the collected data.

3.2 Nature and Sources of Data

This research study is based on secondary data that are extracted from Balance sheet, P/L a/c, different financial schedule of concerned banks, annual reports. Required data are get by visiting the website of selected commercial banks. This study is based on historical data of 7 fiscal years i.e from 2001/02 to 2007/08.

3.3 Selections of Financial Variables

This study has selected the following financial variables for the purpose of study.

) Debt Ratio

The debt ratio indicates the relationship between the total- debt to total assets of a firm. Debt ratio is the use of fixed cost capital such as debt. It is computed as:

Debt ratio= Total debt / Total assets

) Debt- Equity Ratio

Debt-equity ratio is vital tool used to analyze the long-term solvency of firm. It is the relationship between borrowed fund and owner's equity. This ratio equals the firm's debt divided by its equity.

D/E ratio = Total debt / Shareholders equity

) Debt to Total Capital Ratio

It is a relationship between long-term debt and total capital. Total capital includes owner's equity as well as borrowed capital.

Debt-Total capital = Long-term debt / Total capital

) Interest Coverage Ratio

It is also known as time interest earned ratio. This ratio measures the debt servicing capacity of a firm. It is computed by dividing Net profit before interest and tax by interest, thus

Interest Coverage ratio = Net profit before interest & tax / Interest

) **Degree of Financial Leverage**

The degree of financial leverage at a particular EBIT level is measured by the percentage change in earning per share relative to the percentage change in EBIT. It is calculated as:

$$\text{DFL} = \text{Percentage change in EPS} / \text{Percentage change in EBIT}$$

Or, it can also be calculated as,

$$\text{DFL} = \text{EBIT} / \text{EBIT} - I$$

) **Return on Total Assets**

This ratio measures the overall profitability of the firm with respect to total assets. This ratio is examined to measure the profitability of all financial resources invested in the bank assets.

$$\text{Return on total assets} = \text{NI} / \text{Total assets}$$

) **Return on Shareholder Equity**

A return on shareholder's equity is calculated to see the profitability of owner's investment. Return on Shareholder equity is return on total fund belong to equity shareholder. The return on shareholder equity is net profit after taxes divided by shareholder's equity.

$$\text{Return on shareholder's equity} = \frac{\text{Net profit after tax}}{\text{Total Shareholder Equity}}$$

) **Earning Per Share (EPS)**

EPS measures the return of each equity shareholder. It is calculated by dividing the profit after taxes by the total number of common shares outstanding.

$$\text{EPS} = \text{EAT} / \text{No. of share outstanding}$$

) **Dividend Per Share (DPS)**

DPS measures the dividend distributed to each equity shareholder. It is calculated by dividing dividend distributed to ordinary shareholders divided by the number of ordinary outstanding.

$$\text{DPS} = \text{Dividend} / \text{No. of share outstanding}$$

) **Overall Capitalization Rate under NI Approach**

Net income approach is a relevant theory of capital structure. Under it, value of the firm and overall capitalization rate is calculated as:

$$\text{Market value of the firm} = \text{MV of debt} + \text{MV of equity}$$

$$\text{Or, } V = B + S$$

And,

$$\text{Overall Capitalization rate} = \text{EBIT} / \text{Value of firm}$$

$$\text{Or, } K_o = \text{EBIT} / V$$

) **Equity Capitalization Rate under NOI Approach**

It is a irrelevant theory of capital structure. Under this approach, equity capitalization rate is calculated as:

$$\text{Equity Capitalization rate} = \text{EAT} / \text{Value of equity}$$

$$\text{Or, } K_e = \text{EAT} / S$$

$$\text{Or, } K_e = \text{NI} / S$$

3.4 Method of Data Analysis

In this study, simple statistical tools are used. Mainly financial tools and techniques have been used to show the financial condition of the selected commercial banks. Hence, statistical tools used in this study are as follows:

) **Correlation Coefficient (r)**

Correlation Coefficient measures the degree and direction of relationship between two variables. There are various methods for studying correlation between two

variables. In this study, Karl Pearson's co-efficient of correlation is used, which is popularly known as Pearsonian co-efficient of correlation. Karl Pearson's co-efficient of correlation is simply denoted by the symbol 'r'. The value of 'r' always has been +1 or -1. When 'r' = +1, there is perfectly positive correlation, when 'r' = -1, there is perfectly negative correlation. When 'r' = 0, there is no correlation.

The closer r is to +1 or -1, the closer the relationship between the variables and vice versa.

The closer r is to 0, the less close the relationship.

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

Where, $x = X - \bar{X}$

$y = Y - \bar{Y}$

$$\bar{X} = \frac{X}{n}$$

$$\bar{Y} = \frac{Y}{n}$$

In this study, correlation coefficient between EBIT and Interest Payment and correlation coefficient between Overall Capitalization Rate and Debt-Equity ratio are calculated

) Probable Error (P.E)

The probable error of the co-efficient of correlation helps in interpreting its value. With the help of probable error, it is possible to determine the reliability of the value of co-efficient. The P.E. of the coefficient of correlation is obtained as follows

$$\text{P.E.} = 0.6745 \frac{\hat{f} Z r 2A}{\sqrt{n}}$$

Where,

r = correlation co-efficient

n = No. of observation

If the value of r is less than the probable error, there is no evidence of correlation, i.e., value of r is insignificant and if the value is more than six times of the probable error, the r is practically certain and significant.

CHAPTER- IV

PRESENTATION AND ANALYSIS OF DATA

Presentation and analysis of data consists the most crucial part in the study of research problem. It provides different mechanism to meet the basic objectives of the study. The research has followed the methodology described in third chapter in order to attain the objective. Thus, application of the major variables taken into account for the purpose study are Total debt and Shareholder's Equity, EBIT and EBT, Net profit after tax and Shareholder's Equity, EBIT and Interest, Net Income and Net Operating Income approach, correlation coefficient analysis of different variables of selected banks.

4.1 Analysis of Debt to Equity Ratio

The relationship between borrowed fund and owner's equity is known as debt-equity ratio. It is determined to measure relative interest of owner and outsider. A high debt-equity ratio implies the large share of financing by the creditors, as compared to that of owners. This means creditor would suffer more in times of distress than the owner. This is why long term creditors generally prefer to see a modest debt-equity ratio. The total debt includes long term debt i.e deposits. Current liabilities are usually omitted from this ratio because the firm is assumed to be able to adjust the short-term part of capital structure rapidly when the rate of return on assets declines. Thus, the debt considered here is excessive of current liabilities.

Shareholder's equity includes paid-up capital, reserve and surplus. These ratios are presented in quantitative term to show the movement of the trend fiscal year.

Table 4.1.1
Debt to Equity Ratio of EBL

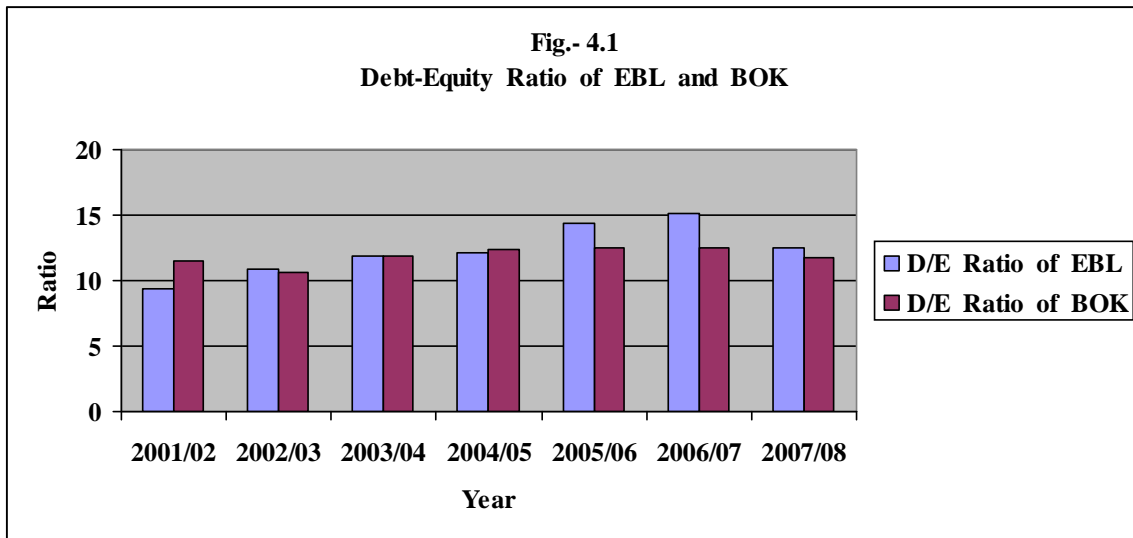
(in million)

Fiscal Year	Total Debt	Shareholder's Equity	D/E Ratio	Change%
2001/02	5466.61	582.80	9.40	-
2002/03	6694.96	612.80	10.93	1.53
2003/04	8063.90	680.30	11.85	0.92
2004/05	10097.70	832.62	12.13	0.28
2005/06	13802.40	962.81	14.33	2.20
2006/07	18186.30	1201.52	15.14	0.81
2007/08	23976.30	1921.23	12.50	-2.64
Average			12.30	

Table 4.1.2
Debt to Equity Ratio of BOK

(in million)

Fiscal Year	Total Debt	Shareholder's Equity	D/E Ratio	Change%
2001/02	5723	500.00	11.45	-
2002/03	6171	579.13	10.65	-0.80
2003/04	7742	650.74	11.90	1.25
2004/05	8943	720.74	12.41	0.51
2005/06	10485	839.73	12.50	0.09
2006/07	12390	993.27	12.47	-0.03
2007/08	15834	1342.07	11.80	-0.67
Average			11.88	



EBL has D/E ratio of 12.3 times on average. It means debt capital financing is more than almost 12 times higher than shareholder's equity with the bank. EBL D/E ratio is in increasing trend i.e. 9.4 times in 2001, 10.93 in 2002, 11.85 in 2003, 12.13 in 2004, 14.33 in 2005, 15.14 in 2006 and decline in 2007 i.e. 12.5.

BOK has D/E ratio of 11.88 times on average. This bank has decreasing and increasing trend in D/E ratio. This bank has 11.45 times D/E ratio in 2001/2002, which decreased down to 10.65 times in 2002/2003. This ratio increased to 11.90 in 2003/2004, 12.41 in 2004/2005, 12.50 in 2005/2006, and again decreased to 12.47 in 2006/07 and 11.80 in 2007/08 resp. However, the debt-equity ratio of EBL is higher than BOK. This means that the customer of EBL suffers more than BOK in distress situation.

4.2 Analysis of Interest Coverage Ratio

The interest coverage ratio, also known as time-interest earned ratio is designed to measure the debt-servicing capacity of a firm. Interest coverage ratio reflects the firm's ability for payment of interest on borrowed capital out of earning. This ratio shows the number of times the interest charges are covered for their payment. A high ratio is a sign of low burden of borrowing of the business and lower

utilization of borrowing capacity. Whereas low ratio is a sign of excessive utilization of borrowing capacity and doesn't have ability to offer assured payment of interest to the creditors.

Table 4.2.1
Interest Coverage Ratio of EBL

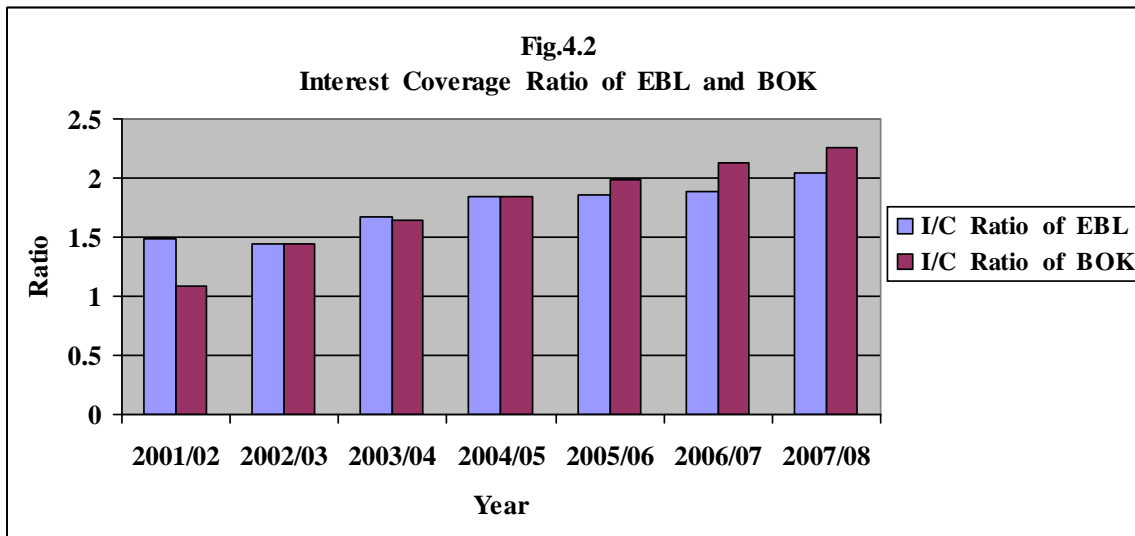
(in million)

Fiscal Year	EBIT	Interest	I/C Ratio	Change%
2001/02	384.39	257.05	1.49	-
2002/03	443.55	307.64	1.44	-0.05
2003/04	527.52	316.37	1.67	0.23
2004/05	552.27	299.56	1.84	0.17
2005/06	746.91	401.40	1.86	0.02
2006/07	971.88	517.17	1.88	0.02
2007/08	1291.31	632.61	2.04	0.16
Average			1.75	

Table 4.2.2
Interest Coverage Ratio of BOK

(in million)

Fiscal Year	EBIT	Interest	I/C Ratio	Change%
2001/02	311.70	285.01	1.09	-
2002/03	398.85	276.71	1.44	0.35
2003/04	470.94	286.3	1.64	0.20
2004/05	445.93	241.64	1.85	0.21
2005/06	609.36	308.15	1.98	0.13
2006/07	722.59	339.18	2.13	0.15
2007/08	945.44	417.54	2.26	0.13
Average			1.77	



Above table has been constructed to show the effect of interest charge ratio of two banks over past seven yrs period. Average interest ratio of both banks are closer to each other.

The interest coverage ratio of EBL was 1.49 in 2001/02, 1.44 in 2002/03, 1.67 in 2003/04, 1.84 in 2004/05 , 1.86 in 2005/06, 1.88 in 2006/07 and 2.04 in 2007/08 resp. Average interest coverage ratio is 1.75 times. Similarly, the interest coverage ratio of BOK was 1.09 in 2001/02, 1.44 in 2002/03, 1.64 in 2003/04, 1.85 in 2004/05, 1.98 in 2005/06, 2.13 in 2006/07 and 2.26 in 2007/08 resp. Its average interest coverage ratio is 1.77 times. The computed interest coverage ratio of banks show how many times the interest charges are covered by funds that the ordinarily available to pay interest charges.

4.3 Analysis of Degree of Financial Leverage

Financial leverage refers to the use of interest bearing debt and preferred stock along with debt capital. The degree of financial leverage indicates the degree of financial risk, i.e. higher the value of degree of financial leverage higher the degree

of financial risk and vice versa. The degree of financial leverage can be calculated as:

$$\text{DFL} = \text{Percentage Change in EBT} / \text{Percentage Change in EBIT}$$

$$\text{Or, DFL} = \text{EBIT} / \text{EBT}$$

$$\text{Here, EBIT} - \text{I} = \text{EBT}$$

The degree of financial leverage employed by two banks has been shown as:

Table 4.3.1

Degree of Financial Leverage of EBL

(in million)

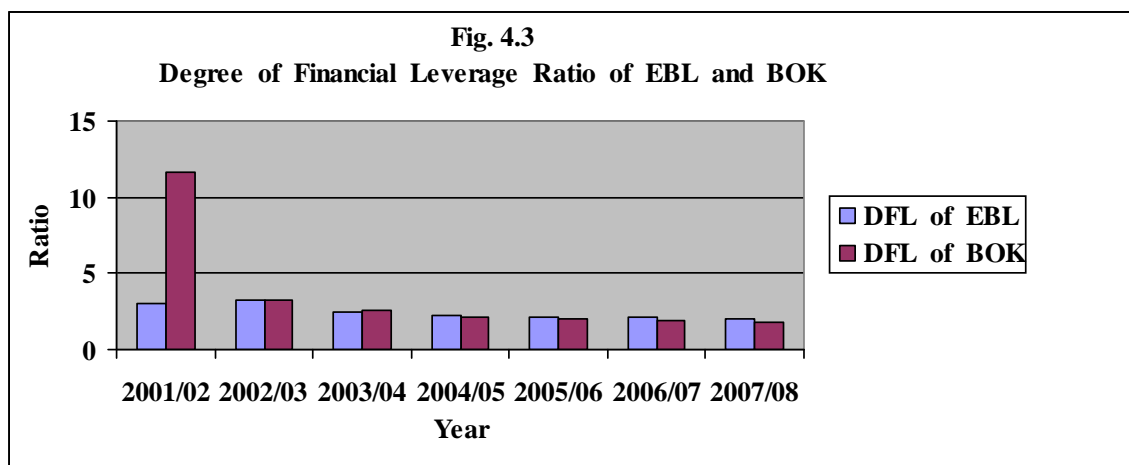
Fiscal Year	EBIT	EBT	DFL	Change%
2001/02	384.39	127.34	3.02	-
2002/03	443.55	135.91	3.26	0.24
2003/04	527.52	211.15	2.50	-0.76
2004/05	552.27	252.71	2.19	-0.31
2005/06	746.91	345.51	2.16	-0.03
2006/07	971.88	454.72	2.14	-0.02
2007/08	1291.31	658.61	1.96	-0.18
Average			2.46	

Table 4.3.2

Degree of Financial Leverage of BOK

(in million)

Fiscal Year	EBIT	EBT	DFL	Change%
2001/02	311.70	26.69	11.68	-
2002/03	398.85	122.14	3.26	-8.42
2003/04	470.94	184.64	2.55	-0.71
2004/05	445.93	204.29	2.18	-0.37
2005/06	609.36	301.21	2.02	-0.16
2006/07	722.59	383.41	1.88	-0.14
2007/08	945.44	527.90	1.79	-0.09
Average			3.62	



EBL has lowest degree of financial leverage ratio in average i.e 2.46 times, which reflects the bank has lower degree of financial risk. The DFL ratio of EBL over seven fiscal year are 3.02 in 2001/02, 3.26 in 2002/03, 2.5 in 2003/04, 2.19 in 2004/05, 2.16 in 2005/06, 2.14 in 2006/07 and 1.96 in 2007/08 respectively.

BOK constitutes higher degree of financial leverage, which represents higher financial risk. Its average DFL is 3.62 times i.e 362 percent. The degree of financial leverage in 2001/02 is 1168 percent, which represent highest figure of DFL over the study period. In the year 2002/03 to 2007/08, the ratios are 326 percent, 255 percent, 218 percent, 202 percent, 188 percent and 179 percent respectively.

4.4 Analysis of Return on Total Assets

Return on total assets measures the overall profitability of the bank that explains a firm to earn satisfactory return on all financial resources invested in the banks assets, otherwise its survivable is threatened. This ratio explains net income for

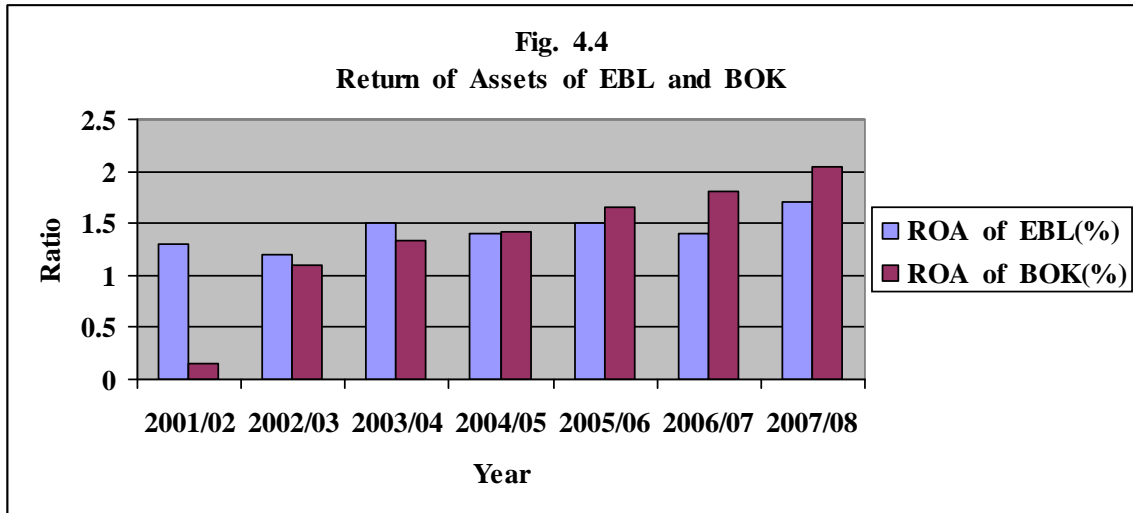
each unit of assets. Higher ratio indicates efficiency in utilizing its overall resources and vice versa. The return on assets ratio of selected banks are as follows:

Table 4.4.1
Return on Total Assets of EBL
(in million)

Fiscal Year	Net Income	Total Assets	ROA%	Change%
2001/02	85.30	6561.54	1.30	-
2002/03	94.20	7850.00	1.20	-0.10
2003/04	143.60	9573.33	1.50	0.30
2004/05	170.80	11732.52	1.40	-0.10
2005/06	237.20	15959.28	1.50	0.10
2006/07	296.40	21432.57	1.40	-0.10
2007/08	451.20	27149.34	1.70	0.30
Average			1.40	

Table 4.4.2
Return on Total Assets of BOK
(in million)

Fiscal Year	Net Income	Total Assets	ROA%	Change%
2001/02	9.10	6000.00	0.15	-
2002/03	82.13	7444.82	1.10	0.95
2003/04	127.47	9496.34	1.34	0.24
2004/05	139.53	9857.13	1.42	0.08
2005/06	202.44	12278.33	1.65	0.23
2006/07	262.39	14581.39	1.80	0.15
2007/08	361.50	17721.93	2.04	0.24
Average			1.36	



EBL's return on total assets are 1.3, 1.2, 1.5, 1.4, 1.5, 1.4 and 1.7 percent in the fiscal year 2001/02, 2002/03, 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. Its average ratio 1.40. Whereas BOK's return on total assets are 0.15, 1.1, 1.34, 1.42, 1.65, 1.8 and 2.04 percent in the fiscal year 2001/02, 2002/03, 2003/04, 2004/05, 2005/06 2006/07 and 2007/08 respectively. Its average ratio 1.36. This means that EBL has outperformed than other bank. EBL has been able to utilize its resource in most profitable project than that of BOK.

4.5 Analysis of Return on Shareholder equity

The return on Shareholder Equity measures the productivity of Shareholder's funds. It carries the relationship of return to Shareholder's equity. The Shareholder equity includes common share capital, preference share capital and reserve and surplus. Every firm wants to generate the maximum return on shareholder's investment. ROE is therefore the best single measure of the company's success in fulfilling its goal. The ratio equal the net profit after taxes divides by the common stockholder's equity.

Table 4.5.1
Return on Shareholder's Equity of EBL
 (in million)

Fiscal Year	EAT	Equity	R.E.%	Change%
2001/02	85.30	582.80	14.60	-
2002/03	94.20	612.80	15.40	0.80
2003/04	143.60	680.30	21.10	5.70
2004/05	170.80	832.62	20.50	-0.60
2005/06	237.20	962.81	24.60	4.10
2006/07	296.40	1201.50	24.70	0.10
2007/08	451.20	1921.20	23.50	-1.20
Average			20.60	

Table 4.5.2
Return on Shareholder's Equity of BOK
 (in million)

Fiscal Year	EAT	Equity	R.E.%	Change%
2001/02	9.10	500.00	1.82	-
2002/03	82.13	579.13	14.20	12.38
2003/04	127.47	650.74	19.60	5.40
2004/05	139.53	720.74	19.40	-0.20
2005/06	202.44	839.73	24.10	4.70
2006/07	262.39	993.27	26.40	2.30
2007/08	361.50	1342.07	26.90	0.50
Average			18.90	

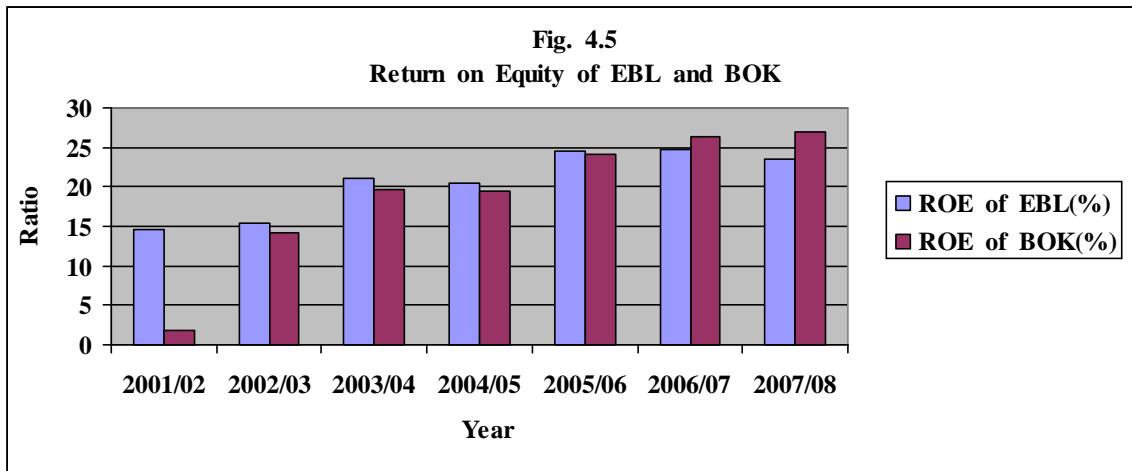


Table 4.5.1 and 4.5.2 shows the return on shareholder's equity of two banks over the seven fiscal year. EBL has the highest ROE. In average EBL has 20.6% where as BOK has 18.9%. In the first fiscal year BOK has bad performance in terms of earning capacity. Since EBL has higher ROE than BOK, EBL has satisfactory ROE than BOK.

4.6 Earning Per Share

Earning per share measures the profitability of the firm on a per share basis. It doesn't reflect how much is paid as dividend and how much is returned in the business. It is an important index of the bank's performance and the investors rely heavily on it for their investment decision.

To see the strength of the share in the market, EPS of EBL and BOK are calculated as follows:

Table 4.6.1
Earning Per Share of EBL

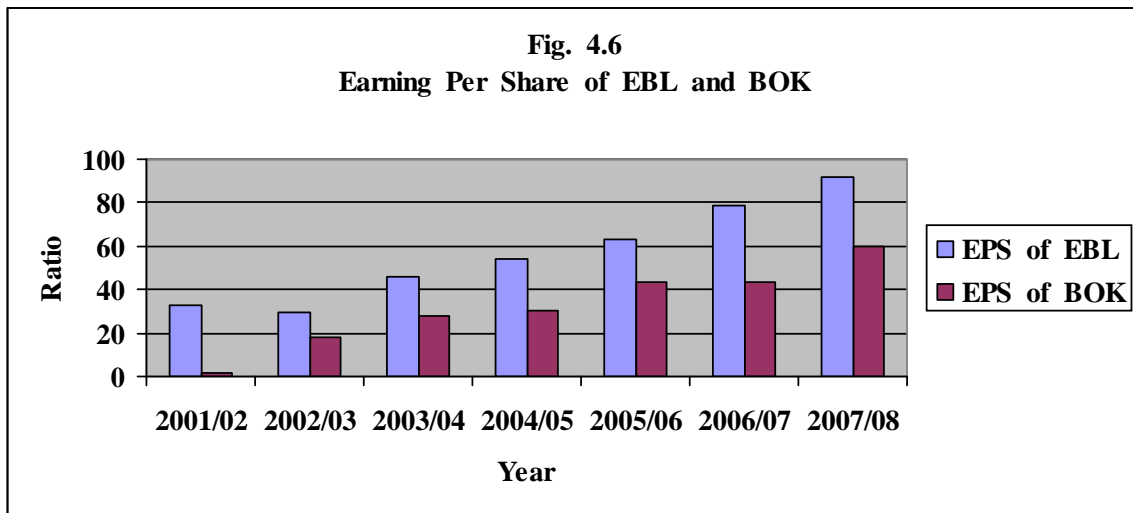
(in million)

Fiscal Year	EAT	No. of Share	EPS(Rs.)	Change(%)
2001/02	85.30	2593186	32.91	-
2002/03	94.20	3150000	29.90	-3.01
2003/04	143.60	3150000	45.58	15.68
2004/05	170.80	3150000	54.22	8.64
2005/06	237.20	3780000	62.78	8.56
2006/07	296.40	3780000	78.41	15.63
2007/08	451.20	4914000	91.82	13.41
Average			56.52	

Table 4.6.2
Earning per Share of BOK

(in million)

Fiscal Year	EAT	No. of Share	EPS(Rs.)	Change(%)
2001/02	9.10	4635809	2.00	-
2002/03	82.13	4635809	17.72	15.72
2003/04	127.47	4635809	27.50	9.78
2004/05	139.53	4635809	30.10	2.60
2005/06	202.44	4635809	43.67	13.57
2006/07	262.39	6031413	43.50	-0.17
2007/08	361.50	6031413	59.94	16.44
Average			32.06	



In comparison between two banks, EBL has significant EPS. It has decreasing and increasing trend of EPS. In the fiscal year 2001/02, the EPS is Rs.32.91. In 2002/03, EPS decreased to Rs. 29.9, thereafter increased to Rs.45.58, Rs.54.22, Rs.62.78, Rs.78.41 and Rs.91.82 in fiscal year 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. Its average EPS is Rs.56.52.

BOK has increasing trend of EPS. BOK's EPS are Rs.2 , Rs.17.72, Rs.27.5, Rs.30.1, Rs.43.67, Rs.43.5 and Rs.59.94 in fiscal year 2001/02, 2002/03, 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. Its average EPS is Rs.32.06. EBL has higher average EPS than BOK, which gives the strength of the share better in the market.

4.7 Dividend Per Share

Companies generally prefer to pay cash dividend. They finance their expansion and growth by issuing new share or borrowing. Companies like to follow a stable dividend policy since investor generally prefer such policy for certainty season.

Table 4.7.1
Dividend Per Share of EBL

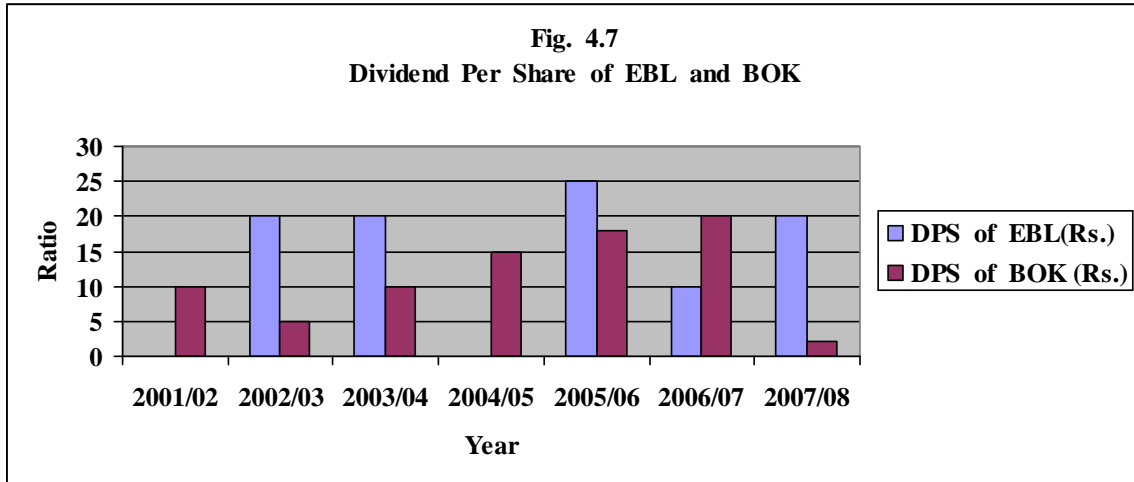
(in million)

Fiscal Year	Total Dividend	No of Shares	DPS(Rs.)	Change%
2001/02	0.00	2593186	0.00	-
2002/03	63.00	3150000	20.00	20.00
2003/04	63.00	3150000	20.00	0.00
2004/05	0.00	3150000	0.00	-20.00
2005/06	94.50	3780000	25.00	25.00
2006/07	37.80	3780000	10.00	-15.00
2007/08	98.30	4914000	20.00	10.00
Average			13.57	

Table 4.7.2
Dividend Per Share of BOK

(in million)

Fiscal Year	Total Dividend	No of Shares	DPS(Rs.)	Change%
2001/02	43.66	4365809	10.00	-
2002/03	21.83	4365809	5.00	-5.00
2003/04	43.66	4365809	10.00	5.00
2004/05	65.49	4365809	15.00	5.00
2005/06	83.44	4635809	18.00	3.00
2006/07	120.63	6031413	20.00	2.00
2007/08	12.73	6031413	2.11	-17.89
Average			11.44	



EBL distribute dividend in only 5 times within 7 year period. Whereas BOK dividend per share are Rs.10, Rs.5, Rs.10, Rs.15, Rs.18, Rs.20 and Rs.2.11 in fiscal year 2001/02, 2002/03, 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively.

4.8 Dividend Payout Ratio

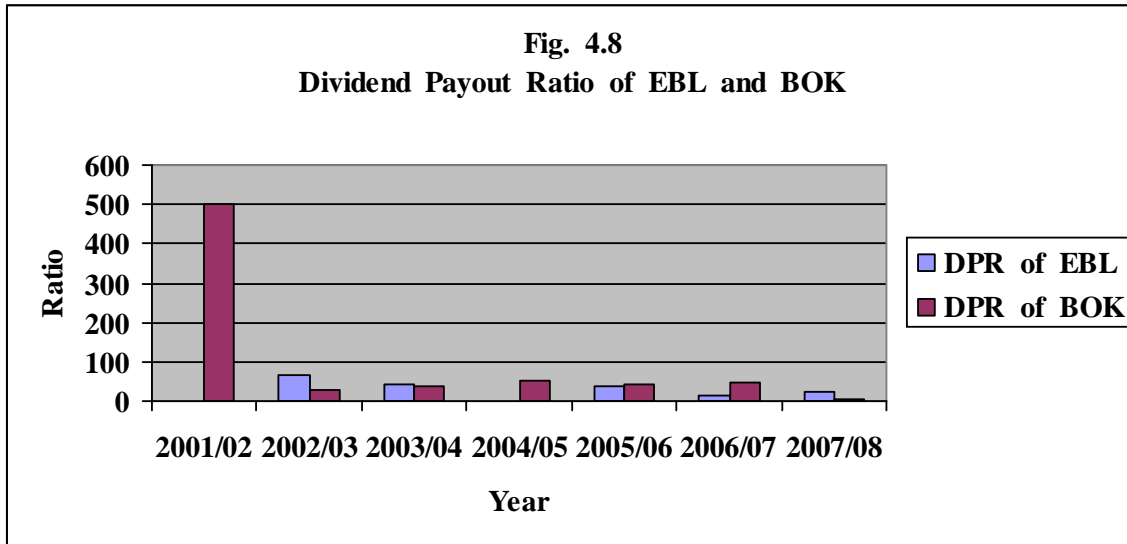
This ratio represents the percentage of the profit distributed as dividend and the percentage retained as revenue and surplus for the growth of the bank. The shareholders prefer usually higher ratio whereas very high ratio may also slow down the growth rate of the firm. It helps to segregate the proportion of dividend and retained earning.

Table 4.8.1
Dividend Payout Ratio of EBL
(in million)

Fiscal Year	DPS	EPS	DPR	Change%
2001/02	0.00	32.91	0.00	-
2002/03	20.00	29.90	66.90	66.90
2003/04	20.00	45.58	43.88	-23.02
2004/05	0.00	54.22	0.00	-43.88
2005/06	25.00	62.78	39.82	39.82
2006/07	10.00	78.41	12.75	-27.07
2007/08	20.00	91.82	21.78	9.03
Average			26.45	

Table 4.8.2
Dividend Payout Ratio of BOK
(in million)

Fiscal Year	DPS	EPS	DPR	Change%
2001/02	10.00	2.00	500.00	-
2002/03	5.00	17.72	28.22	-471.78
2003/04	10.00	27.50	36.36	8.14
2004/05	15.00	30.10	49.83	13.47
2005/06	18.00	43.67	41.22	-8.61
2006/07	20.00	43.50	45.97	4.75
2007/08	2.11	59.94	3.52	-42.45
Average			100.73	



In comparison with two banks, in EBL has unstable dividend payout ratio. Where in BOK, have average 100.73. But EBL has not dividend payout ratio in every year so it is incomparable between two bank.

4.9 Analysis of Capital Structure Under Net Income (NI) Approach

The total market value of firm is simply obtained by adding the market value of debt to the market value of equity.

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

The overall capitalization of EBL under NI was shown in table 4.9.1

Table 4.9.1
Capital Structure of EBL

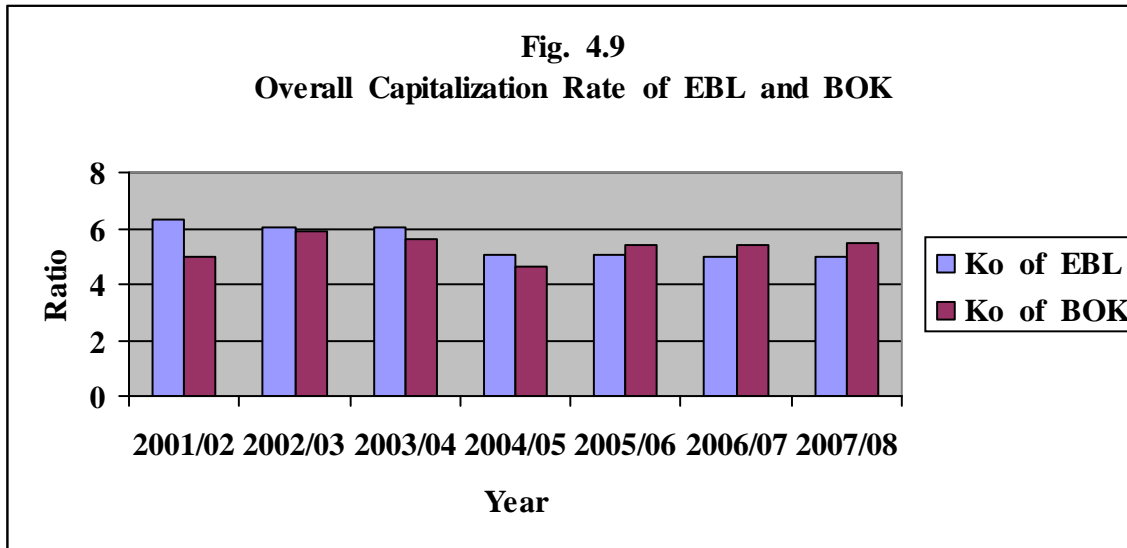
(in million)

Fiscal Year	EBIT	V	K_o	Change%
2001/02	384.39	6049.41	6.35	-
2002/03	443.55	7307.76	6.07	-0.28
2003/04	527.52	8744.20	6.03	-0.04
2004/05	552.27	10930.31	5.05	-0.98
2005/06	746.91	14765.25	5.06	0.01
2006/07	971.88	19387.77	5.01	-0.05
2007/08	1291.31	25897.30	4.98	-0.03
Average			5.51	

Table 4.9.2
Capital Structure of BOK

(in million)

Fiscal Year	EBIT	V	K_o	Change%
2001/02	311.7	6223.00	5.01	-
2002/03	398.85	6750.13	5.91	0.90
2003/04	470.94	8392.74	5.61	-0.30
2004/05	445.93	9663.74	4.61	-1.00
2005/06	609.36	11324.70	5.38	0.77
2006/07	722.59	13383.30	5.40	0.02
2007/08	945.44	17176.10	5.50	0.10
Average			5.35	



EBL's overall capitalization rate are 6.35, 6.07, 6.03, 5.05, 5.06, 5.01 and 4.98 in fiscal year 2001/02, 2002/03, 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. Whereas BOK's overall capitalization rate are 5.01, 5.91, 5.61, 4.61, 5.38, 5.4 and 5.5 in fiscal year 2001/02, 2002/03, 2003/04, 2004/05, 2005/06, 2006/07 and 2007/08 respectively. The overall capitalization rate of both the banks are closer to each other in average i.e 5.51 and 5.35 respectively.

4.10 Analysis of Capital Structure Under Net Operating Income (NOI) Approach

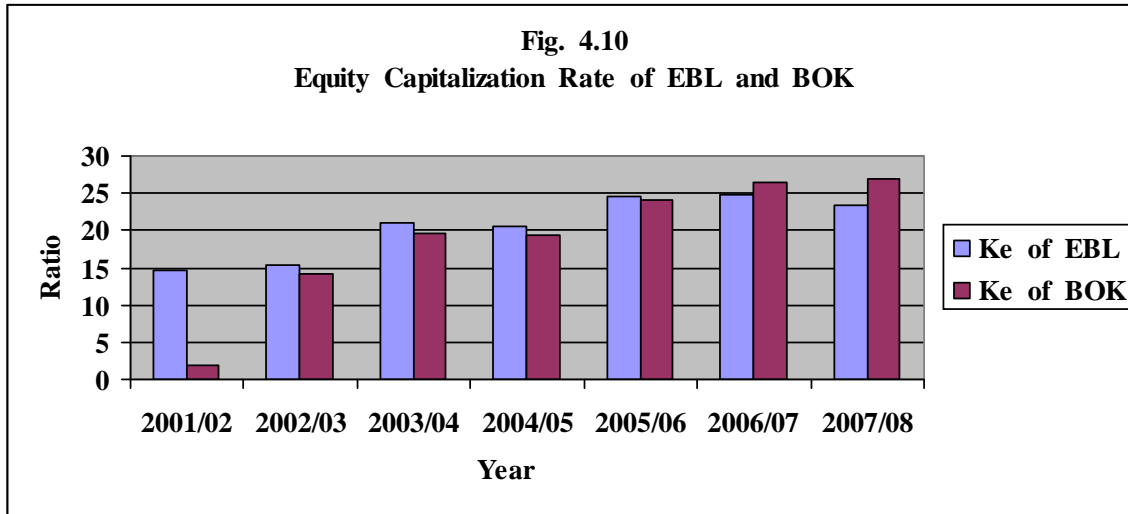
Net operating income approach is an irrelevant theory of capital structure. This theory assumes that the capital structure is irrelevant to the value of firm and the overall cost of capital. Under this approach, net operating income is capitalized at an overall capitalization rate to obtain the total market value of the firm.

Table 4.10.1
Net Operating Approach Rate of EBL
(in million)

Fiscal Year	EAT	S	K_e	Change%
2001/02	85.30	582.80	14.64	-
2002/03	94.20	612.80	15.37	0.73
2003/04	143.60	680.30	21.11	5.74
2004/05	170.80	832.62	20.51	-0.60
2005/06	237.20	962.81	24.64	4.13
2006/07	296.40	1201.50	24.70	0.06
2007/08	451.20	1921.20	23.50	-1.20
Average			20.64	

Table 4.10.2
Net Operating Approach Rate of BOK
(in million)

Fiscal Year	EAT	S	K_e	Change%
2001/02	9.10	500.00	1.82	-
2002/03	82.13	579.13	14.18	12.36
2003/04	127.47	650.74	19.59	5.41
2004/05	139.53	720.74	19.36	-0.23
2005/06	202.44	839.73	24.11	4.75
2006/07	262.39	993.27	26.42	2.31
2007/08	361.50	1342.07	26.94	0.52
Average			18.92	



EBL has average equity capitalization rate of 20.64%. Its equity capitalization rate over seven fiscal year are 14.64%, 15.37%, 21.11%, 20.51%, 24.64%, 24.7% and 23.5% respectively. Similarly, average equity capitalization rate of BOK is 15.812%. Its equity capitalization rate are 1.82%, 14.18%, 19.59%, 19.36%, 24.11%, 26.42% and 26.94% in fiscal year 2001/02, 2002/03, 2003/04, 2004/05,, 2005/06, 2006/07 and 2007/08 respectively. EBL has highest K_e than BOK which means that BOK has poor profitability position than EBL.

4.11 Correlation Coefficient Between EBIT and Interest

The relationship between EBIT and interest payment is evaluated in order to measure debt-serving capacity of the banks. It is assumed that there is significant relationship between EBIT and Interest payment. Here, interest payment (X) is dependent variable and EBIT (Y) is independent variable.

Table 4.11

Correlation Coefficient between EBIT and Interest Payment of EBL and BOK

Bank	r	r^2	P.E.	Relationship	Effect
EBL	0.99	0.98	0.01	Positive	Significant
BOK	0.91	0.82	0.04	Positive	Significant

From above calculation, the correlation between interest and EBIT in case of EBL is 0.99 which showed positive relationship and on the other hand the correlation between interest and EBIT is 0.91 in case of BOK. This means that EBL has highest positive relationship than BOK. Considering the probable error (P.E), the value of 'r' is greater than six times of the probable error. Therefore, it is depicted that the value of 'r' in banks is significant, i.e. there is significant relationship between EBIT and interest payment. It shows that the both banks are significantly able to serve their debt.

4.12 Correlation Coefficient Between Overall Capitalization Rate (X) and Debt-Equity Ratio (Y)

Correlation coefficient between Overall Capitalization Rate (X) and Debt-Equity Ratio (Y) in terms of total debt to net worth is calculated in order to measure whether increase in the debt-equity ratio decreases overall capitalization rate of the banks.

Table 4.12
Correlation Coefficient between K_0 and D/E ratio of EBL and BOK

Bank	r	r^2	P.E.	Relationship	Effect
EBL	-0.81	0.66	0.09	Negative	Insignificant
BOK	-0.52	0.27	0.19	Negative	Insignificant

From the above calculation, correlation coefficient between overall capitalization rate and debt-equity ratio of EBL and BOK are -0.81 and -0.52 respectively, which indicate highly negative relationship. The probable error of EBL and BOK is 0.09 and 0.19 respectively, which clarifies that the relationship between overall capitalization rate and debt-equity ratio is insignificant because the 'r' is less than P.E.

Hence, it can be concluded that the value of 'r' is insignificant and there is no proper relationship between overall capitalization rate and debt-equity ratio on both the banks i.e. EBL and BOK.

4.12 Major Finding of the Study

The major finding of the study are:

- J The average Debt-Equity ratio of EBL is 0.123, which indicates that the creditors of EBL has 12.3% claims on the total assets. The Debt-Equity ratio of first three year is lower than the average which implies that the claim of owners is higher than the creditors. Similarly., the average Debt-equity ratio of BOK is 0.118, which indicates that the claim of creditors is 11.80% higher than the owners of the bank in the total assets.
- J The average Interest Coverage ratio of EBL is 1.75 and of BOK is 1.77, which shows that both the banks are able to pay the interest amount.
- J The comparative position of Return on Total Assets of the two commercial banks shows an average of 1.40 for EBL. The overall trend is fluctuating. However the year 2007/08 shows the highest return i.e. 1.7. Similarly for BOK, the return is 1.36. Here, the overall trend is increasing. The return is lowest in 2001/02 i.e. 0.15 and highest in 2007/08 i.e. 2.04 . This shows that profitability position of BOK is slightly higher than EBL.
- J The return on Shareholder's Equity of EBL is fluctuating over the period of seven years. The average ratio is 20.60%. The data indicates that EBL has instable return. Similarly, BOK has increasing trend. The average ratio is 18.90%. By analyzing the average return, it can be concluded that the return earned by the shareholder's equity of EBL is higher than that of BOK.
- J Earning per share of an organization shows how much earning theoretically belongs to the ordinary shareholders. The average EPS of EBL is Rs.56.52. Similarly, the average EPS of BOK is Rs.32.06. Among these two banks EBL has the highest EPS than BOK.

-) The average DPS of EBL is Rs.13.57. Similarly, BOK shows an Average DPS is Rs.11.44. This implies that EBL has paid the highest dividend.
-) The NI approach implies that proportion of higher leverage consequently increases the value of the firm. The approach is well acquainted with this study as the value of the banks are increased in accordance to the increasing portion of the leverage. The K_o of both banks is positive.
-) When the company employs debt or other fund carrying fixed charges in the capital structure, financial leverage exist. From the degree of Financial Leverage, it can be concluded that EBL has moderate financial risk. BOK is bearing high financial risk because the average DFL of BOK is higher than EBL.
-) The Correlation Coefficient between EBIT and Interest payment of EBL is 0.99, which implies that there is positive correlation. The P.E of EBL is 0.01, which is less than correlation coefficient (r). According to this P.E., the relationship between EBIT and Interest payment is significant. Similarly, the Correlation Coefficient between EBIT and Interest payment of BOK is 0.91. The P.E of respected correlation is 0.04, which indicates that the value of r is significant.
-) The Correlation Coefficient between K_o and D/E ratio of EBL is -0.81 and P.E is 0.09, which indicates that the correlation is insignificant. In case of BOK also, it has negative correlation of -0.52, which is less than P.E. i.e.0.19. Thus, the correlation is insignificant.

CHAPTER-V

SUMMARY, CONCLUSION & RECOMMENDATION

This is the concluding chapter of the study. This chapter is divided into three parts: Summary, Conclusion, and Recommendations. In this chapter further study are summarized in brief and recommendations are given to improve the financial performance of the banks which are useful not only to bank but also to stakeholders of the banks.

5.1 Summary

Capital structure decision is the choice between debt and equity by an enterprise. The issue of capital structure has generated great interest in finance over the past four and half decades since the path breaking seminal paper by Modigliani and Miller (1958). The capital structure is an initial factor of the company which holds a strong role for the beginning leading to success. However, the issue of capital structure is still a matter of controversy in the literature of finance.

To analyze the capital structure of the commercial banks, in this study two commercial banks have been taken. To make the study reliable, it has been divided into five chapter. This study is made to evaluate the capital structure of the commercial banks with reference to the sample banks. The main objective of this study is to evaluate and analyze the capital structure ratio of the sample commercial banks. To make the study simple and realistic, various types of journal, books and previous thesis related with it are taken. In this study, mainly secondary data are used. Seven yrs. data of the concerned commercial banks are taken which are analyzed by using statistical and financial tools. This research package has been divided into five chapters as Introduction, Review of Literature, Research Methodology, Presentation and analysis of data and summary, conclusion and recommendation.

The first chapter comprises the framework of the study as well as the brief introduction of selected commercial banks. The second chapter deals with the review of issues related with abstracts of capital structure. In the third chapter, research methodology has been explained for the purpose of this study. The possible valid used of ratios and mechanics, financial tools and statistical tools and technique are briefly reviewed in this chapter. Fourth chapter consists of analytical framework of data that is considered as the important part revealing the performance of selected bank. Lastly, Summary, Conclusion and Recommendation of the study are presented separately to understand instantly about the whole study.

5.2 Conclusion

The growth and increasing integration of the world economic has been paralleled by expansion of global banking activities. Nepal, through a developing country, couldn't deny the fact that the commercial bank has running potentiality, which is responded by extending loans and developing new, highly innovative financial techniques. On the basis of entire research study, some conclusion has been deducted. This study particularly deals with conclusion about " A study on Capital Structure of selected Commercial banks writhe respect to Everest Bank Ltd. and Bank of Kathmandu Ltd."

The average Debt-Equity ratio of EBL is higher than BOK which implies that the claim of creditors of EBL is higher than that of BOK. The ICR shows that all banks are able in paying interest. Both the banks are operating efficiently in terms of ICR. The average degree of financial leverage of BOK is higher than EBL which indicates the higher degree of financial risk of BOK then EBL.

ROA shows the relationship between net return of firm and total assets. The profit is able to cover the total assets is shown in this ratio. The average ROA of EBL is slightly higher than BOK. So, it is concluded that EBL is able to utilize its overall assets in efficient way than BOK The ROE ratio has great impact to show

the realities performance and strength of the bank in attractive future investment. The average ROE of EBL is higher than BOK which shows that EBL has been able to utilize the shareholder's equity in efficient way than BOK.

EPS of EBL is higher than BOK. In those regard, public would be attracted to buy the share. So, bank are suggested to collect fund through issuing share. DPS is evaluated to know the share of dividend that the shareholders receive in relation to the paid of value of share. The average DPS of EBL is higher than BOK which implies that EBL is able to paid highest dividend than BOK.

5.3 Recommendation

In this section of the study, after having an overall analysis of capital structure management of commercial banks following recommendation is made which would be helpful in taking prompt and appropriate decision about capital structure.

-) The proportion of debt and equity capital should be decided keeping in mind the efforts of tax advantage and financial distress. The banks, when in difficult to pay interest and principal, ultimately lead to liquidation or bankruptcy. Thus, banks are recommended to reduce the high use of debt capital.
-) Interest coverage ratio indicates that the companies are able to meet the claim of debtors. Thus, it is recommended to minimize financial and other expense and can increase return by using less cost of debt, improving strategy of promotion activities etc.
-) Shareholders seek high return from their investment. Observing ROE it has been found that EBL has the highest and BOK has the lowest ratio . Thus, it is recommended all the organization to plan their capital structure well by analyzing the possible financial alternatives.

-) DPR should be determined considering the shareholder's expectation and the growth requirement of the banks. A higher payout attracts both the existing and potential investors leading to increase in market price of the share, which consequently leads to the strengthened financing capability. Hence, the banks are recommended to maintain consistent DPR.

-) Regular analysis and evaluation of capital structure will help to possible alternatives and avenues reap benefits. Thus, it is recommended to do so by keep in mind that the theories of capital structure are helpful in talking correct decision.

-) Many of the Nepalese banks have concentrated only in big businessmen and industrialists. Thus, it is recommended to open their doors for small depositors and entrepreneurs also.

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Appendix I

Calculation of Correlation Coefficient between EBIT and Interest Payment of EBL

Year	Interest (X)	EBIT (Y)	$\bar{x} = X - \bar{X}$	$\bar{y} = Y - \bar{Y}$	xy	x^2	y^2
2001/02	257.05	384.39	-133.21	-318.15	42380.80	17744.14	101223.98
2002/03	307.64	443.55	-82.62	-258.99	21397.60	6825.59	67079.52
2003/04	316.37	527.52	-73.89	-175.03	12932.25	5459.31	30634.50
2004/05	299.56	552.27	-90.70	-150.28	13629.71	8225.97	22583.22
2005/06	401.4	746.91	11.14	44.36	494.33	124.16	1968.06
2006/07	517.17	971.88	126.91	269.33	34181.80	16106.87	72540.19
2007/08	632.61	1291.31	242.35	588.76	142688.36	58734.91	346641.70
Total	2731.8	4917.83	0	0	267704.86	113220.96	642671.16

$$\bar{X} = \frac{X}{n} = \frac{2731.8}{7} = 390.2571429$$

$$\bar{Y} = \frac{y}{n} = \frac{4917.83}{7} = 702.5471429$$

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}} = \frac{267704.86}{\sqrt{113220.96} \sqrt{642671.16}} = 0.99 \quad r^2 = 0.98$$

$$P.E. = 0.6745 \frac{\sqrt{Zr^2A}}{\sqrt{n}} = 0.01$$

Calculation of Correlation Coefficient between EBIT and Interest Payment of BOK

Year	Interest (X)	EBIT (Y)	$\bar{x} = X - \bar{X}$	$\bar{y} = Y - \bar{Y}$	xy	x²	y²
2001/02	285.01	311.70	-22.78	-246.13	5606.84	518.92	60579.97
2002/03	276.71	398.85	-31.08	-158.98	4941.09	965.96	25274.64
2003/04	286.30	470.94	-21.49	-86.89	1867.26	461.82	7549.87
2004/05	241.64	445.93	-66.15	-111.9	7402.18	4375.82	12521.61
2005/06	308.15	609.36	0.36	51.53	18.55	0.12	2655.34
2006/07	339.18	722.59	31.39	164.76	5171.81	985.33	27145.85
007/08	417.54	945.44	109.75	387.61	42540.19	12045.06	150241.51
Total	2154.53	3904.81	0	0	67547.95	19353.06	285968.81

$$\bar{X} = \frac{\sum X}{n} = \frac{2154.53}{7} = 307.79$$

$$\bar{Y} = \frac{\sum y}{n} = \frac{3904.81}{7} = 557.83$$

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{67547.95}{\sqrt{19353.0616} \sqrt{285968.81}} = 0.91 \quad r^2 = 0.82$$

$$P.E. = 0.6745 \frac{\sum Zr^2 A}{\sqrt{n}} = 0.04$$

Appendix II

Calculation of Correlation Coefficient Between Overall Capitalization Rate (X) and Debt-Equity Ratio (Y) of EBL

Year	K _o (X)	D/E ratio (Y)	$\bar{x} = X - \bar{X}$	$\bar{y} = Y - \bar{Y}$	xy	x ²	y ²
2001/02	6.35	9.40	0.84	-2.92	-2.46	0.71	8.55
2002/03	6.07	10.93	0.56	-1.39	-0.78	0.31	1.94
2003/04	6.03	11.85	0.52	-0.47	-0.24	0.27	0.22
2004/05	5.05	12.13	-0.45	-0.19	0.08	0.20	0.03
2005/06	5.06	14.33	-0.44	2.00	-0.89	0.19	4.01
2006/07	5.01	15.14	-0.49	2.81	-1.39	0.24	7.92
2007/08	4.98	12.50	-0.52	0.17	-0.09	0.27	0.03
Total	38.55	86.28	0	0	-5.79	2.23	22.74

$$\bar{X} = \frac{X}{n} = \frac{38.55}{7} = 5.507142857$$

$$\bar{Y} = \frac{Y}{n} = \frac{86.28}{7} = 12.32571429$$

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{Z5.7980}{\sqrt{2.2345} \sqrt{22.7402}} = -0.81 \quad r^2 = 0.66$$

$$P.E = 0.6745 \frac{\sum Zr^2A}{\sqrt{n}} = 0.09$$

**Calculation of Correlation Coefficient Between Overall Capitalization Rate (X)
and Debt-Equity Ratio (Y) of BOK**

Year	K _o (X)	D/E ratio (Y)	x=X- \bar{X}	y=Y- \bar{Y}	xy	x ²	y ²
2001/02	5.01	11.45	-0.33	-0.43	0.14	0.11	0.18
2002/03	5.91	10.65	0.56	-1.23	-0.69	0.31	1.51
2003/04	5.61	11.90	0.26	0.01	0.00	0.06	0.00
2004/05	4.61	12.41	-0.73	0.52	-0.38	0.54	0.27
2005/06	5.38	12.50	0.03	0.61	0.02	0.00	0.38
2006/07	5.40	12.47	0.05	0.58	0.03	0.00	0.34
2007/08	5.50	11.80	0.15	-0.08	-0.01	0.02	0.00
Total	37.42	83.18	0	0	-0.89	1.07	2.71

$$\bar{X} = \frac{X}{n} = \frac{37.42}{7} = 5.345714286$$

$$\bar{Y} = \frac{Y}{n} = \frac{83.18}{7} = 11.88285714$$

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{0.8934}{\sqrt{1.0702} \sqrt{2.7180}} = -0.52 \quad r^2 = 0.27$$

$$P.E. = 0.6745 \frac{\sum Zr^2A}{\sqrt{n}} = 0.19$$