

CHAPTER-1

INTRODUCTION

1.1 Background of the Study

Globalization of economy and market, present world economy has been more competitive and complicated. Every sort of change occurring in one sector of the world affects the other. A healthy economy is dependent on efficient transfers of fund from people who are not severs to firms and individuals who need capital. Without efficient transfer, the economy simply impossible, without good system for allocating capital within the economy.

Nepal is a landlocked country economically based on agriculture. The geographical variation has been standing as a challenge for development of the country. About more than 80% people are dependent on agriculture traditional agriculture system is used till now. The current situation of Nepalese economy is not satisfactory due to poor infrastructure, unutilized natural resources miserable agriculture, deficit trade, illiteracy, political instability and so on.

Like blood is necessary for human beings, finance is for business organizations and industries. Each and every business organization should base their decision making in financial management. Financial management is mainly concerned with the acquisition and utilization of funds. For this, financial market plays vital role in utilizing financial resources for expanding productive sectors in the country. It mobilizes unproductive and unutilized financial resources towards productive sectors and helps in expanding economic growth of the country.

Capital structure plays a vital role in accelerating the economic growth of nation, which in turns in 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. In order to collect the enough saving and put them into productive channels, financial institution like banks is necessary. It will either be diverted abroad or used for unproductive consumption or speculative activities.

Banks are among the most important financial institutions in the economy of the country. Bank is a business establishment that safeguards people's money and uses it to make loans and investments. A bank is an organization concerned with the accumulation of the idle money of the general public for the purpose of advancing to others for expenditure or investment. A bank is the institution, which accepts deposits from the public and in turn advances loans by creating credit.

Banks are the institutions that provide the funding required starting the business to those with skills and desire to operate the business collecting from those with the money but no skill or time to operate the business. Bank is a resource of mobilizing institution, which accepts deposit from various sources, and invests such accumulated resources in the fields of agriculture, commerce, trade and industry.

In other words, banks are the institutions offering deposits subject to withdrawal on demand and making loans of a business nature. Banks offers wide range of financial services like credit, savings, payments services etc.

Commercial Banks

Commercial banks means a bank which operates currency exchanges transactions, accept deposits, provides loan performs dealing relating to commerce except the banks which have been specified for the cooperative, agriculture, industry or other similar specific objectives. There are 32 commercial banks in Nepal.

1.2 History of Bank

When, where and how the modern banking actually came in existence cannot be pointed out. But from the different historical facts it reveals that some banking activities have been carried out since the time immemorial. At that time merchants, money lenders, goldsmiths, etc performed the banking transactions. Latter the transactions started increasing and they became the activities of money exchange securing the valuable goods, deposit money, lending money and so on. For all these types of activities written receipts began to be used and the modern banking started. In the historic age sources say that goldsmiths and money lenders contributed to large extent in the growth of banking system. They used to store peoples gold charging nominal charges issued receipts to the depositors, which was good for payments. Latter they started advancing money charging interest on it. So the goldsmiths and money lenders started performing the functions of modern banking i.e. accepting deposits and advancing loans. However, the modern banking originated in Italy. The word bank was derived from the Italian word “Banco” which means accumulation of money or stock. Bank as an institution was originated from Italy. The bank of Venice which was established in 1157 A.D was the first bank in the history of banking and it was established to finance the monarch in the wars. The Bank of Barcelona Spain which was established in 1404A.D. was the second bank in the World and then. The Bank of Genoa was set up in 1407 AD.

The first central bank though was the bank of England which was established in 1844 A.D. Banking has come to the present advanced form through various stages. Some sorts of banking activities have been carried out since the time immemorial. Traditional forms of banking were traced during the civilization of Greek, Rome and Mesopotamia. With large banking firms established in Florence, Rome, Venice and other Italian cities the banking activities spread through out the Europe and it slowly spread through out the world.

1.3 Banking Industry in Nepal

The specific date of beginning of money and banking transaction in Nepal is unknown. The banking functions were carried out in unorganized sectors. It is found that minted coins, copper coins, silver coins, and gold coins were introduced by different kings.

Institutional development of modern banking in Nepal had begun from early 1990s. With the establishment of Nepal Bank Limited in 1994 B.S, the new era of banking sector had started in Nepal. As a central bank, Nepal Rastra Bank was established in 2013 B.S. under the provision of Nepal Rastra Bank Act 2012, with the objectives of helping in the development of monetary and financial sector by undertaking various functions.

Another step was added when Rastriya Banijya Bank was established in 1966(2022BS) under the Banijya Bank Act 1965(2021BS). Likewise, Agriculture Development Bank was established in 1965(2024BS) with the objective of increasing the life standard of those people who are involved in agriculture.

The banks opened before the decade of 1980s were by the government. No private sector was permitted to open banks in Nepal. The process of development adopted liberalized economic policies to develop the financial sector. As a pre-condition to economic liberalization, the Foreign Investment and Technology Transfer Act, 1981 came into existence. The government allowed private sectors to open banks. Joint venture projects were also allowed. Many joint venture commercial banks and financial institutions were established. As a result, Nepal Arab Bank Limited was established as a first joint venture commercial bank in 1985 under the provision of Commercial Bank Act, 1974 and Company Act 1965. Then, Nepal Indosuez Bank Limited was established in 1985 and Nepal Grindlays Bank Limited in 1986. In 2001, the name of Nepal Grindlays Bank Limited has been changed into Standard Chartered Bank Nepal Limited and Nepal Indosiez Bank Limited has been changed into Nepal Investment Bank in 2002, which has not foreign share now. After the restoration of multiparty democracy, the newly formed government adopted liberalized policies aimed at accelerating economic growth and considerably reducing state interference in business. The governments encouraged foreign and private investment by offering attractive incentives and facilities including

100% foreign ownership in all but few sectors. This help to create conducive business environment for banking. As a result, additional commercial banks came into existence. When the internal violence shows green signal to manage and Nepal Rastra Bank make ease for rules and regulations, many new commercial banks are coming existence and existing development banks and financial institutions are upgrading them as commercial banks. At present there are 32 commercial banks registered and operated in Nepal.

1.4 Function of Commercial Banks

-) The main functions of commercial banks include:
-) accepting deposits in the forms of current,
-) saving and fixed deposits, providing short, medium and long term loans,
-) acting as an agency in transfer of money, make payment on commission basis for the cheque, draft, bill of exchange etc. by the customer,
-) buying and selling shares and debentures of any company and government bonds
-) collecting interests on debenture and government bonds, dividend on shares and funds from other banks for its customers
-) making payments on insurance premium, rent, income tax, school fees, telephone bills to the concerned offices on behalf of customers
-) carrying out the foreign currency exchange, and
-) Helping in foreign trade etc.

Moreover, other functions include: to protect the precious jewelleries to provide travelers cheque, to underwrite the debentures; to issue credit card, debit card, master card, visa card etc.; to create credit on the specific basis and expand credit and so on

1.5 PROFILE OF THE CONCERNTRATED BANKS

Nepal SBI Bank Ltd.

Under commercial bank act 1974, Nepal SBI Bank Ltd. Was established in 7thjuly 1993AD (2050) is a joint venture of state bank of India and Nepalese investors, managed by state band of India through a team of managerial staff including the managing directors deputed under the technical services agreement. The managing director works under the general supervision of board of directors.

Nepal SBI bank provides various services concerned with deposits, remittances, loans and advances, sales and encasements of foreign currencies, travelers check etc.

The objective of Nepal SBI bank is to provide a wide range of international banking services to facilities Nepal's trade and tourists and to serve its clients. Offering reliable cost and development banking service in Nepal. The mission of Nepal SBI bank is to play an important role in facilitating Indo-Nepal trade which is growing with the support of large network of branches of SBI in India.

Its share subscription is given as: –

Subscription	% Holding
State Bank of India	50%
Nepalese public	30%
Employ provident fund	15%
Agriculture Development Bank	5%

The present capital structure of the bank is given below:-

Share structure	Amount (In Rs)
Authorized capital	2000000000
Issued capital	1869303258
Paid up capital	1869303258

Everest Bank Ltd.

Everest Bank Ltd. was registered under the company act 1964 and started banking transaction in 19th Nov. 1993(2049\09\03) and started banking transition in 18thOct.1994AD (2051\07\01) is a joint venture of Panjab National Bank, local promoters and general public. Panjab National Bank is one of the largest commercial bank in India having over 3700 branches and more than 300 foreign correspondents around the globe. PNB has a century old tradition of successful banking and is known for its financial strength and will laid down modern banking system and procedures. PBN is providing the top management service to EBL under a technical services agreement signed between the two institutions.

The main purpose of EBL is to extend professional banking services to various sectors of the society and thereby contributing in the economic development of the country. It provides cumulative deposit scheme, remittances, ATM facilities, and facilities of NRN, require deposit plan, TT, LOC, drawing arrangement, SWIFT transfer, foreign exchange, international trade and bank guarantees, merchant banking.

The ownership of EBL is composed as:-

Subscription	% Holding
Punjab National Bank	20%
Nepalese promoters	50%
General public	30%

Present capital structure of the bank is presented below:-

Share structure	Amounts (in Rs)
Authorized capital	2000000000
Issued capital	1281406500
Paid up capital	1279609490

Bank of Katmandu Ltd.

Incorporated in 1993, in collaboration with SIAM commercial bank of Thailand, BOKL started operation 12th march 1995(2051\11\28) With the share capital of 45% of the local promoters,30%of Siam Commercial Bank of Thailand and 25%of the General public. But the share pattern has already changed and the Nepalese promoters and general public hold 97.70% and financial institutions hold 2.07% and some companies are holding .23%.

BOKL is committed to delivering quality services to customer, general goal return to share holders, providing attractive incentives to employees and serving the community through stronger corporate social responsibility end ever. It has today become a land mark in the Nepalese banking sector by entirely managed by Nepalese professionals and owned by the general public.

Its share subscription is given below:-

Subscription	% Holding
Local promoters and general public	97.70%
Financial institution holds	2.07%
Some other companies	0.23%

The present capital structure of BOKL is shown below:-

Share structure	Amounts (in Rs)
Authorized capital	2,000,000,000
Issued capital	1,359,480,700
Paid up capital	1,359,480,700

Himalayan Bank Ltd.

Himalayan Bank was established on 18th January 1993AD (2049) with the collaboration of Habib Bank of Pakistan, Nepalese promoters and general public. It is established to maintain the economic welfare of the general people to facilitate loan for agriculture,

industry and commerce to provide the banking service to the country and the people. It is the first joint venture bank having domestic ownership more than 51%. Himalayan bank is the first bank who introduced ATM service first time in Nepal.

The ownership of HBL is composed as:-

Subscription	% Holding
The founder stockholder own	51%
Habib Bank of Pakistan	20%
Karmachari sanchaya kosh	14%
General public	15%

The capital structure of the HBL is presented below:-

Share structure	Amounts(in Rs)
Authorized capital	3000000000
Issued capital	2000000000
Paid up capital	2000000000

1.6 Capital Structure of Commercial Banks

Every business firm or Bank requires the initial funds for its sound operation. Capital is the blood of the business. A business firm or enterprises cannot run their business without capital. 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 operation smoothly.

The fund required are generated usually by two means: equity and debt, equity provides the ownership of the firm to the shareholders. On the other hand, debt is a fund borrowed with fixed charges to be paid periodically to the debtor, the term capital structure refers to the proportion of debt and equity capital or the composition of long term sources of finance, such as preference capital debentures, long term debt and equity capital including services and surpluses (i.e. retained earning and excluding short term debts.)

The term capital structure refers to the mix of different types of funds a company uses to finance its activities. Capital structure varies greatly from one company to another. For example, some companies are financed mainly by shareholders funds whereas others make much greater use of borrowings.

Firstly, we must decide what we mean by a good capital structure. This would be a capital structure, which results in a low overall cost of capital for the company, that is, a low overall rate of return that needs to be paid on funds provided. If the cost of capital is low, then the discounted value of future cash flows generated by the company is high resulting in a high overall company value. The objective is therefore to find the capital structure that gives the lowest overall cost of capital and consequently, the highest company value.

The capital structure decision affects the total value of the firm. The proper balance between debt and equity is necessary to ensure a trade off between risk and return to the shareholders. The capital structure of the bank should be such that leads to the value maximization. The optimal capital structure, i.e. the capital structure with reasonable proportion of debt and equity minimizes the opportunity cost of capital and maximizes the shareholders' wealth.

1.7 Focus of the study

As we have stated above the meaning and importance of the capital structure of financial institution. The main purpose of this study is to evaluate the capital structure of the private banks. The capital structure decision is a major decision, which affects the overall cost of capital, total value of the firm and earning per share.

This study is based upon the study of overall cost of capital structure by using various relative measurement tools. It considered earning per share, dividend per share, return on total assets etc. Optimal capital structure plays vital role in every organization. So, this study tries to evaluate the optimality of their capital structure using various financial variables for the purpose of comparative evaluation.

Hence the focus of this study mainly deals with the effects of the capital structure on the growth of the firm and the extent to which the capital structure policy is followed by the commercial banks.

1.8 Statement of the problems

Bank plays a significant role in the economic development of the country by extending credit to the people. Although banking industry in Nepal is making remarkable progress and growth. It's not without the problems. At the present context, the main problem faced by the business sector as well as bank is the unstable political and economic condition of the country.

Another problem faced by the banking industry is the lack of optimal capital structure in the commercial banks. The success and prosperity of a bank relies heavily on maximization of the wealth of the shareholders or return on equity. Nepalese banks do not take the capital structure concept seriously. The combination of debt and equity used in the capital structure is not proportionate which in turn affects the value maximization of the bank

The present study will try to analyze and examine the practice of capital structure in the commercial banks in Nepal. This study specially deals with the following problems.

-) Whether the capital structure affects the growth of a bank or not?
-) To what extent the capital structure policy is followed by the commercial banks.
-) What are the main problems faced by the commercial banks in developing and implementing the capital structure policy.

Therefore this study deals with the problems in terms of capital structure formation and its overall effects and its difficulties in implementation and after its implementation.

1.9 Objectives of the study

The main objective of the study is to analyze the behavior of the capital structure of the selected commercial banks. The study involves 5 yrs financial data of four commercial

banks to evaluate, compare and examine their capital structure. The main objectives of selected commercial banks are given below:

-) To study and evaluate the role of capital structure on the growth of the commercial banks in Nepal.
-) To analyze the capital structure of the commercial banks in Nepal.
-) To examine the relationship of capital structure with variables such as earning per share, dividend per share and net worth.
-) To provide suggestions on the basis of findings for future growth of the banks under study.

1.10 Significance of the study

First of all, it is the fact that this study is undertaken to apply the theoretical concept and knowledge of Financial Management to the practical aspect as a partial fulfillment of the requirement of Master of Business Study (MBS) under faculty of Management, Tribhuvan University. This study would contribute an overall look at the coming up new capital policies to be taken by the bank and the factors that should be taken in consideration while preparing the next year's policy. The bank which would be included in as sample would likely see the point of their weakness and significance of this study on their future plan.

This study is also important for owners, creditors and potential investors to make their attitude on investment. The study will also have significance for management, policy maker, stakeholder of the banks and others those having investment on capital structure decision.

The main significance of the study is:

-) It will be valuable property for the library use.
-) The study will be used as a pilot work for the future research.
-) It will be helpful to other Commercial Banks and others.

1.11 Limitations of the study

Each study is conducted under some constraints and limitations. Likewise this study is also limited by some common constraints. This study is prepared for partial fulfillment of MBS degree which has to be finished within a short span of time and under different strains. Some of the basic limitations are as follows:

-) This study is based on secondary data.
-) It covers data of only five fiscal years.
-) Only factors considering capital structure are taken into consideration.
-) Only four banks are taken as the sample for the study among whole population.

1.12 Organization of the study

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

Chapter-I

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

Chapter-II

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

Chapter- III

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

Chapter- IV

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

Chapter-V

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

CHAPTER-2

REVIEW OF LITERATURE

2.1 Introduction

Scientific research must be based on a past knowledge. The previous studies cannot be ignored because they provide the foundation to the present study. The purpose of literature review is thus to find out what research studies have been conducted in one;s chosen field of study and what remains to be done(Wolff and Pant;2005:30)

The purpose of literature review is thus is find out what research studies have been conducted in ones field of study, and what remains to be done. Review of literature provides foundation to the study. The literature survey also minimizes the risk of pursuing the dead end in research. To make meaningful research study conceptual review has been done through the study of various books, journals and articles and researches conducted by the previous researches in the field of capital structure ie research work, thesis and dissertation etc. so, this chapter ‘literature review’ has been divided into the following sections.

-) Review of Books
-) Review of Journals
-) Review of Article
-) Review of Thesis

2.2 Review of Books

In this section, various books are reviewed that are written by the different writers that make clear about the conceptual foundation of capital structure. It helps to assess new idea by examining views of different writers and scholars.

2.2.1 Conceptual Framework

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

The financial manager is concerned with determining the best financial mix or capital structure where the optimal financing mix would exist, in which market price per share could be maximized. (Pandey, 1988:203)

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

Capital structure analysis is the basis for analyzing the usefulness of accumulation from different sources of capital composition of capital is another factor, which affects the profitability. Loan capital dominant enterprises have less chance for prosperity despite of their huge profits. (Kuchhal, 1961:525)

Sound capital structure is required to operate Business smoothly and achieve the business goal. Capital structure is concerned with analyzing the capital composition of the company. (Weston & Brigham, 1978:555)

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

2.2.2 Theories of Capital Structure

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

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

Basically, the theories of capital structure are distinguished into 6 different groups.

-) Traditional theory
-) Modigliani - Miller theorem
-) Trade off theory

-) Free Cash Flow theory
-) Pecking Order theory
-) Stakeholder theory

2.2.2.1. Traditional Theory

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

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

2.2.2.2 Modigliani - Miller Theorem

The next theory is the most important theory, although it is not a realistic theory. The Modigliani -Miller theorem states that if the capital structure decision has no effect on the cash flows generated by a firm, the decision also will have no effect - in absence of transaction costs - on the total value of the firm's debt and equity. This means that there is no relationship between a firm's market value and the capital structure. Profitability of a firm's activities is the only factor that determines the market value.

This theory is based on a perfect capital market. The only market imperfections they admit are corporate taxes. In short, the assumptions of the Modigliani - miller theorem are (JC van Horne, 1995):

1. Capital markets are perfect
 -) Information is free of costs and widely available.
 -) No transaction cost.
 -) Investors behave rational.
2. Every firm has perpetual flows of money with equal time values
3. Companies can be divided in homogeneous risk classes

4. There are no taxes.

2.2.2.3 Trade off Theory

The third theory is called the (static) trade off theory. The trade off between the costs and returns of debt financing determines the optimum debt ratio. Firms consider this ratio as a target debt ratio, because this ratio will maximize the market value of a corporation. Myers assumes that firms need to adapt their capital structure to reach that ratio. But an adaptation of the capital structure needs time and costs money. Therefore, it is possible that present temporary debt ratios differ from the target ratios.

Or, as Myers formulated it:

"A static trade off framework, in which the firm is viewed as setting a target debt-to-value ratio and moving gradually towards to it, in much the same way that a firm adjusts dividends to move towards a target payout ratio" (Myers, 1984:576)

2.2.2.4 Free Cash Flow Theory

In the contrary of the trade off theory, in which a firm strives after a maximization of the market value, the free cash flow theory presumes that there are enormous conflicts of interest between shareholders and stakeholders. This implies that manager's decisions don't always maximize the market value of the firm (Jensen, 1986:324)

A free cash flow is the balance of money, when all projects (with positive net present values) are financed. Debt reduces the agency costs of free cash flow by reducing the cash flow available for spending at the discretion of managers (Jensen, 1986:324). Debt also reduces the freedom of decisions, because of firm is forced to pay at certain times interest and payoffs. There will always be risk that a firm won't be able to pay interest and payoffs in future times. This risk causes managers to lead and organize a firm more efficient.

2.2.2.5 Pecking Order Theory

Myers also shows another view of capital structure, not the static trade off theory, but also the pecking order theory. This fifth theory assumes that firms have perforations by choosing a way to finance their projects. The sequence of investment resources is restricted by problems caused by asymmetrical information between managers and potential investors. The following assumptions are made by this theory. (Myers, 1984)

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

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

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

Baskin researched the validity of this theory in 1989. He made the following conclusion: The accumulated evidence in favor of the Pecking order hypotheses is now substantial. Now it is possible to provide pecking order behavior with a rational theoretical basis, and there seems no longer any reason to ignore the manifest empirical evidence.

2.2.2.6 Stakeholder Theory

Cornell and Shapiro (1987) assume that not only investors have an interest in a firm. There are different groups of non-investor stakeholders, and some of them have a lot of

influence in the financial policy of a firm. Or, as Cornel and Shapiro wrote: Financial structure may also depend on a firm's net organizational capital and on the nature of its stakeholders. Examples of non-investor stakeholders are customers, employees and suppliers.

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

2.2.3 Approaches to Capital Structure

-) Traditional approach
-) Net income approach
-) Net operating income approach
-) Modigliani-Miller's approach

All the above approaches are based on some common assumptions, which are as follows:

Basic assumptions and definitions: (Weston and Brigham, 1992:741)

-) Only two types of capital are employed, long term debt and common stock.
-) There is no tax on corporate income.
-) The firm's total assets are fixed, but its capital structure can be changed immediately by setting debt to repurchase common stock, or stock to retire debt.
-) All earnings are paid out as dividends.
-) All investors have the same subjective probability distributions of expected future operating earnings (EBIT) for a given firm: that is, investors have homogeneous expectations.
-) The operating earnings of the firm are not expected to grow, that is, the firm's expected EBIT is same in all future periods.
-) The firm's business risk is constant over time and is independent of its capital structure and financial risk
-) The firm is expected to continue indefinitely.

In addition to these assumptions, it uses the following basic definitions and symbols:

S = total market value of the stock. (Equity)

B = total market value of the bonds (Debt)

V = total market value of the firm =S+B

EBIT = earnings before interest and taxed= net operating income (NOI)

I = Interest payments

Debt

$$\text{Cost of Debt (Kd)} \times \frac{\text{Interest}}{\text{Debt}} \times \frac{I}{B}$$

$$\text{Value of Debt (B)} \times \frac{\text{Interest}}{Kd} \times \frac{I}{Kd}$$

Equity or common stock

$$\text{Cost of Equity Capital (Ks)} \times \frac{d1}{P0} \Gamma g$$

where,

$d1$ X Next Dividend

$P0$ X Current price per share

g X Expected Growth Rate

Overall or Weighted Average cost of capital

$$K \times Kd(B/V) \Gamma Ks(S/V) \times \frac{Kd(B)}{B \Gamma S} \Gamma \frac{Ks(S)}{B \Gamma S}$$

The total value of the firm is thus,

$$V \times B \Gamma S \times \frac{I}{Kd} \Gamma \frac{EBIT - I}{Ks}$$

2.2.3.1. Traditional approach

The traditional view of capital structure, which is also known as an Intermediate approach, is a compromise between the Net Income Approach and the Net Operating Income Approach. It states that when a company starts to borrow, the advantages outweigh the disadvantages. The cheap cost of debt, combined with its tax advantage,

will cause the WACC to fall as borrowing increases. However as gearing increases, the effect of financial leverage causes shareholders to increase their required return (i.e., the cost of equity rises). At high gearing the cost of debt also rises because the chance of the company defaulting on the debt is higher (i.e. bankruptcy risk). So at higher gearing, the WACC will increase.

According to this view, the value of firm can be increased or the cost of capital can be reduced by a judicious mix of debt and equity capital, and that an optimum capital structure exists for every firm. This approach very clearly implies that the cost of capital decreases within the reasonable limit of debt and then increases with leverage. Thus, an optimum capital structure exists, and it occurs when the cost of capital is minimum or the value of firm is maximum.

The statement that debt funds are cheaper than equity funds carries the clear implication that the interest rate of debt plus the increased yield on the common stock, together on the weighted basis will be less than yield (cost of equity) which existed on the common stock before debt financing (Barges, Alexander, 1963:11). That is the weighted average cost of capital will decrease with the use of debt up to a limit.

According to the traditional position, the manner in which the overall cost of capital reacts to changes in capital structure can be divided into three stages. (Soloman, Ezra, 1963:94)

First stage: Increasing Value

The first stage starts with the introduction of debt in the firm's capital structure. In this stage, the cost of equity (K_s) either remains constant or rises slightly with debt because of the added financial risk. But it does not increase fast enough to offset the advantage of low cost debt. In other words, the advantage arising out of the use of debt is so large that, even after allowing for higher cost of equity, the benefit of the use of the cheaper sources

of funds are still available. As a result the value of the firm (V) increases as the overall cost of capital falls with increasing leverage.

During this stage cost of debt (K_d) remains constant or rises only modestly. The combined effect of all these will be reflected in increase in market value of the firm and decline in overall cost of capital (K)

Second stage: Optimum value

In the second stage, further application of debt will raise cost of debt and equity capital so sharply as to offset the gains in net income. Hence, the total market value of the firm would remain unchanged. While the firm has reached a certain degree of leverage, increase in it has a negligible effect on the value of the firm or overall cost of capital of the firm. The increase in the degree of leverage increases the cost of equity due to the added financial risk that offsets the advantage of low cost debt. Within the range of such debt level or at a specific point, the value of the firm will be maximum or the cost of capital will be minimum.

Third stage: Declining value

Beyond the acceptable limit of leverage, the value of the firm decreases with the increase of the leverage or the overall cost of capital increases with the additional leverage, this happens because investors perceive a high degree of financial risk, which increases the cost of equity by more than enough to offset the advantage of low cost debt.

The overall effect of these three stages is to suggest that the cost of capital is a function of leverage, i.e. first falling and after reaching minimum point or range it would start rising.

The relation between cost of capital and leverage is graphically shown in figure below.

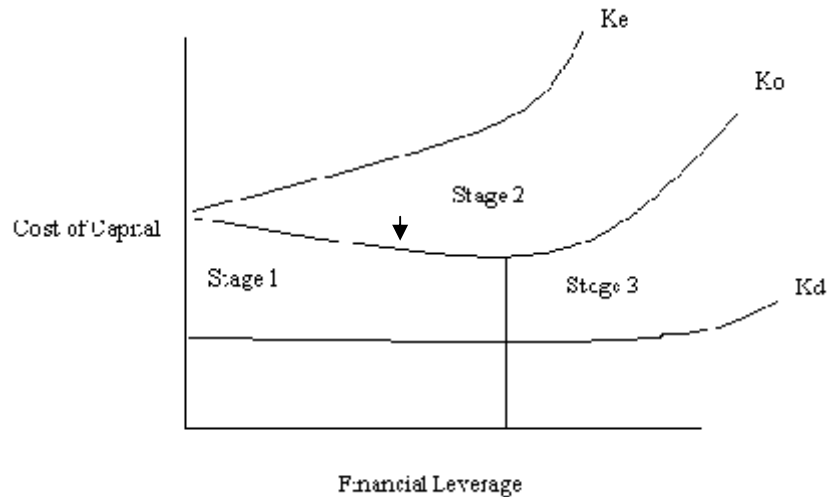


Figure 1:

Effect of leverage on cost of capital under traditional theory

In the above figure, it is assumed that K_s rise at an increasing rate with leverage, whereas K_d is assumed to rise only after significant leverage has occurred. At first, the weighted cost of capital, K declines with leverage because the rise in K_s does not entirely offset the use of cheaper debt funds. As a result, K declines with moderate use of leverage. After a point, however the increase in K_s more than offset the use of cheaper debt funds in the capital structure, and K begins to rise. The rise in K is supported further once K_d begins to rise. The optimal capital structure is point X; thus the traditional position implies that the cost of capital is not independent of capital structure of the firm and that there is an optimal capital structure.

2.2.3.2. Net Income approach

David Durand proposed the Net Income Approach. This approach stated that firm can increase its value or lower the cost of capital by using the debt capital. According to NI approach, there exists positive relationship between capital structure and valuation of firm and change in the pattern of capitalization bring about corresponding change in the overall cost of capital and total value of the firm. Thus with an increase in the ratio of debt to equity, overall cost of capital will decline and market price of equity stock as well as value of firm will rise. (David Durand, 1959:91-116). The converse will hold true if ratio of debt to equity tends to decline. The approach assumes no change in the behavior

of both stockholders and debt holders as to the required rate of return in response to a change in the debt-equity ratio of the firm. They want to invest since debt holders are exposed to lesser degree of risk, assumed of a fixed rate of interest and are given preferential claim over the profit and assets, the debt holders' required rate of return is relatively lower than that of equity holders. So, the debt financing is relatively cheaper than equity. For this reason, at constant cost of equity (K_s) and cost of debt (K_d), the overall cost of capital (K) declines with the increased proportion of the debt in the capital structure. This suggests that higher the level of debt, lower the overall cost of capital and higher the value of firm.

It means that a firm attains an optimal capital structure when it used 100% debt financing. Running a business with 100% debt financing, however, is quite uncommon in the real world. The firm can achieve optimal capital structure by making judicious use of debt and equity and attempt to maximize the market price of its stock.

In sum, as per NI approach, increase in ratio of debt to total capitalization brings about corresponding increase in total value of firm and decline in cost of capital. On the contrary, decrease in ratio of debt to total capitalization causes decline in total value of firm and increase cost of capital. Thus, this approach is appeared as relevancy theory.

This approach is based on the following assumptions:

-) The cost of equity and debt remain constant to the acceptable range of leverage.
-) The corporate income taxes do not exist.
-) The cost of debt rate is less than the cost of equity.
-) The increasing leverage brings about no deterioration in the equity of net earnings so long as borrowing is consigned to the amount below the acceptable limits.

Graphically, the effect of leverage on the firm's cost of capital and the total market value of the firm is shown below.

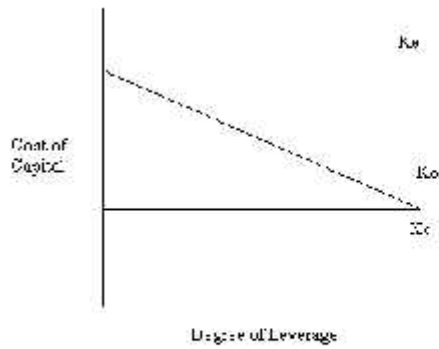


Figure 2: The Effect of Leverage On the Capital Structure

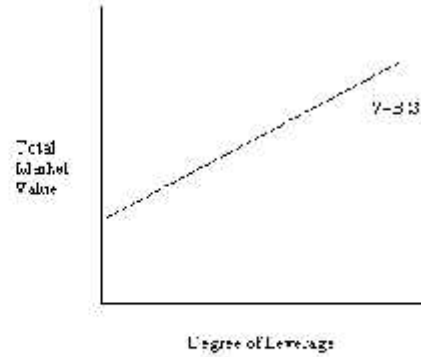


Figure 3: The Effect of Leverage on the Total Market Value of the Firm

Figure 2 shows a continuous decrease in K with the increase in debt-equity ratio, since any decrease in K directly contributes to the value of the firm, it increases with the increase in the debt-equity ratio (figure 3). Thus the financial leverage, according to the NI approach is an important variable in the capital structure decision of a firm. Under the NI approach, a firm can determine an optimal capital structure. If the firm is unleveled the overall cost of capital will be just equal to the equity capitalization rate.

In brief, the essence of the net income approach is that the firm can lower its cost of capital by using debt. The approach is based on the assumption that the use of debt does not change the risk perception of the investor. Consequently, the interest rate of debt and the equity capitalization rate remain constant to debt. Therefore, the increased use of debt results in higher market value of shares and as a result, lower overall cost of capital (K).

2.2.3.3. Net Operating Income approach (NOI)

NOI approach is another behavioral approach suggested by Duran David. This approach is diametrically opposite from the NI approach with respect to the assumption of the behavior of equity holders and debt holders. The essence of this approach is that the leverage/capital structure decision of the firm is irrelevant. The overall cost of capital is independent of the degree of leverage; any change in leverage will lead to change in the value of the firm and the market price of the shares. Net operating approach is slightly different from NI approach, unlike the NI approach in NOI approach, the overall cost of

capital and value of firm are independent of capital structure decision and change in degree of financing. Leverage does not bring about any change in the value of firm and cost of capital.

The main difference between NI and NOI approach is the base that investors use to value the firm. Under NOI approach, the Net operating income, i.e. the earning before interest and tax (EBIT), instead of net income is taken as the base. Like the NI approach, the NOI approach also assumes a constant rate of K_d , which means that the debt holders do not demand higher rate of interest for higher level of leverage risk. However, unlike the assumption of NI approach, NOI approach assumes that the equity holders do react to higher leverage risk and demand higher rate of return for higher debt-equity ratio. This approach says that the cost of equity increase with the debt level and the higher cost of equity offset the benefit of cheaper debt financing resulting no effect at all on overall cost of capital.

The NOI approach is based on following assumption:

-) 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 to capitalize the net operating income. K depends on the business risk. If the business risk is assumed to remain unchanged, K is constant.
-) The use of less costly debt funds increases the risk of shareholders. This causes the equity-capitalization rate to increase. Thus, the advantages of debt are offset exactly by the increase in the equity capitalization rate, K_s .
-) The debt capitalization rate, K_d is constant
-) The corporate income taxes do not exist.

The function of K_s under NOI approach can be expressed in equation as follows:

$$K_s = K + \frac{K - K_d}{1 - \tau} \left(\frac{D}{E} \right)$$

The relationship between financial leverage and K , K_s , and K_d has been graphically depicted in following

figures.

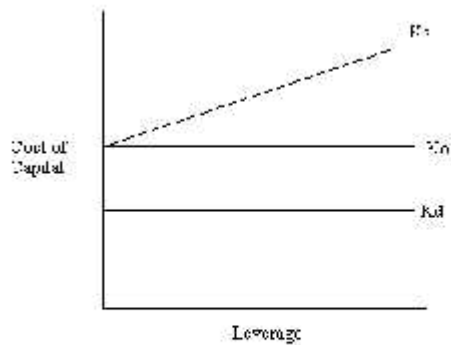


Figure 4: The Effect of Leverage on Cost of Capital

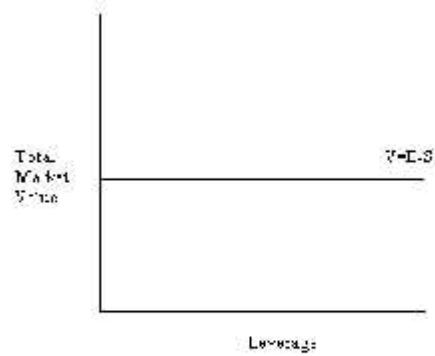


Figure 5: The Effect of Leverage on Total Market Value of the Firm

In the figure 4 above, it is shown that the curve K and K_d are parallel to the horizontal X-axis and K_s are increasing continuously. This is because K and K_d remain constant under all the circumstances but the K_s increases with the degree of increase in the leverage. Thus, there is no single point or range where the capital structure is optimum. We know obviously from the figure 4 that under the NOI approach, as low cost of debt is used, its advantage is exactly offset by increase in cost of equity in such a way that the cost of capital remains constant. By this, value of the firm also remains constant. At the extreme degree of financial leverage, hidden cost becomes very high hence the firm's cost of capital and its market value are not influenced by the use of additional cheap debt fund. (Gitman Lawrence, 1988:791)

2.2.3.4. Modigliani-Miller approach (MM approach)

The Modigliani-Miller thesis (Modigliani F and M.H. Miller, "The Cost of Capital, Corporate Finance and The Theory of Investments", American Economic Review, XLVIII June 1958) relating to the relation is akin to net operating income approach. MM approach, supporting the net operating income approach argues that, in the firm remain invariant to the capital structure changes. They make a formidable attack on the transitional position by offering behavioral justification for having the cost of capital, K , remain constant through all degree of leverage. (Ibid, 272) MM contend that cost of

capital is equal to the capitalization rate of a pure equity stream of income and the market value is ascertained by capitalizing its expected income at the appropriate discount rate of its risk class. MM position is based on the idea that no matter how you divide up the capital structure of a firm among debt, equity and other claims, there is conservation of investment value. (Ibid, 273) However, the following assumption regarding the behavior of the investors and the capital market, the actions of the firms and the tax environment are crucial for the validity of the MM hypotheses.

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

The MM cost of capital hypotheses can be best expressed in terms of their proposition I and II. (Modigliani and Miller, 1969: 261-279)

Proposition I

Given the above assumption, MM argues that for 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 the risk class (Ibid, 268).. This is their proposition I. In equation this can be expressed as follows:

$$\frac{\text{ValueOftheFirm} \times \text{MarketValueofDebt}(B)}{\text{MarketValueofEquity}(S)} \times \frac{\text{ExpectedNetOperatingIncome}}{\text{ExpectedOverallCapitalizationRate}} \times \frac{\text{EBIT}}{\text{EBT}}$$

For an unlevered firm,

$$V_u \times \frac{\text{EBIT}}{K_s}$$

Where K=Ks in case of unlevered firm.

Proposition I can be expressed in terms of the firm's overall capitalization rate, K, which is the ratio of Net operating income to the market value of all its securities. That is:

$$K \times \frac{\text{NOI}}{S + B} \times \frac{\text{NOI}}{V}$$

K can also be expressed as

$$K \times \frac{K_s(S)}{S + B} + \frac{K_d(B)}{S + B}$$

It means K is the weighted average of the expected rate of return of equity and debt capital of the firm since the cost of capital is defined as the expected net operating income divided by the total market value of the firm and since MM conclude that the total market value of the firm is unaffected by the financing mix, it follows that the cost of capital is independent of the capital structure and is equal to the capitalization rate of a pure equity stream of its class. (Pandey I.M, 1981:35)

The overall cost of capital function as hypothesised by MM is shown in figure below:

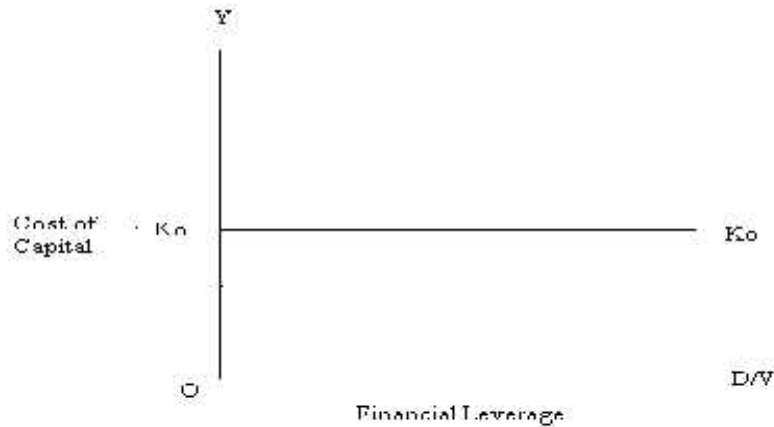


Figure 6: The Cost of Capital Under the MM Hypothesis

Thus two firms identical in all respects except for their capital structure cannot command different market values nor have different cost of capital. But if there is a discrepancy in the market values or the cost of capital, arbitrary will take place, which will enable investors to engage in personal leverage to restore equilibrium in the market. (I.M. Pandey, 1981:37)

Proposition II

MM proposition II, which defines the cost of equity, follows from their proposition I and shows the implications of the net operating approach. The proposition II states that the cost of equity rise 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. (Pradhan S., 1992:362) The equation for the cost of equity can be derived from the definition of the average cost of capital.

$$K = \frac{K_s(S)}{S + B} + \frac{K_d(B)}{S + B}$$

$$K_s = \frac{K(B + S)}{S} - \frac{K_d(B)(B + S)}{(S + B)S}$$

$$K_s = K \left(1 + \frac{D}{S}\right) - \frac{K_d(D)}{S}$$

$$K_s = K + \left(\frac{B}{S}\right)(K - K_d)$$

The above equation states that for any firm in a given risk class the cost of equity, K_s , is equal to the constant average cost of capital, K , plus a premium for the financial risk, which is equal to debt-equity ratio times the spread between the constant average cost of capital and the interest rate. As their proportion of debt increase, the cost of equity increases continuously even though K and K_D are constant, the crucial part of the MM hypothesis is that K will not rise even if very excessive use of leverage is made. This conclusion could be valid if K_d remains constant for any degree of leverage. But in practice K_s increases with leverage beyond a certain acceptable level of leverage. However, MM maintains that even if K_s are a function of leverage, K will remain constant as K_s will increase at a decreasing rate to compensate. This can be shown as:

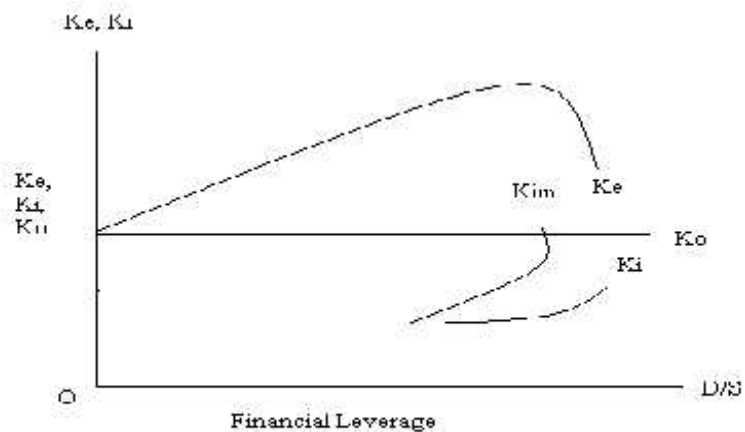


Figure 7: Behavior of K_o , K_i and K_e under MM Hypothesis

It is clear from the figure that K_s will increase till the marginal rate of interest (K_{im}) is below the cost of capital. As soon as the marginal rate of interest cuts the cost of capital, K_s will start falling.

2.2.4. Leverage

The term leverage may be defined as the use of that source of funds in the business for which the firm has to pay fixed charges, irrespective to the earnings of firm. There are

two types of leverage: Financial leverage and operating leverage. Leverage associated with investment activities is called operating leverage and associated with financial activities is called financial leverage.

2.2.4.1. Financial leverage

Financial leverage is the ratio of total debt to total assets or the total value of the firm. (Weston and Brigham, 1981:555). The use of fixed sources of funds, such as debt and preference capital along with the owners' equity in the capital structure is described as financial leverage. (Waterman and Martin, 1963:7). Financial leverage refers to the response of shareholders income to change in earning before interest and tax and is created by debt or preferred stock financing with fixed interest and dividend payment. (Lawrence D. Schell and Haley, 1983:325).

The debt is risky as well as more advantageous in the context of earning. The use of debt and preferred stock financing provide the income advantage over the common stock financing of the firm under the favorable condition and they increase the risk too. Leverage is employed by the company to earn more. The surplus will increase the return on equity. Since the interest and principle payments are the contractual obligation to the firm. It is risky in the viewpoint of the shareholders.

2.3. Review of Journals

The Modigliani and Miller's Study: Modigliani F and Miller M.H., the cost of capital, corporation finance and the theory of investment. American economic review, XLVIII, June 1958:261-297)

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

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

In the second part of their study, they tested their proposition II the expected yield on common share is linear function of debt to equity ratio. The second part of their study is consistent with their views i.e. if the cost of borrowed funds increases, the cost of equity will decline to offset this increase.

MM conducted the second study in 1963, correcting their original hypothesis for corporate income taxes and expected cost of capital to be affected by leverage of its tax advantages or not. For this they conducted the mathematical analysis regarding the effect of leverage and other variable on the cost of capital, they found that the leverage factors are significant only because of the tax advantage involved. (Miller, M.H. and F. Modigliani, Estimates of the Capital to Electric Utility Industry, 1954-1957, American Economic Review, 56 June 1966:333-391)

Joshua Abor (Abor J, "The effect of capital structure on profitability", the journal of Risk Finance, 2005:438-445)

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

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

Bankruptcy costs are the cost directly incurred when the perceived probability that the firm will default on financing is greater than zero. The bankruptcy probability increases with debt level since it increases the fear that the company might not be able to generate profits to pay back the interest and the loans. The potential costs of bankruptcy may be both direct and indirect. Examples of direct bankruptcy costs are the legal and administrative costs in the bankruptcy process. Examples of indirect bankruptcy costs are the loss in profits incurred by the firm as a result of the unwillingness of stakeholders to do business with them. The use of debt in capital structure of the firm also leads to agency costs. Agency costs arise as a result of the relationships between shareholders and managers and those between debt-holders and shareholders. The need to balance gains and costs of debt financing emerged as they known as the static trade-off theory by Myers. It values the company as the value of the firm if unleveled plus the present value of the tax shield minus the present value of bankruptcy and agency costs.

Viet Anh Dang's study (Viet Anh Dang, "Testing the Trade-Off and Pecking Order Theories ", 2005)

Viet Anh Dang in the study, "Testing the Trade-Off and pecking Order Theories", 20 July 2005 examined the performance of two influential but contradicting theories of capital structure, known as the trade-off and pecking order theory. In general, our finding suggests that the trade-off theory holds well under both a partial adjustment and an error correction framework. In specifications that nest both theories, the former theory outperforms the latter theory. The introduction of the cash flow deficit variable has added little amount of additional explanatory power to the trade-off framework. Furthermore, the estimated coefficient on that variable is not found to be statistically equal to unity as it would be if the strict interpretation of the pecking order theory were to hold. The results

consistently show that the adjustment process prevails with the speed of adjustment coefficient significant and relatively high (above 50). There has been also some compelling evidence in favor of the relationships between gearing and the conventional determining factors except profitability, as predicted by trade-off framework. Non-debt tax shields and growth opportunities are reported to be inversely related to debt to the ratio, while collateral value of assets and size are found to have positive effects upon gearing.

In other respect, the study has posed serious questions on the empirical validity of the pecking order theory. However, given the simplicity of the empirical model it is impossible to reject the pecking order theory prediction completely.

In summary, there is no universal theory of the debt-equity choice. Different views have been put forward regarding the financing choice.

Rima Devi Shrestha (Shrestha Rima Devi, Focus on Capital structure, Pravaha Journal of Management, Nepal Commerce Campus, Kathmandu, 1993 Vol. 10:40)

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

makers have to be careful in developing the suitable capital structure guidelines in making public enterprises as well as listed companies to be aware of financial accountability.

2.4. Review of Articles

Sudhir Poudyal (Poudyal S, "Capital Structure: It's impact on value of a Firm, Seminar on Emerging Issues and Challenges in Corporate Finance in Nepal, Research Paper Submitted to Faculty of Management, TU, Kathmandu, Nepal, 2002)

"A study on Capital Structure: Its impact on value of a Firm," an article by Sudhir Poudyal concentrated to examine the interrelationship between the objective of achieving an optimal capital structure and to provide conceptual framework for the determination of the optimal capital structure.

For this, a hypothetical firm is constructed and different assumptions are laid down to analyze the effect of capital structure. Various statistical and financial tools like ratio analysis are used to extract reasonable figure for the hypothetical firm. It is observed that the minimum weighted average cost of capital, maximum value of the firm and price per share are attended at debt ratio of 30%.

Furthermore, if there is flexibility to select capital structure in any proportion, optimal capital structure range from 30% to 40%. An optimal capital structure would fulfill the interest of equity shareholder and financing requirement of a company as well as other concerned groups.

Paul Marsh (Marsh P, "The choice between Equity and Debt". The Journal of Finance, vol XXVII No. 1, March 1982)

In the article, "the Choice between Equity and Debt", following issues are expressed

-) Whether companies are having the targeted debt ratio.
-) Whether they have similar targets form the composition of their debt.

-) Whether debt ratio or the choice of the finance instrument are influenced by other factors.
-) How accurately can we predict whether the company will issue equity or debt?
Then he suggested that
-) While planning their issues, company should consider future as well as current debt ratio.
-) If the companies are looking at book value debt ratio, there will change during the interest issuing period of retentions and bank loans.
-) Any overall change in tax level could cause issuing companies to shift their performance towards either debt or equity.
-) Small companies rely on bank loan rather than long-term debt because of location, cost and problems of access to capital market.
-) Equity issues seem to be favorable as it provides strong share price and overall market performance.

2.5. Review of Thesis

Ayer (2012) has conducted a research topic on “*Capital Structure Management of Commercial Banks in Nepal.*”(With reference to EBL, HBL and NIBL)

His main Objectives

-) To examine the leverage position of the sample banks.
-) To evaluate the impact of capital structure on the profitability of sample commercial banks in Nepal
-) To analyze the relationship between wreathing income and interest payment
-) To examine the relationship between debt to equity ratio and cost of equity.

His Major findings

-) Debt equity ratio calculated in relation to the proportion of total debt and shareholder’s equity. It shows that the percentage of debt is greater than ownership capital. It implies a greater claim of creditors than owners. The average

debt equity ratio of EBL, HL and NIBL are 14.71, 11.95, and 12.29 times respectively which indicates EBL has the highest average and Hbl has lowest ratio during the study period.

- J Total debt to total assets calculated in relation to the proportion of total debt and total asset shows the percentage of total assets financed by outsider's fund that of financed by owner's side. The average total debt to total assets ratio of EBL, HBL and NIBL are 93.59%, 92.42% and 92.40% respectively. Total debt to total assets has shown that claims of creditors are greater than the owners in the total assets of the selected banks during the study period.
- J Long term debt to total assets ratio measure the financial leverage of the firm. The ratios show the relationship between long term debt and total assets. The average LTD to assets ratio of EBL, HBL and NIBL are 0.936% 1.39% and 2.24%. the NIBL has higher ratio than EBL and HIBL which means NIBal is using more LTD than other sample banks. Optimum utilization of LTD may be fruitful for organization.
- J The long term debt to equity ratio measures the long term components of capital structure loan term debt and shareholders equity are used in financing asset of the companies. So it reflects the relative claim of creditors and shareholders against the assets of the firm. The average LTD to equity ratio of EBL, HBL and NIBL are 14.94, 18.23 and 30.33. all sample banks have the lower ltd to equity proportion. This is not profitable for sample banks. Among sample banks NIBL has higher average proportion.
- J The long term debt to total debt ratio measure the percentage of long term debt to total debt used in the firm. So, it is the percentage of long term debt among the total debt employed by the firm. The average ratio of EBL, HBL and NIBL are 1%, 1.5% and 2.4% respectively. All sample banks have the lower portion of long term debt in comparison of total debt.
- J The interest coverage ratio shows that all selected banks are able to pay interest. Average ratio of interest coverage ratio is only 1.88, 1.82 and 1.82 times of EBL, HBL and NIBL respectively. In comparison, EBl is operating slightly efficiently in terms of interest coverage ratio than HBL and NIBL bank. Otherwise all the

selected banks should make effort to retire excessive debt to have comfortable coverage ratio.

Acharya,(2009) conducted a study on “A comparative study of capital structure management between Kuamri Bank Ltd. And Siddrtha Bank Ltd. ” with the following objectives:

His main objectives

-) To find out the comparative position in capital structure between two banks.
-) To analyze the various source of capital and their cost
-) To highlight the relationship between operating profit an interest expenses to measure the debt service capacity of the banks.
-) To analyze the return on capital in relation to capital employed.
-) To study capital structure and adequacy ratio.

His major findings

-) The shareholder’s equity of both the banks is in increasing trend during the entire study period.
-) Higher overall capitalization rate of KBL is more capable to utilize the value of the firm compare to SBL.
-) KBL is more capable to utilize its long term Capital
-) Debt equity ratio of both banks is significant in generating more return on equity.

Dhungana(2010), has conducted research on “Capital Structure Management of Commercial Banks in Nepal”. Objectives of the study and findings are as follows:

His main Objectives:

-) To analyze the capital structure position of the sample banks in terms of debt and equity position, profitability position ad assets management position of sample banks.
-) To analyses the significant of debt equity and net profit of sample banks.
-) To measure the relationship between total debt to total assets. Interest coverage, debt to equity and total asset of sample banks.

-) To measure the relationship between total debt to total assets, interest coverage dent to equity and total assets of sample banks.

His Major findings

-) NIBL has the highest amount of average debt ratio in comparison to other banks. Debt equity ratio of sample banks is gradually increasing trend of the study period.
-) Debt to total assets ratio of the sample banks are in increasing trend over the study period. EBT to EBIT ratio of sample banks are in ascending order as the year progress.
-) Study shows EBL is not in a better position in terms of return on capital employed ratio. However NIBL and HBL are almost equal position and average return on shareholder equity ratio is satisfactory in all the three banks and is highest in ebl.
-) The study shows that among three banks EBL's shareholders are enjoying highest return on equity. NIBL's shareholders are getting good returns and HBL's trend is downward then it continues to increase.

Dware(2011) conducted research on “a Study of Capital Structure Management of Commercial Banks in Nepal (With reference to NIBL, BOK, HBL and EBL)”

His main objectives

-) To analyze the factors that affects the capital structure of commercial banks.
-) To evaluate the impact of capital structure on the profitability of sample commercial banks.
-) To analyze the relationship of capital structure with variables like earnings per share dividend par share.

His major findings:

-) The percentage of total debt of selected banks is contributed by current liabilities to a large extent. The analysis of all four banks reveals the fluctuating trend of long term debt total debt ratio.

-) Analysis of long term debt to capital employed ratio shows that BOK has least and NIBL has the highest long term debt capital ratio. The long term debt in comparison to their total assets used by all four banks for financing is very minimum or negligible. Debt to equity ratio of all sample banks shows the fluctuating trends over the study period.
-) Return on shareholder equity of NIBL and BOK is fluctuating and that of HBL and EBL is showing increasing trend.

2.6 Research Gap

This study is different in the sense that the selected companies are totally different from the above previous studies. The study totally revolves around the banking and the named of selected commercial banks. This study is done considering the data of five years (2006/07-2010/11) of all the selected banks. This study tried to analyze and evaluate the relationship of capital structure with various on like, leverage ratio, cost of capital, cost of equity and so on. I used SPSS accounting software and calculate the statistical tools which are used in multiple regression. As the above studies are also related to capital structure, they are mostly done by taking four sample banks. At least this study will be different from the above in terms of sample companies, data presentation as well as statistical tools used for interpretation and analysis of data.

CHAPTER-3

RESEARCH METHODOLOGY

3.1. Introduction

This chapter is related to research methodology in this study. Research methodology is a way to systematically solve the research problem. In other words, research methodology describes the methods and processes applied in the entire aspect of the study. It may be understood as a science of studying how research is done scientifically. It is necessary for the researcher to know not only the research methods but also the methodology (Kothari, 1984:10-13). This chapter includes the research design, population and sample.

3.2. Research Design

Research design is the plan, structure and strategy of investigations conceived so as to obtain answers to research questions and to control variances. It includes an outline of what the investigator will do from writing the hypotheses and their operational implications to the final analysis of data. The structure of the research is more specific; it is the outline, the scheme, and the standard of the operation of the variables. When we draw diagrams that outline the variables and their relation and juxtaposition, we build structural schemes for accomplishing operational research purposes. Strategy, as used here, is also more specific than plan. In other words, strategy implies how the research objectives will be reached and how the problem encountered in the research will be tackled.

The method and definite technique, which guides to study and give ways to perform research work is known as research design. It is most necessary to complete the research and fulfill the objective of the research.

First of all, information and data are collected. The important information and data are selected. Then data is arranged in a useful manner. After that, data are analyzed by using appropriate financial and statistical tools. In the analysis part, interpretation and comments

are also made wherever necessary. Result and conclusion are given after analysis of data, recommendation and suggestion is also given, the thesis has been adopted from previous research works. Previous thesis styles and formats have been followed.

The main objective of research work is to evaluate the capital structures of Himalayan Bank Limited and Bank of Kathmandu. To complete this study, following design and format has been adopted.

3.3. Data Collection Procedure

3.3.1 Nature and Sources of Data

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

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

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

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

mail internet, financial statement, annuals reports and from Nepal stock exchange, security exchange board and other related office.

3.3.2 The Population and Sample

Population of this study includes all listed commercial banks in NEPSE. At present, there are 32 commercial banks have listed their shares in NEPSE. They have only been considered as population for the study, four leading private commercial banks are selected as sample. On the basis of establishment period and performances, samples are taken. The time limitation and unavailability of the relevant data had forced me to make research on the few commercial banks functioning all over the kingdom and most of their stocks are trade activity in the stock market out of them commercial bank have been chosen this study on the sample commercial banks selected are as follows:-

-) Nepal SBI Bank
-) Everest Bank
-) Bank of Katmandu
-) Himalayan Bank Ltd.

3.4 Tools for Analysis

For the purpose of data analysis, various financial and statistical tools will be used to achieve the objective of the study. The evaluation of data will be carried out to the pattern of data available. Different tools have been selected according to the nature of data as well as subject matter. The major tool employed for the analysis of the data is ratio analysis, which established the numerical relationship between two variables of the financial statement. Besides financial tools, the statistical tools are also used.

3.4.1 Financial Tools

Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet. In this study ratio analysis is used as the financial tools for the data analysis.

The financial tools that will be used for data analysis are:

-) Ratio analysis
-) Leverage analysis
-) Capital structure analysis

3.4.1.1 Ratio Analysis

Ratio analysis is a technique of analyzing interpreting financial statements to evaluate the performance of an organization by creating the ratios from the figures of different accounts consisting in balance sheet and income statement. The qualitative judgment concerning financial performance of a firm can be carried out with the help of ratio analysis. Even though there are many ratios, only those ratios have been covered in this study, which are related to investment operation of the bank.

This study contains following ratios:

Long Term Debt to Total Debt

The long term debt to total debt ratio measure the percentage of long term debt to total debt used in the companies. So it is the percentage of long term debt among the total debt employed by the company.

The Long Term Debt to Total Debt is calculated as:

$$\text{LongTermDebttoTotalDebtRatio} \times \frac{\text{LongTermDebt}}{\text{TotalDebt}} \times 100$$

Long Term Debt to Capital Employed

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

$$\text{LongTermDebttoCapitalEmployed} \times \frac{\text{LongTermDebt}}{\text{CapitalEmployed}}$$

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

Debt to Total Assets

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

$$DebttoTotalAssetRatio \times \frac{TotalDebt}{TotalAssets} \times 100$$

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

Debt to Equity Ratio

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

$$DebttoEquityRatio \times \frac{LongTermDebt}{Shareholder'sEquity} \times 100$$

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

Interest Coverage Ratio

This ratio indicates the ability of the company to meet its annual interest costs or it measures the debt servicing capacity of the firm. It is determined by using following formula:

$$\text{InterestCoverageRatio} \times \frac{\text{EarningBeforeInterest and Tax}}{\text{Interest}}$$

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

Return on Total Assets

Return on total assets ratio measures the profitability of bank that explains a firm to earn satisfactory return on all financial resources invested in the banks' assets. The ratio explains net income for each unit of assets.

The return on total assets ratio is calculated using the formula below:

$$\text{ReturnOnTotalAssets} \times \frac{\text{Net ProfitAfterTax}}{\text{TotalAssets}}$$

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

Return on Shareholders Equity

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

$$\text{Return On Shareholder's Equity} \times \frac{\text{Net Profit After Tax}}{\text{Shareholder's Equity}}$$

A company's owners always prefer higher ratio of return on shareholders' equity. And higher ratio represents the higher profitability of the firm and vice versa.

Earning Per Share (EPS) Analysis

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

$$\text{EPS} \times \frac{\text{Net Income}}{\text{No Of Shares Outstanding}}$$

Dividend Per Share (DPS) Analysis

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

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

$$\text{DPS} \times \frac{\text{Total Dividend}}{\text{No Of Ordinary Shares}}$$

3.4.1.2 Leverage Analysis

The degree of financial leverage as part of leverage analysis also reflects the leverage of the firm as similar as above ratios. The degree of financial leverage analyzes the burden of interest expenses and financial risk of the company. The degree of financial leverage (DFL) is defined as the percentage change EPS due to a given percentage change in EBIT

or this is a relationship between EBIT and EBT. In this study the following relationship will be used. It is expressed as:

$$DFL \times \frac{\% \text{Change in EPS}}{\% \text{Change in EBIT}} \text{ or}$$

$$DFL \times \frac{EBIT}{EBT}$$

The higher ratio of DFL indicates the higher financial risk as well as higher fixed charges of the company and vice versa.

3.4.2.1 Capital Structure Analysis

Various approaches have been developed under the relevancy of the capital structure, which helps to evaluate value of the firm, such as Net Income approach (NI), Net Operating Income approach (NOI), Traditional Method and MM approach. These all approaches are based on the market value. Practical usualness of other approaches is bit complex thus NI and NOI approaches are used in this study.

$$\text{Market Value of Firm (V)} = \text{Market Value of Debt (B)} + \text{Market Value of Equity (S)}$$

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

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

3.5 Statistical Tools

To meet the objectives of the study statistical tools are equally important. It helps us to analyze the relationship between two or more variables. In this research, the following statistical tools are used.

The statistical tools that will be used for data analysis are:

-) Karl Pearson's Coefficient of Correlation
-) Probable Error

3.5.3. Corrélation Coefficient (r)

Correlation coefficient measures the relationship between two and more than two variable, when they are so related that the change in the value of one variable is accompanied by the change in the value of the other. Or it indicates the direction of relationship among variables.

A method of measuring correlation is called Pearson's coefficient of correlation. It is denoted by 'r'. The correlation coefficient can be calculated by using following formula:

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

Where,

N= number of observations

X and Y are variables.

The decision criteria:

When,

r = 0, there is no relationship between the variables.

r = 1, the variables have perfectly positive correlated.

r = -1, the variables have perfectly negative correlated.

3.5.4. Probable Error (P.E.)

P.E. interprets the value of correlation co-efficient. It helps to determine applicability for the measurement of reliability of computed value of the correlation coefficient 'r'. It can be calculated as:

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

Where,

r = correlation coefficient

N = number of pairs of observations.

If the value of r is less than the probable error there is no evidence of correlation, i.e. the value of r is not significant.

If the value of r is more than 6 times of probable error the coefficient of correlation is practically certain, i.e. the value of r is significant.

CHAPTER -IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter is related to presentation and analysis of data collected from various primary and secondary sources. The chapter has been divided into main three sections. The first part of the chapter involves the analysis of secondary data while the second part includes the analysis of primary data and the last part of the chapter includes the major findings of the study. The main objective of the study is to evaluate the capital structure of BOK, EBL, HBL and SBI. To analyze the financial performance in respect to capital structure, various presentation and analysis have been presented in this chapter according to analytical research design mentioned in the third chapter using various financial and statistical tools.

It is already stated that capital structure refers to the combination of preference share, equity share capital including reserve and surplus as well as long-term debt. Optimal capital structure refers to that combination of funds, which maximizes the EPS, value of the firm and overall cost of capital. Thus this chapter emphasizes the position of capital structure of BOKL and HBL. The analysis in this chapter is divided into following section, which are directly and indirectly related to the capital structure.

-) Ratio Analysis
-) Analysis of Capital Structure
-) Leverage Analysis
-) Correlation Analysis

4.2 Ratio Analysis

4.2.1 Long Term Debt to Total Debt Ratio

The relationship between long term debt and total debt has a decisive impact on the financial structure of the companies. This relationship indicates what percentage of total debt is covered by long term debt of the firm. Normally firms use short term and long term debt. Current liabilities and provisions are also needed during the operation of the firm. Simply dividing long-term debt by the total debt can derive the relationship between the long term debt and total debt of the firm. The total debt includes all types of borrowed fund, current liabilities and provisions. If the firm used large amount of short term loans and over current liabilities and provision in the larger amount, the percentage of long term debt will be low and vice versa. The higher ratio of long term debt to total debt indicates the higher claim of long term debt holders upon the total debt and the lower ration indicates the higher portion of short term loans and current liabilities in the total debt of the firm. The amount of short term loans and current liabilities used depends upon the liquidity of that firm. This relationship of long term debt and total debt is presented in the following table along with the percentage change in that ratio to show the movement of trend individually. In addition the average (standard) ratios are also calculated to compare with each other. But the detailed calculation is shown in the appendix 2.

$$\text{LongTermDebtToTotalDebtRatio} \times \frac{\text{LongTermDebt}}{\text{TotalDebt}} | 100$$

Table No. 4.1
Long term Debt and Total Debt Position

Fiscal Year	Long Term Debt to Total Debt			
	BOK	EBL	HBL	SBI
2063/64	92.64657	93.43979229	96.92654192	91.42226629
2064/65	97.88695	96.22719582	97.14890498	88.22397642
2065/66	97.4916	96.85908497	97.18484929	96.41538039
2066/67	96.2161	96.39776672	97.0295855	98.59314778
2067/68	95.05368	96.06992536	96.91138136	96.88577067
Average	95.85898	95.79875303	97.04025261	94.30810831

Source: Appendix I

The above calculation shows that the ratio of long term debt to total debt of BOK constituted 92.65% in fiscal year 2063/64. This means of contribution of long term debt in total debt is 92.65% and remaining portion is contributed by the current liabilities. This ratio of BOK in FY 2064/65 is 97.89% which is increased than previous year and then increased to 97.49% in FY 2065/66. The company has 96.22% in 2066/67 and 95.05% in 2067/68. The company has 95.86% of average long term debt to total debt ratio.

In the case of EBL, it shows in the fiscal year 2063/64, the ratio is 93.44%, which indicates there is 93.44% contribution of long term debt in total debt and remaining portion is contributed by current liabilities, in the year 2064/65, the ratio is 96.23% which is increase 96.86% in 2065/66. Then it is increased to 96.40% in 2066/67 and in the year 2067/68 the ratio is 96.07%. The average ratio is 95.80%

Similarly, In the case of HBL, it shows in the fiscal year 2063/64, the ratio is 96.93%, which indicates there is 96.93% contribution of long term debt in total debt and remaining portion is contributed by current liabilities, in the year 2064/65, the ratio is 97.15% which is decrease 97.19% in 2065/66. Then it again is decreased to 97.03% in 2066/67 and in the year 2067/68 the ratio is 96.91%. The average ratio is 97.04%

And, In the case of SBI, it shows in the fiscal year 2063/64, the ratio is 91.42%, which indicates there is 91.42% contribution of long term debt in total debt and remaining portion is contributed by current liabilities, in the year 2064/65, the ratio is 88.22% which is increase 96.41% in 2065/66. Then it again is increased to 98.59% in 2066/67 and in the year 2067/68 the ratio is 96.89%. The average ratio is 94.31%

4.2.2 Long Term Debt to Capital Employed Ratio

In the company's view, the calculated net debt to capital employed ratio provides a more complete picture of the group's current debt situation than gross interest-bearing debt. The calculation uses balance sheet items relating to total debt and adjusts for cash, cash equivalents and short-term investments. Certain adjustments are made since different legal entities in the group lend to projects and others borrow from banks. Project financing through an external bank or similar institution will not be netted in the balance sheet and will over-report the debt stated in the balance sheet in relation to the underlying exposure in the group. The optimal capital structure has important relationship with the long term debt to capital employed ratio. This relationship suggests the portion of long term debt and capital employed used in the capital structure of the firm. This ratio highlights the need of long term debt in the capital employed but the firm. Long term debt includes the debt, which matures in more than one accounting period whereas capital employed includes long term debt and shareholders equity of the firm. The relationship of long term debt and capital employed can be analyzed by establishing the ratio between them. This ratio is called the long term debt to capital debt ratio. Larger the ratio, larger the proportion of long term debt in the capital employed and vice versa. This ratio can be calculated by dividing the long term debt with capital employed by the firm. This ratio is also known as debt to permanent capital ratio, whereas permanent capital means total assets minus current liabilities. The long term debt to permanent capital ratio is presented in the following table:

$$\text{LongTermDebtToCapitalEmployedRatio} \times \frac{\text{LongTermDebt}}{\text{CapitalEmployed}}$$

Table No. 4.2
Comparative Long term Debt to Capital Employed Ratio

Fiscal Year	Long Term Debt to Capital Employed			
	BOK	EBL	HBL	SBI
2063/64	0.926869437	0.940138	0.907195593	0.909178819
2064/65	0.922761989	0.926663	0.904003012	0.907720836
2065/66	0.913031735	0.938492	0.894736951	0.941246324
2066/67	0.908207726	0.931007	0.892176215	0.934733639
2067/68	0.897047913	0.930098	0.886264274	0.93774208
Average	0.91358376	0.93328	0.896875209	0.926124339

Source: Appendix 2

The above table shows that the long term debt to capital employed ratios of BOK in fiscal year 2063/64, 2064/65, 2065/66, 2066/67, and 2067/68 are 92.69%, 92.28%, 91.30%, 90.82% and 89.71% respectively. The average ratio is 91.36%.

Similarly EBL has fluctuating trend of long term debt to capital employed ratio. In the FY 2063/64, the ratio is 94.01%. That means the contribution of long term debt in total capital employed is 94.01% and owner of the companies contributed remaining 5.99%. In the following year 2064/65, the ratio increases to 92.67%. In the FY 2065/66 the ratio increased 93.85%. In the year 2066/67 & 2067/68 it is 93.10% & 93.01%. The average of five years data shows a ratio of 93.33%.

Again, HBL has fluctuating trend of long term debt to capital employed ratio. In the FY 2063/64, the ratio is 90.72%. That means the contribution of long term debt in total capital employed is 90.72% and owner of the companies contributed remaining 9.28%. In the following year 2064/65, the ratio increases 90.40%. In the FY 2065/66 the ratio decreased 89.47%. In the year 2066/67 & 2067/68 it is 89.22% & 88.63%. The average of five years data shows a ratio of 89.69%.

And, SBI has fluctuating trend of long term debt to capital employed ratio. In the FY 2063/64, the ratio is 90.92%. That means the contribution of long term debt in total

capital employed is 90.92% and owner of the companies contributed remaining 9.08%. In the following year 2064/65, the ratio decreases 90.77%. In the FY 2065/66 the ratio increased 94.12%. In the year 2066/67 & 2067/68 it is 93.47% & 93.77%. The average of five years data shows a ratio of 92.61%.

4.2.3 Debt to Total Assets Ratio

A metric used to measure a company's financial risk by determining how much of the company's assets have been financed by debt. Calculated by adding, short-term and long-term debt and then dividing by the company's total assets. Debt to total assets ratio express the relationship between creditors fund and total assets. It is also the leverage ratio, which is generally called the debt ratio. This type of capital structure ratio is a variant of debt equity ratio. Calculating debt to total assets is one calculation approach of the debt to capital ratio. Debt includes all loans and total assets include all types of assets of the fir, it measures the percentage of total funds provided by creditors.

This ratio can be calculated by simply dividing long term debt by the total assets of the firm. A measurement representing the percentage of a corporation's assets that are financed with loans and financial obligations lasting more than one year. The ratio provides a general measure of the financial position of a company, including its ability to meet financial requirements for outstanding loans. A year-over-year decrease in this metric would suggest the company is progressively becoming less dependent on debt to grow their business. The calculation for the long term debt to total assets ratio is:

$$DebtTotalAssetsRatio \times \frac{TotalDebt}{TotalAssets} | 100$$

OR

$$DebtTotalAssetsRatio \times \frac{LongtermDebt}{TotalAssets} | 100$$

Table No. 4.3
Comparative Debt to Asset Ratios

Fiscal Year	Long Term Debt to Total Asset			
	BOK	EBL	HBL	SBI
2063/64	0.8633555	0.88042	0.907195593	0.8377
2064/65	0.9047401	0.89418	0.904003012	0.8096
2065/66	0.8920753	0.91078	0.894736951	0.9107
2066/67	0.8768878	0.89971	0.892176215	0.9224
2067/68	0.8570414	0.89601	0.886264274	0.9246
Average	0.87882	0.89622	0.896875209	0.881

Source: Appendix 3

BOK has fluctuating trend of long term debt to total assets ratio. In the FY 2063/64, the ratio is 86.33%. That means the contribution of long term debt in total assets is 86.33%. In the following year 2064/65, the ratio increases 90.47%. In the FY 2065/66 the ratio decreased 89.21%. In the year 2066/67 & 2067/68 it is 87.69% & 85.70%. The average of five years data shows a ratio of 87.88%.

Similarly, The above table shows that the long term debt to Assets ratios of EBL in fiscal year 2063/64, 2064/65, 2065/66, 2066/67, and 2067/68 are 88.04%, 89.42%, 91.10%, 89.97% and 89.60% respectively . The average ratio is 89.62%.

Again, the above table shows that the long term debt to Total Assets ratios of HBL in fiscal year 2063/64, 2064/65, 2065/66, 2066/67, and 2067/68 are 90.72%, 90.40%, 89.47%, 89.22% and 88.63% respectively . The average ratio is 89.69%.

And, the above table shows that the long term debt to Total assets ratios of SBI in fiscal year 2063/64, 2064/65, 2065/66, 2066/67, and 2067/68 are 83.77%, 80.96%, 91.07%, 92.24% and 92.46% respectively . The average ratio is 88.10%.

4.2.4 Debt Equity Ratio

Debt equity ratio is used to show the relationship between borrowed funds and owners' capital. It reflects the relative claims of creditors and shareholders against the assets of the firm. It is an important tool for the financial analysis to appraise the financial structure of a firm. The ratio reflects the relative contribution of owners and creditors capital of business in its financing. In other word, this ratio exhibits the relative proportions of capital contributed by owners and creditors. Debt equity ratio can be calculated in the basis of shareholders' equity and long tem debt. Shareholders' equity includes reserve and accumulated profit, preference share and equity share capital. Where long term debt includes total debt minus short term debt or current liabilities, here debt equity ratio is also computed by simply dividing long term debt of the firm by shareholders' equity. The high D/E ratio shows the large share of financing in the capital by the creditors then the owners or it also reflects that the creditors claim is higher against the assets of firm and vice versa. D/E ratios of concerned companies are shown in the following table that is referred from the appendix 1.

$$DebtEquityRatio \times \frac{LongTermDebt}{Shareholder'sEquity} | 100$$

Table No. 4.4
Comparative Debt to Equity Ratios

Fiscal Year	DEBT to Equity Ratio			
	BOK	EBL	HBL	SBI
2063/64	12.67417349	15.70498	14.16651813	10.01064739
2064/65	11.9469932	12.63576	13.01349229	9.83668247
2065/66	10.49844711	15.25802	11.27650583	16.02021158
2066/67	9.894163043	13.49419	11.08139875	14.32182858
2067/68	8.713256225	13.30571	10.3668765	15.06221344
Average	10.74540661	14.07973	11.9809583	13.05031669

Source: Appendix 4

The debt equity ratio and average ratio has been calculated in the above table. Five years data have been presented here.

Calculated value of BOK shows that the D/E ratios of BOK have fluctuating trend. In the fiscal year 2063/64, D/E ratio is 12.67 which decreases 11.95 in the fiscal year 2064/65. Again it decreased 10.50 in FY 2065/66. The ratio decreases 9.89 and 8.71 in the following year 2066/67 and 2067/68 respectively. The average D/E ratio of BOK is 10.75. The table shows that D/E ratios of EBL are 15.71, 12.64, 15.26, 13.49, and 13.31 in fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. The average D/E ratio of EBL is 14.08.

The table shows that D/E ratios of HBL are 14.17, 13.01, 11.28, 11.08, and 10.37 in fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. The average D/E ratio of HBL is 11.98.

The table shows that D/E ratios of SBI are 10.01, 9.84, 16.02, 14.32, and 15.06 in fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. The average D/E ratio of SBI is 13.05.

4.2.5 Interest Coverage Ratio

A ratio used to determine how easily a company can pay interest on outstanding debt. The interest coverage ratio is calculated by dividing a company's earnings before interest

and taxes (EBIT) of one period by the company's interest expenses of the same period. The interest coverage ratio is useful tool to measure long term debt serving capacity of the firm. It is also called interest earned ratio. Interest is fixed charges of the companies, which is charged in long term and short term loans. Generally, interest coverage ratio measured the debt serving capacity of a firm and it is concerned with long term loans. It shows how many times the interest charges are covered by EBIT out of which they will be paid. This ratio uses the concept of net profit before tax because interest is tax deductible or tax is calculated after paying interest on loan. This ratio examines the interest paying capacity of the firm by how many times the interest charges are covered by EBIT.

Interest coverage ratio is calculated dividing EBIT by interest. So, it is necessary to analyze EBIT and interest. This ratio is useful to measure long term debt serving capacity of the firm. The high ratio shows that the firm may imply unused debt capacity and the firm has greater capacity to handle fixed charges liabilities of creditors. Whereas, low ratio is a signal that the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors. The interest coverage ratio is used to determine how easily a company can pay interest expenses on outstanding debt. The ratio is calculated by dividing a company's earnings before interest and taxes (EBIT) by the company's interest expenses for the same period. The lower the ratio, the more the company is burdened by debt expense. When a company's interest coverage ratio is only 1.5 or lower, its ability to meet interest expenses may be questionable. The calculated interest coverage ratios of four companies are presented in the following table.

$$\text{InterestCoverageRatio} \times \frac{\text{EBIT}}{\text{Interest}}$$

Table No. 4.5
Comparative Interest Coverage Ratio

Fiscal Year	Interest Coverage Ratio			
	BOK	EBL	HBL	SBI
2063/64	2.14103679	1.943552	1.8991088	1.729611267
2064/65	2.39745368	2.137089	2.1592811	1.776678434
2065/66	2.20909658	2.128422	2.2408764	1.536397478
2066/67	1.8337409	1.808811	1.3728431	1.39502069
2067/68	1.7412368	1.559333	1.4204121	1.321680237
Average	2.06451295	1.915441	1.8185043	1.551877621

Source: Appendix 5

In the above table, the average ratio of BOK is 2.07, which implies the number of times the interest covered by its EBIT. The interest coverage ratio of BOK shows a fluctuating trend. The interest coverage of BOK in FY 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 is 2.14, 2.40, 2.21, 1.83 and 1.74 respectively.

Similarly, in case of EBL, the interest coverage ratio is 1.94, 2.14, 2.13, 1.81 and 1.56 in the FY 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. The average IC ratio of EBL is 1.92.

Again, in case of HBL, the interest coverage ratio is 1.90, 2.16, 2.24, 1.37 and 1.42 in the FY 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. The average IC ratio of HBL is 1.82.

In case of SBI, the interest coverage ratio is 1.73, 1.78, 1.54, 1.40 and 1.32 in the FY 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. The average IC ratio of SBI is 1.55.

4.2.6 Return on Total Assets

Return on assets is an indicator of how profitable a company is before leverage, and is compared with companies in the same industry. Since the figure for total assets of the company depends on the carrying value of the assets, some caution is required for

companies whose carrying value may not correspond to the actual market value. Return on assets is a common figure used for comparing performance of financial institutions (such as banks), because the majority of their assets will have a carrying value that is close to their actual market value. Return on assets is not useful for comparisons between industries because of factors of scale and peculiar capital requirements (such as reserve requirements in the insurance and banking industries).

Return on total assets ratio measures the profitability of bank that explains a firm to earn satisfactory return on all financial resources invested in the banks assets. The ratio explains net income for each unit of assets.

An indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as "return on investment". The formula for return on assets is:

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

Table No. 4.6

Position of comparative Return on Total Assets

Fiscal Year	Return on Total Assets			
	BOK	EBL	HBL	SBI
2063/64	1.799457459	1.382984	1.467287005	1.833712198
2064/65	2.039823552	1.661985	1.757729555	1.441575438
2065/66	2.252799887	1.730191	1.914618095	1.02330842
2066/67	2.176691924	2.009931	1.191086741	1.02960814
2067/68	2.444293201	2.014229	1.910970388	1.007990456
Average	2.142613205	1.759864	1.648338357	1.26723893

Source: Appendix 6

The above table shows the comparative position of return on total assets of the four commercial banks. From the table, the ROA is BOK in the years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 are 1.80, 2.04, 2.25, 2.18 and 2.44 respectively. The average ratio is 2.14.

Similarly, the ROA of EBL in the years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 is 1.38, 1.66, 1.73, 2.01 and 2.02. Respectively and the average return is 1.76.

Again, the ROA of HBL in the years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 is 1.47, 1.76, 1.91, 1.19 and 1.91. Respectively and the average return is 1.65.

And, the ROA of SBI in the years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 is 1.83, 1.44, 1.02, 1.03 and 1.01. Respectively and the average return is 1.27.

4.2.7 Return on Shareholders' Equity

Return on equity (ROE) measures the rate of return on the ownership interest (shareholders' equity) of the common stock owners. It measures a firm's efficiency at generating profits from every unit of shareholders' equity (also known as net assets or assets minus liabilities). ROE shows how well a company uses investment funds to generate earnings growth. ROEs between 15% and 20% are generally considered good. Shareholders' fund represents that part of long term source of funds, which is collected by issuing equity shares and preference shares. Shareholders are actually the owners of the company. Shareholders have ultimate claim in the return of the company. To measure the return earned by shareholders, return on shareholders equity is used or this ratio is calculated to find out the profitability on the owners' capital or investment.

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

The high ROSHE represents the high profitability of the firm and vice versa. So, high ROSHE is desirable from the point of view of the owners of the firm. The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the

money shareholders have invested.
 ROE is expressed as a percentage and calculated as:

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

Table No. 4.7
Position of comparative ROSHE

Fiscal Year	Return on Shareholders Equity			
	BOK	EBL	HBL	SBI
2063/64	26.42	24.67	22.913	24.67
2064/65	26.94	23.486	25.303	23.486
2065/66	26.51	28.986	24.13	28.986
2066/67	24.56	30.146	14.794	30.146
2067/68	24.85	29.911	22.353	29.911
Average	25.85	27.44	21.899	27.44

Source: Appendix 7

Above table exhibits ROSHE of sampled companies. In case of BOK, in the fiscal year 2063/64, the ratio is 26.46% that implies that one rupee investment by shareholders' equity earned 26.46 paisa in one year. In the fiscal year 2064/65 and 2065/66 it is 26.94 and 26.51 respectively. But in FY 2066/67 it is decreased to 24.56% and in 2067/68 it is 24.85%. The average ratio is 25.85%.

Similarly in the case of EBL, in the fiscal year 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 are 24.67%, 23.49%, 28.98%, 30.15% and 29.91% respectively. Average ratio is 27.44%.

Again, in the case of HBL, in the fiscal year 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 are 22.91%, 25.30%, 24.13%, 14.79% and 22.35% respectively. Average ratio is 21.89%.

Similarly in the case of SBI, in the fiscal year 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 are 24.67%, 23.49%, 28.98%, 30.15% and 29.91% respectively. Average ratio is 27.44%.

4.2.8 Earning per share

The term **earnings per share (EPS)** represents the portion of a company's earnings, net of taxes and preferred stock dividends, that is allocated to each share of common stock. The figure can be calculated simply by dividing net income earned in a given reporting period (usually quarterly or annually) by the total number of shares outstanding during the same term. Because the number of shares outstanding can fluctuate, a weighted average is typically used. The profitability of bank from the point of view of the ordinary shareholders' is earning per share. The ratio explains net income for each unit of share. Earning per share of an organization gives the strength of the share in the market. Earnings per share (EPS) are found by taking the net income and dividing it by the basic or diluted number of shares outstanding, as reported. If you do this for each quarter and then add them up, you'll get the trailing EPS. (Trailing means last 12 months or, actually, four quarters.) This is part of the input in the price to earnings (P/E) ratio. One can also take "expected" earnings for the current year or for future years to calculate other P/E ratios. It shows how much theoretically belongs to the ordinary shareholders. The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability. Calculated as:

$$\text{EarningPerShare} \times \frac{\text{NetIncome}}{\text{No.OfSharesOutstanding}}$$

Table No. 4.8
Position of comparative EPS

Fiscal Year	Earning Per Share			
	BOK	EBL	HBL	SBI
2063/64	43.5	78.42	60.66	39.35
2064/65	59.94	91.82	62.74	28.33
2065/66	54.68	99.99	61.9	36.18
2066/67	43.08	100.16	31.8	23.69
2067/68	44.51	83.18	44.66	24.85
Average	49.142	90.714	52.352	30.48

Source: Appendix 8

The earnings per share of BOK are 43.50, 59.94, 54.68, 43.08 and 44.51 in the years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. The average EPS is 49.14. The overall trend is increasing. The highest EPS is 59.94 in the year 206/65.

Similarly, the earnings per share are EBL in the years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 are 78.42, 91.82, 99.99, 100.16 and 83.18 respectively. And the average EPS is 90.71. Here, the overall trend is fluctuating.

Again, the earnings per share are HBL in the years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 are 60.66, 62.74, 61.90, 31.80 and 44.66 respectively. And the average EPS is 52.35. Here, the overall trend is fluctuating.

And, the earnings per share are SBI in the years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 are 39.35, 28.33, 36.18, 23.69 and 24.85 respectively. And the average EPS is 30.48. Here, the overall trend is fluctuating.

4.3 Capital Structure

4.3.1 Net Income (NI) Approach

Net Operating Income Approach was also suggested by Durand. This approach is of the opposite view of Net Income approach. This approach suggests that the capital structure decision of a firm is irrelevant and that any change in the leverage or debt will not result in a change in the total value of the firm as well as the market price of its shares. This approach also says that the overall cost of capital is independent of the degree of leverage. Net income (NI) approach is known as dependent hypothesis of capital structure. The essence of this approach is that the firm can reduce its cost of capital by using debt and total valuation of the firm through the reduction in the cost of capital leading to an increase in the cost of capital thus leading to an increase in the degree of leverage. This theory assumes that the cost of debt and cost of equity remain constant as change in the firm's capital structure. In other words, the firm can increase its value or lower the overall cost of capital by increasing the proportion of debt in the capital structure. It gives attention on overall capitalization rate. According to this theory, optimum capital structure is that, where the total value of the company is highest and the overall capitalization rate is lowest. The overall capitalization rate can be calculated simply by dividing EBIT by the value of the company. Calculated rates are presented below that is referred from appendix 10.

Table No. 4.9
Comparative Position of Overall Capitalization Rate

Fiscal Year	BOK		EBL		HBL		SBI	
	Cost of Capital (Ko)	Value of Firm (in Thousand)	Cost of Capital (Ko)	Value of Firm (in Thousand)	Cost of Capital (Ko)	Value of Firm (in Thousand)	Cost of Capital (Ko)	Value of Firm (in Thousand)
2063/64	0.035	20882120	0.036	28055168	0.033	44516511	0.037	19263395
2064/65	0.033	30207557	0.034	39666946	0.034	52770336	0.030	27129509
2065/66	0.037	33694242	0.044	49306001	0.037	56586729	0.028	44773248
2066/67	0.055	30445953	0.056	50768927	0.042	51167202	0.043	47349753
2067/68	0.073	28967457	0.074	53676442	0.065	52920627	0.052	53176964
Average	0.047	28839465	0.051	44294696.8	0.042	51592281	0.040	38338573.8

Source: Appendix 9

Above computed overall capitalization rate of BOK shows that the costs are 3.5%, 3.3%, 3.7%, 5.5% and 7.3% in the fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 when the values of the firm are Rs. 20882120, 30207557, 33694242, 30445953 and 28967457 thousand respectively. The average cost is 4.7% at an average value of Rs. 28839465.8 thousand.

Similarly, in the case of EBL, the costs are the costs are 3.6%, 3.4%, 4.4%, 5.6% and 7.4% in the fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. And the values of the firm are Rs. 28055168, 39666946, 49306001, 50768927 and 53676442 thousand respectively. The average cost is 7.4% at an average value of Rs. 44294696.8 thousand.

Again, in the case of HBL, the costs are the costs are 3.30%, 3.4%, 3.7%, 4.2% and 6.5% in the fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. And the values of the firm are Rs. 44516511, 52770336, 56586729, 51167202, and 52920627 thousand respectively. The average cost is 4.2% at an average value of Rs. 51592281 thousand.

And, in the case of SBI, the costs are the costs are 3.7%, 3.0%, 2.8%, 4.3% and 5.2% in the fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. And the

values of the firm are Rs. 19263395, 27129509, 44773248, 47349753 and 53176964 thousand respectively. The average cost is 4.0% at an average value of Rs. 38338574 thousand.

4.3.2 Net Operating Income (NOI) Approach

Another modern theory of capital structure, suggested by Durand. This is just the opposite to the Net Income approach. According to this approach, Capital Structure decision is irrelevant to the valuation of the firm. The market value of the firm is not at all affected by the capital structure changes. According to this approach, the change in capital structure will not lead to any change in the total value of the firm and market price of shares as well as the overall cost of capital. It is an independent hypothesis of capital structure decision of the firm and which is irrelevant to the value of firm an overall cost of capital. Change in leverage will not lead to any change in the total value of the firm and market price of share, as the overall cost of capital is independent of the degree of leverage. The increase in leverage leads to an increase in financial risk of the ordinary shareholders. To minimize the financial risk, the shareholders want a higher return on their investment. Increases in K_o are exactly offset by using cheaper debt fund keeping K_o constant. So equity capitalization rate K_e is calculated here by simply dividing EBT by the market value of common equity, which is presented in the following table. Detail calculation of K_e is presented in the appendix.

Table No. 4.10**Comparative Position of Effect of Debt on Equity Capitalization Rate**

Fiscal Year	BOK		EBL		HBL		SBI	
	Cost of Equity (Ke)	Long Term Debt(in Thousand)	Cost of Equity (Ke)	Long Term Debt(in Thousand)	Cost of Equity (Ke)	Long Term Debt(in Thousand)	Cost of Equity (Ke)	Long Term Debt(in Thousand)
2063/64	0.046	12588927	0.053	18869768	0.049	30408417	0.039	11645286
2064/65	0.041	16033737	0.047	24276298	0.048	32702789	0.027	13915394
2065/66	0.044	18283980	0.073	33622946	0.054	35181345	0.027	28157220
2066/67	0.077	20515834	0.095	37232310	0.045	38111202	0.047	35096400
2067/68	0.117	21218417	0.116	41427914	0.09	41420627	0.064	42615400
Average	0.06515	17728179	0.0769	31085847	0.0573	35564876	0.04073	26285940

Source: Appendix 10

The equity capitalization rates of BOK in the fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 are 4.60%, 4.10%, 4.40%, 7.70% and 11.70% respectively. And their respective long term debts are Rs. 12588927, 16033737, 18283980, 20515834, 21218417 thousand respectively. The average cost is 6.52% at an average long term debt of Rs. 17728179 thousand.

Similarly, the equity capitalization rates of EBL are 5.30%, 4.70%, 7.30%, 9.50% and 11.60% in the fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. And the long term debts are Rs. 18869768, 24276298, 33622946, 37232310 and 41427914 thousand respectively. The average cost is 7.69% at an average long term debt of Rs. 31085847 thousand.

Again, The equity capitalization rates of HBL are 4.90%, 4.80%, 5.40%, 4.50% and 9.00% in the fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. And the long term debts are Rs. 30408417, 32702789, 35181345, 38111202 and 41420627 thousand respectively. The average cost is 5.73% at an average long term debt of Rs. 35564876 thousand.

And, The equity capitalization rates of SBI are 3.90%, 2.70%, 2.70%, 4.70% and 6.40% in the fiscal years 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 respectively. And the

long term debts are Rs. 11645286, 13915394, 28157220, 35096400 and 42615400 thousand respectively. The average cost is 4.07% at an average long term debt of Rs. 26285940 thousand

4.4 Leverage Analysis

The use of various financial instruments or borrowed capital, such as margin, to increase the potential return of an investment. The amount of debt used to finance a firm's assets. A firm with significantly more debt than equity is considered to be highly leveraged. Leverage is most commonly used in real estate transactions through the use of mortgages to purchase a home. Leverage and capital structure are closely related concepts linked to cost of capital and therefore capital budgeting decision. Leverage results from the use of fixed cost assets or tends to magnify return to the firm's owners. Changes in leverage result in changes in level of return and associated risk. Generally, increase in leverage result in increase in return and risk, where as decrease in leverage result in decreased return and risk. The amounts of leverage in the firm's capital structure the mix of long term debt and equity maintained b the firm can significantly affect its value by affecting return and risk. Because of its effect on value, the financial manager must understand how to measure and evaluate leverage when attempting to create the best capital structure.

Generally, leverage refers tot he use of special force of power to have more than normal results from a particular action. Similarly in financial term it is used to describe about utilization of funds for which the firm has to pay fixed cost and to have more return than normal having more risk as well. Leverage may be used to boost owners' returns, but it is used at the risk of increasing losses, if the firm's economics fortune declines. Thus gain and losses are magnified by leverage, and the higher the leverage employed by a firm, the greater will be the volatility of its returns. There are three types of leverages: operating leverage, financial leverage and combine leverage. Operating leverage is the function of fixed cost, contribution margin and sales volume. Financial leverage is the relationship between EBIT and EBT and combined leverage is the combined effect of operating leverage and financial leverage. The operating leverage indicates the impact of changes sales an operating income and financial leverage exist when the capital structure if the

firm composed debt capital. Financial leverage is related to the capital structure of the firm. So, financial leverage is the relevant issue of this study, which is explained in this section. Leverage helps both the investor and the firm to invest or operate. However, it comes with greater risk. If an investor uses leverage to make an investment and the investment moves against the investor, his or her loss is much greater than it would've been if the investment had not been leveraged - leverage magnifies both gains *and* losses. In the business world, a company can use leverage to try to generate shareholder wealth, but if it fails to do so, the interest expense and credit risk of default destroys shareholder value.

4.4.1 Analysis of Financial Leverage

The debt to asset ratio is the percentage of total debt financing the firm uses as compared to the percentage of the firm's total assets. It helps you see how much of your assets are financed using debt financing. When the company employs debt or other fund carrying fixed charges i.e. interest in the capital structure, financial leverage exists. If the financial charge is high the company can have advantage of tax shield but it will affect to owners' return i.e. net profit as well. Financial leverage explains the relationship between earning before interest and taxes and net profit of the company. It is an open question whether the financing decision adds value to shareholders or not. We will make two observations here. First, we will see that increasing financial leverage has a positive impact upon ROE. However, it also increases risk and so equity investors will require a higher rate of return. If this higher rate of return exactly offsets the positive impact from financial leverage then it is all awash and the financing decision has no impact upon shareholder value. If the financing decision interacts with the investment decision, for example as per a financial institution then the financing decision matters.

Four methods: either dividing percentage change into EPS by percentage change into EBIT or dividing percentage change into EBT by EBIT can calculate degree of financial leverage. In this analysis of financial leverage second method is chosen. High the financial leverage, high will be the financial risk and also high will be the shareholders' return. The degree of financial leverage of sampled companies is presented in the following table.

$$DFL \times \frac{\% \text{Change In EPS}}{\% \text{Change In EBIT}} \times \frac{EBIT}{EBT}$$

Table No. 4.11
Comparative Degree of Financial Leverage

Fiscal Year	Degree of Financial Leverage			
	BOK	EBL	HBL	SBI
2063/64	1.89	2.0542891	2.102	2.37262
2064/65	1.713	1.867705	1.844	2.305215
2065/66	1.833	1.8779698	1.8	2.84809
2066/67	2.169	2.2148986	3.605	3.515774
2067/68	2.335	2.7850315	3.327	4.089795
Average	1.988	2.1599788	2.5354	3.026298864

Source: Appendix 11

Above calculated DFL of BOK indicates fluctuation trend. In the fiscal year 2063/64 the DFL is 1.89 times. In the second year i.e. 2064/65 the DFL is 1.71 times. In the fiscal years 2065/66, 2066/67 and 2067/68 the DFL are 1.83, 2.17 and 2.34 times respectively. The average DFL of BOK is 2.00 times.

The trend of EBL is fluctuation trend. The DFL of EBL in the fiscal year 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 is 2.05, 1.87, 1.88, 2.23 and 2.79 respectively. The average DFL of EBL is 2.16 times.

The trend of HBL is fluctuating trend. The DFL of HBL in the fiscal year 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 is 2.10, 1.84, 1.80, 3.61 and 3.33 respectively. The average DFL of HBL is 2.54 times.

The trend of SBI is increasing trend. The DFL of SBI in the fiscal year 2063/64, 2064/65, 2065/66, 2066/67 and 2067/68 is 2.37, 2.31, 2.85, 3.52 and 4.09 respectively. The average DFL of SBI is 3.03 times.

4.5 Correlation Analysis

Correlation analysis enables us to have an idea about the degree and direction of the relationship between the four or more variables. The correlation is a statistical tool which studies the relationship between four or more variables and correlation analysis involves various methods and techniques used for studying and measuring the extent of the relationship between the four or more variables. It is denoted by 'r'. However, it fails to reflect upon the cause and effect relationship between the variables. Although there are three types of correlation i.e. simple, partial and multiple but here we focus on simple correlation based on 'Pearson's coefficient of correlation'. In the following section correlation between different variables are calculated and presented of the sampled companies.

-) Total debt and shareholders equity
-) EBIT and interest

4.5.1 Total Debt and Shareholders Equity

The relationship between total debt (TD) and shareholders equity (SHE) have been shown in the following table below. The total debt includes all types of long term borrowed funds, current liabilities and provisions. Whereas, shareholders' equity includes share capital reserve and surplus. This correlation indicates whether there is positive or negative correlation between TD and SHE and their respective probable error is also presented. P.E. interprets the value of correlation co-efficient. It helps to determine applicability for the measurement of reliability of the computed value of the correlation coefficient (r). Detail calculations are presented in the appendix 13.

Table No. 4.12

Comparative Coefficient between TD and SHE with Probable Error

BOK		EBL		HBL		SBI	
Correlation Coefficient (r)	Probable Error 6(P.E.)	Correlation Coefficient (r)	Probable Error 6(P.E.)	Correlation Coefficient (r)	Probable Error 6(P.E.)	Correlation Coefficient (r)	Probable Error 6(P.E.)
0.9978	0.044	0.972	0.099	0.9997	0.0011	0.9995	0.0018

Source: Appendix 12

Karl Pearson's correlation coefficient between total debt and shareholders equity of BOK is 0.998. There is positive correlation between TD and SHE. The probable error 6(PE) of BOK is 0.044. PE is less than correlation coefficient (r).

Similarly, Karl Pearson's correlation coefficient between total debt and shareholders equity of EBL is 0.972. There is positive correlation between TD and SHE. The probable error 6(PE) of EBL is 0.099. PE is less than correlation coefficient (r).

Karl Pearson's correlation coefficient between total debt and shareholders equity of HBL is 0.9997. There is positive correlation between TD and SHE. The probable error 6(PE) of HBL is 0.001. PE is less than correlation coefficient (r).

Karl Pearson's correlation coefficient between total debt and shareholders equity of SBI is 0.9995. There is positive correlation between TD and SHE. The probable error 6(PE) of SBI is 0.0018. PE is less than correlation coefficient (r).

4.5.2 EBIT and Interest

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

Table No. 4.13

Correlation Coefficient between EBIT and Interest, and their respective Probable Error

BOK		EBL		HBL		SBI	
Correlation Coefficient (r)	Probable Error 6(P.E.)	Correlation Coefficient (r)	Probable Error 6(P.E.)	Correlation Coefficient (r)	Probable Error 6(P.E.)	Correlation Coefficient (r)	Probable Error 6(P.E.)
0.9914	0.031	0.9879	0.044	0.9481	0.18	0.9996	0.002

Source: Appendix 13

In the above table, correlation coefficient of BOK is found to be 0.9914 i.e. there is positive correlation between Interest and EBIT. PE of respected correlation is 0.031, which is less than correlation coefficient (r).

Similarly, in the case of EBL, the correlation coefficient between Interest and operating profit is 0.9879. It is also positive. The Probable error of respected correlation is 0.044, which is greater than correlation coefficient (r).

Again, in the case of HBL, the correlation coefficient between Interest and operating profit is 0.9481. It is positive. The Probable error of respected correlation is 0.183, which is greater than correlation coefficient (r).

And, in the case of SBI, the correlation coefficient between Interest and operating profit is 0.9996. It is positive. The Probable error of respected correlation is 0.002, which is greater than correlation coefficient (r).

4.6 Major findings of the Study

The percentage of total debt of the firm covered by long term debt is indicated by long term debt to total debt ratio. BOK has 95.86% of average long term debt to total debt ratio. Similarly EBL has average ratio of 95.80%. Again HBL has average ratio of 97.04%. And SBI has average ratio of 94.31%. In four cases, the total debt is contributed

by current liabilities to a small extent. The analysis of four Banks reveals the fluctuating trend of long term debt to total debt ratio. Among the four, HBL has used maximum long term debt in comparison to others.

The analysis shows that among the four banks, BOK has least and EBL has the highest long term debt to capital employed ratio of .91 and 0.93 respectively. This indicates that EBL is using more long term debt financing as its capital. It can be said that long term debt to capital employed ratio of companies are inappropriate.

The debt equity ratio shows the claim of creditors on the total asset of the company. The trend analysis shows fluctuating trend in four sample banks. The average debt equity ratio of BOK is 10.75. It also indicates that the company has used more amount of debt as financing and has higher amount to be paid as interest on debt. EBL has the highest debt equity ratio among the four with the average ratio of 14.08. The average debt equity ratio of HBL is 11.98. It also indicates that the company has used more amount of debt as financing and has higher amount to be paid as interest on debt. The average debt equity ratio of SBI is 13.05. It also indicates that the company has used more amount of debt as financing and has higher amount to be paid as interest on debt. The ratio shows that EBL has used almost amount of debt for financing where as in case of BOK the contribution of debt is low in comparison others sample.

The analysis shows that the sample Banks BOK, EBL, HBL and SBI are able to pay the interest amount. Among the four, SBI has the lowest interest coverage ratio of 1.55, which shows that the firm is able to pay the interest amount. In case of BOK, EBL and HBL, the average interest coverage ratios are 2.07, 1.92 and 1.82 respectively.

In comparison, BOK, EBL, HBL and SBI have the average return on asset of 2.14, 1.76, 1.65 and 1.27 respectively. The overall return on asset of BOK, EBL, HBL and SBI are fluctuating in trend.

The returns on shareholder's equity of banks are fluctuating over the period of five years. The average return of BOK is 25.85.0% which indicates that the shareholders earned Rs. 25.85 paisa investing rupee one. Similarly, the returns of shareholders equity of EBL, HBL and SBI have 27.44%, 21.89% and 27.44% respectively. By analyzing the average

return, we can conclude that return earned by the shareholders equity of HBL and EBL are highest among four companies i.e. 27.44%

The earning per share explains net income for each unit of share. It shows the market position of the market. The average earning per share of BOK, EBL, HBL and SBI has Rs. 49.14 Rs.90.71 Rs. 52.35 and Rs.30.48 respectively. Among the four, EBL has the highest earning per share (i.e. 90.71).

Under the NI approach, the interest rate and the cost of equity are dependent of the capital structure. With the increased use of leverage, overall cost of capital declines and the total value of firm rise. From the calculations, HBL has the optimum capital structure because it has the least cost of capital and the highest value of the firm.

Net operating income (NOI) approach is an independent hypothesis of capital structure. Any changes in leverage will not lead to any change in the total value of the firm and market price of share. From the position of average cost of equity, it is found that BOK, EBL, HBL and SBI has an average cost of equity of 6.5%, 7.7%, 5.7% and 4.1% respectively with an average long-term debt of Rs. 17728179, 31085847, 35564876 and 26285940 thousand, which in comparison to EBL is higher, where EBL has average cost of equity of 7.7% at long term debts of Rs. 31085847 thousand.

The financial leverage analysis helps to evaluate the financial risk of the firm. The average degree of financial leverage of BOK, EBL, HBL and SBI are 2.00, 2.16, 2.54 and 3.03 times respectively, which concludes that SBI is bearing the highest risk and BOK, EBL and HBL are bearing the least financial risk.

BOK has positive correlation between TD and SHE of 0.9978 that is they deviate in the same direction. Likewise, the probable error is 0.044, less than correlation coefficient, i.e. relationship between TD and SHE is significant. In case of EBL the correlation coefficient is 0.972. The 6(PE) of EBL is 0.099 which shows that the value of r is significant. Similarly, in case of HBL the correlation coefficient is 0.9997. The 6(PE) of HBL is 0.0011 which shows that the value of r is significant. And in case of SBI the correlation coefficient is 0.9995. The 6(PE) of SBI is 0.0018 which shows that the value of r is significant.

The correlation coefficient between EBIT and interest of both banks are positive. In case of both banks the value are significant that PE are less than correlation coefficient.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Capital structure is considered as that 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 suppliers of capital, they hold greater degree of risk and hence have claims over firms assets and cash flow. Similarly debt holders are also a source of financing fund and they have risk considering firm's cash flow is uncertain and there is probability that it may default in its obligations to pay off its interest and principal.

This chapter is a complete conclusion and suggestion package, which contains summary conclusion of the findings and actionable plans. This would be meaningful to the top management of the bank to initiate an action and achieve the desire result. Summary gives brief introduction to the entire chapter of the study and shows the actual factors of the present situation under the topic of the study. Conclusion of the findings is based on the consequences of the analysis of relevant data by using various financial and statistical tools. On the basis of the study, the preceding chapters have brought certain finding and recommendation which are summarized below.

This research is concerned about the analysis of Capital Structure Management of Commercial Banks of Nepal. The researcher has identified that research problem and set objectives to solve research problems about capital structure management of selected commercial banks as described in introduction chapter. The main objective of the study is to analyze the loan disbursement and collection pattern of bank, various financial analysis, loan management, as well as offer suitable suggestions based on findings of this study. The research is based on secondary source of data. There include in first part

background of study, introduction of Bank of Kathmandu, Everest Bank, Himalayan Bank and Nepal SBI Bank focus of the study, statement of problem, objective, significant and limitation and organization of the study. To make this study more effective, related literatures have been reviewed. This section includes conceptual review and review of related studies. In conceptual review includes concept and function of commercial banks, types of loan, feature and objective of disbursement and collection policy and lending process. In the review of related studies includes review of books, journal and articles, NRB directives and review of previous thesis as well.

Research methodology has been described in third chapter, which is a way to solve the research problems with the help of various tools and techniques. This chapter includes the various financial as well as statistical tools to analyze the data in order to come to the decisions. This chapter includes the research design, population and sample data collection procedure, data period covered and methods of analysis. These studies is mainly conducted on the basis of secondary data collected from annual reports of concern banks, official report, economic journal, financial statement etc. and authorize web site of Bank of Kathmandu, Everest Bank Limited, Himalayan Bank Limited, Nepal SBI Bank Limited and Nepal stock exchange and security board of Nepal.

The presentation and analysis of data has been made comparative analytical and their interpretation has done in chapter four by applying the wide varieties of methodology as stated in chapter three. It includes the various financial and statistical tools. In case of financial tools there analyzed various component of capital structure. Various statistical tools such as coefficient of correlation, trend analysis have been applied to fulfill the objective of this study. The major findings of the study are also included in the final section of the presentation and analysis chapter.

In this chapter, summary conclusion and recommendation are included. All the summary and conclusion are made according to obtained data from analysis. Recommendation has made which would be beneficial for all concerned person, management of the bank and

other stakeholder. This research is concerned about the Capital Structure Management of Commercial Bank.

5.2 Conclusion

There is no hard and fast rule for standardization of financial ratios. It varies from the nature of the Banks. We have observed from the study that real life ratios of the Banks are unexpectedly different from the traditional capital structure literature. Different new strategies have been emerging in the market because of which we have experienced ratios which seems to be almost impracticable. As a result of dynamic business environment, traditional debt-centered strategies may not prove to be effective. Only those business firms who make appropriate decision related to capital structure will be outstanding. Nepalese Banks have mixed results of the extent of leverage. However, after capital structure management of commercial banks of Nepal, it is seen that Commercial Banks are found to be financed mostly by Shareholder's equity than by debt rather. They tend to generate capital by issuing shares and take loan depending upon the financial leverage. Most of the Nepalese commercial banks are found to be using high-debt financing. The moderately levered firm are highly profitable than less levered and highly levered firms. In Nepalese context, generally, moderate to high or around 65% level of debt is regarded as optimal capital structure.

The debt to asset ratio shows that the banks have greater claim from outsider in case of Himalayan Bank Limited and Everest Bank Limited whereas the remaining Banks: Bank of Kathmandu and Nepal SBI Bank are seen to be dominated by the shareholders. Likewise, in the valuation of the total debt, long-term debt is found to be significantly low in comparison to the short-term debt. Firms are seen to rely more on short-term debt. Among the selected four banks, all have been using long-term debt. This implies that due to the use of debt in higher proportion, SBI and HBL also have to bear huge amount of interest on debt causing very low interest coverage ratios. Also, the higher contribution of short-term debt ratio over total leverage and low contribution of long-term debt ratio over total leverage shows the importance of short-term financing over long-term financing.

Bank of Kathmandu has been the most profitable Bank among all four. On the other hand, Nepal SBI Bank Limited has the lowest profit percentage. Everest Bank Limited is the second topmost Commercial Bank with the profitability percentage. The remaining Himalayan Bank has the satisfactory level of profit.

The capital structure pattern of a business firm is a dependent variable which is affected by various specific characteristics of the business firm. The variables that affect the decision of choosing the capital structure are: asset structure, tax, market, size, risk, growth, profitability, industry class, management control, liquidity, sales, etc. All these are the most important factors that influence the leverage. The following conclusion can be drawn

Long term debt to total debt ratio shows that all of the sample banks have fluctuating trend of long term debt to total debt ratio. In average BOK has 95.86% of average long term debt to total debt ratio, which means that about 4.14% of the total debt is contributed by current liabilities. Similarly EBL, HBL and SBI have the average ratio are 95.79%, 97.04% and 94.31% respectively.

Long term debt to capital employed ratio highlights the portion of fund financed by long term debt in the capital employed by the firm. The data shows BOK has the average ratio of 91.36%. Similarly EBL, HBL, and SBI have the average of 93.33%, 89.69% and 92.61% respectively. We can conclude that four banks do not have appropriate ratio of long term debt to capital employed and among the four in average EBL has employed more of the long term debt in the capital than the others.

Interest coverage ratio shows how many times the interest charges are covered by EBIT out of which they will be paid. The conclusion drawn by the study is the average interest coverage ratio of BOK, EBL, HBL and SBI are 2.07, 1.92, 1.82 and 1.55 times respectively which shows that all banks are able to cover the interest but as the higher interest coverage ratio is better. BOK seems to have higher ratio than others.

In regards of the comparative position of return on total assets of the four commercial banks BOK seems to have the highest return of 2.14 in comparison of others.

The return on shareholder's return of BOK shows the average ratio of 25.85% and it has fluctuating trend. The data indicates that BOK has instable return. Similarly EBL, HBL, SBI have also fluctuating trend and the ratio of 27.44%, 21.89% and 27.44 respectively. By analyzing the average ROSHE, we can conclude that return earned by the shareholders equity of HBL is least i.e. 21.89% and the return of EBL and SBI are highest i.e. 27.44%. So we can conclude that all banks should apply suitable action to increase ROSHE.

Earning per share of an organization shows the strength of the share in the market. The average earning per share of BOK is Rs. 49.14. Similarly, the average earning per share of EBL, HBL, and SBI are Rs. 90.71 Rs.52.35 and Rs.30.48 respectively. Among the four, EBL has the highest earning per share.

Net income approach is the dependent hypotheses of capital structure, which states with the increased use of leverage, overall cost of capital declines and the total value of the firm rise. According to this hypothesis the firm with the highest value and the least cost of capitalization rate is considered to have the best capital structure. The average value of firm of BOK, EBL, HBL and SBI are 28839465, 44294696, 51592281 and 38338573 respectively and the average cost of capitalization rate are 4.7%, 5.1,4.2 and 4.0% respectively. From the calculation it can be concluded that HBL has the better capital structure in comparison to others.

Net operating income is the independent hypothesis of the capital structure decision of the firm. According to this hypothesis, any change in the leverage will not lead to any change in the total value of the firm and market price of the share, as the overall cost of capital is independent of the degree of leverage. From the position of average Ke we can conclude that SBI has lesser Ke i.e. 4.07% than BOK, EBL and HBL i.e. 6.52%, 7.69% and 5.73% respectively.

When the company employs debt or other fund carrying fixed charges in the capital structure, financial leverage exists. From the calculations, we can conclude that HBL is using high long term debt and so is bearing the highest risk among the four. But it can also be concluded it is taking corrective actions to decrease its risk since the trend is decreasing. Other has moderate financial risk.

Considering the correlation coefficient and probability error calculated the correlation coefficients are positive and PE are less than the correlation coefficient which concluded that the total debt and shareholder's equity deviate in the same direction and relationship between total debt and correlation coefficient are insignificant. Likewise in the case of EBIT and interest the correlation coefficient are positive and significant in relationship.

In the case of long term debt and earning per share, the correlation coefficients of all are positive which concluded that the positive correlation exists between the two variables. Since PE in all cases is greater than correlation, the relationship between LTD and EPS is insignificant.

5.3 Recommendation

Capital structure is taken as one of the most complex and mystifying subject matter of financial management. It is a very difficult decision that involves a complex trade-off among several considerations. The findings of the study show that most of the Nepalese companies lack theoretical and practical knowledge of capital structure and due to which they have not been able to utilize their fund and resources in a proper way. In this section of study, few points that can be helpful to stakeholders as well as to the company are recommended based upon above calculations and drawn conclusions. These recommendations are guidelines, which would be helpful in taking prompt and appropriate decision about capital structure. These recommendations are given below:

First of all, the companies lack the theoretical knowledge regarding the capital structure. They have not given significant attention to the capital structure matter. Capital structure

is a serious matter. It affects EPS, Value of the firm, cost of capital etc. So it is recommended that these companies should follow the theoretical aspects of the capital structure management or give bit more attention in this matter and try to manage their activated accordingly.

Observing the return on shareholders' equity, earning per share, dividend per share, return on assets, BOKL seems to have better capital structure but with greater financial risk than the HBL. The companies along with the return should also consider the risk associated. The companies' shareholders not only seek the high return from their investment but also consider the risk of the investment. So it is recommended to all these companies to plan their capital structure well by analyzing the possible financial alternatives considering high return and least risk.

The companies are also recommended to minimize the financial and other expenses so the interest coverage ratio could be increased. They are recommended to use less cost debt, improve strategy of promotion activities, analyze and evaluate before making investments etc to increase the return and decreases risk.

Whenever we happen to shed a light upon the present condition of our country, it is seen to be in turmoil which directly or indirectly affects the functioning of the business firm. Various obstacles that hinder the development of the Nepalese commercial banks were discussed in the first chapter. Therefore, in order to overcome all the problems faced by these banks, the managers need to be alert. They should focus their eye in the investment decisions and other decisions too. The management should be updated with all the internal environment of the company. The most vital factor in which the company seeks the proper decision of the management is the choice of the proper mix of the source of fund.

The recommendations regarding the study are given as follows:

-) A careful attention should be given on the features of capital structure and its determinants, before designing the capital structure for the company
-) Optimal capital structure should be determined.

-) Any company has to compare its business performance with several other companies similar to it so that it can also improve in the fields where it is weak and the competing firm is strong. This helps the company to work on its weaknesses.
-) Consistency in the capital structure management should be maintained

BIBLIOGRAPHY

Books

- Acharya, R. (2009) “*A Comparative Study of Capital Structure Management between Kumari Bank and Siddratha Bank Ltd.*” A master Degree thesis, Kathmandu: Shankar Dev Campus, T.U.
- Ayer Dependra Kumar (2012) “*Capital Structure Mangement of Commercial Banks in Nepal*”. A master Degree thesis, Kathmandu: Shankar Dev Campus, T.U.
- Barges, Alexender (1963), *The Effect of Capital Structure on the Cost of Capital*, Prentice-Hall of India Pvt. Ltd., India.
- Dahal, Peshal and Khatiwada, Som Prasad (2059), *Research Methodology*, MK Publishers and Distributors, Bhotahity Kathmandu.
- Dhungana, Yub Raj (2005), *Fundamentals of Financial Management*, Asia Publications Pvt. Ltd. Kathmandu.
- Dhungana, S. (2010) “*Capital Structure of Commercial Banks in Nepal with reference to EBL, NIBL and HBL*”. A master Degree thesis, Kathmandu: Shankar Dev Campus, T.U.
- Enterprises Vaidya, Shakespeare (2001), *Banking and Insurance Management*, 3rd editon., Taleju Prakahana, Bhotahity, Kathmandu.
- Gautam, Rishi Raj &Thapa, Kiran (2062), *Capital Structure Management*, 3rd ed., Asmita Books and Stationery, Putalisadak, Kathmandu.
- Haag, Stephen (2005), *Management Information System for the Information Age*, Mc Graw –Hill/Irwin, New York.
- James, C Van Horne (2000), *Financial Management and Policy*, Prentice Hall of India Pvt. Ltd., New Delhi.
- Joshi, P.R. (2001), *Research Methodology*, Buddha Academic Enterprises Pvt. Ltd., Kathmandu.
- Kerlinger Gupta, S.C (1996), *Fundamentals of Statistics* 7th edition, Himalayan Publishing House Bombay, Fred N. (1973), *Foundations of Behavioural Research* 2nd edition, Surjeet Publication, Delhi

Kothari, C R (1994), *Research Methodology: Methods and Techniques* Vikash Publication House Pvt. Ltd., New Delhi.

Nepal, S. (2011) “A Study on Capital Structure of selected Commercial Banks in Nepal”. A master Degree thesis, Kathmandu: Shankar Dev Campus, T.U.

Pant, Prem R. and Wolff, Howard K. (2003), *A Hand Books for Social Science Research and Thesis Writing*, Buddha Academic

Sharma, P.R. and Silwal, D.P. (2053), *Business Mathematics and Statistics* 4th ed., Talaju Prakashan, Bhotahity, Kathmandu.

Sharma, P.R. and Chaudhary, A.K. (2060), *Statistical Methods*, 2nd ed., Khanal Books and Stationery, Kathmandu

Shrestha, M. K., *Financial Markets and Institutions*, Asmita Books Publishers and Distributors, Kathmandu.

Shrestha, Madhu Sundar (2006), *Fundamentals of Banking*, Buddha Academic Publishers and Distributors Pvt. Ltd., Kathmandu

Weston, J.F. and Copeland, T.E., (1990), *Managerial Finance*, 9th ed., The Dryden ress, USA.

Journals/Articles

Bhurtel, Pratistha and Pokherel, Matrika Babu (2008), *Market Outlook, Business Age*, Kathmandu.

Shrestha, R.D., (1993), *Focus on Capital Structure* (Selected & Listed Public Companies), vol. 10 Prava Journal Management, Nepal Commerce Campus, Kathmandu.

University Thesis/Independent Studies

Aisha Malik., (1996), *Capital Structure and Management In Nepal*, Master Degree Thesis, Shanker Dev Campus., Kathmandu.

Nisha Lamichhane., (2008), *Capital Structure of Selected Manufacturing Companies*, Master Degree Thesis, Shanker Dev Campus., Kathmandu.

Pathak, Krishna, (1981), *Capital Structure Management of Gorakhkali Rubber Udhyog*, Master Degree Thesis, T.U., Kathmandu.

Regmi, G.P., (1998), *A Study on Capital Structure Management of Necon Air Limited*, Unpublished Masters Degree Thesis, T.U., Kathmandu.

Urmila Kandel, (2008), *A Comprehensive Analysis of Capital Structure of Commercial Banks*, Master Degree Thesis, Nepal Commerce Campus. Kathmandu.

Acts/Byelaws

Bank and Financial Institutions Act (2063), *Nepal Law Books Management Committee*, Babarmahal, Kathmandu.

Nepal Act Collection (Supplementary part 'Kha') (2063), *Law Books Management Committee*, Babarmahal, Kathmandu.

Annual Reports/ Publications

Annual Report of BOK Bank.

Annual Report of EBL Bank

Annual Report of HBL Bank.

Annual Report of SBI Bank

Economic Report (2011), Nepal Rastra Bank, Kathmandu.

Webpages

<http://www.businessweek.com>

<http://www.nepalstock.com>

<http://www.nrb.org.np>

<http://www.sebonp.com>

APPENDICES

APPENDIX 1 : Long Term Debt to Total Debt

Long Term Debt to Total Debt of HBL

F/Y	Long Term Debt	Total Debt	(LTD/TD)%
2063/64	30408417	31372642	96.92654192
2064/65	32702789	33662540	97.14890498
2065/66	35181345	36200442	97.18484929
2066/67	38111202	39277919	97.0295855
2067/68	41420627	42740725	96.91138136
Average			97.04025261

Long Term Debt to Total Debt of BOKL

F/Y	Long Term Debt	Total Debt	(LTD/TD)%
2063/64	12588927	13588120	92.64656921
2064/65	16033737	16379852	97.88694672
2065/66	18283980	18754415	97.49160398
2066/67	20515834	21322662	96.21610097
2067/68	21218417	22322562	95.05368156
Average			95.85898049

Long Term Debt to Total Debt of EBL

F/Y	Long Term Debt	Total Debt	(LTD/TD)%
2063/64	18869768	20194574	93.43979229
2064/65	24276298	25228105	96.22719582
2065/66	33622946	34713260	96.85908497
2066/67	37232310	38623623	96.39776672
2067/68	41427914	43122667	96.06992536
Average			95.79875303

Long Term Debt to Total Debt of SBI

F/Y	Long Term Debt	Total Debt	(LTD/TD)%
2063/64	11645286	12737910	91.42226629
2064/65	13915394	15772803	88.22397642
2065/66	28157220	29204075	96.41538039
2066/67	35096400	35597200	98.59314778
2067/68	42615400	43985200	96.88577067
Average			94.30810831

APPENDIX 2 : Long Term Debt to Capital Employed**Long Term Debt to Capital Employed HBL**

F/Y	Long Term Debt	Capital Employed	LTD/CE
2063/64	30408417	32554916	0.934065288
2064/65	32702789	35215780	0.928640201
2065/66	35181345	38301225	0.918543597
2066/67	38111202	41550407	0.917228127
2067/68	41420627	45416105	0.912025084
Average			0.92210046

Long Term Debt to Capital Employed BOKL

F/Y	Long Term Debt	Capital Employed	LTD/CE
2063/64	12588927	13582201	0.926869437
2064/65	16033737	17375810	0.922761989
2065/66	18283980	20025569	0.913031735
2066/67	20515834	22589363	0.908207726
2067/68	21218417	23653605	0.897047913
Average			0.91358376

Long Term Debt to Capital Employed EBL

F/Y	Long Term Debt	Capital Employed	LTD/CE
2063/64	18869768	19687768	0.958451359
2064/65	24276298	26197535	0.926663444
2065/66	33622946	35826571	0.938491881
2066/67	37232310	39991447	0.931006823
2067/68	41427914	44541459	0.930097822
Average			0.936942266

Long Term Debt to Capital Employed SBI

F/Y	Long Term Debt	Capital Employed	LTD/CE
2063/64	11645286	12808576	0.909178819
2064/65	13915394	15330037	0.907720836
2065/66	28157220	29914826	0.941246324
2066/67	35096400	37546953	0.934733639
2067/68	42615400	45444692	0.93774208

Average			0.926124339
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Appendix 3 : Debt to Total Asset Ratio

Long Term Debt-Total Asset Ratio HBL

F/Y	Long Term Debt	Total Asset	LTD/TA
2063/64	30408417	33519141	0.907195593
2064/65	32702789	36175531	0.904003012
2065/66	35181345	39320322	0.894736951
2066/67	38111202	42717124	0.892176215
2067/68	41420627	46736203	0.886264274
			0.896875209
Average			

Long Term Debt-Total Asset Ratio BOKL

F/Y	Long Term Debt	Total Asset	LTD/TA
2063/64	12588927	14581394	0.86335552
2064/65	16033737	17721925	0.904740145
2065/66	18283980	20496005	0.892075309
2066/67	20515834	23396191	0.876887781
2067/68	21218417	24757750	0.857041411
Average			0.878820033

Long Term Debt-Total Asset Ratio EBL

F/Y	Long Term Debt	Total Asset	LTD/TA
2063/64	18869768	21432574	0.880424722
2064/65	24276298	27149343	0.894176261
2065/66	33622946	36916848	0.910775102
2066/67	37232310	41382760	0.89970582
2067/68	41427914	46236212	0.896005797
Average			0.89621754

Long Term Debt-Total Asset Ratio SBI

F/Y	Long Term Debt	Total Asset	LTD/TA
2063/64	11645286	13901200	0.837718039
2064/65	13915394	17187446	0.809625467
2065/66	28157220	30916681	0.910745238
2066/67	35096400	38047679	0.922432088
2067/68	42615400	46088234	0.924648143
Average			0.881033795

Appendix 4 : Debt-Equity Ratio**Debt to Equity Ratio of HBL**

F/Y	Long Term Debt	Total Equity	D/E Ratio
2063/64	30408417	2146499	14.16651813
2064/65	32702789	2512991	13.01349229
2065/66	35181345	3119880	11.27650583
2066/67	38111202	3439205	11.08139875
2067/68	41420627	3995478	10.3668765
Average			11.9809583

Debt to Equity Ratio of BOKL

F/Y	Long Term Debt	Total Equity	D/E Ratio
2063/64	12588927	993274	12.67417349
2064/65	16033737	1342073	11.9469932
2065/66	18283980	1741589	10.49844711
2066/67	20515834	2073529	9.894163043
2067/68	21218417	2435188	8.713256225
Average			10.74540661

Debt to Equity Ratio of EBL

F/Y	Long Term Debt Total Equity		D/E Ratio
2063/64	18869768	1201515	15.70497913
2064/65	24276298	1921237	12.63576435
2065/66	33622946	2203625	15.25801622
2066/67	37232310	2759137	13.49418677
2067/68	41427914	3113545	13.30570588
Average			14.07973047

Debt to Equity Ratio of SBI

F/Y	Long Term Debt	Total Equity	D/E Ratio
2063/64	11645286	1163290	10.01064739
2064/65	13915394	1414643	9.83668247
2065/66	28157220	1757606	16.02021158
2066/67	35096400	2450553	14.32182858
2067/68	42615400	2829292	15.06221344
Average			13.05031669

Appendix 5 : Interest Coverage Ratio**Interest Coverage Ratio of HBL**

F/Y	EBIT	Interest	I/C Ratio
2063/64	1457397	767411	1.899108822
2064/65	1778697	823745	2.159281088
2065/66	2094722	934778	2.240876443
2066/67	2132753	1553530	1.372843138
2067/68	3430021	2414807	1.420412066
Average	2178718	1298854.2	1.818504311

Interest Coverage Ratio of EBL

F/Y	EBIT	Interest	I/C Ratio
2063/64	1005139	517166	1.943551974
2064/65	1351942	632609	2.137089419
2065/66	2155823	1012874	2.128421699
2066/67	2844880	1572790	1.808811094
2067/68	3954274	2535876	1.559332554
Average	2262411.6	1254263	1.915441348

Interest Coverage Ratio of SBI

F/Y	EBIT	Interest	I/C Ratio
2063/64	713053	412262	1.729611267
2064/65	808243	454,918	1.776678434
2065/66	1267067	824,700	1.536397478
2066/67	2013983	1443694	1.39502069
2067/68	2770292	2096038	1.321680237
Average	1514527.6	1046322.4	1.551877621

Interest Coverage Ratio of BOKL

F/Y	EBIT	Interest	I/C Ratio
2063/64	726199	339181	2.141036792
2064/65	1001040	417,543	2.397453675
2065/66	1243971	563,113	2.209096576
2066/67	1655736	902928	1.833740896
2067/68	2122202	1218790	1.7412368
Average	1349829.6	688311	2.064512948

Appendix 6 : Return on Total Assets

Return on Total Assets of HBL

F/Y	Net Profit	Total Assets	ROA
2063/64	491822	33519141	1.467287005
2064/65	635868	36175531	1.757729555
2065/66	752834	39320322	1.914618095
2066/67	508798	42717124	1.191086741
2067/68	893115	46736203	1.910970388
Average			1.648338357

Return on Total Assets of BOKL

F/Y	Net Profit	Total Assets	ROA
2063/64	262386	14581395	1.799457459
2064/65	361496	17721925	2.039823552
2065/66	461734	20496006	2.252799887
2066/67	509263	23396191	2.176691924
2067/68	605152	24757750	2.444293201
Average			2.142613205

Return on Total Assets of SBI

F/Y	Net Profit	Total Assets	ROA
2063/64	254908	13901200	1.833712198
2064/65	247770	17187446	1.441575438
2065/66	316373	30916681	1.02330842
2066/67	391742	38047679	1.02960814
2067/68	464565	46088234	1.007990456
Average			1.26723893

Return on Total Assets of EBL

F/Y	Net Profit	Total Assets	ROA
2063/64	296409	21432574	1.382983677
2064/65	451218	27149343	1.66198497
2065/66	638732	36916848	1.73019105
2066/67	831765	41382760	2.009931189
2067/68	931303	46236212	2.014228588
Average			1.759863895

Appendix 7 : Return on Shareholders' Equity

Return on Shareholders' Equity of HBL

F/Y	Net Profit	S.E.	ROE
2063/64	491822	2146499	22.91275235
2064/65	635868	2512991	25.30323427
2065/66	752834	3119880	24.13022296
2066/67	508798	3439205	14.79405851
2067/68	893115	3995478	22.35314523
Average			

Return on Shareholders' Equity of BOKL

F/Y	Net Profit	S.E.	ROE
2063/64	262386	993274	26.41627587
2064/65	361496	1342073	26.93564359
2065/66	461734	1741589	26.51222533
2066/67	509263	2073529	24.5602063
2067/68	605152	2435188	24.85031956
Average			

Return on Shareholders' Equity of EBL

F/Y	Net Profit	S.E.	ROE
2063/64	296409	1201515	24.66960462
2064/65	451218	1921237	23.48580628
2065/66	638732	2203625	28.98551251
2066/67	831765	2759137	30.14583908
2067/68	931303	3113545	29.911339
Average			

Return on Shareholders' Equity of SBI

F/Y	Net Profit	S.E.	ROE
2063/64	254908	1163290	21.9126787
2064/65	247770	1414643	17.51466624
2065/66	316373	1757606	18.00022303
2066/67	391742	2450553	15.98586115
2067/68	464565	2829292	16.41983224
Average			

Appendix 8 : Earning Per Share**Earning Per Share of HBL**

F/Y	Net Income	No. of Shares(N)	EPS
2063/64	491837346	8108100	60.66
2064/65	635877742.5	10135125	62.74
2065/66	752837085	12162150	61.9
2066/67	508800000	16000000	31.8
2067/68	893200000	20000000	44.66
Average			

Earning Per Share of BOKL

F/Y	Net Income	No. of Shares(N)	EPS
2063/64	262366465.5	6031413	43.5
2064/65	361522895.2	6031413	59.94
2065/66	461716771.7	8443979	54.68
2066/67	509273278.7	11821571	43.08
2067/68	605104859.6	13594807	44.51
Average			

Earning Per Share of EBL

F/Y	Net Income	No. of Shares(N)	
		EPS	
2063/64	296427600	3780000	78.42
2064/65	451203480	4914000	91.82
2065/66	638757117.9	6388210	99.99
2066/67	831796047.7	8304673	100.16
2067/68	931291182.1	11196095	83.18
Average			

Earning Per Share of SBI

F/Y	Net Income	No. of Shares(N)	EPS
2063/64	254908670.4	6477984	39.35
2064/65	247753725.7	8745278	28.33
2065/66	316404158	8745278	36.18
2066/67	391743501.9	16536239	23.69
2067/68	464521870.1	18693033	24.85
Average			

Appendix 9 : Calculation of NI Approach

Calculation of Overall Capitalization rate (Ko)

Value of firm of HBL

F/Y	No. of Shares(N)	Closing MPS	Market Value of Share (S)	Market Value of Debt (B)	V=S+B
2063/64	8108100	1740	14108094	30408417	44516511
2064/65	10135125	1980	20067547	32702789	52770336
2066/67	12162150	1760	21405384	35181345	56586729
2066/67	16000000	816	13056000	38111202	51167202
2067/68	20000000	575	11500000	41420627	52920627
Average					51592281

Value of firm of BOKL

F/Y	No. of Shares(N)	Closing MPS	Market Value of Share (S)	Market Value of Debt (B)	V=S+B
2063/64	6031413	1375	8293193	12588927	20882120
2064/65	6031413	2350	14173820	16033737	30207557
2065/66	8443979	1825	15410262	18283980	33694242
2066/67	11821571	840	9930119	20515834	30445953
2067/68	13594807	570	7749040	21218417	28967457
Average					28839465.8

Value of firm of EBL

F/Y	No. of Shares(N)	Closing MPS	Market Value of Share (S)	Market Value of Debt (B)	V=S+B
2063/64	3780000	2430	9185400	18869768	28055168
2064/65	4914000	3132	15390648	24276298	39666946
2065/66	6388210	2455	15683055	33622946	49306001
2066/67	8304673	1630	13536617	37232310	50768927
2067/68	11196095	1094	12248528	41427914	53676442
Average					44294696.8

value of firm
of sbi

F/Y	No. of Shares(N)	Closing MPS	Market Value of Share (S)	Market Value of Debt (B)	V=S+B
2063/64	6477984	1176	7618109	11645286	19263395
2064/65	8745278	1511	13214115	13915394	27129509
2065/66	8745278	1900	16616028	28157220	44773248
2066/67	16536239	741	12253353	35096400	47349753
2067/68	18693033	565	10561564	42615400	53176964
Average					38338573.8

Calculation of Overall Capitalization rate (Ko) of HBL

F/Y	EBIT	Value of Firm	Ko
2063/64	1457397	44516511	0.032738347
2064/65	1778697	52770336	0.03370638
2065/66	2094722	56586729	0.037017902
2066/67	2132753	51167202	0.041682033
2067/68	3430021	52920627	0.064814444
	2178718	51592281	
Average			

Calculation of Overall Capitalization rate (Ko) of BOKL

F/Y	EBIT	Value of Firm	Ko
2063/64	726199	20882120	0.034776115
2064/65	1001040	30207557	0.033138728
2065/66	1243971	33694242	0.036919394
2066/67	1655736	30445953	0.054382794
2067/68	2122202	28967457	0.073261591
Average	1349829.6	28839465.8	0.046804945

Calculation of Overall Capitalization rate (Ko) of EBL

F/Y	EBIT	Value of Firm	Ko
2063/64	1005139	28055168	0.035827232
2064/65	1351942	39666946	0.034082331
2065/66	2155823	49306001	0.043723339
2066/67	2844880	50768927	0.05603585
2067/68	3954274	53676442	0.073668706
Average	2262411.6	44294696.8	0.051076354

Calculation of Overall Capitalization rate (Ko) of SBI

F/Y	EBIT	Value of Firm	Ko
2063/64	713053	19263395	0.037015957
2064/65	808243	27129509	0.029792025
2065/66	1267067	44773248	0.028299644
2066/67	2013983	47349753	0.042534182
2067/68	2770292	53176964	0.052095716
Average	1514527.6	38338573.8	0.039504015

Appendix 10: Calculation of NOI Approach

Calculation of Equity Capitalization rate of HBL

F/Y	EBT	Market Value of Equity, S	Ke
2063/64	693479	14108094	0.049154691
2064/65	964652	20067547	0.04807025
2065/66	1163754	21405384	0.05436735
2066/67	591605	13056000	0.045312883
2067/68	1031070	11500000	0.089658261
Average			0.057312687

Calculation of Equity Capitalization rate of BOKL

F/Y	EBT	Market Value of Equity, S	Ke
2063/64	384238	8293193	0.046331733
2064/65	584307	14173820	0.041224384
2065/66	678831	15410262	0.044050581
2066/67	763242	9930119	0.076861315
2067/68	908876	7749040	0.117288851
			0.065151373
Average			

Calculation of Equity Capitalization rate of EBL

F/Y	EBT	Market Value of Equity, S	Ke
2063/64	489288	9185400	0.053268012
2064/65	723852	15390648	0.047031938
2065/66	1147954	15683055	0.073197091
2066/67	1284429	13536617	0.094885524
2067/68	1419831	12248528	0.115918501
Average			0.076860213

Calculation of Equity Capitalization rate of SBI

F/Y	EBT	Market Value of Equity, S	Ke
2063/64	300534	7618109	0.039449947
2064/65	350615	13214115	0.02653337
2065/66	444883	16616028	0.026774329
2066/67	572842	12253353	0.046749816
2067/68	677367	10561564	0.064135103
Average			0.040728513

Appendix 11: Degree of Financial Leverage

Degree of Financial Leverage of HBL

F/Y	EBIT	EBT	DFL
2063/64	1457397	693479	2.101573371
2064/65	1778697	964652	1.843874268
2065/66	2094722	1163754	1.799969753
2066/67	2132753	591605	3.605028693
2067/68	3430021	1031070	3.326661623
Average	2178718		

Degree of Financial Leverage of BOKL

F/Y	EBIT	EBT	DFL
2063/64	726199	384238	1.88997184
2064/65	1001040	584307	1.713208981
2065/66	1243971	678831	1.832519434
2066/67	1655736	763242	2.169346027
2067/68	2122202	908876	2.334974188
Average	1349830		1.988004094

Degree of Financial Leverage of EBL

F/Y	EBIT	EBT	DFL
2063/64	1005139	489288	2.054289089
2064/65	1351942	723852	1.867705
2065/66	2155823	1147954	1.877969849
2066/67	2844880	1284429	2.214898605
2067/68	3954274	1419831	2.785031458
Average	2262412		2.1599788

Degree of Financial Leverage of SBI

F/Y	EBIT	EBT	DFL
2063/64	713053	300534	2.37262007
2064/65	808243	350615	2.305215122
2065/66	1267067	444883	2.848090397
2066/67	2013983	572842	3.515773983
2067/68	2770292	677367	4.089794749

Appendix 12 Correlation coefficient Between Total Debt and Shareholders Equity With Probable Errors

All Calculate data taken from SPSS Software
Correlation Coefficient Between TD and SHE of HBL

		debthbl	equityhbl
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debthbl	Pearson Correlation	1	0.99973381
	Sig. (2-tailed)		5.2132E-06
	N	5	5
equityhbl	Pearson Correlation	0.99973381	1
	Sig. (2-tailed)	5.2132E-06	
	N	5	5
**	Correlation is significant at the 0.01 level (2-tailed).		

Correlation coefficient Between TD and SHE of BOK

		debtbok	equitybok
debtbok	Pearson Correlation	1	0.997765605
	Sig. (2-tailed)		0.000126744
	N	5	5
equitybok	Pearson Correlation	0.997765605	1
	Sig. (2-tailed)	0.000126744	
	N	5	5
**	Correlation is significant at the 0.01 level (2-tailed).		

Correlation Coefficient Between TD and SHE of EBL

		debtebl	equityebl
debtebl	Pearson Correlation	1	0.972040498
	Sig. (2-tailed)		0.005588538
	N	5	5
equityebl	Pearson Correlation	0.972040498	1
	Sig. (2-tailed)	0.005588538	
	N	5	5

Correlation Coefficient Between TD and SHE of SBI

Correlations			
		debtsbi	equitysbi
debtsbi	Pearson Correlation	1	0.999448807

	Sig. (2-tailed)		1.55329E-05
	N	5	5
equitysb	Pearson Correlation	0.999448807	1
	Sig. (2-tailed)	1.55329E-05	
	N	5	5

Appendix 13: Correlation Coefficient Between EBIT and INTEREST with Probable Error

Correlation Coefficient Between LTD and EPS of BOK

		Bokebit	Bokint
Bokebit	Pearson Correlation	1	0.991419183
	Sig. (2-tailed)		0.000952943
	N	5	5
Bokint	Pearson Correlation	0.991419183	1
	Sig. (2-tailed)	0.000952943	
	N	5	5

Correlation Coefficient Between LTD and EPS of EBL

		Eblebit	Eblint
Eblebit	Pearson Correlation	1	0.987992813
	Sig. (2-tailed)		0.001576565
	N	5	5
Eblint	Pearson Correlation	0.987992813	1
	N	5	5

Correlation Coefficient Between LTD and EPS of HBL

		Hblebit	Hblint
Hblebit	Pearson Correlation	1	0.948078683
	Sig. (2-tailed)		0.014090968

	N	5	5
Hblint	Pearson Correlation	0.948078683	1
	Sig. (2-tailed)	0.014090968	
	N	5	5

Correlation Coefficient Between LTD and EPS of SBI

		SBIebit	SBIint
SBIebit	Pearson Correlation	1	0.99963079
	Sig. (2-tailed)		8.51568E-06
	N	5	5
SBIint	Pearson Correlation	0.99963079	1
	Sig. (2-tailed)	8.51568E-06	
	N	5	5