CHAPTER I

INTRODUCTION

1.1 General Background of the Study:

Nepal is a predominantly agricultural landlocked country. Its economy is almost based on agriculture. Though dependence is decreasing day by day and approximately 89% of total population is still hanging on agriculture. Thus a major source of income of the people as well as the country is agriculture. But the position of the agriculture in the country is not so good and the entire country is loosing its revenue from agriculture day by day because of lack of sufficient capital, fertilizer, irrigation, latest technology, professionalism in agriculture, supportive government policy and stable government. People are unable to handle their livelihood from this profession are they are changing their profession toward trade, commerce and industry.

Fund or capital is the most essential part for the development of any sector. Establishment of trade and industry is impossible in the absence of sufficient capital. In the context of capital flows, the bank plays a vital role as a financial intermediary. Without banks, capital flow could not be systematic. In the present competitive business market, no one can operate their business successfully only with their own capital. Everyone should depend upon financial intermediary even for the small scale business. Thus the bank plays the key role in the economic development of the country.

The business world today is entirely different from past. The social needs have increased tremendously in quantity as well as in quality. So establishment and development of business is essential and it is possible only if there is sufficient fund. The type of financial needed by a firm largely depends upon the type of enterprise and varies from one firm to another.

There are two sources of financial, internal and external. An internal source of financial mainly consists of retained earnings of the enterprise, different kinds of reserves and provision for depreciation. With the development of finance and financial institutions, it is no longer for an enterprise to finance from its internal sources alone and have a balance budget. Furthermore the innovation of corporate firm of business

organization with the principal limited liability and efficient technique of acquiring capital through the issue of various ownership and debt securities has enable investors to satisfy their diverse assets preferences. So it is possible for a corporate enterprise to attract the external funds from the public by issuing shares debentures. Issuing shares to the public is essential under government rules and regulation.

Success and failure of any organization or banks mainly depends upon the structure of its optimum capital structure. It determines the profit making power of the bank as well as it helps to reduce its risk to minimum level. Increase in equity capital decreases the earning power as well as risk to its shareholders. Similarly increase in debt capital increase the profit as well as risk to the shareholders. Therefore the bank should manage the optimum capital structure so that profit and risk both could be managed well.

Hence banking is the source for economic development. The bank itself should have strong and sufficient capital to mobilize the finds into a profitable direction. Without smooth and sound capital structure, a bank could not be able to maintain the financial position into a desired goal.

1.2 History of Banking

Financial development of a country largely depends on effective mobilization its internal resource. Banks and Financial institutions play pivotal role in the development of the country by performing the task of effective mobilization of its internal resources. It helps in growth of agriculture, trade, commerce and industry of national economy. The banking sector is largely responsible for collecting public deposit in various in various types and deploying these in the society by lending in different sectors of economy.

According to Dahal, B. and Dahal, S. (2002)," Banking has crossed various phases to come to the modern form. Some sort of banking activities had been carried out since the time immemorial. Traditional forms of banking were traced during the civilization of Greed, Rome and Mesopotamia. Merchants, goldsmiths and moneylenders are said to be the ancestors of modern banking."

According to Paul A.S., "Banking concept was also in existence even in ancient period when the goldsmith and reach people used to issue receipt to common people against the promise to safe keeping their valuable items. On the presentation of receipt,

the depositors would get back their gold and valuables after paying a small amount for safekeeping and saving."

Merchants

Business activities have been carried out since the time immemorial. Merchants had remit money from one place to another. It was very difficult to carry physical money (coins) each time when trading was executed. The merchants were so popular and creditworthy that the letters issued by them treated as good as money. They issued to make trading activities based on these letters and settle the outstanding (due to/from) through actual coins on periodical basis. These letters gave birth to modern negotiable instruments.

Goldsmiths

Goldsmiths had very sound credit standing in the society. They used to have safe to keep valuables. Fear of theft and robbery led people keep thief valuables (gold, silver, metallic coin) in the custody of the goldsmiths. Goldsmiths used to charge commission for safe keeping and used to return on demand. The depositors had to visit goldsmiths for part and full withdrawal of their valuables. In order to remove the inconvenience, goldsmiths started issuing a receipt to the depositor with a nation "I Owe You (IOU)…" which could be transferred to any person the depositor wished. This gave birth to the bank note.

Money-lenders

Moneylenders used to give loan to the needy public out of their own treasury. Latter on, savers started depositing their savings/deposits with the moneylenders.

Goldsmiths and moneylenders experienced that all the money deposited with them were not withdrawn at a time. Some used to deposit while some used to withdraw, but a large amount used to remain with them. They started offering interest on those deposits and started utilizing those funds to disburse the loans to needy people. They used to keep a fraction of total deposit in the form of cash to honor withdrawal demands and rest was lent. The principal of fractional reserve is the foundation of liquidity in modern banking.

Such tasks previously performed by merchants, goldsmiths and moneylenders are now a days being performed by various types of banks in modern ways, Banks refer to any firms that are basically concerned with the transaction of money; however, today's banks are for different purposes.

1.3 Emergence of modern Bank:

The first modern bank of the world of is bank of Venice, set up in 1157 is Venice, Italy. Subsequently, bank of Barcelona in 1401 and bank of Genoa in were established.

The Lombard's migrated to England & other parts of Europe from Italy are regarded for their role in the development & expansion of the modern banking; bank of Amsterdam set up in 1609 was very popular then. The banks of Hindustan established in 1770 are regarded as the first bank in India. Though bank of England was established in 1694, the growth of banks accelerated only after the introduction of banking act 1833 in United Kingdom as it allows opening joint stock company banks. Those modern banks gradually replaced gold-Smiths & Money-Lenders.

1.4 Emergence of Bank in Nepal

Established of Tejaratha Adda by the then Prime Minister Ranndip Singh (B.S. 1933) was the first step towards the institutional development of banking in Nepal .Tejaratha Adda did not collect deposits from the public but gave loans to employees & general public against the bullion.

The banking history of Nepal is not more than seven decade. Nepal bank Ltd. is the first of the country established in 1994 B.S. Till the establishment of Nepal Rastra Bank, Nepal Bank ltd. was also discharging the function of central bank. as a result, Nepal Rastra bank was established in 2014 B.S. The objective of the bank as to promote, develop & facilitate to banking sectors.

As the government provided favorable industrial policy, foreign investor was also attracted. As results some joint venture's banks were established after 2040 B.S. Among them Nepal Arab bank in the first joint venture's bank of Nepal. Then after so many JVB's are established in Nepal (as N.S. B.I., N.B.nepal H.B.etc.), Bank is business organization that receives & holds despite & funds from others makes loans & extends credits & transfer funds by written. Having observed the success of Nepal based on marketing concepts and also because of liberal economic policy adopted by the successive government.

According to Dahal, B. and Dahal, S. (2002),"Liberal and market oriented economic policy adapted by GoN since mid 1980s, allowed foreign banks on joint venture basis to operate in the country on the approval of Nepal Rastra Bank. As a result, Nabil Bank Ltd. (Nepal Arab Bank Ltd.), Nepal Investment Bank Ltd. (Nepal Indo-Suez Bank Ltd.) and Standard Chartered Bank Nepal Ltd were established in 2041, 2042 and 2043 B.S. respectively.

To regulate the commercial banks and accommodate them into the main stream of national economy "Commercial Bank Act-2031" was in 2031B.S.

There are 25 licensed commercial Banks in Nepal. These commercial banks have given a new horizon to the financial sector of the country regarding healthy competition, foreign capital investment, technological transfer and experience and skills. The name of 25 Licensed Commercial Banks are as follows:

Table No.-1.1

S.N.	Names of the Banks
1	Nepal Bank Limited
2	Rastriya Banijya Bank
3	NABIL Bank
4	Nepal Investment Bank Ltd.
5	Standard Chartered Bank Nepal Ltd.
6	Himalayan Bank Ltd.
7	Nepal SBI Bank Ltd.
8	Nepal Bangladesh Bank Ltd.
9	Everest Bank Ltd.
10	Bank of Kathmandu Ltd.
11	Nepal Credit and Commerce Bank Ltd.
12	Lumbni Bank Ltd.
13	Nepal Industrial and Commercial Bank Ltd.
14	Machhapuchhre Bank Ltd.
15	Kumari Bank Ltd.
16	Laxmi Bank Ltd.
17	Siddhartha Bank Ltd.
18	Agriculture Development Bank Ltd.
19	Global Bank Ltd.
20	Citizens Bank International Ltd.
21	Prime Commercial Bank Ltd.
22	Bank of Asia Nepal Ltd.
23	Sunrise Bank Ltd.
24	Development Credit Bank Ltd.
25	NMB Bank Ltd.

1.5 Profile of the Banks

The organizations under research are following:

A. Nepal Investment Bank Ltd. (NIBL)

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of banks Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

A group of companies holding 50% of capital

Rashtriya Banijya Bank holding 15% of the capital.

Rashtriya Beema Sansthan holding the same percentage.

The remaining 20% being held by the General Public (which means that NIBL is a company listed on the Nepal Stock Exchange).

B. Himalayan Bank Limited

Himalayan Bank Limited was incorporated in 1992 by a few distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Limited, one of the largest commercial Banks of Pakistan. Banking operation was commenced from January 1993. Himalayan Bank is the first commercial bank of Nepal whose maximum shares are held by the Nepalese private sector. Besides commercial banking services, the Bank also offers industrial and merchant banking services.

Himalayan Bank has total network of 17 branches across the Country and a counter in the premises of the Royal Palace. There are six branches in Kathmandu valley. In addition, the bank also has ten branches outside Kathmandu valley.

1.6 Objectives of the Study

This study has been conducted to accomplish the following objectives:

(a) To find out comparative position of capital structure of Nepal Investment Bank Ltd. (NIBL) and Himalayan Bank Ltd. (HBL).

(b) To determine the relationship between interest expenses and operating of NIBL and HBL.

(c) To measure the cost of capital of NIBL and HBL.

(d) To examine the different sources of capital structure of the two banks.

1.7 Statement of the Problem

The financial problem is to be considered as one of the greatest obstacle for overall socio-economic development of any country. Commercial banks can play a predominant role in the development of agriculture, industry, commerce and trade. In underdeveloped and developing countries, there are not quite commercial activities of financial institutions. In Nepal commercial banks have not been organized and developed, there is insufficient capital which can help to prevent financial problem. So, they are still in the age of growth and development. Most commercial banks of Nepal miss invest their capital due to lack of proper knowledge of utilization. Some commercial banks have lost a lot of capital to the selfishness i.e. they give loan to their relatives, those who give bribe to them, those who have sourced and force.

Banks accepts various types of deposits from the general public and lends them to various sectors for generating some return at the same time assuming some level of risk associated with the specific sector. Thus, there is risk and return. To minimize risk for a given level of return or to maximize return for a given level of risk, banks have to manage their optimum level of capital structure. But Nepal Bangladesh Bank Ltd, Nepal Bank Ltd, and Rastriya Banijya Bank Ltd, have huge loss despite their strong capital and deposit because of the lack of their capability in capital structure management. The matter of assisting in economic growth of the company growth of the company by these banks is far away from the reality and in this context of being burden to themselves with the proportion of nonperforming loan about 60% of their total loan portfolio.

Other commercial banks are also not sowing enough consciousness towards the capital structure management. Every bank seems to go after a few lucrative business sectors or business houses and for under price war. This has disproportionately benefited a few business people at the cost of larger section of the population. The risk- return trade-off has not been properly analyzed before making capital proportion, which has result the higher cost of fund than the acceptable level. Current situation of banking sector shows that the growth of non-performing assets (NPA) has been faster than the growth of credit due to the higher cost of fund and poor management of loan.

In last few years, the trend of lunching joint venture banks seems to be stopped and some of the foreign banks have withdrawn their investment from Nepal. Withdrawal of foreigners is due to some anomalies in Nepalese banking sector irrespective of what

the withdrawing foreign bank would say officially to the Nepalese authorities or the general public. If such situation of shortsightedness prevails longer, Nepalese banking sector may fall into crisis as in East and Argentina in the past and even the public deposits made in these banks may be unsecured. To avoid such potential crises, the concerned authorities i.e. Nepal Rastra Bank and commercial banks themselves have to pay their proper attention in their capital structure management. Rare researches made regarding this issue also indicate the less perceived importance for such a sensitive fact.

This study will attempt to answer the following questions:

a) How far the banks under study are able maintain the optimum capital structure?
b) How far the banks under study are able to generate income from utilization of debt efficiency?
c) What are the factors effecting financial efficiency?
d) To what extent the investors of these banks are getting benefits from its current operation?
e) What are actual overall financial conditions of these banks?
f) Is return level of the banks under study satisfactory in relation to the risk?

1.8 Significance of the Study

This study is concern with the capital structure management of Nepal Investment Bank Ltd. and Himalayan Bank Ltd. It is expected that this study will significantly contribute towards the field of capital structure.

The banks capital structure should be managed in such a way that the fund could be provided efficiently and effectively. The goal of the study is to examine the efficiency and performance of these tow banks management as reflected in the annual financial reports.

The following points justify the study:

a) The study will help to specify the entire glory of these two banks especially in the sector of capital structure.

b) The study will help to show the financial position of the banks to the investors as well as concerned management.
c) The study will help to find out which bank is showing comparatively good performance in the economic development of the country.
d) The study will help to indicate strengths and weaknesses of these banks especially in the sector of capital structure.
e) Optimum capital structure is the key of success of any organizations to lack of sound knowledge of capital structure, many organizations failed in our country. So, this study will help to the concerned management to improve their efficiency.
f) This study will also helpful to depositors, lenders, borrowers, policy madder, shareholders and customers of the banks under research.

1.9 Limitations of the Study

Every work has its own limitations due to lack of time, resources and knowledge. The work has been completed within the periphery of the limitations. Despite ample efforts on the part of the researcher, this study was limited to:

a) This study has been based on secondary sources of data i.e. annual reports of the banks, Nepal Rastra Bank and government publications and other related journals. Thus, the result of the analysis depends on the information provided by the concern offices.
b) The study covers only the latest seven fiscal years.
c) The study covers the capital structure management and its impact on risk-return trade-off the banks under research.
d) This study has been conducted by taking only two commercial banks.
e) Standard normal performance level is not available. So, interpretations of data depend upon judgment and common sense. In this context, concerned experts are also consulted.

1.10 Organization of the Study

This study has been organized in five chapters. Each devoted to some aspects of the capital structure of these two banks. The titles and contents of each chapter are briefly mentioned below.

Chapter 1: Introduction

It describes the introductory part of the study where general background , statement of the problem, objective, limitations, significance and organization of the study are investigated.

Chapter 2: Review of Literature

It deals with review of available literature of related studies. It contains conceptual framework, major studies, review of books, review of articles and reports.

Chapter 3: Research Methodology

It describes the research methodology adopted in carrying out the present research. It includes research design, sources of data, method of analysis, and limitation of the study, financial and statistical tools.

Chapter 4: Analysis and Interpretation of Data

It concerns with presentation and analysis of data. It includes the analysis of financial indicators, analysis of mean, standard deviation, coefficient of variation and regression analysis. It consists of analyzing capital structure of the banks under research.

Chapter 5: Summary, Conclusion and Recommendation

This chapter comprises summary, major findings of prevailing issues and some recommendation to the organization that help them to improve their miserable situation to some extent.

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CHAPTER II

REVIEW OF LITERATURE

2.1 Introduction

This chapter deals with the capital structure management as a brief to find previous condition of the company which gives proper material to forecast the future of the company. According to Wolf & Pant," The purpose of the reviewing the literature is to develop some expertise in one's area to see what new contribution can be made and to review some idea for developing design."

For the study of comparative capital structure management of Nepal Investment Bank Ltd. (NIBL) and Himalayan Bank Ltd.(HBL); there is not enough previous

investigation information of capital structure management about them .During the investigation; dissertation have been consulted which are presented by various students (researcher) about capital structure management.

2.2 Review of books

Various articles, books and principles are reviewed to clarify capital structure management.

2.2.1 Concept of Capital Structure

According to Battarai, R. (2005)," Capital is termed in different ways by dfferent scholars and professionals. Economics spesk of as wealth, businessmen speak of it as total assets whereas the accountant as net assets or stockholders interest as shown by the balance sheet or the net worth of the shareholders equity. Similarly, a lawyer calls it capital stock. Whatever may be the term used, capital is the fund raised to finance different assets, short-term or long-term. Therefore, capital is a mix of long-term as well as short-term funds."

According to Gautam, R.R. & Thapa K. (2060), "Capital structure decision is one of the most important decision is one of the most important decisions that are taken by financial manager. It is because the optimal capital structure maximizes shareholder's wealth & minimizes overall cost of capital. Before knowing the capital structure, we must know about the financial structure."

Financial structure:

According to Bhattarai, R. (2005), "Financial structure refers to the way the firm's assets are financed to use or invest in business. The various means of financing represent the financial structure of an enterprise. Financial structure is represented by the Capital and Liabilities side i.e. entire left-hand side (in Nepal) and entire right hand side (in USA) of the balance sheet. So, it includes shareholder's funds (equity), long- term loans as well as short-term loans. Shareholders equity includes common stock, paid-in or capital surplus, different kinds of reserves and accumulated amount of retained earning. But, it is different from capital structure as capital structure includes only the long-term sources of financing while financial structure includes only the long-term and short-term sources of

financing. Long term sources of financing include long-term debt (i.e. bond, debentures etc.) preferred stock and shareholder's equity. Conclusively, it can be said that capital structure is a part of financial structure not the whole."

Capital structure:

Capital structure or capitalization of the firm is a permanent financing which includes long term debt, preferred stock and shareholder's equity. Thus, a firm's capital structure is only of its financial structure. The determination of the degree of liquidity of a firm, but whether it survives to achieve long run profitability depend to some extent on its capital structure. The term includes only long-term debts and total stockholder's investment. Some companies do not plan their capital structure, and it develops as a result of the financial decision taken by the financial manager without any formal planning. These companies may prosper in the short-run but ultimately they may face considerable difficulties in raising funds to financial their activities. With unplanned capital structure these companies may also fail to economize the use of their funds. Theoretically, the financial manager should plan an optimal capital structure for his company. The optimal capital structure is obtained when the market value per share is maximum. In practice the determination of an optimal capital structure is a formidable task and one has to beyond the theory.

There is significant variation among industries and among individual companies within any industry in terms of capital structure since a number of factors influence the capital structure decision of a company. The judgment of the person making the capital structure decision plays a crucial part. These factors are highly psychological complex and qualitative and do not always follow accepted theory, since capital markets are not perfect and the decision has to be taken under imperfect knowledge and risk.

Capital structure planning is the key to the objective of profit maximization which ensures minimum cost of capital and the maximum rate of return to the equity holders. The amount of capital a firm need is not its only financial consideration and equally important is the capital mix: the kinds of capital that form the company's financial base. How much will be the equity money representing funds owned by the stockholders in the enterprises? A financial manager determines the mix of debt and equity securities which would maximize the value of the sock. To maximize the shareholder's wealth as well to minimize the opportunity cost of capital, optimal capital structure is required. Debt is an important part of capital structure and determines the leverage firm. It increases

shareholder's return when the firm has highly operating income but makes them worse than they otherwise would be when the firm has low operating income.

Capital means money or fund. Without capital no one do any thing. The capital has both features of risk as well as return. So, optimal capital mix is required to obtain high return in tolerable amount of risk. Management of this optimal capital mix is called capital structure management. Capital rises from debenture, long-term debt, preference share, equity shares, and short-term debt including retained earning, reserve and surplus too. Every types of fund have risk. They require different rate of return. Common stock is riskier and it required rate of return will be higher than that of debt.

Thus, it is necessary that the firm should make a portfolio of such types of capitals, which result higher return with low cost of capitals. The firm should also to generate at least sufficient cash flow to pay investors and creditors (i.e. shareholders, preference shareholders and dept holders). So the firm should yield more cash flow than to just satisfy the investor's expectation to maximize the shareholders wealth and the firm should try to obtain necessary funds in lowest cost as soon as possible.

The cost capital will depend upon the proportion of capital (dept and equity). When capital structure is optimal, it has optimal; it has optimal risk, which makes entrepreneurs capable to hold the market in this competitive business environment for long period. On the basis of priority, short term dept get second priority, preference share get third priority and equity share get last priority. The capital structure should be planned generally keeping in view the interest of the equity shareholders and the financial requirement of a company. However, the interest of other groups such as employees, customers, creditor, society and government should also be given reasonable consideration. The management of a company may fix its capital structure near the top this range in order to make maximum use of favorable subject to other requirements such as flexibility, solvency, control and norm set by the financial institutions, the Security Exchange Board of Nepal and Stock Exchange.

According to Brealey, R.A. & Myers, S. C. (2002), "the firm's mix of different securities is known as capital structure. The choice of capital structure is fundamentally a marketing problem. The firm can issue dozen's of various securities in countless combination but it attempts to find the combination which maximizes its overall market value."

According to Pradhan, S. (2003), " different sources of financing are use to finance current and fixed assets. The sources of financing may be short-term and long-

term, but they are usually grouped into dept and equity which characterized the firm's capital structure".

According to Chandra, P. (1985), "a distinction is usually made between financial and capital structure. Financial structure refers o all sources, both short and long term that are used to finance the entire assets of a firm. But capital structure is taken as the capitalization part of a firm's total. Which includes only the long-term sources such as long term dept and equity Thus, the capital structure is a part of the financial structure," The composition of capital structure could differ from company to company which is directly guided and controlled by management of the company. However a reasonable satisfactory capital structure can be determined considering relevant factor and analyzing the impact of alternative financing proposals on the earning per share.

According to Mathur I. (1979), "capital structure is the combination of long-term debt and equity. It is a part of financial stock, long term debt and equity. It is a part of financial structure is the combination of total combination of preferred stock, common stock, long term dept and current liabilities. If current liabilities are removed from it, we get capital structure."

One of the principal goals of the financial manager's is to maximize value of the firm. For this purpose, the firm should select a financial mix(financial leverage), which will help in achieving the objective management with a view to maximize the value of the share. In order to attain this business goal, the firm should select an appropriate capital structure. "Given the objective of the firm to maximize the value of equity share, the firm should select a financial mix which helps in achieving the objective of financial management."

According to Khan, M.Y.Jain, P.K. (2002), "If capital structure decision affects the total value of a firm, the firm should select such a financial mix as will maximize the shareholders wealth. Such a capital structure is referred to as the optimum capital structure."

According to Pandey, I.M. (1985), "an optimum capital structure would be attained at the combination of debt and equity that minimizes the weighted averages cost of capital."

According to Solaman E. (1968), "optimal capital structure is that mix of debt and equity which will maximizes the market value of the company. If such an optimum does exist, it has two folds. Firstly, it maximizes the value of company and hence the wealth of

its owners. Secondly, it minimizes the company's cost of capital which in turn increases its ability to find new wealth creation investment opportunities."

Capital structure is the permanent financing of the firm represented primarily by long-term debt, preferred stock, common stock, capital surplus and accumulated retained earrings.

According to Gitman, L.J. (2001), "Leverage and capital structure are closely related concepts liked to cost of capital and therefore capital budgeting decision. Leverage results from the use to fixed-cost assets of tend to magnify return to the firm's owners. Changes in leverages result in level of return and associated risk. Generally, increase in leverages results increase in return and risk. The amount of leverage in the firm's capital structure, the mix of long term dept and equity maintained by the firm can significantly affect its value by affective return and risk. Because of its effect on value, the financial must understand how to measure and evaluate leverage when attempting to create the best capital structure."

According to Brigham, E.F.(1995)," Financial leverage generally raises expected EPS but it also increases as the dept/assets ratio rises, so do the interest rate in dept and the required rate of return on equity . Thus, leverage produces two opposing effects: higher EPS which leads to a higher stock price but increases risking which depresses stock price. There is, however, a dept/assets ration that strikes an optimal balance between these opposing effects. This ratio is called optimal capital structure and it is the one that maximizes the price of the firm stock."

Thus, the capital structure management means the appropriate mix of long-term capital and short-term capital and short-term capital, which gives the company sufficient profit. Optimal capital structure has certain risk and appropriate return. This is done by a good management. "How much debt is appropriate for a firm?" In this reference Prasanna Chandra has given the following suggestion in tanning the capital structure for establishing new company.

a) The debt-equity ratio does note exceeds 2:1 for large capital intensive projects. A higher dept-equity ratio of 4:1 or even 6:1 may be allowed (debt for this purpose is defined as long-term debt plus preference capital, which is redeemable after 12 years).
b) The ratio of preference capital to equity does not exceed1:3
c) Promoters hold least 25% of the equity capital.

The factors listed above given information's to the financial manager. He should adhere in proper maximizes the value and minimizes the overall cost of capital of the firms. There are four-dimensional lists when thinking about capital structure decision.

a) Taxes: - If a company is a tax-paying entity, the increase in leverage reduces the income tax paid by the company and increases the tax paid by the investors. If the company has a large accumulated loss, an increase in leverage cannot reduces corporate tax but does increases personal taxes
b) Bankruptcy cost: - With presence of bankruptcy cost, financial distress is costly; other things equal, distress is more likely for the firms generally issue less debt.
c) Assets type: - The cost of distress is likely to be greater for firms whose value depend on growth opportunity or intangible assets. These firms are likely to pursue more profitable opportunities and if default occurs, their assets may erode rapidly. Hence, firms whose assets are weighted forward intangible assets should borrow significantly less on average their holding assets they can kick.
d) Financial slack: - In the long run, a company's value rests more on its capital investment on operating decision than on financing. Therefore, we need to make sure that our fire has sufficient financial slacks, so that financing is quickly accessible when good investment opportunity arises. Financial slack is most valuable to the firms that have positive NPV growth opportunity. This is another reason that why growth company usually sticks to conservation capital structure.

Commercial Banks

According to Thapa, K; Bhattarai R. and Basnet D. (2006), "Commercial banks accept both demand deposits and time deposits. These funds are loaned to individuals, businesses and government. Commercial banks are important sources of short term loans. Banks are also major sources of term loans, which have initial maturities between 1 and 10 years and are usually repaid in installments over the life of the loan. The proceeds from term loans can be used to finance current assets, such as inventory or account

receivable, and to finance the purpose of fixed plant facilities and equipment, as well as to reply other debts. Many people maintain a checking amount at a commercial bank. These demands are demand deposits, time deposit and certificates of deposit."

2.2.2 Assumption of Theories of Capital Structure

In order to grasp, the capital structure and value of the firm on the cost of capital controversy properly, we make the following assumptions:

1. Firms employ only two types of capital, debt and equity.
2. The total assets of the firm are given. The degree of leverage can be changed by selling debt to repurchase shares or selling share to retire debt.
3. Investors have the same subjective probability distributions of expected future operating earning for a given firm.
4. The firm has a policy of paying 100% dividends.
5. The operating earnings of the firm are not expected to grow.
6. The business risk is assumed to be constant and independent of capital structure.
7. The corporate and personal income taxes do not exit. This assumption is relaxed later on.

Definitions

In the theoretical analysis of capital structure, the following symbols are used.

B = Total market value of debt.

S = Total market value of stock.

V = Total market of firm (B+S).

K_e =Equity capitalization rate.

K_d = Before tax cost of debt.

K_o = Overall capitalization rate.

I = Total amount of capital interest.

NI = Net income

EBIT or NOI = Earning Before Interest & Tax or Net Operating Income.

a) Cost of debt (K_d) $= \frac{AnnualInterestCharge}{MarketValueofDebt} = \frac{I}{B}$

b) Cost of equity (K_e) $= \frac{NI}{S} = \frac{EBIT - I}{S} = \frac{NOI}{S}$

c) Overall Cost of Capital (K_e) $= \frac{NOI}{V} = K_d(B/V) + K_e(B/V)$

d) Value of the Firm (V) $= B + S = \frac{NOI}{Ko}$

2.2.3 Approaches to Capital Structure

Different approaches have been developed under the relevancy of capital structure to value of firm and cost of capital. The approaches to explain the relationship between capital structure cost of capital and value of the firm are following :

a) Net income approach

b) Net operating income approach

c) Traditional approach

d) Modigliana-Miller (M-M) approach

I. Without taxes

II. With taxes

a) Net Income (NI) Approach:-

This approach is a relevant theory of capital structure. According to this approach, the cost of debt capital and equity capital remains unchanged when leverage ratio varies. As a result, the weighted average cost of capital of declines as the leverage ratio increases. This is because when the leverages ratio increases, cost of debt, which is lower than cost of equity, receives a higher weight in average cost of capital.

Assumptions of this approach are following:

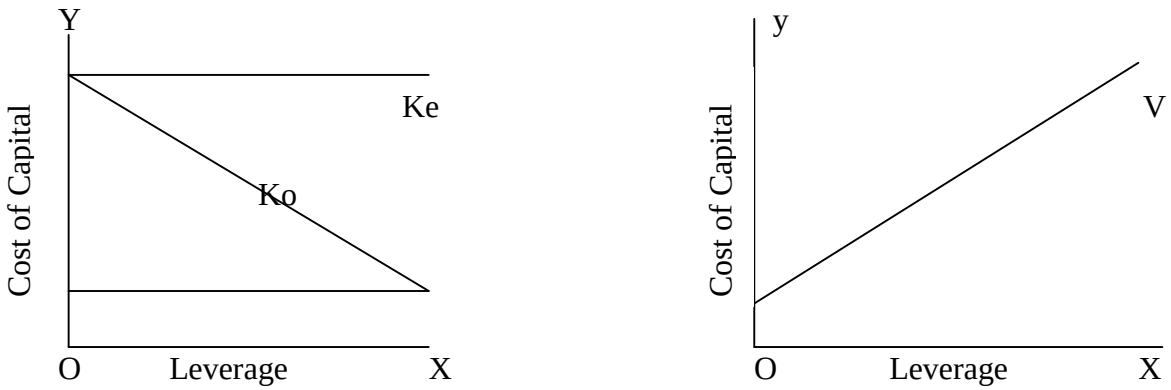
1) The use of debt does not change the risk perception of investors; as a result, the equity capitalization rate (K_e) and the debt capitalization rate (K_d) remain constant with change in leverage.

2) The debt capitalization rate is less than the equity capitalization rate (i.e. $K_d > K_e$).

3) There are no taxes.

4) Net operating income remains constant.

From above assumptions, if K_e and K_d are constant increased use of dept by increasing the shareholder earning will result in higher value of the firm via higher value of equity. Consequently the overall the cost (K_o) will decrease.



In the above figure, x-axis called of leverage and y-axis called cost of capital. Under NI approach K_e and K_d are assumed as constant. As the proportion of dept is increase in the capital structure, being less costly, it causes weighted average cost of capital to decrease approach the of debt. The optimal capital structure would occur at the pointing where the value of the firm is maximum and overall cost of capital is minimum.

As the whole assumption of NI approach, K_e and K_d are constants and K_d is less than the K_e, so that Ko decreases if B/V increases. Also $K_e = K_d$ and S=V. Also $K_o = K_e - (K_e - K_d)$ B/V.

a) Net Operating Income (NOI) Approach:-

This theory was identified by David Durand. Under NOI approach, the cost of equity is assumed to increase linearly with leverage. As a result, the weighted average cost of capital remains constant total value of the firm also remains constant though leverage is changed. Assumptions of net operating income (NOI) approach are:

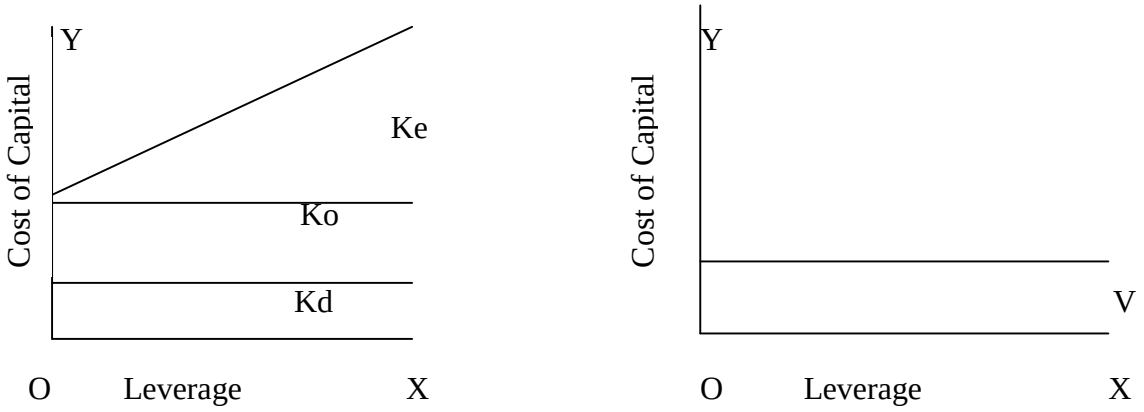
1) The market capitalizes the value of the firm as a whole. Thus, the split between dept and equity is not important.

2) The market use an overall capitalization rate (K_o) to capitalization the net operating income. K_o depends on the business risk and the business risk is assumed to remain unchanged. K_o is constant.

3) The use of less costly dept funds increases. Thus, the advantage of dept is offset exactly by the increase in the equity capitalization rate, K_e.

4) The dept capitalization rate, K_d is a constant.

5) The corporate income taxes do not exist.



From above assumption, we know that the leverage/ capitalization structure decision of firm is irrelevant. Any charge in leverage will not lead to any change in the total value of the firm and the market price of shares, as the overall cost of capital is independent of the degree of leverage.

The above figure shows that K_o and K_d are constant and K_e is continuously increases .As the firm increase it's degree of leverage, the fixed charge increases with the result that the financial risk also increases. As long as K_d remains constant, K_e remain constant liner function of the dept to equity ratio. The NOI approach implies that there is no one optimum capital structure.

The cost of equity capital is given by:

$$K_e = K_o + (K_o + K_d)\ B/S$$

Also $K_e = \frac{NOI - I}{V - B}$

b) Traditional Approach:-

According to Gitman, L.J.(2001), " The value of the firm is determined by adding the market value of the firm's debt to the market value of its equity. Once market value has been determined, the overall cost of capital or overall capitalization rate can be found."

It is also known as an intermediate approach .It comprises between net income approach & operating income approach. Thus, we know that the value of firm can be judicious mix of debt and stock of the firm.

According to Barges A. (1963), "The cost of capital decline with leverage because debt capital is cheaper than equity capital within the reasonable limit of debt. The statement that debt funds are cheaper than equity fund carries the clear implication that the cost of debt, plus the increased cost of equity, together on a weighted basic, will be less than the cost of equity which existed on equity before debt financing."

Finally, we know that from tradition approach, overall cost of capital will decrease with the use of debt financing. From traditional approach, the manners in which the overall cost of capital reacts to charges in capital structure can be divided into three stages as given below:

Stages-1

In this stage, the cost of equity K_e remain constant of less slightly with debt. But when it increases, it does not increase fact enough to offset the advantage of low cost

debt. K_d remain constsnt or rises negligibly since the market views the use of debt as a reasonable policy. As a result, the value of the firm 'V' increases or the overall cost of capital, K_o =X/V.

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

Stage: - 2:

According to Pandey, I.M. (2003), "The firm has reached a certain degree of leverage. Increases in leverage have a negligible effect on the value or the cost of capital of the firm. This is so because the increase in the cost of equity due to the added financial risk offset the advantage of low cost of debt. Within the range of the specific point, the value of the firm will be maximum or the overall cost of capital will be minimum."

Stage: - 3:

In the stage, the value of the firm decrease with leverage or the cost of the capital increases with leverage. This happens because investors perceive a high degree of financial risk and demand a higher equity capitalization rate, which offsets offset the advantage of low cost debt. From the above stage we come to know that:

a) Increase Valuation and decreased overall cost of capital.

b) Optimum valuation and optimal overall cost of capital.

c) Declined valuation and increases cost of capital.

Thus, the overall effect of these three stages is to suggest that the cost of capital is a function of leverage. It decline with leverage and after reaching a minimum point or range starts rising. The relation between cost of capital and leverage is graphically shown as below:

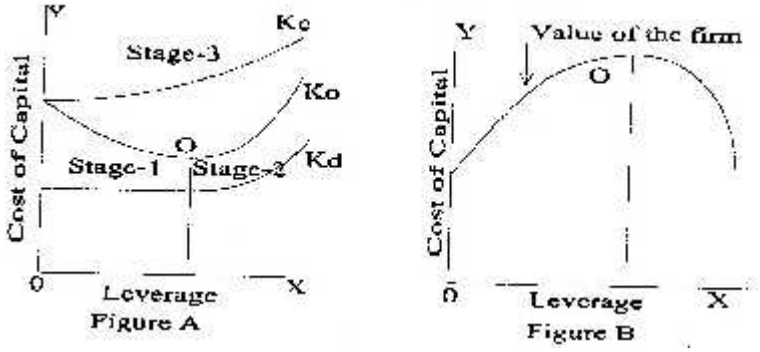


Figure A shows the cost of equity (K_e) increases with increase in leverage but much more rapidly than the cost of dept. The cost of debt will remain fixed as leverage increases, until a point is reached where lenders feel that the firm is becoming financially risky. At this point, the cost of debt (K_d) will increase. The overall cost is optimal at point O and ten after K_o is increasing upward. In figure B, the firm value is optimal up to the point O and then after the value declines.

d) Modigliani- Miller (MM) Model: -

i) MM without corporate tax:

Before 1958, all management believed that capital structure made by judicious mix of dept and equity capital. Optimal capital structure decreases the overall cost of capital and increases the value of the firm. In 1958, two prominent financial researchers, Franco Modigliani and Miller (MM) argue that in the absence of taxes a firm's market value and the cost of capital remain invariant to the capital structure changes. The M-M theory is based on following assumption.

Prefect capital market: - This specifically means that (a) investors are free to buy or sell securities, (b) they can borrow without restriction at the same term as the firm do and (c) they behave rationally. It is also implied that the transaction costs, the cost of buying and selling securities do not exist.

Homogeneous risk classes: - Firm can be grouped into homogeneous risk classes. Firms would be considered to belong to a homogeneous risk class if their expected earning has identical within same industry constitute the homogeneous class.

Risk: - The risk of investors is defined in terms of the variability of the net operating income. The risk to investors depends on both the random fluctuation of the expected NOI and the possibility that the actual value of the variable may turn out to be different than their best estimate.

Full Payout: - Firm's distribute all net earnings to the shareholder, which mean a 100% payout.

No Taxes: - In MM hypothesis, it is assumed that no corporate income taxes exist.

Terminology and notation in used in MM Model are given below:

Terminology

- Levered: - A firm that uses dept and equity in its capital structure is called levered firm.
- Unleveled: - A firm that uses only equity in capital structure is called unleveled firm.
- Risk premium: - It is the expected additional return required by the equity holders for making a risky investment.

Notation

K_s = Equity capitalization rate of an unlevered firm.

K_{el} = Equity capitalization rate of a levered firm.

K_d = Dept capitalization rate.

K_{ou} = Overall capitalization rate of unlevered firm.

V_u = Value of an unlevered firm.

V_l = Value of a levered firm.

T = Corporate tax-rate.

BT = Present value of tax-shied benefits of debt/ PV of interest tax-shield

Basic Propositions

Proposition I

In this proposition, the overall cost of capital (K_o) and the value of the firm (V) are independent of its capital structure. The K_o and V are constant for all degree of leverage. The total value is given by capitalizing the expected stream of operating

earnings at a discount rate appropriate for its risk class. This preposition can be expressed as below:

For levered firm, $V = EBIT\ (NOI)/K_o$

For unlevered firm, $K_o = K_e$

$S\ V_o = NOI/K_{ou} = NOI/K_{eu}$

From the above proposition, MM theory conclude that the total market value of the firm is unaffected by financing mix. It follows that the cost capital is independent of the capital structure.

This proposition states about the implication of propositions for investment decision-making. It emphasizes the point that investment and financing decisions are independent because the average cost of capital is not affected by the financing decision.

Proposition II

This proposition states that the K_e is equal to the capitalization rate of a pure equity stream plus a premium for financial risk equal to the difference between the pure equity capitalization rates (K_e) and (K_d) times the ratio of debt to equity. In other words, K_e increases in a manner to offset exactly the use of a less expensive source of funds represented by debt. The cost of equity capital for levered firm (K_{el}) is equal to the cost of equity of an unleveled firm (K_{eu}) plus a risk premium equal to the difference between K_{eu} and K_d multiplied by the debt equity ratio.

$K_{el} = K_{eu} + (K_{eu} - K_d)\ B/S$

Since $K_{eu} = K_{ou}$ So, $K_{el} = K_{ou} + (K_{ou} - K_d)\ B/S$

This proposition shows the impact of financial leverage on the cost of equity. Due to increases in leverage, the firm gets the benefits of cheaper debt but the benefit is exactly offset by increases in the cost equity in the from of risk premium demanded by shareholder.

ii) MM with corporate taxes:

This hypothesis states that the value of the firm is independent of its debt. Policy is based on the critical assumption that the corporate income taxes do not exist. In reality, corporate income taxes exist and interest paid to debt holders is treated as deductible expenses. Dividends paid to shareholders on the hand are not tax deductibles.

Thus unlike dividends, the return to debt holder is not subject to the taxation at the corporate level. This makes debt financing advantageous. In their 1963 article, MM shows that the value of the firm will increase with debt due to the deductibility of interest charges for tax computation and the value of the levered firm will be higher than the unlevered firm.

Thus, the value of the levered firm is equal to the value the unlevered firm plus the present value of the interest tax-shied as shown below:

Value of a levered firm = Value of an unlevered firm + PV of interest tax-shied.

i.e. $V_l = V_u + BT$

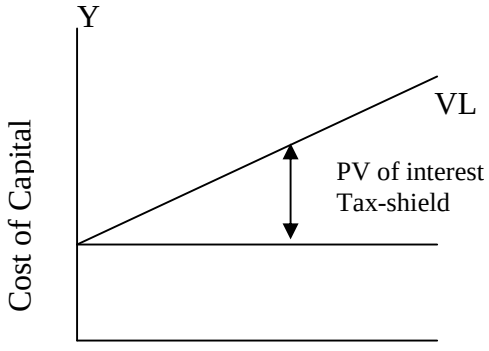
The value of an unliveled firm when corporate taxes exist is given by

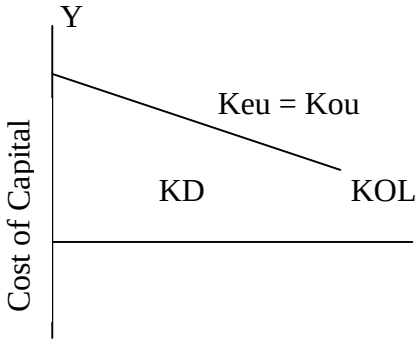
Where NI = Net income after taxes.

Also when a firm is unlevered, $K_{ou} = K_{eu}$

Thus $V_i =$

The above equation implies that when the corporate tax rate T is positive (T > 0), the value of the levered firm will increases continuously with debt. Thus, theoretically the value of the firm will be maximum when it employs 100% debt.





O Leverage 100% X ~~O Leverage 100% X~~

The figure 2.4 shows that a firm can increases its value or lower its cost of capital continuously with leverage because of the tax deductibility of interest charges. Thus the optimal capital structure is reached when the firm employs 100% debt. In practice, firms neither employ large amount of debt not lenders ready to lend beyond certain limits.

According to Pandey, I.M. (2003), "Why does company not employ extreme level of debt in practice? There could be two possibilities: First, we need to consider the impact of both corporate and personal taxes for corporate borrowing. Personal income tax may offset the advantages of the interest tax-shied. Second, borrowing may involve extra costs (in addition to contractual interest cost) of financial distress, which may also offset the advantage of the interest shield."

2.2.4 Determinants of Capital Structure Decision

Capital structure refers to the mix of long-term sources of fund, which maximizes value of the firm/equity holders. Concept/definition of capital structure gives the main theme of optimal capital structure.

According to Weston, J.F; Besley, S. & Brigham, E.F. (1996), "theoretically, the financial manager should plan an optimal capital structure for his company. The optimal capital structure is obtained when the market value per share is maximum. The values will be maximized when the marginal cost of each source of funds is the same. In practice, the determination of an optimum capital structure is a formidable task and one has to go beyond the theory. There are significant variations among industries and among individual companies within an industry in term of capital structure. Since a number of factor influence the capital structure decision of a company, the judgment of the person making the capital structure decision plays a crucial."

Generally, the factors listed below, all have an important bearing on the firm's capital structure decision:

(1) Asset structure: - The firm whose assets are suitable as security for loans tend to use dept heavily. Thus real estate companies are tending to

be highly levered while manufactures with heavy investment in specialized machinery and work in progress employ less debt.

(2) Operating leverage: - Other things remaining the same, a firm with less operating is better able to employ financial leverage because the interaction of operating and financial leverage determines the overall of decline in sales on operating income and net cash-flows.

(3) Sales stability: A firm whose sales are relatively stable can safely take on more debt and incur higher fixed charges than a company with unstable sales. Utility companies have historically been able to use more financial leverage than industrial firms because of their stable demand.

(4) Profitability: One often observes that firm's with very higher rate of return on investment use relatively little debt. Although there is on theoretical justification for this fact, the practical reason seems to be that very profitable firm's such as IBM and KODAK simply do not need to do much dept financing. Their higher rates of return enable them to do most of them to do most of their financing with retained earnings.

(5) Growth Rate: - Other things remaining the same, faster growing firm most rely more heavily on external capital. Further, the flotation costs involved in selling common stock exceed those incurred in selling debt. Thus, to minimize financing costs, rapidly growing firm tends to use somewhat more dept than do slower growth companies.

(6) Taxes: - Interest is a deductible expense, while dividends are not. Hence, the higher a firm's corporate tax rate, the greater the advantage of using debt.

(7) Controls: - A management concerned about control may prefer to issue debt rater than (voting) common stock to raise funds. If makes conditions are favorable, a firm can sell non-voting equity shares or make a pre-empty offering, allowing each share holders to maintain proportionate ownership. Generally, only in closed held firms or firms threatened by

takeover control become a major concern in the capital structure decision by process.

(8) Market Condition: - Conditions in the stock and markets undergo both long and short run changes, which can have an important bearing on a firm's optimal capital structure. For example, during the credit crunch in the winter of 1982, there was simply no market at any "reasonable" interest rate for new long-term bonds. Low rated companies that needed capital were forced to go to the stock market or to the short term debt market. Such action does not represent permanent changes in target capital structure but are of temporary departures from targets. The important point, however, is that stock and bond market conditions do influence the type of securities used for a given financing.

(9) Lenders and Rating Agency Attitude: - Regardless of manager's own analysis of the proper leverage factors for their firms, there is no question that the lender's and rating agencies attitudes are frequently important determinants of financial structure. In the majority of cases, the corporation discusses its financial structure with lenders and rating agencies and gives much weight of their advice. But when management is so confident of the future that it seeks so use leverage beyond the norms for its industry. Lenders may be unwilling to accept such debt increases or may do so only at a high price.

(10) Management Attitude: - In the absence of proof that one capital structure will lead to higher stock price than another, management can exercise its own judgment about a proper choice. Some management tends to be more conservative than other and thus use lesser amount of debt than the average firm in their industry, while for other management the reverse is true.

(11) The Firm's Internal Condition: - A firm's own internal condition can also have a bearing on its target capital structure. For example, suppose a firm has just successfully completed a Research & Development program and it projects higher earning in the immediate future. However, yet new

earning is not yet anticipated by investors and hence is not reflected in the price of the stock. This company would not want to issue stock, it would prefer to finance with debt until the higher earning materialization and are reflected in the stock price at which time it might want to sell an issue of common stock, retire the debt and return to its target capital structure.

(12) Cash Flow: - The key concern of the firm, when considering a new capital structure, must center on its ability to generate the necessary cash flows to meet obligation. Cash forecast reflecting ability to service debt and preferred stock must support any capital structure shift.

(13) Contractual Obligation: - A firm may be contractually constrained with respect to the type or from of funds it subsequently raises. For example, a contract describing condition of an earlier bond issue might prohibit the firm from selling additional debt except where the claims of holders of such debt are made subordinate to the existing debt. Contractual constraints on the sale of additional stock as well as the ability o distribute dividends on stock might also exist.

(14) Timing: - Timing decisions are to be necessary based on expected development in a hard-to-predict market. If the price of the company's equity stock is currently depressed but is expected to rise in the wake of better performance and/ or bullish development in the market. It may be advantageous to resort to debt finance now and equity finance later. On the other hand, if the price of company's equity stock is balanced, it may be desirable to resort to equity finance now and debt finance later. The above considerations are important for developing aim of financing about debt and stock.

According To Pandey, I.M. (2003), "The management of company may fix its capital structure near top of those ranges in order to make maximum use of favorable leverage." For further detail, subject to other requirement are given below:

Profitability: - The capital structure of a company should be the most advantageous. Within the constraints, maximum use of leverage at a minimum cost should be made.

Solvency: - The use of excessive debt threatens the solvency the solvency of the company. To the point debt does not add significant risk it should be used, otherwise its use should be avoided.

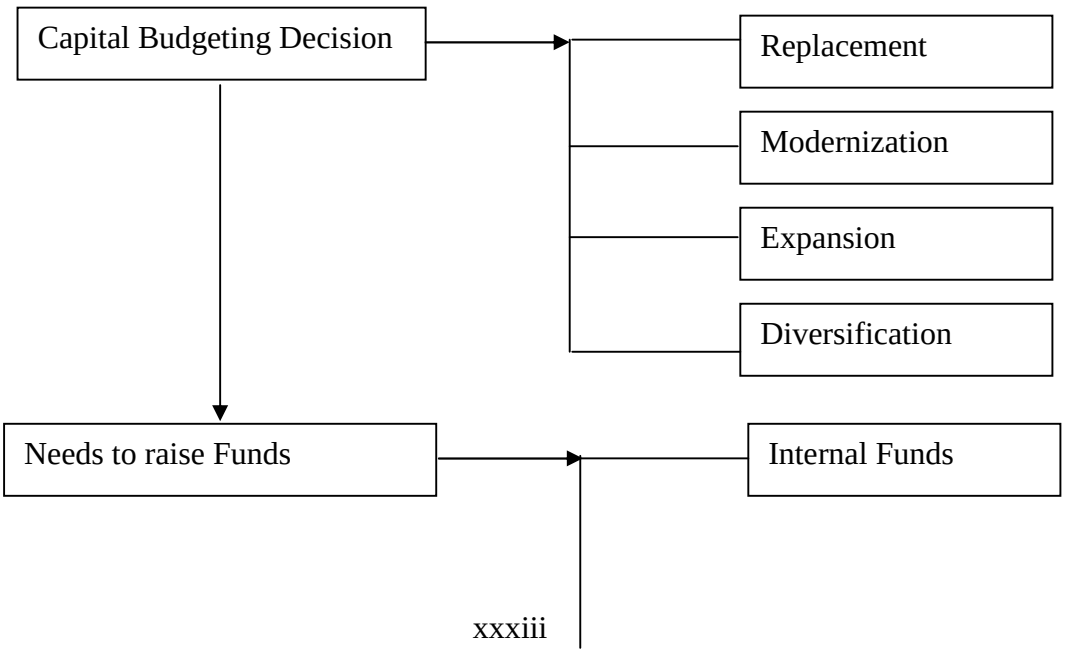
Flexibility: - The capital structure should not be inflexible to meet the changing condition. It should be possible for a company to adopt its capital structure with a minimum cost and delay if warranted by a changed situation. It should also be possible for the company to provide funds whenever needed to finance its profitable activities.

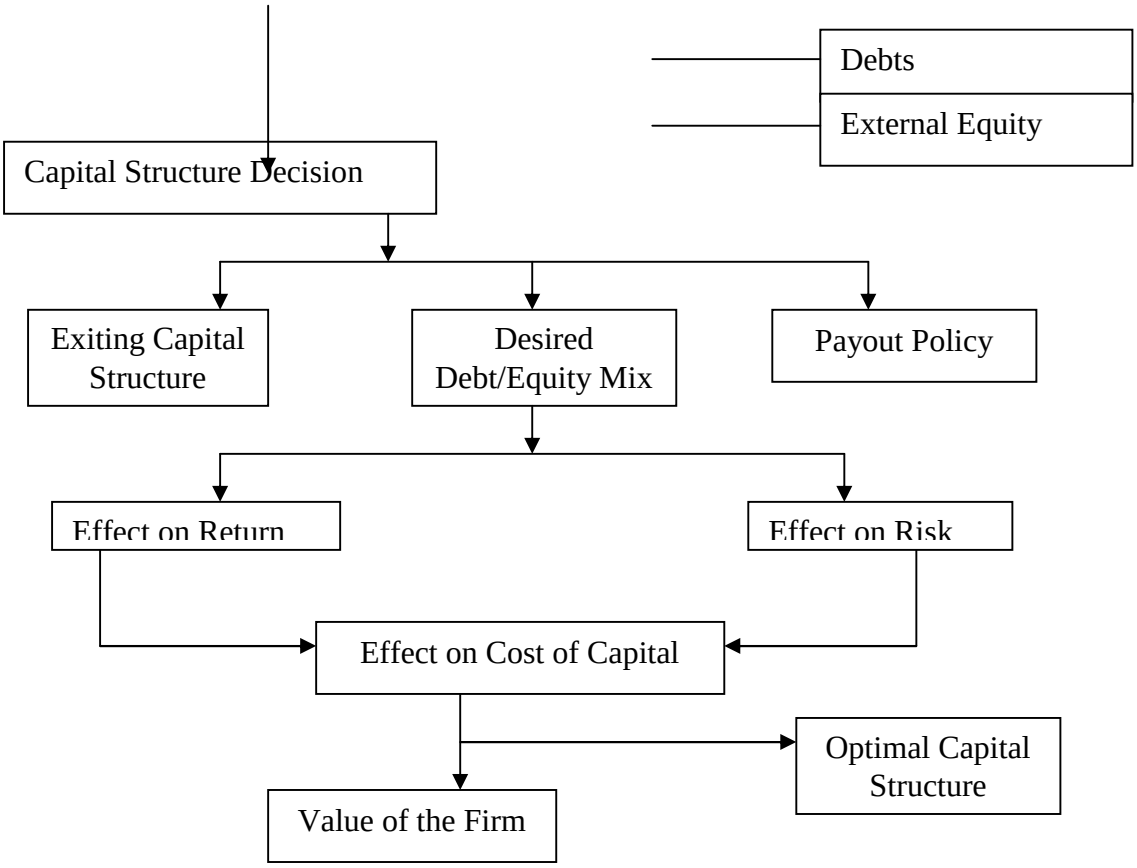
Capacity: - The capacity structure should be determined within the debt capacity of the company and its capacity should not be exceeded. The debt capacity of a company depends on its ability to generate cash flows. It should have enough cash to pay creditor's charges and principal sum.

Control: - The capital structure should involve minimum risk of loss of control of the company. The owners of closely held companies are particularly concerned about dilution of control.

The above considerations are the general features of an appropriate capital structure. The particular characteristics of a company may reflect some additional specific features. The company will have to plan its capital structure initially at the time of its promotion. Subsequently, whenever funds have to be raised to financial investment, a capital structure decision is involved.

The Process of the capital structure decision is below.





2.2.5 Important tools of Capital Structure

Decision: - In management, basic tools are necessary for getting appropriate decision. Financial manager should determine the capital structure that best to the company. It is appropriate, when the company will have optimal capital structure. When the cost of capital tends to increase due to more debt, the use of more debt makes the capital structure volatile.

There are two approaches given below, which help the manager in taking decision.

I. EBIT-EPS Analysis.

II. Cash flow Analysis.

I. **EBIT-EPS Analysis: -** For an appropriate capital structure, we need to understand how sensitive is earning per share (EPS) to changes in earnings before interest and tax (EBIT) under different financial alternatives. Finance manager always want to know about, what is the effect of leverage on risk? A

precise answer of this question is not possible with the help of EBIT-EPS analysis.

The finance manager may do two things: (a) Compare the expected value of EBIT with its indifference value, and (b) assess the probability of EBIT falling below its indifference value. If the most likely value of EBIT exceeds the influence value of EBIT, the debt financing option, may be advantageous. The larger the differences between expected value of EBIT and its indifference value, the stronger the case for debt financing, other things being the same.

Given the variability of EBIT, arising out of the business risk of the company, the probability of EBIT falling below the indifference level of EBIT may be assessed. If such probability is negligible, the debt financing option is advantageous. On the other hands, if such probability is high, the debt financing alternative is risky.

The EBIT-EPS analysis is an important tool in the hands of finance manager to get an insight into the firm's capital structure management. He/She can consider the possible fluctuations in EBIT and examine their impact on EPS under different financial plan. If the probability of earning a rate of return on the firm's assets less than the cost of debt is insignificant, a large amount of debt can be used by the firm in its capital structure to increases the earning per share. This may have a favorable effect on the market value per share. On the other hand, if the probability of earning a rate of return of the firm's assets less than the cost of debt is very high, the firm should stop in employing debt capital. Thus, it may be concluded that the greater the level of EBIT and lower the probability of downward fluctuation, the more beneficial it is to employ debt in the capital structure. However, it should be realized that the EBIT-EPS is a first step in deciding about a firm's capital structure.

II. **Cash Flow Analysis: -** Cash flow analysis is most important part of the company. Cash flow analysis gives us information about liquidity position of the company. Sound liquidity Position Company is able to pay fixed charged on basis of its cash generation. Fixed charges include.

- Principal and interest payments on debt.
- Lease payment.

- Preferred stock dividends and etc.

If the firm is unable to pay is fixed charges, it suffers from difficulty as market domination. It is bad for reputed company. Therefore, the firm must estate and analyzes expected future cash flows before committing itself of fixed. Following two generalizations are important to note for the company.

a) The greater the expected future ash flows, the greater the debt capacity of the firm.

b) The more stable the expected future cash flows, the greater the debt capacity of the firm.

Review of Dissertations: - Dissertations of capital structure related to banking and other sectors done by MBA and MBS students are reviewed as follows.

a) Dahal, S.K.(2004) has studied " A comparative analysis of capital structure management between Nepal Bangladesh Bank & Himalayan Bank Ltd."

The main objectives were as follows:

- To find out comparative position in capital structure between the two banks.
- To highlight the relationship between operating profit and interest expenses to measure the debt service capacity f these two banks.
- To examine the comparative trend of various actual variable of these two banks.
- To find out the rate of return on capital in relation to capital employed.

The major findings were as follows.

- Total fixed deposit of NBBL is more than tat of HBL. The variability was found more in HBL compare to NBBL.

- There is statistically significant different between mean ratios of fixed deposit to net worth of the two banks.

- Interest and commission paid expenses are the major expenses for both the banks but expense of NBBL is higher than that of HBL.

It has been suggested that:

1) NBBL should reduce its debt capital portion from capital structure portfolio as well as the cost of debt so that it could increase the profitability.

2) The management should increase the EBIT more as compare to interest expenses to increase its capacity to handle the fixed charges and to make the payment of interest to the creditors easily. This will make the management capable to achieve the money easily in near future.

3) The management of the banks should increase the return on equity for future fulfilling the expectation of shareholders.

4) The management of the NBBL should eager to increase its performance in the market so that investor should hold the share of NBBL like HBL.

b) Sharma, A. (2004) has conducted a thesis entitled, "A comparative case study between Nepal Bangladesh Bank and Himalayan Bank Ltd."

The main objectives were as follows:

a) To determine the comparative position of capital structure of these two banks and provides suggestive framework issue relating to capital structure management.

b) To examine the cost of capital especially cost of debt.

c) To find out the investment of the raised capital.

The major findings were as follows:

- Debt capital of the banks and interest burden as well is too high.
- High operating cost and low return on equity.
- More concentration and investment of NBBL only in the area of loan and advance.
- Less utilization of value of the firm of NBBL.

The solutions of the above problems are follows:

1) The bank's capital structure should be restructured by increasing equity capital and decreasing debt capital.
2) The debt capital should be issued in low interest rate to reduce the interest burden of the banks.
3) Investment should also be made in the sector of commission base so that investment risk could be minimized.
4) Operating expenses should decrease to increase the profit.

d) **Summan A**. (2005) has studied made, "a comparative study on capital structure of selected joint venture banks."

The main objectives were as follows:

1. To suggest appropriate capital structure and profitability trend.
2. To examine the cost capital of the joint venture banks.
3. To examine the financial condition and performance of the banks.
4. To determine the proper utilization of the resources.

The major findings were as follows:

- Interest and commission expenses are the major expenses of the joint venture banks.
- The problem of over and under inventory exists there.
- The bank's financial condition/performance is not sound.

To solve these problems, following suggestions are made:

1) The banks must utilize the scientific inventory management system.
2) The banks must minimize cost of capital in order to maximize the profit.
3) The banks should pay attention on proper use of the available resources.
4) The banks must follow other pricing policies according to the situation.

e) **Sudedi N. (2003)** has studied, "capital structure of Nepal structure of Necon Air Ltd." The main objectives were as follows:

- To describe the capital structure position of the company.
- To examine the reason of loss bearing by the company in recent years before the company was collapsed.
- To find out the earning power of the company.

The major findings were as follows:

1. Necon Air Limited is highly debt oriented in the capital structure.
2. The company must earn sufficient profit and curtail certain portion of debt from existing capital structure by issuing ordinary shares.

3. The company should reduce its over staffing by providing training opportunities to untrained man-power or by hiring skilled and well trained main-power from outsider.

4. The company should increase its sales revenue.

f) **Gurung, D.D.** (2003) has studied made, "analysis of capital structure in selected joint banks of Nepal."

The main objectives were as follows:

- To find out the profitability of the banks in respect to its capital structure.
- To determine the interest burden of debts over the banks.
- To examine the efficiency of working capital of the joint venture banks.

The major findings were as follows:

- The utilization of total assets is not adequate to generate earning.
- The banks using more debt capital to procure total assets.
- The profitability situation of the banks is poor due to nominal return rate.

The suggestions of the problems are as follows:

1) The banks should have more unfavorable debt and should procure debt capital by reliable sources to reduce a great interest payment.

2) The banks should try to determine its cost of capital to identify the existing capital structure of the company.

3) The banks should operate in its full capacity to meet the target.

Review of the related articles

In this section, various related articles related to the study of the capital structure management of NIBL and HBL have been reviewed.

a) **Government of Nepal** (2006) has reported the standpoint of national economic performance. Drought at the time of price plantation and also at the time of wheat and barley, and rainfall at the time of harvesting led to less then satisfactory performance of agriculture non-agriculture sector also could not perform well due to posing difficulties in the operation of industries and trading activities.

Gross domestic product at producers prices increased by 2.7% in FY 2004/05 and it is expected to increase by only 1.9% in FY 3.0% and similarly non-agriculture GDP increased by 2.1% with overall GDP before deducting banking service chargers at factor cost and in constant prices are expected to grow by 1.7%, 2.8% and 2.4% respectively. GDP at factor cost and in constant price after deducting the banking service charges is expected to grow by the same rate in the FY 2005/06 as well I.E.2.3%.

The major contributor to GDP is agriculture sector which has shown a declining trend in its growth rate in the recent years. It grew by 3.9% in FY 2003/04 and slipped to 3.0% growth rate in 2004/05. It is expected to grow by only 1.7% in FY 2005/06. The overall low growth of Agriculture paddy, wheat and barley despite significant growth in cash crops like potato, jute, sugarcane and vegetables and also in livestock products.

The other sector occupying a significant share in the GDP is non-agriculture sector and its performance is also deteriorating. It grew by 3.4% in FY 2003/04 which declined to 2.1% in FY 2004/05. In the current FY 2005/06, it is expected to improve marginally to register a growth rate of 2.8%. Internal conflict and resulting problems in law and order situation had squeezed the non-agriculture economic activities which showed some improvement when the Maoists announced ceasefire for three months that coincided with Dashain and Tihar festival. This led to marginal improvement in the contribution of this sector to the GDP.

Disaggregating non-agriculture GDP into other sub-sectors, there is a marked increase in the production in the sub-sectors of Electricity, gas and Water and Construction in FY2005/06. Electricity, Gas and Water which grew by 4.8% in FY2004/05 is expected to grow by 5.6% in FY2005/06 primarily due to increase in domestic production of electricity and also its import. On the other hand, the construction

sector which showed a negative growth rate of 0.1% in the last fiscal year is set to grow by 4.2% because of increase in the domestic production of construction materials and increase in their imports also. Likewise the production of the trade, restaurant and hotel sub-sectors, which experienced a negative growth of -2.0% in the last fiscal year, is estimated to grow by 3.9% in the current fiscal year. Such an increase can be attributed to increase in: (i) foreign trade, both imports and exports have shown a significant increase, (ii) increase in the number of tourists visiting the country, and (iii) increase in the domestic consumption. A decline in growth rate is expected in the production of mines, manufacturing industries, transport, communication and storage and financial and real estate sub-sectors for the FY2005/06.Their growth rates are expected to be around 2 %. The community and social services sub-sector is estimated to grow by 1.3% only. In FY2004/05, mines grew by 2.5%, transport, communication and storage by 5.1%, and financial and real estate by 4.6%.

The GDP at current producers' prices is expected to reach to Rs.582.95 billion in 2005/06, an increase of Rs.49.41 billion from the FY2004/05. For FY2005/06, such contributing shares are expected to be 38.8 and 61.2% respectively for agriculture and non-agriculture sectors. There is a marginal increase in the share of contribution of non-agriculture sectors. There is a marginal increase in the share of contribution of non-agriculture sector.

In FY 2004/05, per capita GDP at current producers' prices was RS.21, 091 (USD 297). It is expected to grow by 6.9% and reach Rs.22, 540 (USD 311) in FY2005/06. In USD terms, per capita income increased by 4.7% only. Lower growth rate of per capita income in USD terms is mainly due to the devaluation of the Nepalese currency. However, in constant price terms, per capita income which increased by 0.46% in FY2004/05 is expected to decrease by 0.25% n 2005/06. This negative growth rate of real per capita income in the current year is mainly due to the population growth rate exceeding the GDP growth rate.

The Growth national Production (GNP) at current producer's price was Rs.543.9 billion in FY2004/05 which increased by 9.5% and is expected to reach to Rs.595.67 billion in FY2005/06. Per capital GNP thus increased by 7.1% during the same period and reached to Rs.23, 032 (USD 322) in 2005/06 from Rs.21, 501 (USD 302) n FY2004/05.

b) **Government of Nepal** (2006) has investigated the deposits, liquidity and credit situation of the commercial banks and reported that total deposits of commercial banks increased by 7.6% in the first eight months of FY2005/06. It increased by 2.4% only in the same period in the last fiscal years. The high level of remittance has caused this high growth in the bank deposits. Current deposits declined by 5.0% in the first eight months of FY 2004/05 and this deceleration decreased to 3.1% during the same period of both the fiscal years increased by about the same rate, 8.0% in FY 2004/05 and 7.9% in FY 2005/06. Fixed deposits on the other hand a negative growth rte of 2.2 % in FY 2004/05 which increased by 11.4% in the FY 2005/06. High level of remittance and absence of suitable investment opportunities resulted into an increase in the deposits with the banks. Likewise, there is an increase in the deposit margin. It increased by 0.9% in the FY 2004/05 and this growth rate increased to 1.3% in FY 2005/06.

In the first eight month of FY 2005/06, there was some slackness in the commercial banks leading and investment. In the last fiscal year, loans and investment increased by 9.7 percent which could increase by 8.1 percent only in this Fy2005/06. Such a decline in the growth of commercial bank's loan and investment is due to conflict situation, political disturbance, and consequent slackness in industrial environment. Of the commercial bank's loan and investment, claims on government have shown an increase. Claims on government, have increased by 1.5% in last FY2004/05 and this growth rate increased to 2.8% in this FY 2005/06. Similarly, in contrast to 43.5 growths in the first eight months of last fiscal year, the net claims of commercial bank on non financial public enterprises have declined by 5.1%. Mainly because of priority accorded by Nepal Bank Limited and Rastriya Banijya Bank on loan recovery and net repayments by Nepal Oil Corporation, Nepal Electricity Authority, National Trading Limited and Hetauda Textile Industries, the net claims became negative. Similarly, there was decline in loans advanced by commercial banks to private sector. In the previous fiscal year, such credit had increased by 12.1% which remained at only 10.1% in the first eight months of this fiscal year and thus the net credit flow was only Rs.16.58 billion. In the total credit flow, the share of principal is 84.5% and interest 15.5%. The percentage in previous fiscal year was 83.7% and 16.3%. The slackness in credit flow to private sector is due to political instability and overall economic instability.

Loan distribution of the government-owned Agriculture Development Bank had grown by 16.9% in the first eight months of FY2004/05. In the corresponding period in Fy2005/06, its growth rate declined by 10.0% totaling to Rs.6.23 billion. The loan collection increased by 15.0% in the last FY which declined by 11.5% in FY2005/06 totaling Rs.5.15billion. The outstanding debt extended by the ADB increased by 4.5percent over the last fiscal year and reached to Rs.21.75 billion. In the last FY2004/05, the outstanding debt grew by 8.9 percent. The conflict situation has its effects upon both its loan disbursement and recovery. The ADB has started to implement the guidelines of Nepal Rastra Bank on the standards concerning the provisioning for bad loans, core capital requirement, asset quality management, income expenditure management, liquidity management, risk management and governance.

c) **Government of Nepal** (2006) has examined the commercial bank's sources of funds. Total deposits, the primary sources of funds of commercial bank, increased by 15.2 %(Rs.30.9 billion) and reached 233.6 billion as at mid July 2004. Total deposits in the previous year had increased by 10.3% (Rs.19.1 billion). Of the main components of total deposits, saving deposits went up by 17.8% (Rs. 17.5 billion) aggregating at Rs.114.5 billion as of mid July 2004. Such a saving deposits had registered a growth of 16.0% (Rs.17.4 billion) last year. Fixed deposits another component of total deposits, posted a 10.8% (Rs.8.2 billion) growth in the review year compared to the growth of 1.3% (Rs.975.0million) last year. Further current deposits, which had increased by 19.2% (Rs.4.6 billion) last year, exhibited a growth of 18.3% (Rs.5.2 billion) in the review year, amounting to Rs. 33.5 billion as at mid-July 2004. Similarly, margin deposits also posted a growth of 11.5% (Rs.213.0 million) and reached Rs.2.1 billion as at mid-July 2004. Significant growth in private sector's remittance contributed to the growth in saving and fixed deposits in the review year compared to the last year.

The amount of commercial bank's borrowing from NRB was maintained at Rs. 478.0 million as at mid-July 2004 compared to Rs. 974.0 million as at mid-July 2003. The lower level of sick industries refinance facility availed by commercial banks from NRB contributed to such a decline in commercial bank's borrowing from NRB compared to the that of last year.

Foreign liabilities of commercial banks, which were Rs.130.0 million, last year, quadrupled and reached Rs. 520.0million in review year. In the review year, commercial

bank's other liabilities increased by 2.6% (Rs.2.3 billion) to Rs. 90.5 billion as at mid-July 2004. Last year, such a liability had gone up by 33.8 %(Rs.22.3 billion).

d) **Government of Nepal** (2006) has identified the uses of commercial bank's funds. On the uses side of commercial banks funds, liquid funds reached Rs. 48.6 billion as at mid-July 2004 with a growth of 17.7% (Rs.7.3 billion) Last year, such a fund had registered a decline of 12.0% of the components of total liquid funds foreign currency in hand, in contract to the 17.0%(Rs.10.5 million) growth of the last year declined by 35.2% (Rs.254.0 million) to Rs.468.0 million as at mid-July 2004. However, commercial bans balances with NRB increased by 45.3% (Rs. 7.1 billion) amounting to Rs.22.8 billion as at mid-July2004,coppared to declined of 2.9% (Rs. 462.0million) last year. Cash in hands of commercial banks declined by 7.9%(Rs.373.0million) to Rs.4.4 billion as at mid-July 2004, while such a cash- in hand had gone up by 3.8% (Rs. 186.0 million) last year. Foreign bank balance commercial bank. On the other hand, increased by 6.9% (Rs. 1.3 billion) and stood at Rs. 20.7 billion as at mid-July 2004 in contrast to a decline of 16.7% (Rs.3.9 million) in the preceding year. Cash-in- transit posed a decline of 62.4% (Rs.517.0 million) amounts to Rs. 312.0 million as at mid-July 2004. Such cash had declined by 58.9 %(Rs1.2 billion) last year.

In the review year, loan and advances, a major part of the use of commercial banks funds increased by 12.4% (Rs.25.0 billion) to Rs.226.8 billion as at mid-July2004. Such loan and advances had gone p by 16.4% (Rs.28.5 billion) last year. Among the main sectors of loan and advances, credit flows to government from the banking sector leant up by 11.0% (Rs.4.3 billion) amounting to Rs.43.8 billion as at mid-July 2004, compared to a growth of 35.4% (Rs.10.3 billon) last year. Such a declaration in claims on government was due to mobilization internal loans less than the amount mentioned in the budget because of the growing receipts of foreign loans and grants. Compared to a growth of 6.1% (Rs.587.0 million) last year credit flow to financial enterprises went up substantially by 24.2% (Rs.600.0 million) to Rs.2.2 billion as at mid-July 2004 compared to a decline of 7.9% (Rs.243.0 million) last year, credit year.

Compared to a growth of 13.8%(Rs.17.0 billion) last year, credit flow to private sector from the commercial banks increased by 12.9% (Rs.19.2 billion) to Rs.167.2 billion as at mid-July 2004. Disturbance of peace and security caused low demand from credit by private sector which contributed to such a deceleration in claims of private

sector. Likewise, foreign bills purchased declined by 33.4% and stood at Rs.873.0 million as at mid-July 2004. Such a purchase had declined by 11.4% (Rs.151.0 million) last year.

Total assets and liabilities of commercial banks went up by 11.3% (Rs.33.0 billion) to Rs. 325.1 billion as at mid-July 2004. Such assets and liabilities had gone up by 16.4% (Rs.41.1 billion) last year.

Board of Director's Report (2005) had assessed the overall banking scenario of NIBL. During fiscal year 2004/05, total deposits of commercial bans increased merely by 8.4% i.e. NPR 17.5 billion compared to growth of 15.7% i.e.-NPR 28.2 billion in the previous year. On the other hand total landing registered a healthy growth of 20.2% i.e. NPR 25.7 billion during the review period as compared to a growth of 7.1% i.e. NPR 8.4 billion in the previous year.

On the deposit side, although the growth rate of the bank's deposit is lower in comparison to previous year growth, this bank has nevertheless exceeded the exceeded the overall growth rates of the banking sector. This bank's deposit increased by 23.6% i.e. NPR 2.27 billion where as the total deposit in under review.

On the lending side, the growth rate has exceeded the previous year's growth rate as well as the overall growth rate in the overall growth rate in the banking sector. This bank's total loans increase by 42.4% i.e. NPR 3.11 billion compared to the growth of 20.2% i.e. NPR 25.7 billion in the banking sector consequently, the market share of this bank in the total leading increased from 5.8% to 6.8% during the period under review.

Board of Director's Report (2005) in his brief report of review of the banks performance of HBL stated that the Bank's total deposit reached Rs. 24.814 million during the period under review, recording an increase of 12.74% over the deposit of Rs. 22,010 million during the previous year. Similarly the loans and advances reached Rs.13, 451.2 million during the period under review, recording an increase of 4.11% over the figure of Rs. 12,919.6 million during the previous year. These figures of total deposits and loans and advances represent 9.83% and 8.43% respectively of the total deposits and loan and advances recorded in the overall banking sector. This bank has continued to top the private banks in terms of deposits and loans for the past many years.

The net assets of the Bank increased by 12.06%, reaching Rs.2, 56.4 million during the review period, while the gross assets increased by 12.21% and is valued at Rs. 28,871.3 million.

The bank was able to make an operating profit of Rs. 742.75 million during the review period vis-à-vis Rs. 664.52 million in the previous year. The net profit of the bank reached Rs.308.28 million, registering a growth of 17.19 percent over the net profit of Rs. 263.05 million during the previous year.

The loan loss provision is increased by 6.085 during the period as against 14.83% the previous year.

g) **Modigiliani F.** and Miller M.H. (1958) has studied the cost of capital, corporation and theory of the investment. The study showed that the impact of additional debt in a tax less and economically, perfect, word the total market value of company's debt plus equity should not charge as debt is substituted for equity. Although expected earning per share will increase as debt is substituted for equity (or additional financing is done with debt rather than equity). This effect is exactly offset by a markdown is the company's price/earning ratio. The mar-down occurs because the additional debt exposes the common shareholder to an extra financial risk.

h) **Kandel P**. has attempted to find out the most prominent approach of determinants of investment and find hat investment in the some of formation of capital stock such as land, structure plant and machinery, furniture and inventory, has crucial role in the economy. Question arises, which type of investment, private or public is more valuable to trigger the process of economic growth. The public investment in infrastructure is not complementary to private sector. The determinants of the investment is that if the firm find that actual stock is less than the optimum stock, it makes up the shortage by additional investment.

On the other hand, if it contemplates that the actual stock is greater than the optimal stock, it starts divestment. Investment is associated with current sales, which is

expected to continue in future. Investment as a function of change in factor prices or ratio of factor prices to the prices of output. The firm always tries to maximize its present worth and this present worth maximization in turn depends on rental price or user charge of capital services or cost of capital. It has been concluded from the analysis that availability of market is main determinant of investment.

Thus, this determinant helps the structure manger to make the optimal capital structure.

General Conclusions

Most of the studies cited in the review of related literature have been conducted in different joint ventures banks of Nepal. The banks are more concentrating in the area of loan and advances. It has been noticed that fixed deposits of the banks are increasing. The shareholder's equity of the banks is increasing but the proportion of shareholder's equity is found much lower in the banks. The banks are extremely levered and facing heavy burden of interest payment due to the employment of more debts. The correlation between return and debt capital of the banks are positive, Thus, there is significant relationship between the variables i.e. debt capital of the bank is significant in generating more returns. Thus, it has been found from the review of literature to best of the knowledge of researcher that no investigation was directly related to the present study.

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CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

According to Kothari C.R. (1991), “Research Methodology refers to the four various sequential steps to be adopted by a researcher in studying a problem with certain objective in view. Research methodology basically describes the methods, processes, tools and techniques applied in the entire process of a scientific research.”

According to Michael V.P., (2000), “Research is the process of systematic and in-depth study or search for any particular topic, subject or area of investigation backed by collection, presentation and interpretation or relevant details or data.”

In this chapter, “Capital structure management” of two banks has been analyzed. It describes about the capital structure management of these two banks. The major objectives of this study include the analysis of the comparative trend of various variables by measuring the relationship between debt and equity capital and the analysis of financial decision through correlation analysis. So this chapter is divided into different headings as below:

a) Research Design
b) Population and Sample
c) Nature and Types of Data
d) Techniques of Analysis
e) Tools of Analysis

3.2 Research Design

According to Selltiz C. & others (1962), “Research design is important for scientific investigation. Research design gives students/investigator a direction to research systemically, “a research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.” Since this study seeks to analyze the capital structure management in terms of risk and returns of NIBL and HBL to establish the nature as well as between the returns of the selected banks and the market return as well as between the selected banks themselves. The research design of the study is analytical and correlation type. Moreover, as the study is concentrated on the comparative study of the capital structure management of the two selected banks.

Firstly, the study analyses the risk and return of NIBL and HBL on the basis of income from investing activities. For this purpose, the researcher determines the average, standard deviation and coefficient of variation of the return of NIBL and HBL. The study

also analyses the risks of the respective banks in terms of coefficient of variance and correlation coefficient. Besides, the study also focuses on analyzing the different variables related to the capital structure management of both banks. Secondly, the study analyses the risk and return of NIBL and HBL on the basis of net return. Thirdly, the study concentrates on the hypothesis testing to test the significance of observed correlation coefficient and significance of computed average returns.

3.3 Populations and Sample

Population is the group of interest of the research on which the results of the study can be generalized. In any investigation, the interest usually lies in the studying the various characteristics relating to individuals belonging to population. Since the study is concerned with the capital structure management of the selected two commercial banks, therefore, the population for the study has been all the twenty-five commercial banks which are currently in operation in our country.

The individuals selected from a population in such a way that they represent the larger group from which they are selected comprise a sample. The purpose of se4lecting a sample is to gain information about a population. In the present study, judgment or porosities sampling (a non-random sampling methods) technique has been used in the selection of the commercial banks. The two commercial banks have been selected for the studies are:

1. Nepal Investment Bank Ltd. And
2. Himalayan Bank Ltd.

In addition, financial data of each of the sampled commercial banks are taken for the period of 7 years, during FY 2000/01 to FY 2006/07.

3.4 Nature and Type of Data

Since the study is basically analytical and historical on nature, most of the data are based on the past performance of the sampled commercial banks. For the purpose of the study, all the data used are second-hand published data of the respective banks under study. Such data have been derived from the financial statements of the companies concerned.

a) Sources of Data

All the data used in this study are obtained from the secondary sources. The main of the data are the financial statements of the selected commercial banks under study and of the other banks also. The required financial statements have been obtained from the website of Nepal Investment Bank Ltd. (www.nibl.com.np), Himalayan Bank Ltd. (www.himalayanbank.com.np), Nepal Rastra Bank (www.nrb.org.np), Economic Survey (www.mof.gov.np) and Nepal stock Exchange Limited (www.nepalstock.com). Similarly some of the data has been obtained from Annual Reports of the Banking and Financial Statistics published by NRB and Economic Survey published by Ministry of Finance, Government of Nepal.

b) Data Gathering Procedure

After identification of sources of data, the required data for the study have been gathered through the following procedures:

- Firstly, to obtain the data, the annual reports of all the listed commercial banks were-down loaded to the computer disk. Secondly, all the downloaded annual reports were transcribed into computer printouts and the data required for the study were taken from there.
- To get data from NRB publication (Economic Review and Banking and financial Statistics), authorized staffs of NRB Head Office at Baluwatar, Kathmandu were approached and required data are taken.
- Other books and Journals had also been consulted.

c) Data Processing Procedure

Thus, data are gathered through different procedures have been further processed according the requirements of the study. First of all, the collected data were thoroughly studies to identify the required data for the analysis purpose. Secondly, all the required data were extracted from those sources as per need of the study. Then after, the data have been applied for the analysis of the risk and return of NIBL and HBL on the basis of income from investing activities. For this purpose, the data have been used to determine the average return, standard deviation and coefficient of variation of NIBL and HBL. The data have been also processed for the analyses, the risks of the respective banks in terms

of coefficient of variance and correlation coefficient. Besides, they have been used for capital structure performance measure of the selected banks. The data have also been applied for the analysis of the risks and return NIBL and HBL on the basis of net return. The data have also been used for the purpose of hypothesis testing (i.e. testing the significance of the computed mean values). Further more; the collected data have been processed for the comparative analysis of the selected banks on the basis of liquidity risks and credit risks.

3.5 Techniques of Analysis

Although the separate section of the techniques of analysis has not been presented in the study, the descriptive, correlation and inferential techniques of analysis have been applied through out the study. For the purposes of descriptive analysis, risks and return of the banks under study have been analyzed on the basis of interest income and met income of the respective banks. During this course of analysis, return of the selected commercial banks along with their averages, standard deviation and coefficient of variation have been computed and arranged in the tabular form for their descriptive analysis to observe the variability of the return over the period of the stud. The risks of the selected banks have also been analyzed descriptively with respect to covariance with correlation coefficient. Descriptive analysis has also been used to analysis the risks return tradeoff to the selected banks on the basis of net return on total investment and the capital adequacy risks, liquidity risks and credit risks of the banks under study.

The technique of correlation analysis has also been applied of the study while calculating correlation coefficient of the returns of the selected banks.

For inferential analysis, null and alternative hypothesis have been formulated and tested with the help of student's t-test. By applying the inferential technique of analysis, the significance of the observed correlation coefficient and the significance of the computed mean returns have been analyzed. If the calculated t-value are less than the tabulated values at 5% level of significance for the given degree of freedom, the null hypothesis is accepted and alternative hypothesis is rejected and vice versa.

3.6 Tools of Analysis

For the analysis of the data and to reach to a conclusion, different tools of analysis have been applied for the study. Mainly, the accounting tools, statistical tools and financial tool have been used as mentioned below.

a) Accounting Tools

Ratio Analysis

Ratio is the numerical relationship between two variables. It is generally expressed in percentage. It is obtained by dividing one variable to another variable and multiplied by 100.

b) Statistical Tools

The statistical tools applied in this study are expected rate of return, standard deviation, coefficient of variation, Kari Pearson's coefficient of correlation and student's t-test. This research is related to financial subject matter so statistical tools and formulae are expressed in financial terms except correlation coefficient, coefficient of (multiple) determination (r^2) and student's t-test. Due to the most used of average and standard deviation in financial sector also the researcher has used the financial for these statistical tools.

i Expected rate of return or average rate of return

Expected rate of return is the most popular and widely used measure of representing the entire data by on value called average. Expected rate of return has been used to compute the average rate of return of the variable of the selected two banks. It is the sum of multiply of the variables with their respective probability distribution.

Symbolically,

Expected rate of return, $\overline{X} = \sum X/n$

Where, X = Variables

n = Number of variables.

ii Standard Deviation

The standard deviation measures the absolute value of risk, i.e., variability of the returns from the means returns. It is also known as root mean square deviation for the reason that it is the square root of the squared deviation from arithmetic mean. Symbolically,

Standard Deviation, $\sigma = \sqrt{(\sum X^2/n - \overline{X}^2)}$

Where, X = Variables

n = Number of variables.

$\overline{X}$= Expected rate of return or average rate of return.

iii Coefficient of Variation

As noted above, the standard deviation is the absolute measure of risk. In the case of the different mean returns, it misleads to the invalid decision. Hence, to overcome on such a problem, a standardized per unit risk can be used to measure the risk which is called coefficient of variation. It indicates risk per unit of average return. Variability in return (i.e. the risk) has therefore been measured by the coefficient of variation. In this study, coefficient of variation has been computed to show the bank wise variability or risk return relationship in respect of interest rate and rate of return on total investments. It can be computed by dividing the standard deviation by average rate of return.

Symbolically,

Coefficient of variation, C.V. = $\sigma / \overline{X}$

Where, σ = Standard deviation

$\overline{X}$ = Mean rate of return.

iv Karl Pearson's Correlation Coefficient

In simple correlation gives the relation between two variables. In other words, correlation is defined as the relationship (or association) between (among) the one dependent variable or factor and other (or more than one) independent variables(s) or factor(s). Thus, correlation is a statistical tool which determines the degree (extent) and direction of correlation. It helps in studying the variance of two or more variables. There is several method of analyzing the correlation between the two variables such as Graphic Method, Least Squire Method and so on. Among them, Karl Pearson's Coefficient of

Correlation is most widely used in order to establish the relationship between the returns of NIBL and HBL. Karl pearson's Coefficient measures the degree of association between the two variables, say X and Y, and is denoted by

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

Where, r = coefficient of correlation between X and Y (i.e. r_{xy})

$x = X - \overline{X}$ and $y = Y - \overline{Y}$

$\sum xy$ = summation of multiple of mean deviation of variables X and Y.

$\sum x^2$ = summation of mean deviation square of variable X

$\sum y^2$ = summation of mean deviation square of variable Y

v Coefficient of determination (r^2)

The coefficient of determination is a measure of the degree of linear association or correlation between two variables one of which happens to be independent and other being dependent variable(s). It measures the percentage total variation in dependent variables explained by independent variable(s) i.e. the extent of association between the two variables.

The coefficient of determination is defined by

$$r_2 = \frac{ExplainedV\ \ ariation}{TotalVaria\ \ tion}$$

The value of coefficient of (multiple) determination ranges from zero to one (i.e. $0 \geq r^2 \leq 1$). If r^2 = 075, it indicates that independent variables use in regression model explain 75% of total variation in the dependent variable.

vi Student's t-test

Decision making about the characteristics of the population on the basis of study of the sample taken from the population involves the risk of taking wrong decision. A hypothesis is an assumption that we make about the population parameter. The test of hypothesis is a process of testing of significance regarding the parameter of the population on the basis of the sample drawn from the population.

To test whether there is statistically significant correlation between the related variables of NIBL and HBL in terms of capital structure, profitability and associated risk, student's t-test has been computed by using following formula.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{s^2\{1/n_1 + 1/n_2\}}}$$

Where, t = student's t-test

X1 and X2 = expected or mean variables of NIBL & HBL

n_1 and n_2 = No. of observation for NIBL & HBL

$s^2 = (\sum x_1^2 + \sum x_2^2)/ (n_1 + n_2 - 2)$

Tabulated value is based on n – 2 degree of freedom and 5% level of significance.

If the calculated value of t is less than the tabulated value of t at 5% level of significance and for the above mentioned degree of freedom, the null hypothesis (H_0) is accepted and alternative hypothesis (H_1) is rejected. This implies that the value of r is significant i.e. there is statistically significant relationship between the variables or there is statistically significant difference between the average rate of returns of the variables and vice versa.

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CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

The main focus of this investigation has been to analyze the capital structure of NIBL & HBL. For this purpose four types of data regarding capital structure, profitability, market related ratio and statistical analyses of the two banks were collected. The statistical analyses of the data and obtained results have been reported in this chapter. This chapter has been divvied into following parts:

1) Analysis of Capital Structure
    - Analysis of Fixed Deposit
    - Analysis of Shareholders Equity
    - Analysis of Financial Mix
    - Analysis of Debt Capacity
    - Capital Structure Position of the Banks
    - Equity Capitalization Rate
2) Profitability Analysis
    - Expenses Analysis
    - Return Ratio Analysis
3) Market Related Ratios
    - Earning Per Share
    - Divided Per Share
    - Dividend Payout Ratio
    - Market Value Per Share
    - Price Earning Ratio

- Book Value Per Share

4) Statistical Analysis
   - Correlation Coefficient Analysis
   - Test of Hypothesis

4.1 Analysis of Capital Structure

The capital structure of a bank has been analyzed incorporating the analysis of relationship between fixed deposits and shareholders equity, its composition and index, financial mix ratio and capitalization rate analysis.

4.1.1 Analysis of Fixed Deposited

The fixed deposit of bank is termed as long-term debt collected from customers, which a bank generally accepts for maximum period of two years.

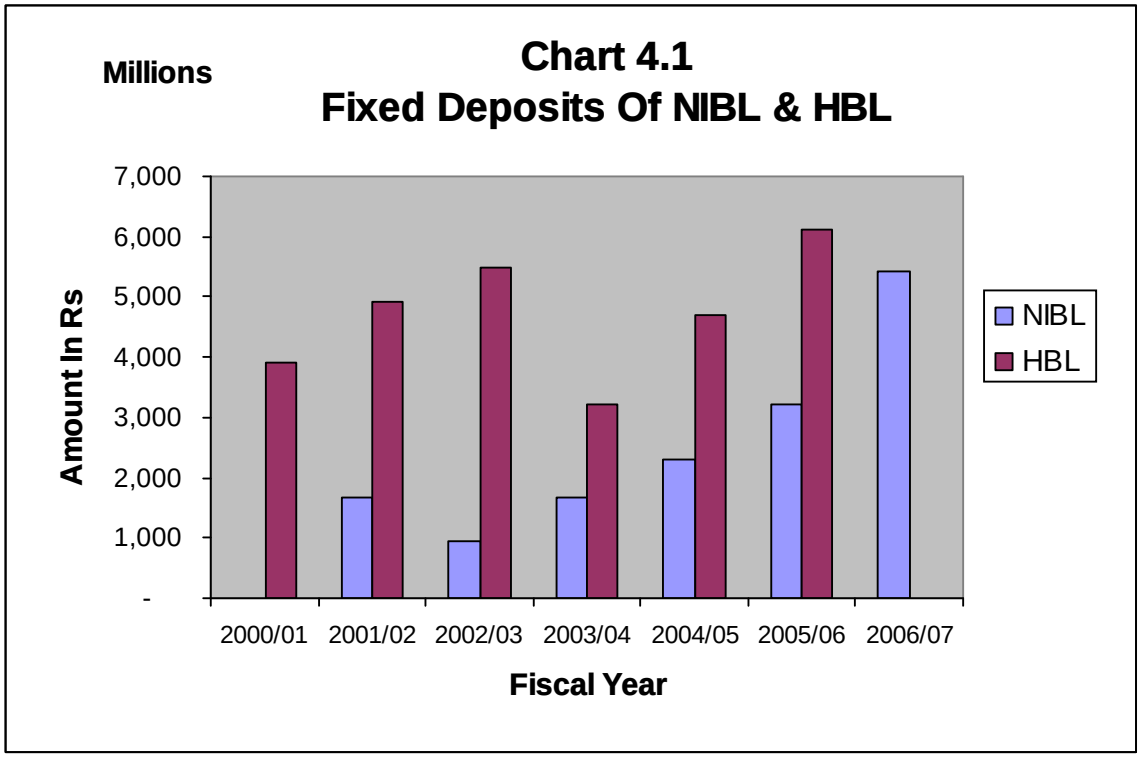
Table No.: 4.1

Fixed Deposit Position (In Rs.) and Index Table of NIBL & HBL

Fiscal Year	NIBL			HBL		
	Fixed Deposit	Index	% Change	Fixed Deposit	Index	% Change
2000/01	-		-	3,917,137,569	100.00	-
2001/02	1,658,664,859	100.00	-	4,927,374,835	125.79	25.79
2002/03	945,933,069	57.02	(0.43)	5,480,843,515	139.92	11.23
2003/04	1,672,824,971	100.85	76.84	3,205,372,779	81.83	(41.52)
2004/05	2,294,680,006	138.35	37.17	4,710,176,693	120.25	46.95
2005/06	3,212,265,752	193.65	39.99	6,107,430,801	155.92	29.66
2006/07	5,412,969,595	326.34	68.51			-
Average			**44.42**			**14.42**
Standard Deviation (S.D.)			**27.26**			**30.20**
Coefficient Of Variance (C.V.)			**61.37**			**209.38**

Table No. 4.1 shows that fixed deposited of NIBL was increasing during every fiscal year except in F.Y. 2002/03. This shows that he bank is concentrating to increase

fixed deposits in it financial mix or capital structure. The fixed depots of NIBL was decreased by 0.43% in F.Y. 2002/03 over the last F.Y. and increase by 76.84% in F.Y.2003/04, which was the highest increment over the past seven years. It was increasing by 37.17%, 39.99% and 68.51% in fiscal years 2004/05, 2005/06 and 2006/07 respectively. Thus, the banks were giving more emphasis to increase fixed deposits during every F.Y. but due to high cost of fund, the bank has given importance to decrease fixed deposit in F.Y.2002/03. The index shows the fixed deposit was increased by 326.34% during the entire study period.



Similarly, fixed deposit of HBL was increased by 25.79% in F.Y. 2001/002 and followed by 11.23% in 2002/03. It decreased 41.52% in F.Y. 2003/04, which was the highest change though out the study period. The index shows that fixed deposit was increased by 155.92% during the entire study period.

In average, the fund collected in the firm of fixed deposits was more by NIBL (Av. = 44.42%) than HBL (Av. = 14.42%). The variability of deposits was found less in NIBL (C.V. = 27.26) than HBL (C.V. = 209.379). Both the banks were found increasing fixed deposits in its financial mix. It is also quite visible in Chart 4.1 (Refer to Appendix: 1)

Table No.: 4.2

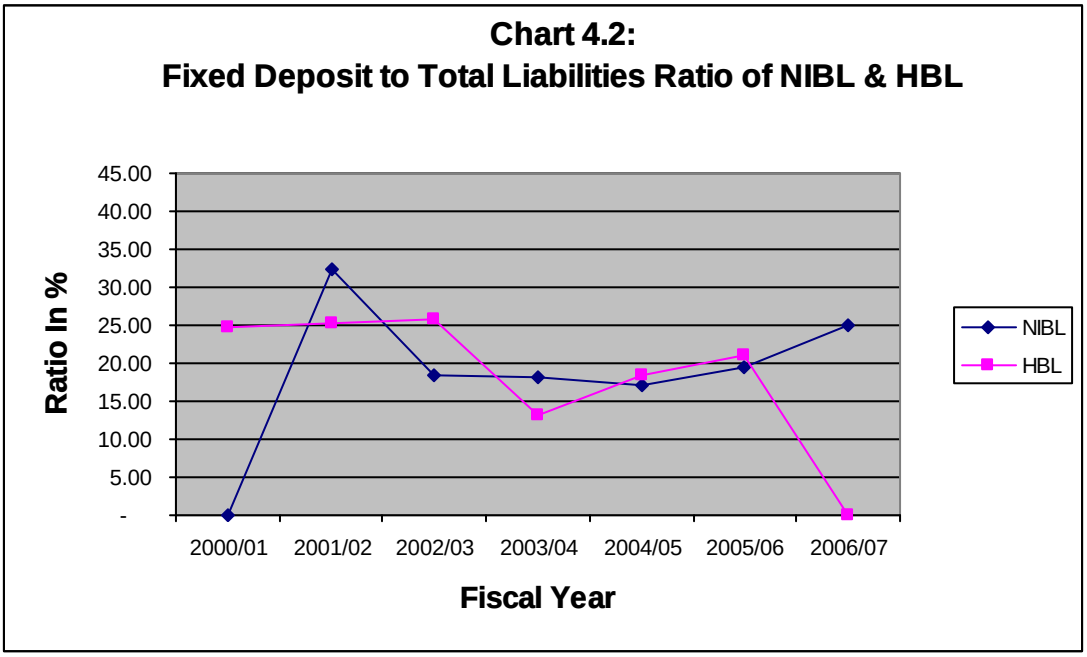
Fixed Deposit to Total Liability Ratio (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	-	-	24.69	-
2001/02	32.35	-	25.25	0.58
2002/03	18.46	(13.86)	25.71	0.44
2003/04	18.25	(0.21)	13.25	(12.46)
2004/05	17.04	(1.21)	18.31	5.06
2005/06	19.60	2.56	21.15	2.84
2006/07	24.91	5.31	-	-
Average	**21.77**		**21.39**	
Standard Deviation (S.D.)	**5.36**		**4.48**	
Coefficient Of Variance (C.V.)	**24.61**		**20.93**	
Combined Average	**21.5805**			

As table no. 4.2 indicates that fixed deposit to total liabilities of NIBL was 32.35% in F.Y.2001/02, which was the highest over the study period. It became 17.04% in F.Y. 2004/05 and recorded as the minimum throughout the study period. It was decreased in F.Y. 2002/03, 2003/04 and 2004/05 by 13.86%, 0.21 and 1.21 respectively. After that, it was increased by 2.56% and 5.31% in F.Y.2005/06 respectively.

Chart 4.2:

Fixed Deposit to Total Liabilities Ratio of NIBL & HBL



Similarly, fixed deposit to total liabilities of HBL was 25.71% in F.Y> 2002/03, which was the highest fixed deposit portion in total asset over the study period. The minimum

fixed deposit was 13.25% in F.Y. 2003/04 over the study period. It was increased in every F.Y. except in F.Y. 2003/04, where it was decreased by 12.46%.

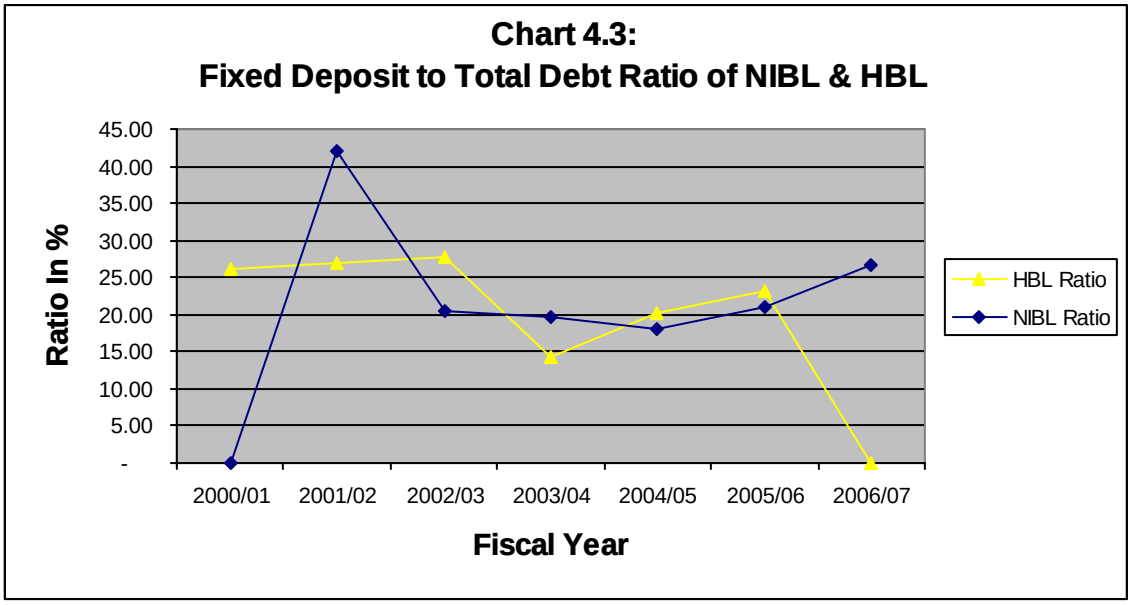
The combined average of fixed deposit to total liabilities was 21.58%. Thus, NIBL has higher portion of fixed deposited in total liabilities than of HBL. Also fluctuation of the ratio was more NIBL (C.V. = 24.61%) than HBL (C.V. = 21.92%). The same is evident form chart 4.2 (Refer to Appendix: 2).

Table No.: 4.3
Fixed Deposit to Total Debt Ratio (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	-	-	26.13	-
2001/02	42.05	-	26.92	0.70
2002/03	20.54	(21.48)	27.66	0.74
2003/04	19.62	(0.95)	14.38	(12.28)
2004/05	18.02	(1.60)	20.10	5.72
2005/06	21.12	3.10	23.22	23.22
2006/07	26.64	5.52	-	-
Average	**24.67**		**23.07**	
Standard Deviation (S.D.)	**8.22**		**4.65**	
Coefficient Of Variance (C.V.)	**33.32**		**20.15**	
Combined Average	**23.869**			

Total debts includes borrowing from banks, deposits, bills payable, bills receivables & other liabilities. Table no.: 4.3 indicate that the highest portion of fixed deposit in total debt of NIBL was 42.05% in F.Y. 2001/02 and the lowest was 19.62% in F.Y. 2003/04. It was decreased by 21.48%, 0.95% and 1.60% in F.Y. 2002/03, 2003/04 and 2004/05 respectively but increased in F.Y. 2005/06 and 2006/07 by 3.10% and 5.52% respectively.

Similarly, the highest portion of fixed deposit in total debt of BL was 27.66% in F.Y. 2001/02 and the lowest was 14.38% in F.Y. 2003/04. There was always increscent in the ratio except in the F.Y. 2003/04 where it was decreased by 13.28 points.



The average of fixed deposit in total debt of NIBL was 24.67% and that of HBL was 23.07%. The volume of fixed deposits to total debt fluctuated more in NIBL (C.V. = 33.306%). The combined average of fixed deposit to total debt of both banks was 23.689%. It may also be seen in Chart 4.3 (Refer to Appendix: 3).

4.1.2 Analysis of Shareholder's Equity

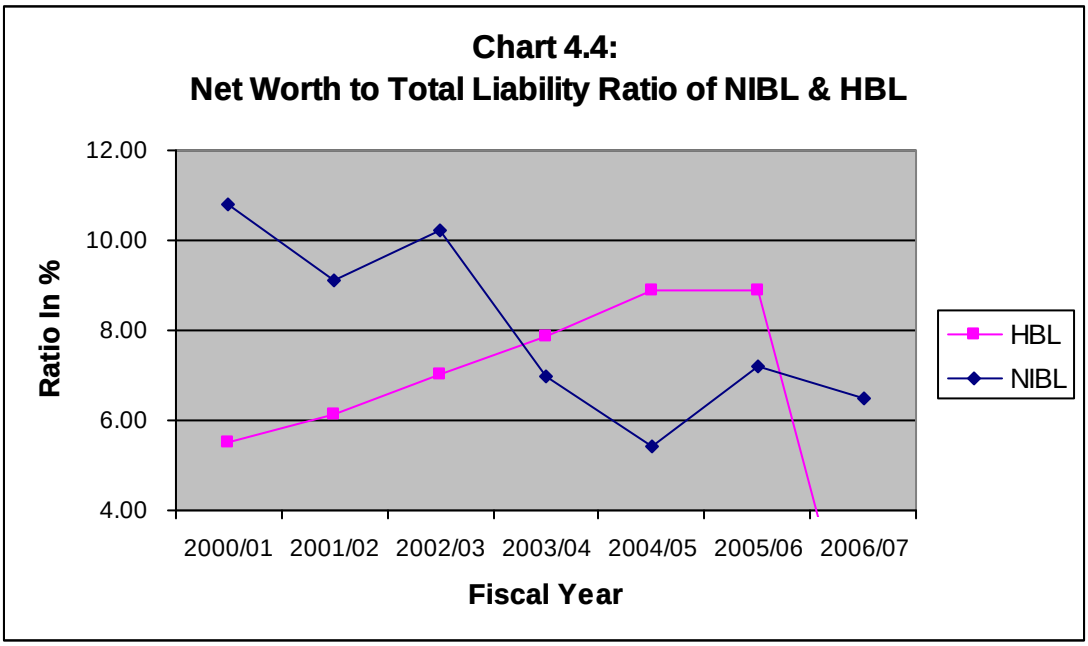
The shareholder's equity of a bank includes paid-up Capital, Reserve Funds and other reserves and undistributed profit.

Table No.: 4.4

Net Worth to Total Liabilities Ratio (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	10.81	-	5.49	-
2001/02	9.12	(1.69)	6.14	0.65
2002/03	10.22	1.10	7.04	0.90
2003/04	6.97	(3.25)	7.88	0.84
2004/05	5.41	(1.56)	8.91	1.03
2005/06	7.20	1.76	8.90	(0.01)
2006/07	6.51	(0.69)	-	
Average	**8.03**		**7.39**	
Standard Deviation (S.D.)	**1.90**		**1.32**	
Coefficient Of Variance (C.V.)	**23.62**		**17.80**	
Combined Average	**7.7135**			

Table No 4.4 indicates that proportion of shareholder's equity i.e. net worth in total claims of assets (Total Liabilities) was much lower in both banks. The highest ratio of NIBL was 10.81% in the FY 2000/01 and the lowest was 5.41% in the FY2004/05. Again, the highest ratio of HBL was 8.91% in the FY 2004/05 and the lowest was 5.49% in FY 2000/01.



Thus, the proportion of shareholder's equity of NIBL was higher than that of HBL. And fluctuation of the proportion of shareholder's equity was more in NIBL (C.V. = 23.38%) than HBL (C.V. = 17.571%). The average ratio of net worth to total asset of NIBL (8.034%) was above the combined average ratio (7.7135%) of both banks. The same is evident from the Chart4.4. (Refer to Appendix: 4).

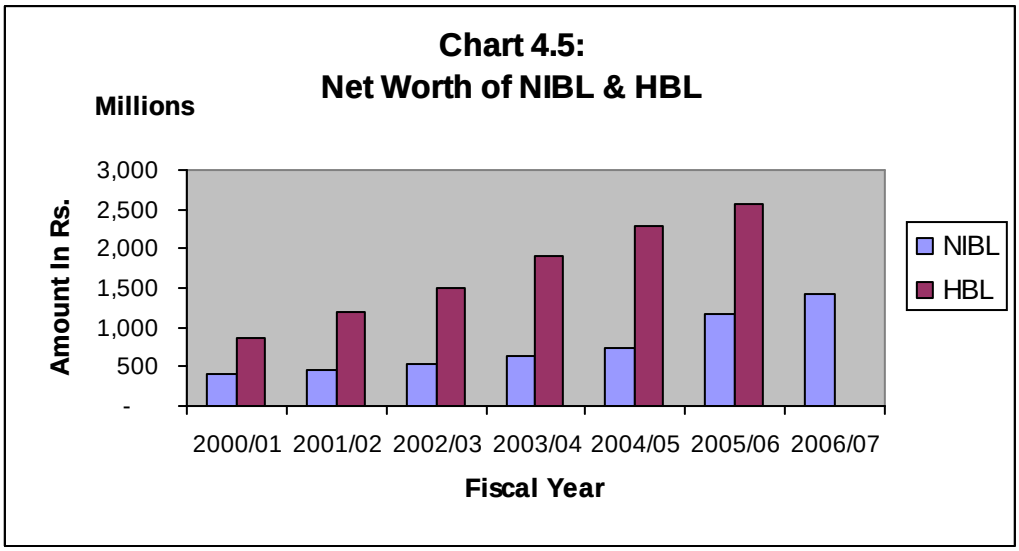
Table No.: 4.5

Shareholders Equity Composition (Rs) and Index Table of NIBL & HBL

Fiscal Year	NIBL			HBL		
	Net Worth	Index	Ratio	Net Worth	Index	Ratio
2000/01	410,200,000	100.00	-	870,535,000	100.00	37.65
2001/02	469,100,000	114.36	14.36	1,198,272,000	137.65	25.31
2002/03	523,460,000	127.61	11.59	1,501,529,000	172.48	26.93
2003/04	638,550,000	155.67	21.99	1,905,883,000	218.93	26.93
2004/05	729,040,000	177.73	14.17	2,291,928,000	263.28	20.26
2005/06	1,180,170,000	287.71	61.88	2,568,395,000	295.04	12.06
2006/07	1,415,450,000	345.06	19.94			-
Average			**23.98**			**24.44**

Standard Deviation (S.D.)	**17.32**			**8.40**
Coefficient Of Variance (C.V.)	**72.20**			**34.34**

Table No. 4.5 shows that shareholder's equity of both banks i.e. NIBL & HBL was increasing during every fiscal year. The highest increment in the shareholder's equity of NIBL was 61.88% in FY2005/06 and that of HBL was 37.65% in 2001/02. Similarly, the lowest increment in the equity of NIBL and HBL were 11.59% in FY 2002/03 and 12.065 in FY2005/06 respectively. The average change in the equity of NIBL was a little bit lower than that of HBL (23.98 %< 24.44%). The variability of equity was found more in NIBL (C.V. = 72.20%) than in HBL (C.V. =34.34). The chart 4.5 also presents the net worth. (Refer to Appendix: 5).



4.1.3 Analysis of Financial Mix of the Banks

The financial mix of the banks has been analyzed by using ratio analysis as a financial tool for the data available from the annual reports of the concerned banks.

4.1.3.1 Debt to Equity Ratio

Debt to equity ratio shows the relationship between borrowed funds and owner's capital. This ratio reflects the relative claims of creditors and shareholders against the assets of the firm. The ratio is important tool to appraise the financial structure of the firm.

A higher ratio shows a large share of financing by the creditors relatively to the owners. So, there is a larger claim against the assets of the firm, which is the danger signal for the creditors. It would be risky for the creditors. A high proportion of debt in the financial structure would lead to inflexibility in the operations of the firm because the firm is legally liable to pay the interest even if the firm is having loss and a smaller ratio shows smaller claim of creditors. To the creditors, relatively high stake of the owners implies sufficient safety margin and substantial protection against shrinkage in assets.

Debt to equity has been calculated in following ways:

I. Debt to Equity Ratio in terms of Fixed Deposit to Net Worth

DER = Fixed Deposit / Net Worth

II. Debt to Equity Ratio in terms of Total Debt to Net Worth

DER = Total Debt / Net Worth

I. Debt to Equity Ratio in terms of fixed Deposit to Net Worth

Table No.: 4.6

Fixed Deposit to Net Worth i.e DER (In %) of NIBL & HBL

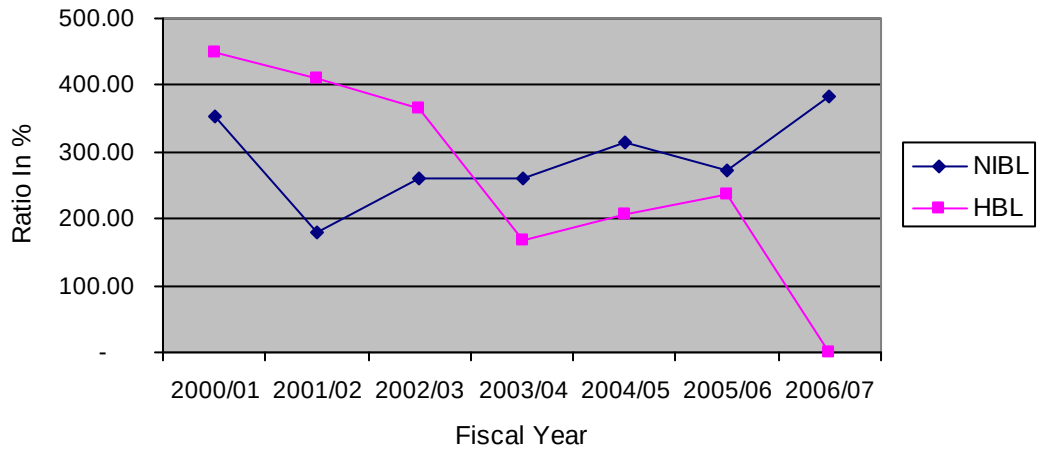
Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	353.58	-	449.97	-
2001/02	180.70	-	411.21	(38.76)
2002/03	261.97	(172.87)	365.02	(46.19)
2003/04	261.97	81.27	168.18	(196.84)
2004/05	314.79	52.82	205.51	37.33
2005/06	272.18	(42.60)	237.79	32.28
2006/07	382.42	110.24	-	-
Average	**294.27**		**306.28**	
Standard Deviation (S.D.)	**66.00**		**107.26**	
Coefficient Of Variance (C.V.)	**22.43**		**35.01**	
Combined Average	**300.275**			

The debt equity ratio is more significant to determine whether a fixed deposit is adequate to strengthen the profitability of the bank. Table no.: 4.6 reveal that both the banks have more DER i.e. greater claims of creditors than owner.

DER on NIBL in the F.Y. 2006/07 was 382.42% i.e. the greatest portion of the fixed deposit. It was 180.70% in the F.Y. 2002/03 i.e. the lowest portion of the fixed deposit throughout the study period. Similarly, DER of HBL in the F.Y. 2000/01 was 449.97%, i.e. the greatest portion of the fixed deposit. It was 168.18% in the F.Y. 2003/04

i.e. the lowest portion of the fixed deposit. The highest increment in the DER of NIBL was 110.24% in F.Y. 2006/07 and that of HBL was 37.33% in F.Y. 2004/05.

Chart 4.6:
Fixed Deposit to net Worth Ratio of NIBL & HBL



However, the portion of DER was smaller in latter fiscal years than it was in 2000/01 of HBL, which shows that the bank has somehow reduced the claim of creditors than that of owners, NIBL has 294.27% average DER and that HBL had 306.28%. The ratio of NIBL was lower than the combined average (300.275%). But the ratio of HBL was higher than the combined average throughout the study period. The C.V. of NIBL was lower than the C.V. of HBL (22.47% <35.01%). This shows that the variability of fixed deposit to net worth was higher in HBL than NIBL.

The DER was higher in HBL than in NIBL. This explains that HBL has more claims of creditors than that of owners. Furthermore, it depicts that HBL had higher portion of fixed deposit than shareholders equity (Net worth) in its capital structure than that of NIBL. Thus, HBL is found to be highly levered than NIBL because their business depended on the deposits rather than the net worth. (Refer to Appendix: 6).

II. Debt to Equity Ratio in terms of Total Debt to Net Worth

Table No.: 4.7

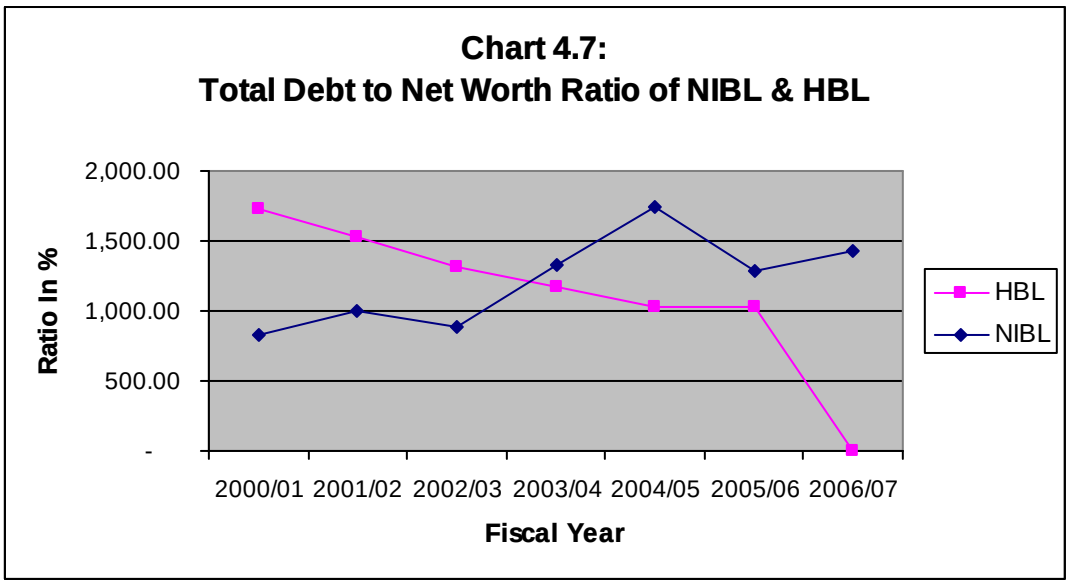
Total Debt to Net Worth Ratio i.e. DER (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	824.11	-	1,722.30	-

2001/02	993.03	168.92	1,527.39	(197.91)
2002/03	878.68	(114.35)	1319.61	(207.78)
2003/04	1,335.11	456.43	1,169.65	(149.96)
2004/05	1,746.80	411.69	1,022.63	(147.02)
2005/06	1,288.84	(457.96)	1,024.10	1.47
2006/07	1,435.35	146.51	-	-
Average	**1,214.56**		**1,297.61**	
Standard Deviation (S.D.)	**308.55**		**258.34**	
Coefficient Of Variance (C.V.)	**25.40**		**19.90**	
Combined Average	**1256.0867**			

Table no.:4.7 show the portion of total debt in shareholders equity. The highest debt to equity ratio of NIBL was 1746.80% in F.Y. 2003/04 and the lowest was 824.11% in the F.Y.2000/01. Similarly, the highest debt to equity ratio of HBL was 1722.30% in F.Y. 2000/01 and the lowest was 1022.63% in the F.Y.2004/05.

In average, NIBL employed 1214.56% of debt capital to net worth and that of HBL had 1297.6133% of DER throughout the study period. The average ratio of the average ratio of HBL was above the combined average ratio. This indicates that HBL had employed higher total debt capital or outside funds as compared to equity fund because the bank is extremely levered than NIBL. The C.V. was more consistent than HBL. Thus, both banks are extremely levered and facing heavy burden of interest payment due to more debts. (Refer to Appendix: 7)



4.1.3.2. Debt to Total Capital Ratio (DCR)

The relationship between creditors fund and owners capital has been shown by debt to total capita ratio. This type of capital structure ratio id deviated from the debt equity ratio (DER). Here, it states that the outsider's liabilities are related to the total capitalization to the firm and not only to the shareholders equity. DCR has been calculated in following ways:

1. Fixed Deposit to Capital Employed (FD/CE): DCR = FE/CE where capital employed includes shareholders equity and fixed deposits.
2. Total Debt to Total Assets (TD/TA): DCR = TD/TA

I. DCR in terms of Fixed Deposit to Capital Employed (FD/CE)

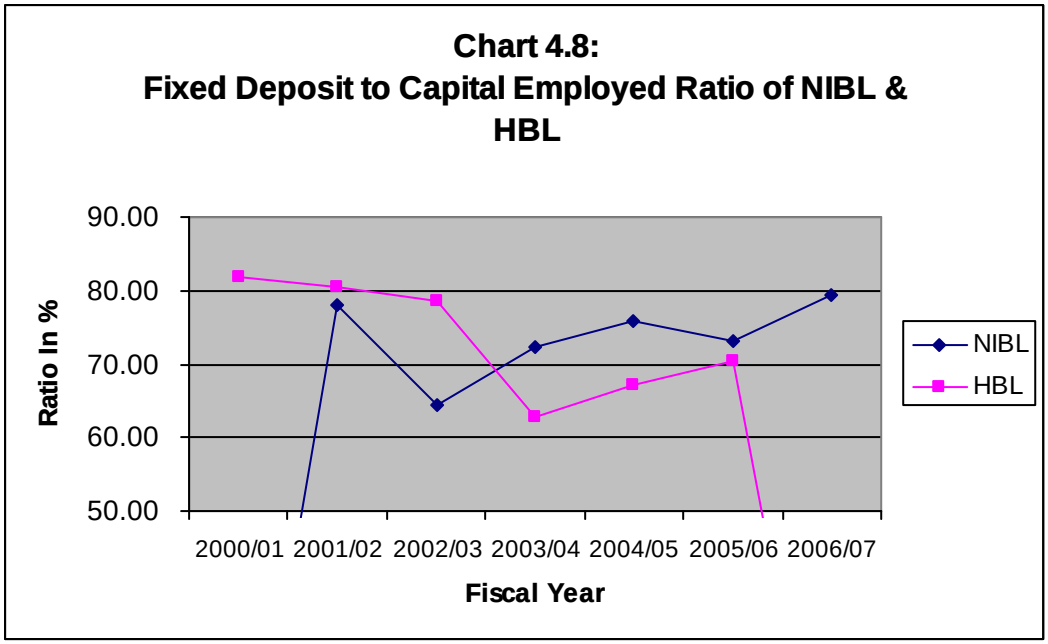
Table No.: 4.8

Fixed Deposit to Capital Employed Ratio(In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	-	-	81.82	-
2001/02	77.96	-	80.44	(1.380)
2002/03	64.37	(13.581)	78.5	(1.940)
2003/04	72.37	7.998	62.71	(15.788)
2004/05	75.89	3.515	67.27	4.556
2005/06	73.13	(2.757)	70.40	9.128
2006/07	79.27	6.139	-	-
Average	**73.83**		**73.52**	
Standard Deviation (S.D.)	**4.88**		**7.16**	
Coefficient Of Variance (C.V.)	**6.61**		**9.73**	
Combined Average	**73.6779**			

Table 4.8 indicates that the ratio of fixed deposits to capital employed has been fluctuated in both the banks over the study period. The highest fixed deposit to capital employed ratio of NIBL was 79.271% in F.Y. 2006/07 and the lowest was 64.376% in the F.Y. 2002/03. The highest increment of fixed deposit to capita employed ratio of NIBL was 7.998% in F.Y.2003/04 and the highest decline was 13.581% in the F.Y. 2002/03 throughout the study period.

Similarly, the highest fixed deposit to capital employed ratio of HBL was 81.82% in F.Y.2000/01 and the lowest was 62.712% in the F.Y.2003/04. The highest increment of fixed deposit to capital employed ratio of HBL was 9.128% in F.Y. 2004/05 and the highest decline was 15.788% in the F.Y. 2003/04 over the study period.



The average DCR of NIBL was 73.8332% and that of HBL was 73.5226%. The combined average DCR of both banks was 73.6779%. thus, both the banks have higher ratio of DCR but in comparison, the ratio was higher in NIBL. The C.V. of NIBL was lower than that of HBL (i.e. 6.6089% < 9.7328%) so that there is more variability of the ratio in HBL. (Refer to Appendix: 8).

II. DCR in terms of Total Debt to Total Assets (TD/TA)

Table No.: 4.9

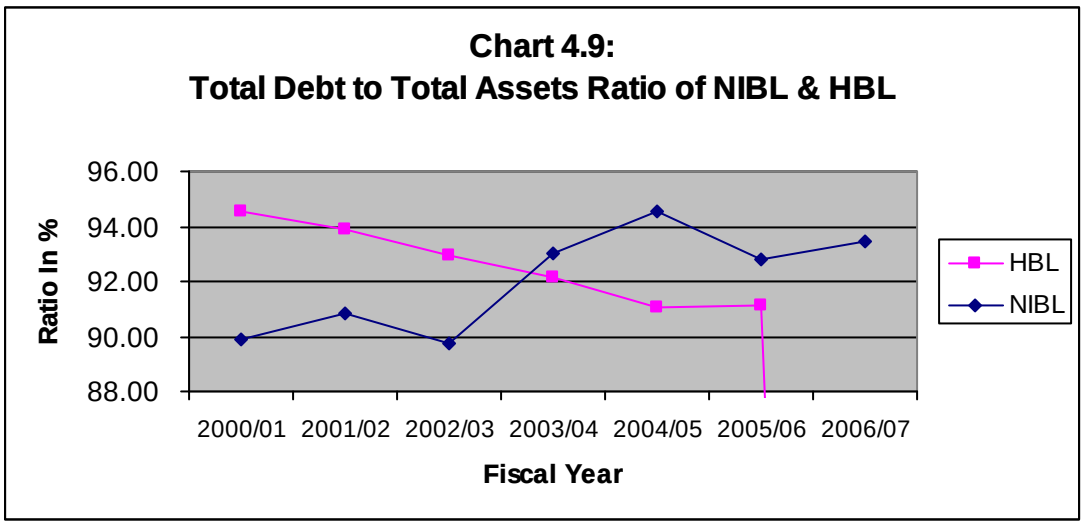
Total Debt to Total Assets Ratio (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	89.91	-	94.51	-
2001/02	90.85	1.660	93.86	(0.650)
2002/03	89.78	(1.070)	92.96	(0.900)
2003/04	93.03	3.250	92.13	(0.830)
2004/05	94.58	1.550	91.09	(1.040)
2005/06	92.80	(1.780)	91.10	0.010
2006/07	93.49	0.690	-	-
Average	**92.06**		**92.61**	
Standard Deviation (S.D.)	**1.74**		**1.30**	
Coefficient Of Variance (C.V.)	**1.89**		**1.40**	
Combined Average	**92.335**			

DCR in terms of total debt to total assets reveals that the share of total assets financed by outsides fund.

Table No.: 4.9 shows the assets of the banks have been financed more by funds collected from creditors. The highest ratio of NIBL was 94.58% in the F.Y. 2004/05 and lowest ratio was 89.78% in the F.Y. 2002/03. The highest increment was 3.25% in the F.Y. 2003/04. The average ratio of the bank was 92.06%.

Similarly, the highest ratio of HBL was 94.51% in the F.Y. 2000/01 and lowest ratio was 91.09% in the F.Y. 2004/05. There was always decrement in the ratio by 0.65%, 0.90%, 0.83% and 1.04% in F.Y.2001/02, 2002/03, 2003/04 and 2004/05 respectively except in the F.Y. 2005/06, where it was increased by 0.01%. The average ratio of the bank was 92.61%.



The C.V. of NIBL was higher than that of HBL (i.e. 1.89% < 1.40%) so there is more variability of the ratio in NIBL ratio of total debt to total assets was recorded over 90% in both the banks, which shows that the banks are using higher debt capital to finance its assets. In both banks, the creditors margin of safety is very low i.e. nearly 8% only, which indicates higher risk. The same is evident from Chart 4.9 (Refer to Appendix: 9)

4.1.4 Analysis of Debt Capacity of Banks

To analyze debt capacity of the banks or to indicate the firm's ability to meet interest obligations, the interest coverage ratio is calculated. It is used to test firm's servicing capacity.

Interest Coverage Ratio (ICR) = EBIT / Interest

From the viewpoint of the creditors, the lager the coverage, the greater will be the ability of the firm to handle fixed charges and assurance of the payment of interest to the creditors. However, too higher or too low ratio is unfavorable to the firms. High ratio implies that the firm is very conservative in using debt. Again, low ratio implies that the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors.

Table No.: 4.10

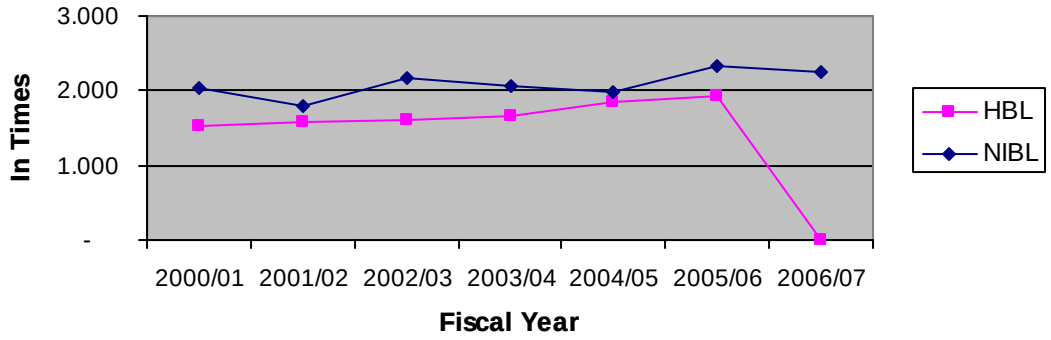
Interest Coverage Ratio (In Times) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	2.038	-	1.527	-
2001/02	1.797	(0.2410)	1.587	0.0600
2002/03	2.175	0.3780	1.604	0.0170
2003/04	2.060	(0.1150)	1.650	0.0460
2004/05	1.989	(0.0710)	1.856	0.2060
2005/06	2.337	0.3480	1.930	0.0740
2006/07	2.240	(0.0970)	-	-
Average	**2.091**		**1.693**	
Standard Deviation (S.D.)	**0.165**		**0.148**	
Coefficient Of Variance (C.V.)	**7.888**		**8.741**	
Combined Average	**1.892**			

Table no. 4.10 indicates that ICR of NIBL was highest (2.337 times) in F.Y. 2005/06 and lowest (1.797 times) in F.Y.2001/02. Again, the highest increment in ICR of NIBL was 0.378 pint in F.Y. 2002/03 over last year throughout the study period. The highest negative change by 0.241 point was observed in F.Y. 2001/02. The average ICR of the NIBL was 2.091 times, which was nearly equal to the normal ratio i.e. 2 times.

Similarly, the ICR of HBL was highest (1.930 times) in F.Y. 2005/06 and lowest was 1.527 times in F.Y. 2000/01 over the study period. The highest positive change by 0.206 pint was observed in F.Y. 2004/05. There was no negative change in HBL throughout the study period.

Chart 4.10:
Interest Coverage Ratio of NIBL & HBL



The average ICR of the HBL was 1.693 times, which is below the normal ratio i.e. 2 times, it might be considered as tight debt service capacity. Thus, NIBL was in better condition than HBL in their debt service capacity. It is also quite visible in the Chart 4.10.

Again, the variation of the ratio of NIBL was observed less in comparison to HBL (i.e. C.V. of NIBL 7.888 < C.V. of HBL 8.741).

In banking business, ICR should not be tight so that the bank could be able to service the debt capital. In this regard, the ICR of HBL was not sufficient. So, the bank should pay more attention in this matter by increase it s EBIT or maintain minimum its interest obligation (Cost of Fund). (Refer to Appendix: 10)

4.1.5 Capital Structure Position of the Banks

When debt and equity are properly mixed, it minimizes the cost of capital and maximizes the value or the firm. To analyze value of the banks, fixed deposits and equity share capitals were taken into consideration.

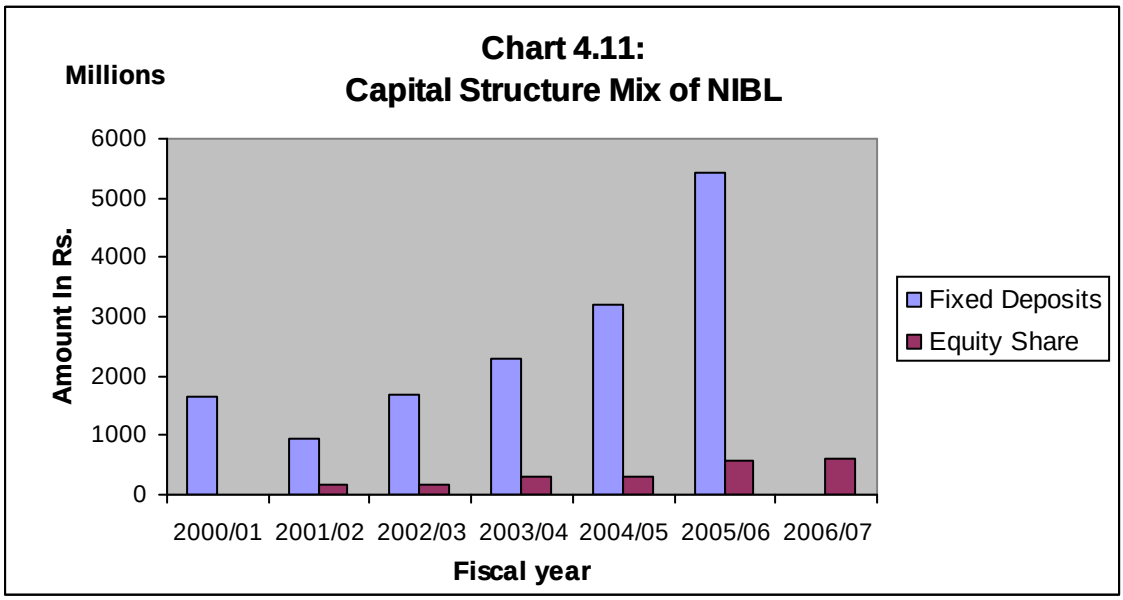
Table No.: 4.11
Equity Capitalization Mix (In Rs.) of NIBL

Fiscal Year	Fixed Deposits	Equity Share	Total Value of Firm	Proportion
2000/01	-	-	-	-
2001/02	1,658,664,859.00	170,000,000.00	3,358,664,859.00	0.494:0.506
2002/03	945,933,069.00	169,900,000.00	1,115,833,069.00	0.848:0.152
2003/04	1,672,824,971.00	295,290,000.00	1,968,114,971.00	0.850:0.150

2004/05	2,294,680,006.00	295,290,000.00	2,589,970,006.00	0.886:0.114
2005/06	3,212,265,752.00	587,740,000.00	3,800,005,752.00	0.845:0.155
2006/07	5,412,969,595.00	590,590,000.00	6,003,559,595.00	0.902:0.098

The value of the firm is determined by adding debt and equity. The structure of the banks is of fixed deposits & equity share capital only. In order to analyze the capita structure management of the banks, the values of the NIBL & HBL were calculated as shown in Table No. 4.13 and 4.14 respectively.

As shown in Table No. 4.11, the proportion of debt capital to equity capital of NIBL was over 84% throughout the study period except in F.Y. 2001/01. The proportion was 49.4% in F.Y. 2001/02 and was increasing during the entire study period except in F.Y. 2005/06. The proportion of the fixed deposits was maximum of 0.902 and 0.098 in F.Y. 2006/07 because of higher increase in fixed deposit than equity share.



The chart 4.11 also explains the NIBL was increasing its fixed deposits over equity share.

Table No.: 4.12

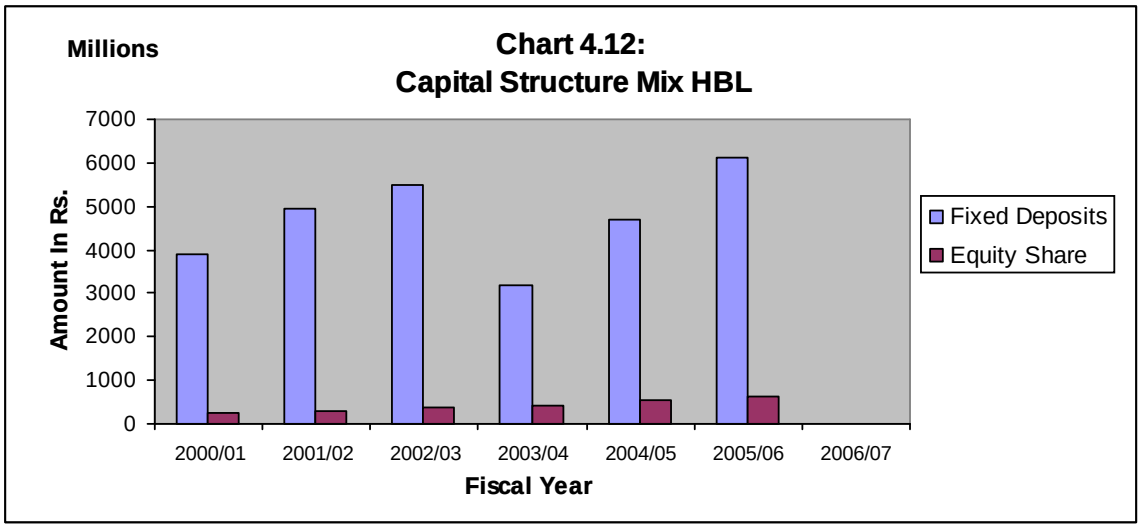
Equity Capitalization Mix (In Rs.) of HBL

Fiscal Year	Fixed Deposits	Equity Share	Total Value of Firm	Proportion
2000/01	3,917,137,569.00	240,000,000.00	4,157,137,569.00	0.942:0.058
2001/02	4,927,374,835.00	300,000,000.00	5,227,374,835.00	0.943:0.057
2002/03	5,480,843,515.00	390,000,000.00	5,870,843,515.00	0.934:0.066
2003/04	3,205,372,779.00	429,000,000.00	3,634,372,770.00	0.882:0.118

2004/05	4,710,176,693.00	536,250,000.00	5,246,426,693.00	0.898:0.102
2005/06	6,107,430,801.00	643,500,000.00	6,750,930,801.00	0.905:0.095
2006/07		-	-	-

Table no. 4.12 revels that proportion of debt capital to equity capital of HBL was also over 90% throughout the study period except in FY2003/04 and 2004/05 where, it was 88.2% & 89.8% respectively. The proportion of the fixed deposits was maximum of 0.973:0.057 in FY 2001/02 over the study period because of increase in fixed deposits was higher in comparison to equity share. But in the FY 2003/04, it was decreased to 0.882:0.118 due to increase in equity share and decrease in fixed deposits. This shows that the bank managed to decrease the portion of fixed deposits in its capital structure to some extant.

It may also be seen in the Chart 4.12 that fixed deposits of HBL were increasing over the study period.



4.1.6 Equity Capitalization Rate

The net operating income (NOI) is considered to find out the equity capitalization rate of NIBL and HBL. The NOI approach implies that the total valuation of the banks is unaffected by its capital structure. IN this approach, the equity capitalization rate has to be analyzed.

Equity Capitalization Rate (K_e) has been calculated as follows:

$$Ke = EPS / MVPS$$

Table No.: 13

Equity Capitalization Rate (In %) of NIBL & HBL

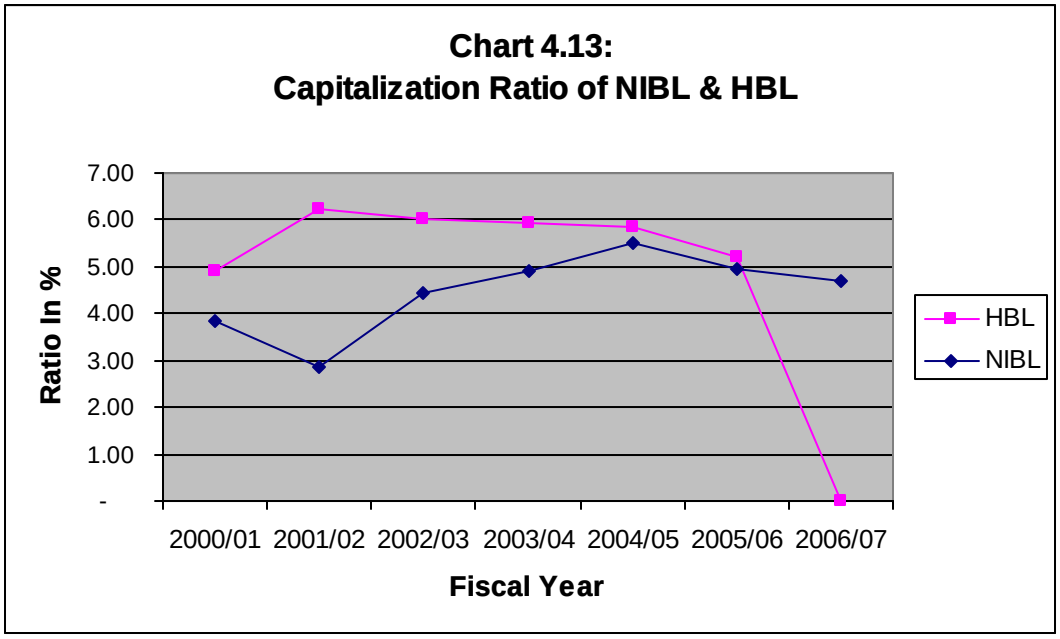
Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	3.83	-	4.89	-
2001/02	2.86	(0.94)	6.24	1.35
2002/03	4.42	1.56	6.03	(0.21)
2003/04	4.92	0.56	5.92	(0.11)
2004/05	5.50	0.52	5.84	(0.08)
2005/06	4.94	(0.56)	5.21	(0.63)
2006/07	4.71	(0.23)	-	-
Average	**4.45**		**5.69**	
Standard Deviation (S.D.)	**0.81**		**0.47**	
Coefficient Of Variance (C.V.)	**18.18**		**8.34**	
Combined Average	**5.07**			

Table No. 4.13 shows that equity capitalization rate of NIBL was 3.83% in FY 2000/01. It was recorded 5.50% in the FY 2004/05; it was decreased by 0.56 points than precious FY and recorded as 4.94%. The Average rate of the bank was 4.45%, which was below than their combined average 5.07%.

Likewise, the equity capitalization rate of HBL was 4.89% in FY 2000/01, which was the lowest throughout the study period. It was recorded 6.24% as the highest in the FY 2002/03, it was decreased by 0.21 points than previous FY and recorded as 6.03%. The drastically decrease in the equity capitalization rate is due to the factor of lower EPS and higher MVPS. The average rate of the bank was 5.69%, which was above the combined average 5.07%.

On observing CVs of both banks, there was more variation in the rate of NIBL than that of HBL (i.e. 18.18% > 8.34%).

The Chart 4.13 also shows that equity cost of both banks is diminishing in nature. This is because of lower EPS to that of greater MVPS. If the banks are unable to improve this situation, their performance will be poorer in the future. (Refer to Appendix: 11)



4.2 Profitability Analysis

Profitability is the main arch around which the venture of every business institutions resolves. The efficiency management is reflected upon the volume of profit. Therefore, profit has always been essential for every business organizations for smooth operations. Banking transitions have been significantly increased but not the profitability of the banks in the same ratio. It may be the top competition of the coming then. Internal and external forces affected bank's profitability.

Profitability of two joint venture banks is analyzed on behalf of the long term financial healthiness. A commercial bank is an organization and hence, wants to make as much profit as possible. Investments are made with the view of making profit. Higher the earning capacity of the assets, higher would be the profitability, if other things remain constant. Profitability depends upon earnings and expenditures. Every business institution should attempt to increase earning and minimize expenditures. This section includes following analysis:

i. Expenses analysis
ii. Return analysis

4.2.1 Expenses Analysis

Expenses stream of any business firm has to be evaluated so that it can be able to identify the proportionate major expenses to total operating expenses. The business firm may be able to curtail down the unnecessary expenses. The business firm may be able to curtail down the unnecessary expenses. Here, major streams of expenses were analyzed in relation to the profitability analysis of the banks.

The analysis is made as per proportionate to total operating expenses and major expenses that covered total income of the bank. Primary operating expenses of the bank include expenses like interest & commission paid, office operating expenses, staff expenses and provision for staff bonus.

The proportionate major expenses of NIBL & HBL to their total operating expenses are presented in Table 4.14 & 4.15 respectively.

Table No.: 4.14

Major Expenses to Total Operating Expenses of NIBL (In %)

Fiscal Year	Interest & Commission Paid	Operating Expenses	Staff Expenses	Provision for Staff Bonus	Total
2000/01	53.5936	30.7009	10.4702	5.2351	100.00
2001/02	58.1944	27.3958	10.7986	3.6111	100.00
2002/03	49.1317	31.8844	15.7143	3.2694	100.00
2003/04	50.1298	28.6244	16.2383	5.0074	100.00
2004/05	55.1805	25.2863	15.1822	4.3508	100.00
2005/06	52.7965	27.2373	14.4444	5.5216	100.00
2006/07	57.5752	23.4804	13.0231	5.9211	100.00
Average	**53.8002**	**27.8014**	**13.6959**	**4.7023**	100.00
Standard Deviation (S.D.)	**3.2023**	**2.7054**	**2.1567**	**3.5481**	
Coefficient Of Variance (C.V.)	**5.9521**	**9.7312**	**15.7470**	**75.4524**	

4.2.1.1 Interest and Commission Paid

This refers to the interest paid on deposit, loan and advances, fees and commission paid which are the major expenses of the banks.

Table No. 4.14 indicates that ratio of interest and commission paid to its total operating expenses of NIBL was fluctuating in nature. It was 53.59 % in FY 2000/01 followed by 58.19% in 2000/01, which was the highest ratio over the study period. It was decreased to 49.13% in the FY 2002/03. In average, 53.80% of interest and commission expenses were recovered over its total operating expenses, which covered 30.05% of total

income in average. Table No. 4.16 indicates that the proportion of expenses to total income was also fluctuating over the study period. However, this shows that interest and commission expenses are the only major ex0penses of the bank. It plays an important role to increase or decrease the profit of the bank. The same is evident from Chart 4.14. (Refer toAppendix: 12)

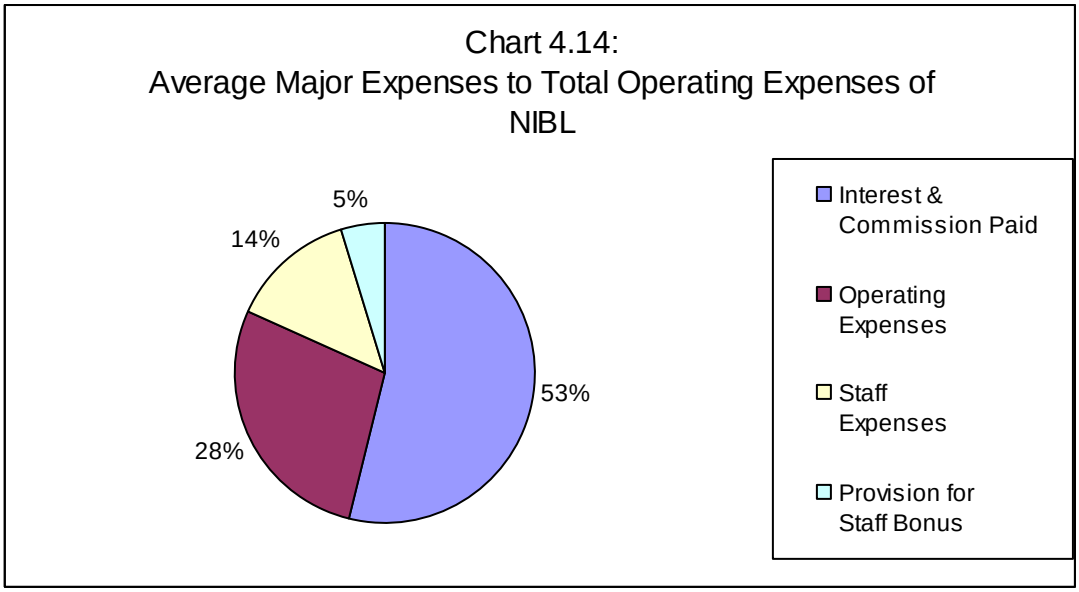


Table No.: 4.15

Major Expenses to Total Operating Expenses of HBL (In %)

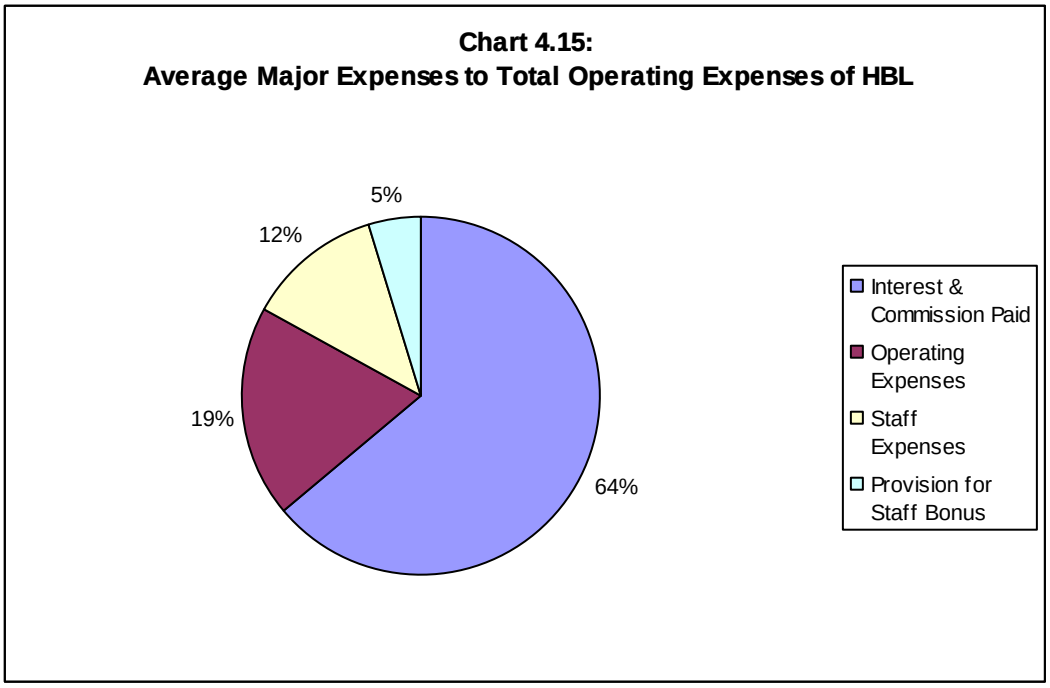
Fiscal Year	Interest & Commission Paid	Operating Expenses	Staff Expenses	Provision for Staff Bonus	Total
2000/01	75.3514	14.3746	6.4940	3.7800	100.00
2001/02	72.7573	13.9781	8.4766	4.7879	100.00
2002/03	66.1299	17.8195	11.6143	4.4362	100.00
2003/04	62.1633	19.8709	13.4781	4.4876	100.00
2004/05	54.5051	23.4020	16.9111	5.1818	100.00
2005/06	52.2277	25.7786	16.5977	5.3960	100.00
2006/07	-	-	-	-	-
Average	**63.8557**	**19.2030**	**12.2619**	**4.6782**	100.00
Standard Deviation (S.D.)	**8.5836**	**4.3550**	**3.8710**	**0.5295**	
Coefficient Of Variance (C.V.)	**13.4420**	**22.6000**	**31.5600**	**11.3180**	

On the other hand, Table No 4.15 shows that ratio of interest and commission paid to total expenses of HBL was decreasing throughout the study period. There were 72.35 % (highest) of interest and commission paid over total operating expenses in FY 2000/01 and decreases to 52.22% (lowest) in FY 2003/04. In average, 63.85% of interest and commission paid was recorded out of its total operating expenses, which covered 39.74%

of total income. Table No. 4.17 shows that the proportion of expenses to total income was decreasing throughout the study period. It is also quite visible in Chart 4.15. (Refer to Appendix: 13).

It is also cleared from Chart 4.14 & 4.15 that interest and commission expenses were the major expenses for both the banks but the expenses of NIBL were than that of HBL. This shows that NIBL is paying proportionally less as interest and commission than HBL. From Chart 4.16 & 4.17, it is cleared that proportionate expenses to total income of

Both the banks were slightly close. It plays an important role to increase or decrease the profit of the bank. The variability in provision for interest & commission paid of NIBl was 5.95%, which was lower than HBL i. e. 13.44%. The conformity could be seen on interest & commission paid in NIBL than HBL.



4.2.1.2 Operating Expenses

Table No. 4.14 indicates that the office operating expenses of NIBL was fluctuating over the study period. The highest operating expense was 31.88% in FY 2002/03 and the lowest was 23.48% in FY 2006/07. The average operating expense was 20.80% over the total expenses, which was 17.63% of total income of NIBL. Table No 4.16 tells that the proportions of operating expenses over the total income were fluctuating over the period.

On the other hand, Table No.4.15 reveals that the operating expenses of HBL were increasing over the study periods except in FY 2001/02. It was 14.37% in FY 2000/01 and decreased to 13.97% in FY 2001/02, which was the lowest expense over the periods. Then after, it increased in every FY and reached to 25.77% (highest) in FY 2005/06. The average expense was 19.20%, which covered 12.11% of the total income (Table NO. 4.17).

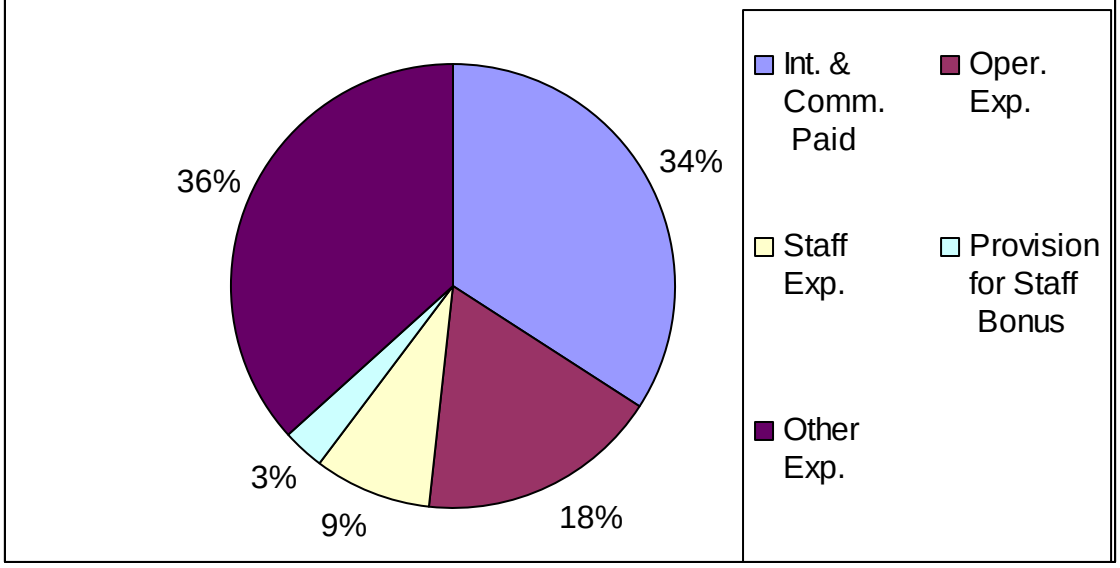
In comparison, the proportionate expenses were higher in NIBL than that of HBL. This shows that NIBL is playing proportionally more as office operating expenses than HBL. The variability in office operating expenses of NIBL was 9.73%, which was lower than HBL i.e. 22.60%. The conformity could be seen on office operating expenses in NIBL than HBL.

Table No.: 4.16

Major Expenses to Total Income of NIBL (in %)

Fiscal Year	Int. & Comm. Paid	Oper. Exp.	Staff Exp.	Provision for Staff Bonus	Total Oper. Exp.	Other Exp.	Total
2000/01	34.474	19.748	6.735	3.367	64.326	35.673	100.00
2001/02	39.753	18.714	7.376	2.466	68.311	31.688	100.00
2002/03	31.147	20.213	9.962	2.072	63.395	36.604	100.00
2003/04	32.739	18.694	10.605	3.270	65.308	34.691	100.00
2004/05	35.700	16.359	9.822	2.814	64.697	35.303	100.00
2005/06	30.948	15.965	8.466	3.236	58.617	41.382	100.00
2006/07	33.593	13.700	7.598	3.454	58.347	41.652	100.00
Average	**34.051**	**17.628**	**8.652**	**2.954**	**63.285**	**36.713**	100.00
S.D.	**2.813**	**2.180**	**1.380**	**0.483**	**3.351**	**3.351**	
C.V.	**8.262**	**12.370**	**15.950**	**16.350**	**5.295**	**9.127**	

Chart 4.16:
Average Major Expenses to Total Income of NIBL



4.2.1.3 Staff Expenses

Staff expenses include salary and allowances, contribution fund & gratuity fund, medical benefit, staff training other related expenses.

Table No 4.14 presents that the staff expenses over the total operating expenses of NIBL were fluctuating over the study periods. The lowest staff expense was 10.47% in FY 2000/01 of total operating expenses and the highest was 15.71% in FY 2002/03. The average staff expenses were 13.69% of the total operating expenses, which covered 8.56% of total income (Table No. 4.16).

On the other hand, Table No. 4.15 shows that the staff expenses over the total operating expenses of HBL were increasing over the study periods except in FY 2005/06. The lowest staff expense was 6.49% in FY 2000/01 of the total operating expenses and the highest was 16.91% in FY 2004/05. The average staff expenses was 12.26% of the total operating expenses, which covered 7.66% of total income as seen in Table No. 4.17.

The staff expenses of NIBL were found slightly higher than that of HBL. This shows that NIBL is playing proportionally more as staff expenses than HBL. The variability in staff expenses of NIBL was 15.74%, which was lower than HBL i.e. 31.56%.

Table No.: 4.17

Major Expenses to Total Income of HBL (In %)

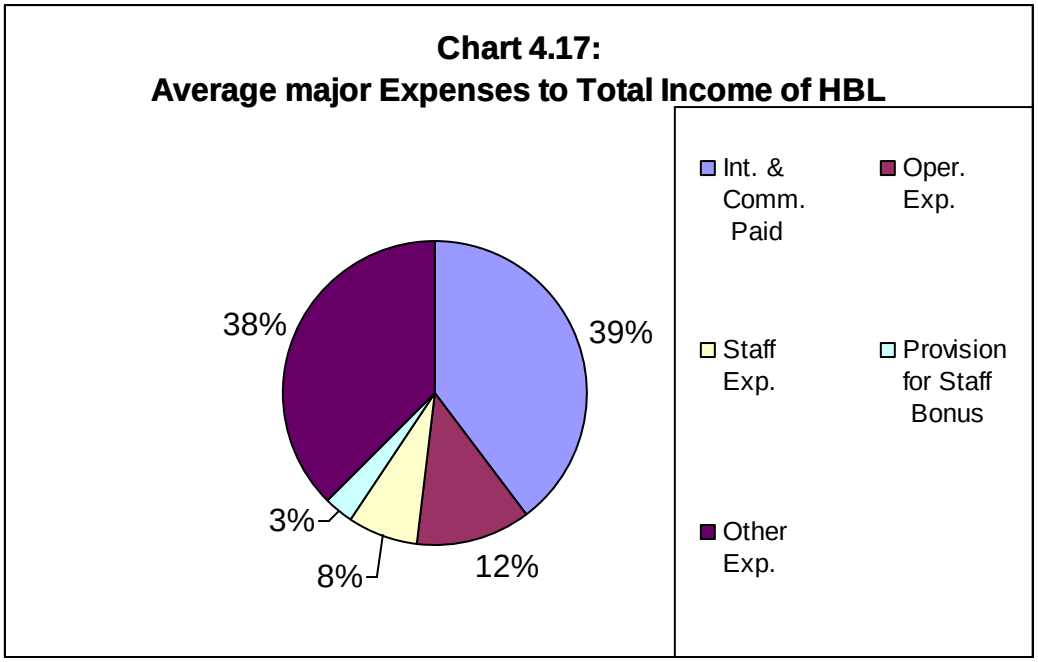
Fiscal Year	Int. & Comm. Paid	Oper. Exp.	Staff Exp.	Provision for Staff Bonus	Total Oper. Exp.	Other Exp.	Total
2000/01	47.860	10.665	4.818	2.804	66.147	33.850	100.00
2001/02	46.629	8.958	5.432	3.068	64.088	35.910	100.00
2002/03	41.598	11.209	7.305	2.790	62.904	37.102	100.00
2003/04	38.102	12.179	8.261	2.750	61.294	32.705	100.00
2004/05	32.346	13.888	10.036	3.075	59.345	40.654	100.00
2005/06	31.917	15.753	10.143	3.297	61.112	38.887	100.00
2006/07	-	-	-	-	-	-	-
Average	**39.742**	**12.109**	**7.666**	**2.964**	**62.482**	**37.518**	100.00
S.D.	**6.263**	**2.208**	**2.054**	**0.198**	**2.210**	**2.211**	
C.V.	**15.760**	**18.241**	**26.804**	**6.684**	**3.538**	**5.893**	

4.2.1.4 Provision for staff Bonus

Table No. 4.14 indicates that the provision for staff bonus of NIBL was fluctuating throughout the study period. It was recorded 5.92% in FY 2006/07 as the highest and 3.26% in FY 2002/03 as the least. The average bonus was 4.70% of the total operating expenses, which was 2.95% of the total income (Table No. 4.16).

On the other hand, Table No. 4.15 presents that the provisions for staff bonus of HBL was increasing throughout the period. It was recorded 5.39% in FY 2005/06 as the highest and 3.78% in FY 2000/01 as the least. The average bonus was 4.67% of the total operating expenses, which was 2.96% of the total income (Table No. 4.17).

In comparison, both the banks had nearly same proportionate bonus. The variability in provision for staff bonus of NIBL was 75.47%, which was higher than HBL i.e. 11.30%. The conformity could be seen of staff bonus in HBL than NIBL. (Refer to Appendix: 12-15).



4.2.2 Return Ratio Analysis

Profitability of a bank is analyzed by using return ratios which incorporates return to total deposits, return on total assets, return on capital employed and return on equity.

4.2.2.1 Return on Total Deposits (ROD)

A major financial source of a bank is deposit collection. The deposits are mobilized for loans & advances and in other investment to earn profit. This return ratio helps to find out the profit earned using total deposits. It assists to identify the banks overall performance as well as its success in generating profit. Here, the ratio was calculated in order to find whether the banks were efficient or not in mobilizing its total deposits.

ROD = Net Income / Total Deposits

Higher ratio signifies better mobilization and utilization of deposits and vice versa. The decreasing trend of return on deposits represents the weak aspects of a bank because the bank is unable in utilizing the deposits.

Table No.: 4.18

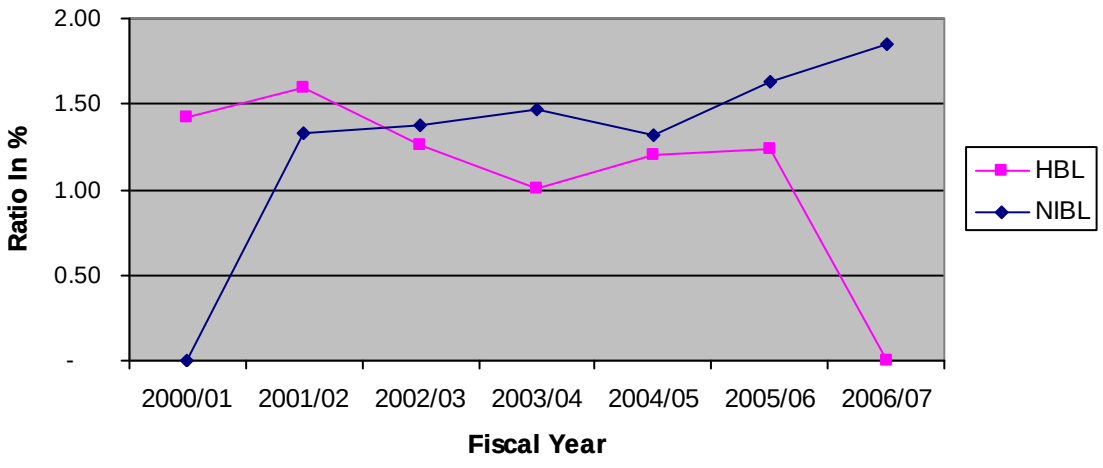
Return on Total Deposit (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	-	-	1.42	-
2001/02	1.33	-	1.60	0.18
2002/03	1.37	0.00	1.26	(0.34)
2003/04	1.47	0.10	1.01	(0.25)
2004/05	1.32	(0.15)	1.20	0.19
2005/06	1.63	0.31	1.24	0.04
2006/07	1.85	0.22	-	-
Average	**1.50**		**1.29**	
Standard Deviation (S.D.)	**0.15**		**0.18**	
Coefficient Of Variance (C.V.)	**9.85**		**14.15**	
Combined Average	**1.39**			

As Table No 4.18 shows that the return on deposits of NIBL was increasing throughout the study period except in the FY 2004/05. There were highest positive change of 0.31 point in the FY 2005/06 and the highest negative change of 0.15 point in the FY 2004/05. In average, the bank had 1.49% of return on its deposits, which was a little bit higher than the combined average of returns on its deposits, which was a little bit higher than the combined average of 1.37%.

On the other hand, the return on deposits of HBL was fluctuating throughout the study period. There were positive changes i.e. 0.18, 0.19, and 0.04 points in the FY 2001/02, 2004/05 and 2005/06 respectively. It had decreased in FY 2002/03 and 2003/04 by 0.34 and 0.25 respectively. The average return on deposits of the bank was 1.29%, which was a little bit lower than the combined average of 1.37%.

Chart 4.18:
Return on Deposit of NIBL & HBL (In %)



The CV of NIBL was 9.85% and that of HBL was 14.15%. Thus, there was more variation of return on deposits in HBL than NIBL.

It is also cleared from Chart 4.18 that both the banks were not able to utilize their deposits effectively. Particularly, HBL was found unable for the better utilization of deposit in FY 2002/03 and 2003/04. (Refer to Appendix: 16)

4.2.2.2 Return on Total Assets (ROA)

Return on total assets ratio measures the profitability of a bank and explain a firm to earn satisfactory return on all financial resources invested in the bank's assets otherwise its survival is threatened. The ratio explains net income for each unit of assets. Higher ratio indicates efficiency in utilizing its overall resources and vice versa. On the basis of operational efficiency, rate of return on total assets is mere useful measurement.

The return on assets is calculated by using following formula:

ROA = Net Income / Total Assets

Table No. 4.19 indicates that the return on assets of NIBL was fluctuating throughout the study period. It was highest i.e. 1.91% in FY 2000/01. Then after, it decreases to 1.10% in FY 2001/02, which was the least ratio of the bank over the study period. The average return on the assets of the bank was 1.364%, which was more than their combined average ratio of 1.252%.

Likewise, return on assets of HBL also was fluctuating throughout the study periods. It was highest of 1.44% in FY 2001/02 and the lowest was 0.91% in FY 2003/04. The average return on assets of the bank was 1.14%, which was more than their combined average ratio of 1.252%.

Table No.: 4.19
Return on Total Assets (In %) of NIBL & HBL

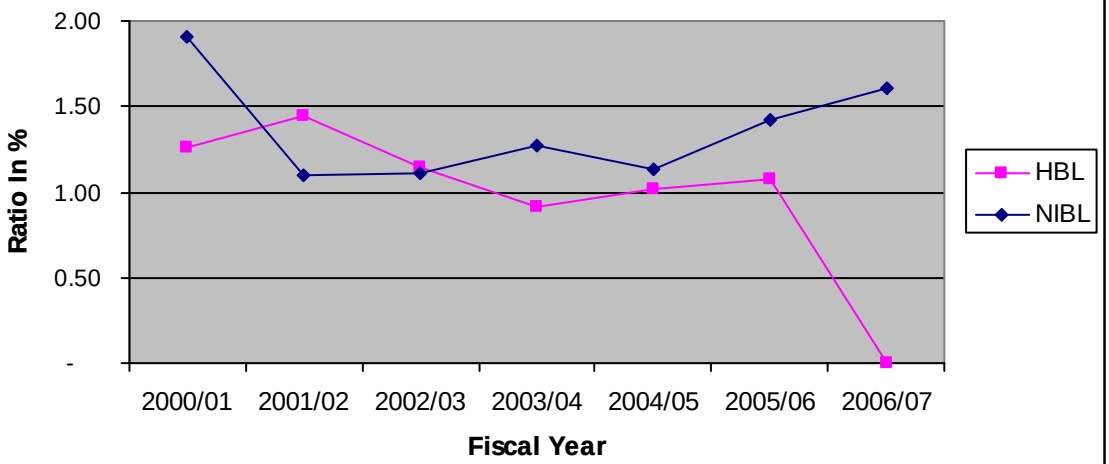
Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	1.91	-	1.26	-
2001/02	1.10	(0.81)	1.44	0.18
2002/03	1.11	(0.01)	1.14	(0.30)
2003/04	1.27	0.16	0.91	(0.23)
2004/05	1.13	(0.14)	1.02	0.11

2005/06	1.42	0.29	1.07	0.05
2006/07	1.61	0.19	-	-
Average	**1.36**		**1.14**	
Standard Deviation (S.D.)	**0.29**		**0.17**	
Coefficient Of Variance (C.V.)	**20.92**		**14.94**	
Combined Average	**1.252**			

The return on the asset of both the banks is not satisfactory. In average, NIBL had more returned on assets than HBL (i.e. 1.364% > 1.14%). The negative change in rate on return of assets shows that the bank has not been able to utilize its resources in most profitable projects. The same is evident from Chart 4.19.

The CV of NIBL was 20.98% and that of HBL was 14.94%. Thus, there was more variation of return on deposits in NIBL than HBL. (Refer to Appendix: 17)

Chart 4.19:
Retrun on Total Assets of NIBL & HBL



4.2.2.3 Return on Capital Employed (ROCE)

Return on capital employed ratio is another related to the profitability of long term funds. It provides a test of profitability related to the sources of long-term funds. It provides a test of profitability the long-term fund of owners and creditors are being used. It explains net income for each unit of long-term funds. The higher the ratio, the more efficient is the use of capital employed.

The ratio is calculated as below:

ROCE = Net Income / (Fixed Deposit + Net Worth)

Table No. 4.20 indicates that the return on capital employed of NIBL was increasing over the study periods except in the FY 2006/07. It had lowest ratio 2.26% in FY 2001/02 and highest ratio 5.29% in 2005/06. Suddenly, a negative change in the ratio was noticed by 0.16 points in the FY 2006/07. The average ratio of the bank was 4.51%.

On the other hand, the ratio of HBL was fluctuating throughout the study periods. It was 4.16% in FY 2000/01. Then after, it increased to 4.58% in FY 2001/02, which was the highest ratio over the study periods. After that, it decreased to 3.37% in FY 2002/03, which was the least ratio of the bank. In average, the bank recorded 3.92% of return on total capital employed.

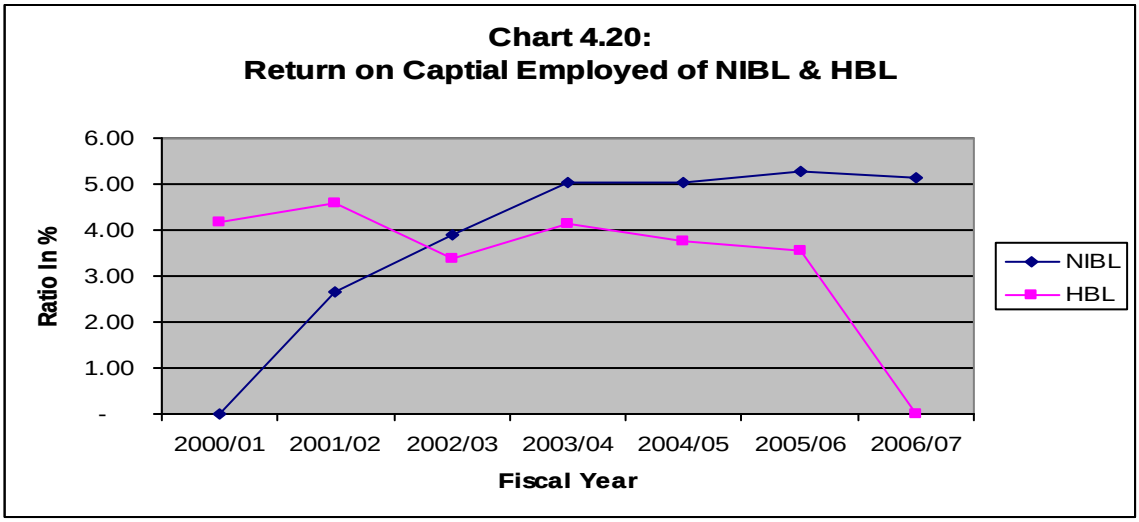
Table No.: 4.20

Return on Capital Employed (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	-	-	4.16	-
2001/02	2.65	-	4.58	0.42
2002/03	3.89	1.25	3.37	(1.21)
2003/04	5.05	1.16	4.15	0.78
2004/05	5.05	-	3.76	(0.39)
2005/06	5.29	0.24	3.55	(0.21)
2006/07	5.13	(0.16)	-	-
Average	**4.51**		**3.92**	
Standard Deviation (S.D.)	**0.95**		**0.48**	
Coefficient Of Variance (C.V.)	**21.07**		**12.34**	
Combined Average	**4.215**			

The coefficient of variation of NIBL was 21.07% and that of HBL 12.34%. This indicates that ratio of NIBL is highly fluctuating and is not capable in handling long-term funds.

In comparison, the average ratio of NIBL (i.e. 4.51%) was higher than that of HBL (i.e. 3.92%). Thus, NIBL is efficiently utilizing its long- term funds than that of HBL. Especially, HBL was unable to maintain profitability in the FY 2002/03, 2004/05 and 2005/06 and there was negative change in the ratio. It may also be seen in Chart 4.20 (Refer to Appendix: 18)



4.2.2.4 Return on Equity (ROE)

It is the ratio of return to the source of funds. It shows the bank have earned a satisfactory return from its internal source or not. This ratio revels how profitably the owner's funds have been utilized by the banks. It also indicates whether a bank can compete for private sources of capital in the economy. Higher the ratio more will be the investment, which the shareholders will undertake. ROE can be calculated as below:

ROE = Net Income / Net worth

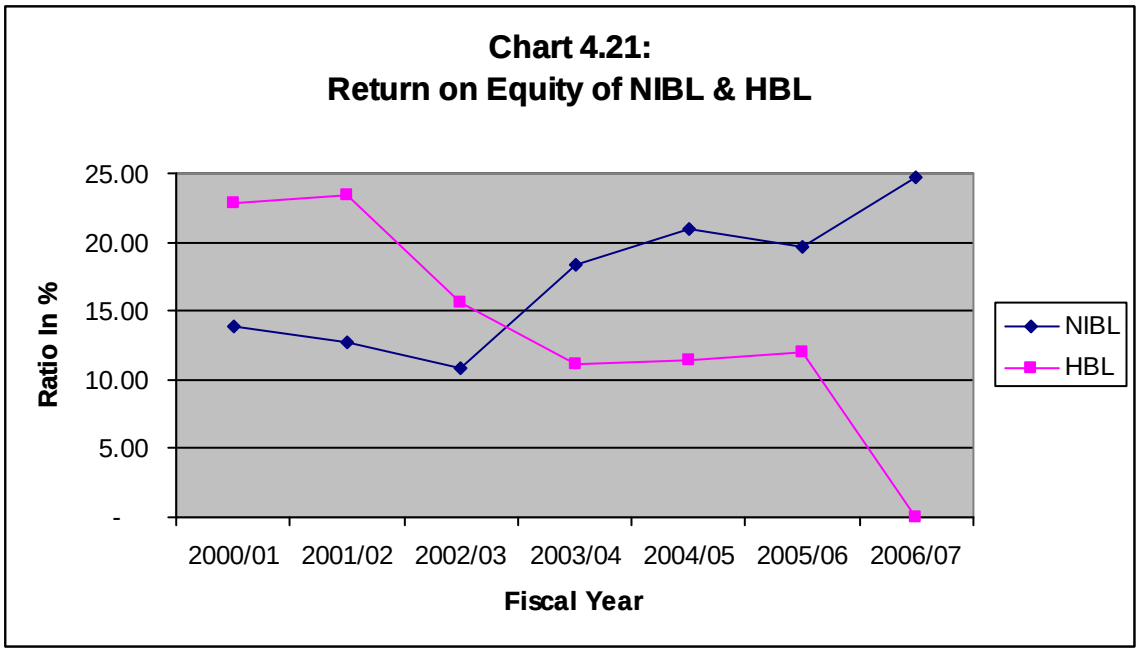
Table No.: 4.21

Return on Equity (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	13.89	-	22.90	-
2001/02	12.67	(1.23)	23.42	0.52
2002/03	10.90	(1.76)	15.65	(7.77)
2003/04	18.29	7.39	11.13	(4.52)
2004/05	20.94	2.65	11.48	0.35
2005/06	19.67	(1.27)	12.00	0.52
2006/07	24.76	5.09	-	-
Average	**17.30**		**16.10**	
Standard Deviation (S.D.)	**4.62**		**5.20**	
Standard Deviation (S.D.)	**26.71**		**32.30**	
Combined Average	**16.700**			

Table NO. 4.12 indicate that the ROE of NIBL was fluctuating over the study period. In FY 2000/01, the ROE of the bank was 13.89% and decreased to 12.67% and

10.90% in FY 2001/02 and 2002/03 respectively. After that it increased to 18.29% and 20.94% in FY 2003/04 and 2004/05 respectively. The highest ratio over the study period was 24.56% in FY 2006/07. The highest positive change was 7.39 points in FY 2003/04. The average ROE (17.3%) was higher than combined average (16.7%) of both the banks under study.



Similarly, the ROE of HBL was fluctuating over the study period. It was 22.90% in FY 2000/01 and increased to 23.42% (highest ratio) in FY 2001/02. Then after, it was decreased to 15.65% and 11.13% in FY 2002/03 and 2003/04 respectively. In the later year of the study period, it increased to 11.48% and 12.00% in FY 2004/05 and 2005/06 respectively. The highest negative change was 7.77 points in FY 2002/03. The average ROE (16.10%) of HBL was lower than combined average (17.30%). So the bank was unable to earn sufficient return from its internal source in the latter FY of the study period.

The C.V. shows that the ROE of NIBL was more consistent than that of HBL (26.71% < 32.30%). It is also quite visible in Chart 4.21.

Thus, both the banks had poor return on equity. But in average, NIBL was better enough to maintain ROE as compared to HBL. (Refer to Appendix: 19).

4.3 Market Related Ratios

In order to measure market performance of the banks, following market related ratios were computed.

i. Earning per share
ii. Dividend per share
iii. Dividend payout ratio
iv. Market value per share
v. Price earning ratio
vi. Book value per share

4.3.1 Earning Per Share (EPS)

The profitability of a bank is earning per share from the point of view of ordinary shareholders. The ratio explains net income for each unit of share. It gives the strength of the share in the market As EPS neither reveal how much dividend did not pay to the owners nor how much of the earnings retained by an organization. Thus, it only shows how much earning theoretically belongs to the ordinary shareholders. EPS can be calculated as below:

EPS = Net Income / No. of share outstanding

Table 4.22 shows that the EPS of NIBL was 53.68% in FY 2000/01 recording the highest throughout the study period. It is decreased by 20.50 points and found as 33.18% in FY 2001/02, which was the least EPS of the bank during the study period. The average EPS of the bank was 44.37%.

The EPS of HBL were higher than NIBL except in FY 2004/05 of the study period. It was 83.80% in FY 2000/01 and increased to 93.57% recording as the highest over the study period. The least EPS of the bank was 47.91% in FY 2005/06 making the average of 64.01% over the study period.

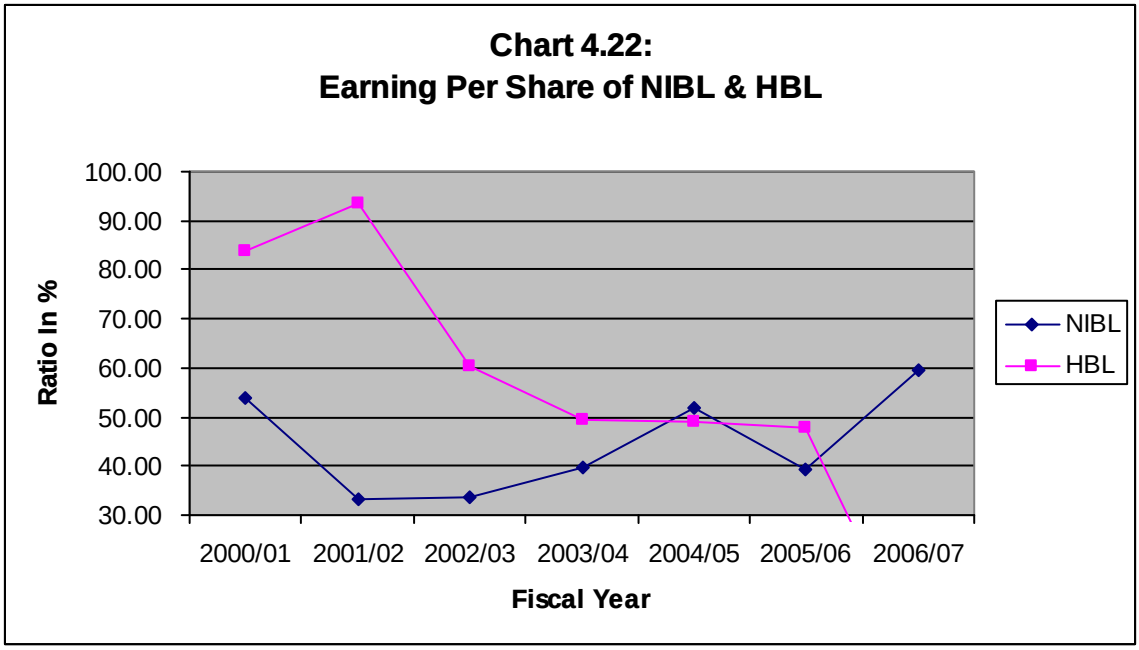
Table No.: 4.22
Earning Per Share (In Rs.) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	53.68	-	83.80	-
2001/02	33.18	(20.50)	93.57	9.77
2002/03	33.59	0.41	60.26	(33.31)

2003/04	39.56	5.97	49.45	(10.81)
2004/05	51.70	12.14	49.05	(0.41)
2005/06	39.50	(12.20)	47.91	(1.14)
2006/07	59.35	(19.85)	-	-
Average	**44.37**		**64.01**	
Standard Deviation (S.D.)	**9.66**		**18.14**	
Coefficient Of Variance (C.V.)	**21.77**		**28.34**	
Combined Average	**54.19**			

The coefficient of variation was lower in NIBL than HBL (21.77 %< 28.34%). It means that there was little variation in EPS of NIBL than that of HBL.

However, the EPS of NIBL was lower than NIBL. The number of share outstanding and low earnings in the middle fiscal years of the study period might be the decreasing factor of EPS of NIBL. The average EPS of HBL was better enough over NIBL, which increases the strength of the share and improves the market price of the share. IT is also seen in Chart 4.22. The same is evident from Chart 4.22 (Refer to Appendix: 20).



4.3.2 Dividend Per Share (DPS)

DPS is evaluated to know the share of dividend that the shareholders received in relation to paid up value of the share. A large number of present and potential investors may be interest in the dividend per share, rather than the earning per share. There fore an

institution offering a higher DPS is regarded as an efficient in fulfilling shareholders expectation, which will also enable to increase the value of an institution.

DPS is the earning distributed to ordinary shareholders divided by the number of ordinary shares outstanding i.e.

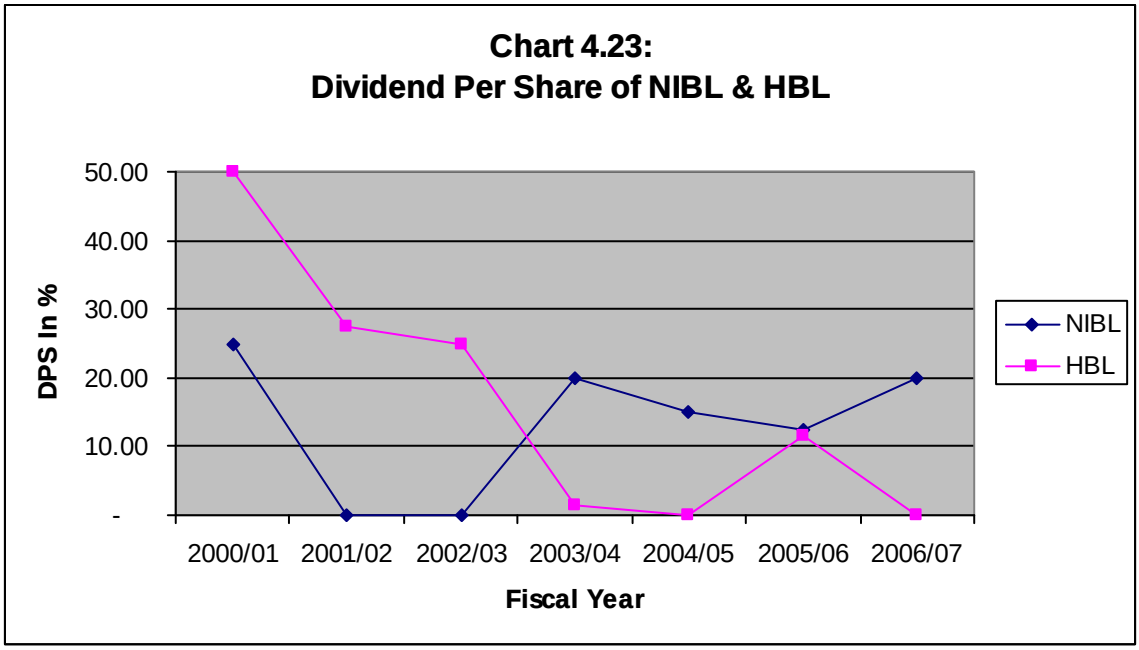
DPS = Earning paid to SHS or Dividend / No. of ordinary shares.

Table No.: 4.23
Dividend Per Share (In Rs.) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	25.00	-	50.00	-
2001/02	-	-	27.50	(22.50)
2002/03	-	-	25.00	(2.50)
2003/04	20.00	-	1.32	(23.68)
2004/05	15.00	(5.00)	-	-
2005/06	12.50	(2.50)	11.58	-
2006/07	20.00	7.50	-	-
Average	**18.50**		**23.08**	
Standard Deviation (S.D.)	**4.36**		**16.45**	
Coefficient Of Variance (C.V.)	**23.56**		**71.29**	
Combined Average	**20.79**			

As DPS measures the capability to earn and distribute the profit, higher DPS have higher profitability and capacity to distribute dividend.

Table No. 4.23 indicates that the DPS of NIBL was decreasing through out the study period except in FY 2006/07. The decrease in DPS of the bank indicates that the bank has low earnings during those periods in comparison to previous years. It was not declared in F 2001/02 and 2002/03 because of low profit. In average, the shareholders of the bank have received 18.50% as a cash dividend every year (except bonus share). The shareholders of the bank were not satisfied in term of low cash dividend distributed by the bank.



Again, the DPS of HBL was also decreasing through out the study period except in FY 2005/06. It was 50.00% in FY 2000/01 recorded as the highest DPS over the study period. It was not declared in FY 2004/05 and 2005/06 because of low profit. In average, the shareholders of the bank have received 23.08% as a cash dividend every year.

The coefficient of variation was found much lower NIBL than HBL (23.56% < 71.29%). It means that there was little variation in EPS of NIBL than that of HBL.

In comparison to NIBL, HBL was found paying more DPS. Thus, HBL seems to be more efficient bank than NIBL in fulfilling shareholders expectation by offering higher dividend. The same is evident from Chart 4.23. (Refer to Appendix: 21).

4.3.3 Dividend Payout Ratio (DPR)

It represents the percentage of the profit distributed as dividend and percentage retain as revenue and surplus for the growth of the bank. The shareholders prefer usually higher ratio but a very high ratio may slow down the growth rate of the firm. It helps to segregate the proportion of dividend and retained earnings. Importance of DPR shows its ability to state eth dividend policy of the concerned banks more, obviously, which influences the market value of the share. DPR can be calculates as below:

DPR = Dividend Per Share / Earning Per Share

Where dividend includes both cash dividend and share dividend.

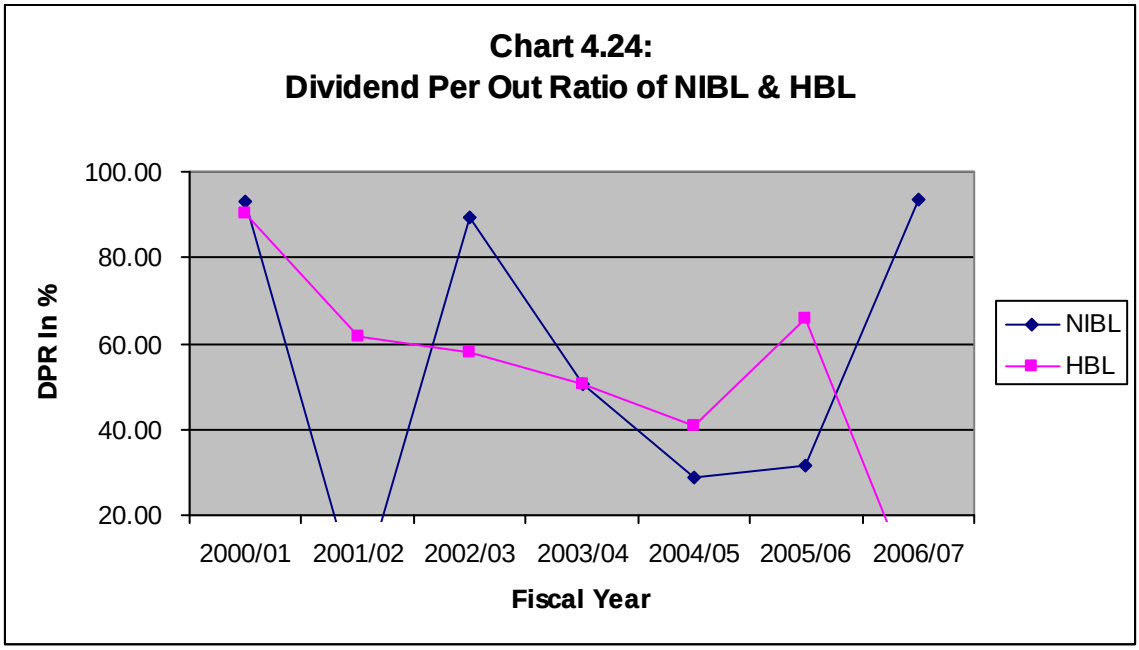
Table No.: 4.24

Dividend Payout Ratio (In %) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	93.14	-	90.27	-
2001/02	-	-	61.45	(28.82)
2002/03	89.31	-	58.08	(3.37)
2003/04	50.53	(38.75)	50.56	(7.52)
2004/05	29.01	(21.55)	40.77	(9.79)
2005/06	31.64	2.64	65.92	25.15
2006/07	93.45	61.81	-	-
Average	**64.52**		**61.18**	
Standard Deviation (S.D.)	**28.31**		**15.32**	
Coefficient Of Variance (C.V.)	**43.87**		**25.04**	
Combined Average	**62.8475**			

Table No. 4.24 indicates that the DPR of NIBL was decreasing in the first five fiscal years of the study period. It was recorded as 93.14%, 89.31%, 50.56% and 29.01% in FY 2000/01, 2001/02, 2003/04 and 2004/05 respectively. It was not declared for FY 2001/02 because dividend was not distributed to its shareholders. It increased to 31.64% and to 93.45% in F.Y. 2005/06 and 2006/07 respectively due to high earning per share than previous fiscal years. The average DPR of the bank was found to be 64.52%.

Similarly, DPR of HBL was decreasing in the firs t five fiscal years of study period. It was recorded as 90.27%, 61.45%, 58.08% 50.56% and 40.77% in FY 2000/01, 2001/02, 2002/03, 2003/04 and 2004/05 respectively. It increased to 65.92% in FY 2005/06 due to high earning per share than previous fiscal years. The average DPR of the bank was found to be 61.17%.



The C.V. of NIBL was found to be 43.87% and that of HBL was 25.038%. It indicates that there was high variation in DPR of NIBL than HBL.

On the basis of above analysis, it may be concluded that NIBL is better than HBL in terms of DPR. It is also seen in Chart 4.24. (Refer to Appendix: 22).

4.3.4 Market Value Per Share (MVPS)

Table No. 4.25 indicates that eh MVPS of NIBL was fluctuating over the study period. It was highest Rs. 1401.00 in FY 2000/01 and decrease to Rs. 760.00 in FY 2002/01. Then after, it increased to Rs. 795.00 and to Rs. 940.00 in FY 2002/03 and 2004/05 respectively. The average MVPS of the bank was found to be Rs. 1015.00.

Table No.: 4.25

Market Value Per Share (In Rs.) of NIBL & HBL

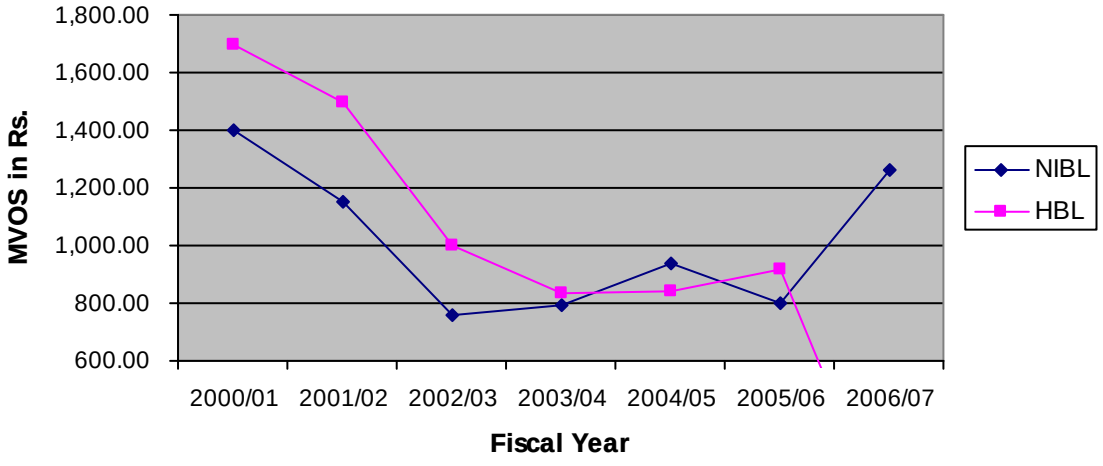
Fiscal Year	NIBL	HBL
2000/01	1,401.00	1,700.00
2001/02	1,150.00	1,500.00
2002/03	760.00	1,000.00
2003/04	795.00	836.00
2004/05	940.00	840.00
2005/06	800.00	920.00
2006/07	1,260.00	-
Average	**1,015.14**	**1,132.67**
Standard Deviation (S.D.)	**236.80**	**339.92**

Coefficient Of Variance (C.V.)	**23.33**	**30.01**

On the other hand, the MVPS of HBL was decreasing in the first four fiscal years and later on increasing. It was Rs. 1700 recorded as highest MVPS in FY 2000/01 and Rs. 836 as lowest MVPS in FY 2003/04. There after, it increased to Rs. 840 and to Rs. 920 in FY 2004/05 and 2005/06 respectively. The average MVPS of the bank was Rs. 1132.

The average MVPS of HBL was higher than that of NIBL (Rs. 1132 > Rs. 1015). The C.V. of NIBL was lower than that of HBL (23.33% < 30.1%). Thus, there was high variation in MVPS of HBL than that of NIBL. It ultimately encourages the investor to hold the share of NIBL rather tan HBL. It is also quite visible in Chart 4.25. (Refer to Appendix: 23).

Chart 4.25:
Market Value Per Share of NIBL & HBL



4.3.5 Pricing Earning Ratio (P/E Ratio)

It indicates the price currently being paid by the market for each rupee of currently recorded EPS. Thus, it measures investor's expectations and the market appraisal of the performance of a firm. It is an indication that investors think that the banks would perform better in the future.

Higher market price suggests that investors expect earning to grow. This gives a high P/E ratio implies that earnings are not likely to raise.

The P/E ratio is calculated as below:

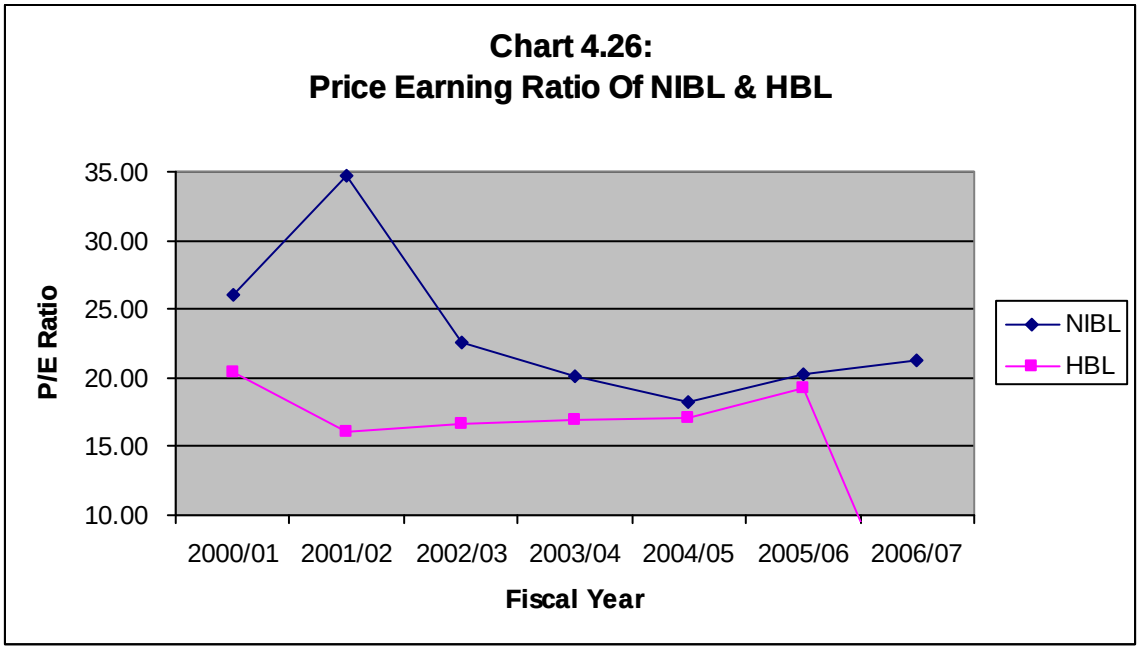
P/E ratio = Market price of a share / Earning per share

Table No.: 4.26
Price Earning Ratio of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	26.10	-	20.46	-
2001/02	34.65	8.55	16.03	(4.43)
2002/03	22.62	(12.03)	16.59	0.56
2003/04	20.10	(2.52)	16.91	0.32
2004/05	18.18	(1.92)	17.12	0.21
2005/06	20.25	2.07	19.20	2.08
2006/07	21.23	0.98	-	-
Average	**23.30**		**17.72**	
Standard Deviation (S.D.)	**5.17**		**1.57**	
Coefficient Of Variance (C.V.)	**22.19**		**8.88**	

Table No. 4.26 indicates that the P/E ratio of NIBL was fluctuating over the study period. It was 26.10 times in FY 2000/01 and increased to 34.65 times in FY 2001/02, which was the highest P/E ratio of the bank during the study period, then after, it decreased to 22.62, 20.10 and 18.18 times in FY 2002/03, 2003/04 and 2004/05 respectively because market price of the share decreased than previous fiscal years in comparison to the earning per share. Again, it increased to 20.25 and 21.23 times in FY 2005/06 and 2006/07 respectively. The average P/E ratio of the bank was 23.30 times.

The P/E ratio HBL was fluctuating over the study period. It was 20.46 times (Highest P/E ratio) in FY 200/01 and decreased to 16.03 times (Lowest P/e ratio) in FY 2001/02. After that it increased to 16.59 an 18.91 times in FY 2002/03 and 2003/04. The average P/E ratio of the bank was 17.72 times.



The average P/E ratio of NIBL was higher than HBL. The combined average of both the banks was 20.51 times. Thus, the P/E ratio of NIBL was above the combined average in all FY except in 2004/05 while the P/E ratio of HBL was below the combined average in all FY.

The coefficient of variation of the P/E ratio of NIBL was higher than that of HBL (22.90 > 8.87%). It is also clear from chart 4.26 that there was more fluctuation of the ratio in NIBL in comparison to HBL. (Refer to appendix: 24)

4.3.6 Book Value Per Share (BVPS)

It is a market related profitability ratio. It helps to indicate the financial achievement through out the operation. It explains net worth of each unit of ordinary share outstanding. Higher the ratio, higher will be the vale of the firm. The BVPS is calculated as below.

BVPS = Net worth / No. of ordinary share outstanding

Table No. 4.27 indicates that the BVPS of NIBL was fluctuating over the study period. It was Rs.303.06 in FY 2000/01 and decreased to Rs.275.97 in FY 2001/02. In FY 2002/03, the bank recorded highest BVPS of Rs. 307.97. The lowest BVPS of the bank was Rs.200.00 in FY 2005/06 less by Rs.46.09 than last year. The average BVPS of the bank was Rs. 255.80.

Similarly, the BVPS of HBL also was fluctuating over the study period. It was Rs.362.72 in FY 2000/01 recorded as the lowest BVPS of the bank over the study period.

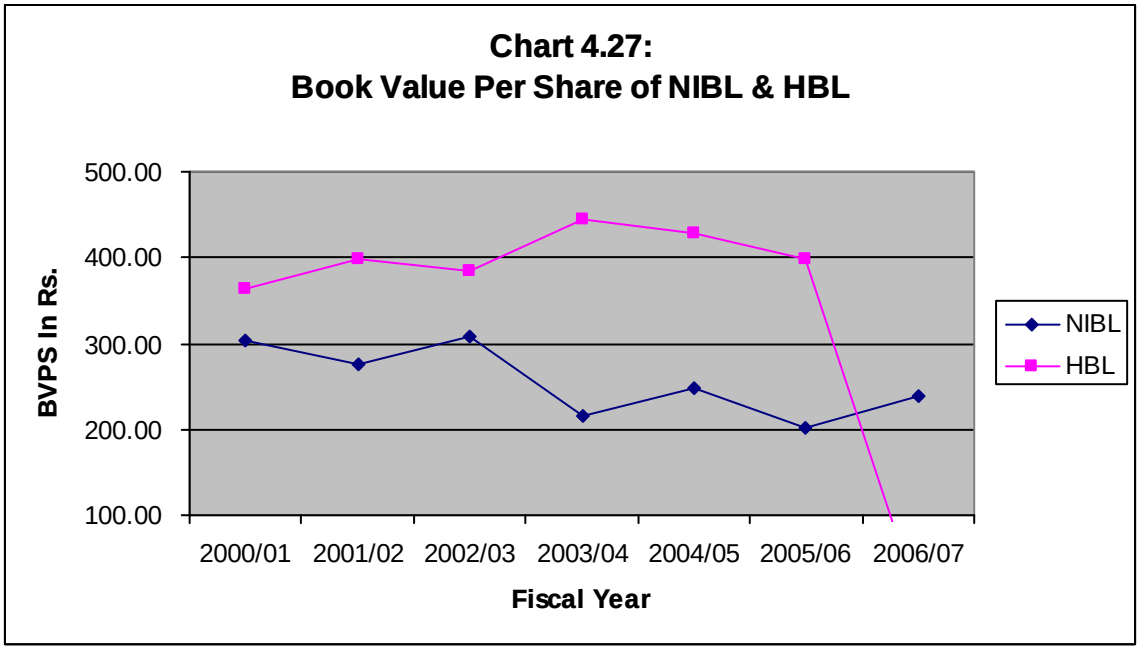
Then after, it increased to Rs.399.42 in FY 2001/02. In FY 2003/04, the bank recorded highest BVPS of Rs.444.26. The average BVPS of the bank was Rs.43.01 over the study period. The highest positive change of BVPS of HBL was Rs.36.70 in FY 2001/02 and higher negative change was Rs.28.25 in FY 2005/06.

Table No.: 4.27
Book Value Per Share ((n Rs.) of NIBL & HBL

Fiscal Year	NIBL		HBL	
	Ratio	Change	Ratio	Change
2000/01	303.06	-	362.72	-
2001/02	275.97	(27.11)	399.42	36.70
2002/03	307.97	32.00	385.00	(14.42)
2003/04	216.24	(91.73)	444.26	59.26
2004/05	246.89	30.65	427.44	(16.82)
2005/06	200.80	(46.09)	399.19	(28.25)
2006/07	239.67	38.87	-	-
Average	**255.80**		**403.01**	
Standard Deviation (S.D.)	**38.34**		**26.69**	
Coefficient Of Variance (C.V.)	**14.99**		**6.62**	
Combined Average	**329.405**			

The average BVPS of NIBL was lower than of the HBL. HBL was found in very good position as its BVPS was above the combined average in all FY. But BVPS of NIBL was below the combined average in all FY. Thus, net worth of NIBL was lower than that of HBL.

The CV of NIBL was found to be 14.99% and that of HBL was 6.62% Thus, CV of HBL was lower than of NIBL. There is very low fluctuation in BVPS of HBL which is a good signal to its shareholders. In comparison to NIBL, the BVPS of HBL was found better. It is also quite visible from Chart 4.27. (Refer to Appendix: 25)



4.4 Statistical Analysis

This topic incorporates some statistical tools, which were used to analyze that data to achieve the objectives of the study. These are Kar-Pearson's correlation coefficient, multiple regression analysis and Student's t=test.

4.4.1 Correlation Coefficient Analysis

4.4.1.1 Correlation Coefficient between EBIT & Interest Payment

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

Correlation Coefficient between X and Y, $r_{xy} = \sum xy / (\sqrt{\sum x^2}\ \sqrt{\sum y^2})$

Probable Error, P.E. = $0.6745\ (1-r^2) / \sqrt{n}$

Table no. 4.28 shows that correlation coefficient between EBIT & interest payment of NIBL and HBL was 0.99 and -0.129 respectively. This shows positive relationship between EBIT and interest payment of NIBL and negative relationship of HBL. Coefficient of determination of NIVL indicates that 98.56% of the variation in the interest payment was explained by EBIT of HBL.

Table No.: 4.28

Correlation Between EBIT and Interest Payment Of NIBL & HBL

(Rs. In Million)

Fiscal Year	NIBL		HBL	
	Interest Payment	EBIT	Interest Payment	EBIT
2000/01	120.80	246.20	594.800	908.496
2001/02	167.60	301.20	734.518	1,165.880
2002/03	130.44	284.74	578.134	927.180
2003/04	189.21	389.69	554.128	914.153
2004/05	326.20	648.76	491.543	912.117
2005/06	354.55	828.64	56.196	1,084.506
2006/07	490.95	1,099.67	-	-
r	0.99278		-0.1292	
r^2	0.9586		0.0167	
P.E.	0.0036		0.2707	
6 P.E.	0.0219		1.6246	
Relation	+ive		-ive	
Sig./Insig.	Significant		Insignificant	

Considering the probable error (P.E.), the variable of NIBL was greater than times of the P.E. so the value of 'r' was significant. It means there was significant relationship between EBIT & interest payment of NIBL. But the value of HBL was lower than six times of the P.E. so the value of 'r' was not significant. It means relationship between EBIT & interest payment of HBL was not significant. (Refer to Appendix: 26-27).

4.4.1.2 Correlation between Return and Debt Capital

The relationship between return and debt capital is analyzed in order to examine whether the debt capital is significant in generating more return. It is assumed that there is significant relationship between return and debt capital.

Here, return (X) is dependent variable and debt capital (Y) is dependent variable. Correlation Coefficient between X and Y,

$r_{xy} = \sum xy / (\sqrt{\sum x^2}\ \sqrt{\sum y^2})$

Probable Error,

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

Table No. 4.29 shows that correlation coefficient between return and debt capital of NIBL was 0.986 which is highly positive relationships over the study period. Coefficient of determination (r^2) of the bank was 97.26% which indicates that 97.26% of the variation in the return was explained by the debt capital. The probable error (6PE) of the bank was 0.0451, which is less than the value of 'r'. This indicates that there was significant relationship between the variable and thus debt capital of the bank was significant in generating more returns.

Table No.: 4.29
Correlation Between Return and Debt Capital of NIBL & HBL
(Rs. In Million)

Fiscal Year	NIBL		HBL	
	Interest Payment	EBIT	Interest Payment	EBIT
2000/01	-	-	-	-
2001/02	301.000	3,387.000	908.000	14,993.000
2002/03	284.000	4,658.000	1,166.000	18,302.000
2003/04	390.000	4,600.000	927.000	19,814.000
2004/05	649.000	8,525.000	914.000	22,292.000
2005/06	829.000	12,735.000	912.000	23,438.000
2006/07	1,100.000	15,210.000	1,085.000	26,302.920
r	0.9862		0.1337	
r^2	0.9727		0.0178	
P.E.	0.0075		0.2704	
6 P.E.	0.0452		1.6226	
Relation	+ive		+ive	
Sig./Insig.	Significant		Insignificant	

On the other hand, correlation coefficient between return and debt capital of HBL was 0.134 which is low positive relationships. Therefore, increase in total debt capital poorly increases return. Coefficient of determination (r^2) of the bank indicates that only 1.78% of the variation in the return was explained by the debt capital. The probable error (6 PE) of the bank was 1.622 which is greater than the value of 'r' so that there was no significant relationship between the variables. (Refer to appendix: 28-29).

4.4.1.3 Coefficient of Correlation between Debt Equity Ratios (DER) & Return of Equity (ROE)

The correlation between DER (X) and ROE (Y) in terms of fixed deposits to net worth is analyzed in order to know whether increased in debt capital portion in the capital structure increases return on equity. ROE is dependent on DER.

Correlation Coefficient between X and Y, $r_{xy} = \sum xy / (\sqrt{\sum x^2}\ \sqrt{\sum y^2})$

Probable Error, P.E. = $0.6745\ (1-r^2) / \sqrt{n}$

Table No.: 4.30

Correlation Between DER and ROE of NIBL & HBL

(Rs. In Million)

Fiscal Year	NIBL		HBL	
	Interest Payment	EBIT	Interest Payment	EBIT
2000/01	-	-	449.970	22.900
2001/02	353.580	12.670	411.210	23.420
2002/03	180.700	10.900	365.020	15.650
2003/04	261.970	18.290	168.180	11.130
2004/05	314.790	20.940	205.510	11.480
2005/06	272.180	19.670	237.790	12.000
2006/07	382.420	24.760	-	-
r	0.5836		0.9194	
r^2	0.3406		0.8452	
P.E.	0.1815		0.0426	
6 P.E.	1.0893		0.2556	
Relation	+ive		+ive	
Sig./Insig.	Insignificant		Significant	

Table No. 4.30 shows that the correlation coefficient between DER and ROE of NIBL was 0.584, a positive relationship. There fore, increase in average (DER) increases ROE, which is the objective of financial leverage. Coefficient of determination (r^2) of the bank indicates that 34.06% of the variation in ROE was explained by DER. The probable error (6 PE) of the bank was 1.089, large than eh value of 'r' so that there was no significant relationship between the variables.

Similarly, the correlation coefficient between DER and ROE of HBL was 0.919. Thus the variables are highly positively correlated. Therefore, increase in leverage (DER) increases ROE. Coefficient of determination (r^2) of the bank indicates that 84.52% of the variation in ROE was explained by DER. The probable error (6 PE) of the bank was 0.255, smaller than the value of 'r' so that there was significant relationship between the variables. This means that DER was significant in generating more ROE (Refer to Appendix: 30-31).

4.4.2 Test of Hypothesis

The test of hypothesis is a process of determining the significance regarding the parameter of the population on the basis of the sample drawn from the population.

Here, hypothesis test were used for the purpose of determining the difference between the two banks regarding some financial ratios. Suppose that the commercial banks regarding some financial ratios. Suppose that the commercial banks are operating under the same environment and of the same class. It is also supposed that there is no significant difference regarding capital structure and profitability. Thus, t-test is performed for NIBL and HBL taking as sample units.

a) Student's t-test regarding Capital Structure:

4.4.21. Test of Hypothesis on Fixed Deposits to Total Liabilities (FD/TL)

Let X_1 and X_2 be denoted as fixed deposits to total liabilities ratio of NIBL & HBL respectively.

Formulation of Hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between the mean ratios of fixed deposit to net worth of NIBL & HBL.

Alternative hypothesis (H_1): $\mu_{x1} \neq \mu_{x2}$ i.e. there is a significant difference between the mean ratios of fixed deposit to net worth of NIBL & HBL.

Table No.: 4.31

Fixed Deposit to Total Liabilities of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	6	21.7683	5.3576	(0.1201003)	Accept Ho
HBL	6	21.3933	4.4768		

Table 4.31 shows that the computed value of t is -0.1201 and the tabulated value of t at 5% level of significance for 10 = (6+6-2) degree of freedom (d.f.) is 2.228.

Decision: Since the calculated value of /t/ =0.1201 is less than the tabulated value of t = 2.228 at 5% of significant level, the null hypothesis is accepted and alternative hypothesis is rejected. So, there is no significant difference between the mean ratios of FD to TL of NIBL & HBL. It may be concluded that fixed deposit to total liabilities ratio seems to independent of the bank. (Refer to Appendix: 32).

4.4.2.2 Test of Hypothesis on Fixed Deposits to Total Debt (FD/TD)

Let X_1 and X_2 be denoted as fixed deposits to total debt ratio of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between the mean ratios of fixed deposit to total debt of NIBL & HBL.

Alternative hypothesis (H_1): $\mu_{x1} \neq \mu_{x2}$ i.e. there is a significant difference between the mean ratios of fixed deposit to total debt of NIBL & HBL.

Table No.: 4.32

Fixed Deposit to Total Debt of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	6	24.6650	8.2167	0.3781125	Accept Ho
HBL	6	23.0680	4.6478		

Table 4.32indicates that the calculated value of t is 0.3781 and the tabulated value of t at 5% level of significant level for 10 = (6+6-2) degree of freedom (d.f.) is 2.228.

Decision: Since the calculated value of /t/ = 0.378 is less than the tabulated value of t = 2.288 at 5% of significant level, the null hypothesis is accepted. So, there is no significant difference between the mean ratios of FD/TD of NIBL & HBL. (Refer to Appendix: 33)

4.4.2.3 Test of Hypothesis on Net worth to Total Liabilities (NW/TL)

Let X_1 and X_2 be denoted as net worth to total liabilities ratio of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_o): μ_{x2} i.e. there is no significant difference in the two means ratios of net worth to total liabilities debt of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is a significant difference between the mean ratios of net worth to total liabilities of NIBL & HBL.

Table No.: 4.33

Net Worth to Total Liabilities of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision

NIBL	6	8.0340	1.9000	0.6474000	Accept Ho
HBL	6	7.3930	1.3200		

Table 4.33 shows that the computed value of t is 0.6474 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) degree of freedom (d.f) is 2.201.

Decision: Since the calculated value of /t/ = 0.6474 is less than the tabulated value of t = 2.201 at 5% of significant level, the null hypothesis is accepted and alternative hypothesis is rejected. So, there is no significant difference between the mean ratio of NW/TL of NIBL & HBL. (Refer to Appendix: 34)

4.4.2.4 Test of Hypothesis on Fixed Deposits to Net worth Ratio (FD/NW)

Let X_1 and X_2 be denoted as fixed deposits to net worth ratio of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_o): μ_{x2} i.e. there is no significant difference between the mean ratios of fixed deposit to net worth of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is a significant difference between the mean ratios of fixed deposit to net worth of NIBL & HBL.

Table No.: 4.34

Fixed Deposit to Net Worth of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	6	294.2700	66.0000	(0.2131810)	Accept Ho
HBL	6	306.2800	107.3600		

Table 4.34 reveals that the computed value of t is -0.2132 and the tabulated value of t at 5% level of significance for 10 = (6 + 6 – 2) degree of freedom (d.f.) is 2.228.

Decision: Since the calculated value of /t/ = 0.213 is less than the tabulated value of t = 2.228 at 5% of significant level, the null hypothesis is accepted and alternative hypothesis is rejected. So, there is no significant difference between the mean ratios of FD/NW of NIBL & HBL. (Refer to Appendix: 35).

4.4.2.5 Test of Hypothesis on Total Debt to Net worth Ratio (TD/NW)

Let X_1 and X_2 be denoted as total debt to net worth ratio of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between the mean ratios of total debt to net worth of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is a significant difference between the mean ratios of total debt to net worth of NIBL & HBL. (Two-tailed test).

Table No.: 4.35

Total Debt to Net Worth Ratio of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	6	1,214.5600	308.5500	(0.4793500)	Accept Ho
HBL	6	12.97.61	258.3400		

Table 4.35shows that the computed value of t is -0.4793 and the tabulated value of t at 5% level of significance for 11 = (7+6-2) d.f. is 2.201.

Decision: Since the calculated value of /t/ = 0.479 is less than the tabulated value of t = 2.201, the null hypothesis is accepted at 5% level of significance i.e. there is no significant difference between the mean ratios of TD/NW of NIBL & HBL. (Refer to Appendix: 36).

4.4.2.6 Test of Hypothesis on fixed Deposit to Capital Ratio

Let X_1 and X_2 be denoted as fixed deposit to capital employed ratio of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between the mean ratios of fixed deposit to capital employed of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is a significant difference between the mean ratios of fixed deposit to capital employed of NIBL & HBL.

Table No.: 4.36

Fixed Deposit to Capital Employed Ratio of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	6	73.8300	4.8800	0.0801000	Accept Ho
HBL	6	73.5200	7.1560		

Table 4.36 reveals that the calculated value of t is 1.0801 and the tabulated value of t at 5% level of significance for 10= (6+6-2) d.f. is 2.228.

Decision: Since the calculated value of /t/ = 0.0802 is less than the tabulated value of t = 2.228, the null hypothesis is accepted at 5% level of significance i.e. there is no significant difference between the mean ratios of FD/CE of NIBL & HBL. (Refer to Appendix: 37).

4.4.2.7 Test of Hypothesis on Total Debt to Total Asset Ratio (TA/TD)

Let X_1 and X_2 be denoted as total debt to total assets ratio of NIBL & HBL respectively. Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference in two mean ratios of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is a significant difference between the mean ratios of NIBL & HBL. (Two-tailed test)

Table No.: 4.37
Total Debt to Total Assets Ratio of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	7	92.0620	1.7400	(0.5813794)	Accept Ho
HBL	6	92.6080	1.2980		

Table 4.37 shows that the computed value of t is -0.5812 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) d.f. is 2.201.

Decision: Since the calculated value of /t/ = 0.581 is less than the tabulated value of t = 2.201, the null hypothesis is accepted at 5% level of significance i.e. there is no significant difference between the mean ratios of TD/TA of NIBL & HBL. (Refer to Appendix: 38).

4.4.2.8 Test of Hypothesis on Interest Coverage Ratio (ICR)

Let X_1 and X_2 be denoted as interest coverage ratio of NIBL & HBL respectively. Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference in two mean ratios of interest coverage ratio of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is a significant difference between the mean ratios of interest coverage ratio of NIBL & HBL. (Two-tailed test)

Table No.: 4.38
Interest Coverage Ratio of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	7	2.0910	0.1650	4.1888170	Rejected Ho
HBL	6	1.6920	0.1480		

Table 4.38 indicates that the calculated value of t is 4.1888 and the tabulated value of t at 5% level of significance for 11= (7 + 6 – 2) d.f. is 2.201.

Decision: Since the calculated value of /t/ = 4.188 is greater than the tabulated value of t = 2.201 at 5% of significant level, the null hypothesis is rejected and alternative hypothesis is accepted. So, there is significant difference between the mean ratios of ICR of NIBL & HBL. (Refer to Appendix: 39).

4.4.2.9 Test of Hypothesis on Equity Capitalization Rate (ECR)

Let X_1 and X_2 be denoted as equity capitalization rate of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of equity capitalization rate of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is a significant difference between the mean ratios of equity capitalization rate of NIBL & HBL. (Two-tailed test)

Table No.: 4.39
Equity Capitalization Rate of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	7	4.4542	0.8100	3.0265700	Rejected Ho
HBL	6	5.6883	0.4740		

Table 4.39 reveals that the calculated value of t is 3.0265 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) degree of freedom (d.f.) is 2.201.

Decision: Since the calculated value of /t/ = 3.026 is greater than the tabulated value of t = 2.201 at 5% of significant level, the null hypothesis is rejected and alternative hypothesis is accepted. So, there is significant difference between the mean ratios of equity capitalization of NIBL & HBL. (Refer to Appendix: 40).

b) Student's t-test regarding Profitability:

4.4.2.10 Test of Hypothesis on Return on Deposit (ROD)

Let X_1 and X_2 be denoted as return on deposit of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of return on deposit of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is a significant difference between the mean ratios of return on deposit of NIBL & HBL.

Table No.: 4.40
Return on Deposit of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	6	1.4950	0.8100	1.7440932	Accept Ho
HBL	6	1.2833	0.4740		

Table 4.40 shows that the calculated value of t is 1.7440 and the tabulated value of t at 5% level of significance for 10 = (6 + 6 – 2) degree of freedom (d.f.) is 2.228.

Decision: Since the calculated value of /t/ = 1.744 is less than the tabulated value of t = 2.228, the null hypothesis is accepted at 5% level of significance i.e. there is no significant difference between the mean ratios of ROD of NIBL & HBL. (Refer to Appendix: 41).

4.4.2.11 Test of Hypothesis on Return on Total Assets (ROA)

Let X_1 and X_2 be denoted as return on total assets of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference between the mean ratios of return on total assets of NIBL & HBL.

Table No.: 4.41
Return on Total Assets of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	7	1.3650	0.2850	1.5583370	Accept Ho
HBL	6	1.1400	0.1703		

Table 4.41 indicates that the computed value of t is 1.5583 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) degree of freedom (d.f.) is 2.201.

Decision: Since the calculated value of /t/ = 1.558 is less than the tabulated value of t = 2.201, the null hypothesis is accepted at 5% level of significance i.e. there is no significant difference between the mean ratios of ROA of NIBL & HBL. (Refer to Appendix: 42).

4.4.2.12 Test of Hypothesis on Return on capital employed (ROCE)

Let X_1 and X_2 be denoted as return on capital employed of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of return on capital employed of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference between the mean ratios of return on capital employed of NIBL & HBL.

Table No.: 4.42
Return on Capital Employed of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	6	4.5100	0.9500	1.2563373	Accept Ho
HBL	6	3.9283	0.4800		

Table 4.42 indicates that the computed value of t is 1.2563 and the tabulated value of t at 5% level of significance for 10 = (6 + 6 – 2) degree of freedom (d.f.) is 2.228.

Decision: Since the calculated value of /t/ = 1.2563 is less than the tabulated value of t = 2.228, the null hypothesis is accepted at 5% level of significance i.e. there is no

significant difference between the mean ratios of ROCE of NIBL & HBL. (Refer to Appendix: 43).

4.4.2.13 Test of Hypothesis on Return on Equity (ROE)

Let X_1 and X_2 be denoted as return on equity of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of return on equity of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference between the mean ratios of return on equity of NIBL & HBL.

Table No.: 4.43
Return on Equity of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	7	17.3020	4.6200	0.4068248	Accept Ho
HBL	6	16.0960	5.2000		

Table 4.43 indicates that the computed value of t is 0.4068 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) degree of freedom (d.f.) is 2.201.

Decision: Since the calculated value of /t/ = 0.4068 is less than the tabulated value of t = 2.201, the null hypothesis is accepted at 5% level of significance i.e. there is no significant difference between the mean ratios of ROE of NIBL & HBL. (Refer to Appendix: 44).

4.4.2.14 Test of Hypothesis on Earning Per Share (EPS)

Let X_1 and X_2 be denoted as earning per share of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of earning per share of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference in the mean ratios of earning per share of NIBL & HBL.

Table No.: 4.44
Earning Per Share of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision

NIBL	7	44.3650	9.6600	2.2841000	Reject Ho
HBL	6	64.0060	18.1400		

Table 4.44 indicates that the computed value of t is 2.2841 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) degree of freedom (d.f.) is 2.201.

Decision: Since the calculated value of /t/ = 2.2841 is greater than the tabulated value of t = 2.201, the null hypothesis is rejected and alternative hypothesis is accepted at 5% level of significance. Thus, there is significant difference between the mean ratios of EPS of NIBL & HBL. (Refer to Appendix: 45).

4.4.2.15 Test of Hypothesis on Dividend Per Share (DPS)

Let X_1 and X_2 be denoted as dividend per share of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of dividend per share of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference in the mean ratios of dividend per share of NIBL & HBL.

Table No.: 4.45
Dividend Per Share of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	5	18.5000	4.3600	(0.5381000)	Accept Ho
HBL	5	23.0800	16.4500		

Table 4.45 indicates that the computed value of t is -0.5381 and the tabulated value of t at 5% level of significance for 8 = (5 + 5 – 2) degree of freedom (d.f.) is 2.306.

Decision: Since the calculated value of /t/ = 0.5381 is less than the tabulated value of t = 2.306, the null hypothesis is accepted and alternative hypothesis is rejected at 5% level of significance. Thus, there is no significant difference between the mean ratios of DPS of NIBL & HBL. (Refer to Appendix: 46).

4.4.2.16 Test of Hypothesis on Dividend Payout Ratio (DPR)

Let X_1 and X_2 be denoted as dividend payout ratio of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of dividend payout ratio of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference in the mean ratios of dividend payout ratio of NIBL & HBL. (Two-tailed test)

Table No.: 4.46
Dividend Per Share of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	6	64.5180	28.3100	0.2322700	Accept Ho
HBL	6	61.1750	15.3200		

Table 4.46 shows that the computed value of t is 0.2322 and the tabulated value of t at 5% level of significance for 10 = (6 + 6 – 2) degree of freedom (d.f.) is 2.228.

Decision: Since the calculated value of /t/ = 0.2322 is less than the tabulated value of t = 2.228 at 5% level of significance, the null hypothesis is accepted. So, there is no significant difference between the mean ratios of DPR of NIBL & HBL. (Refer to Appendix: 47).

4.4.2.17 Test of Hypothesis on Market Value Per Share (MVPS)

Let X_1 and X_2 be denoted as market value per share of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of market value per share of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference in the mean ratios of market value per share of NIBL & HBL. (Two-tailed test)

Table No.: 4.47
Market Value Per Share of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	7	1,015.1429	236.8000	(0.6723000)	Accept Ho
HBL	6	1,132.6670	339.9200		

Table 4.47 shows that the computed value of t is -0.6723 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) degree of freedom (d.f.) is 2.201.

Decision: Since the calculated value of /t/ = 0.6723 is less than the tabulated value of t = 2.201 at 5% level of significance, the null hypothesis is accepted. So, there is no significant difference between the mean ratios of MVPS of NIBL & HBL. (Refer to Appendix: 48).

4.4.2.18 Test of Hypothesis on Price Earning Ratio (PER)

Let X_1 and X_2 be denoted as price earning ratio of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of price earning ratio of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference in the mean ratios of price earning ratio of NIBL & HBL. (Two-tailed test)

Table No.: 4.48
Price Earning Ratio of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	7	23.3042	5.1700	2.3429000	Reject Ho
HBL	6	17.7183	1.5700		

Table 4.48 shows that the computed value of t is 2.3429 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) degree of freedom (d.f.) is 2.201.

Decision: Since the calculated value of /t/ = 2.3429 is greater than the tabulated value of t = 2.201 at 5% level of significance, the null hypothesis is rejected. So, there is significant difference between the mean ratios of PER of NIBL & HBL. (Refer to Appendix: 49).

4.4.2.19 Test of Hypothesis on Book Value per Share (BVPS)

Let X_1 and X_2 be denoted as book value per share of NIBL & HBL respectively.

Formulation of hypothesis:

Null hypothesis (H_0): $\mu_{x1} = \mu_{x2}$ i.e. there is no significant difference between mean ratios of book value per share of NIBL & HBL.

Alternative hypothesis (H_1) = $\mu_{x1} = \mu_{x2}$ i.e. there is significant difference in the mean ratios of book value per share of NIBL & HBL.

Table No.: 4.49
Book Value Per Share of NIBL & HBL

Sample	Sample Size	Mean	S.D.	Value of t	Decision
NIBL	7	255.8000	38.3400	(7.2713400)	Reject Ho
HBL	6	403.0050	26.6900		

Table 4.49 shows that the computed value of t is -7.2713 and the tabulated value of t at 5% level of significance for 11 = (7 + 6 – 2) degree of freedom (d.f.) is 2.201.

Decision: Since the calculated value of /t/ = 7.2713 is greater than the tabulated value of t = 2.201 at 5% level of significance, the null hypothesis is rejected and alternative hypothesis is rejected. So, there is a significant difference between the mean ratios of BVPS of NIBL & HBL. (Refer to Appendix:

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CHAPTER V

SUMMARY, MAJOR FINDINGS AND RECOMMENDATION

This study has been designed to analyze the comparative capital structure of the NIBL & HBL. In this chapter summary, major findings and recommendation have been reported under the following heads:

1. Summary
2. Major Findings
3. Recommendations

5.1 SUMMARY

The prosperity of every developing country can only be ensured but its economic growth. The role of commercial banks in the economic growth of the nation can fairly estimated to be very prominent. By mobilizing scattered idle resources from the savers, commercial banks pool the fund in a sizable volume in order to feed the fund requirement of productive sectors, promote trade and industrialization in the country. Thereby, raising the employment opportunities and earning to the laborers materials & service providers to such industries and traders, which as a chain effect, promotes saving into the banks. More saving means more funds available in the bank for further investment. Thus, as the chain moves rolling on, the economy of the nation also grows.

To be a major contributing factor in the growth of the nation's economy, the commercial banks also have sustainable existence and growth of themselves. So, the banks must ensure reasonable profitability for which capital structure management decision is one of the important functions. As the banks are joint stock companies

promoted by shareholders, it must primarily concerned with determining an optimal capital structure in the view of providing reasonable return on the funds of the shareholders.

For the accomplishment of this objective, it needs a rational evaluation of the alternative courses of actions. It entails risk and return analysis as risk and return are involved in each of the alternative courses of action. By analyzing the capital structure of a commercial bank in terms of involved risk and return, it can restructure the capital to attain optimum capital structure. Therefore, the bank can increase return at its risk level and/or lower its risk level in the same class of return. Furthermore, a rational capital structure decision leads to more profit making opportunity. So, its capital base must be stronger and more sustainable for facing any future threat that may come up.

The capital structure of any investing entity is the main key to ensure its return and make it more sustainable even in adverse environment. A commercial bank also has to plan for the reasonable capital structure. When a firm and/or an individual affect savings for the expectation of greater degree of future utility, the financial system allow them to earn an additional income on the accumulated savings, which is termed as a return on investment. Therefore, rate of return on investment is cash plus accrued capital gain. It is generally expressed on the basis of annual percentage rate.

Risk on the other hand is the chances of loss. Risk can be thought as the possibility that actual return from holding a security will deviate from an expected return. An asset is concerned as risky if its future return is highly volatile. The risk pertaining to an investment can be measured by computing standard deviation, coefficient of variance, covariance coefficient and beta coefficient and so on.

Investors always want to secure a higher return by taking a minimum level of risk. But theoretically, if they want to secure a higher return, they should also assume a higher risk. Again, at lower risk they should remained satisfied with lower return as there is positive relationship between risk and return.

Capital is the base of business firm. In the absence of capital or money, no one can imagine the existence and promoting of a business firm. For the smooth running of a business firm, different types of capital in the optimum level are required. Generally, there are two types of capital. One is debt capital and another is equity capital. Equity is owner’s capital where as debt is the capital of creditors. Debt capital can be also divided in two parts. They are short term debt and long term debt.

Nepal Investment Bank Ltd. (NIBL) was established in 1986 as a joint venture between Nepalese and French partners. Now, the bank has the following shareholding structure:

A group of companies holding 50% of the capital
Rastriya Banijya Bank holding 15% of the capital
Rastriya Beema Sansthan holding the same percentage

The remaining 20% being held by the General Public (which means that NIBL is a company listed on the Nepal Stock exchange).

Himalayan Bank limited was incorporated in 1992 with employees Provident Fund and Habib Bank Limited, Pakistan. Himalayan Bank is the first commercial bank of Nepal whose maximum shares are hold by the Nepalese private sector. Besides commercial banking services, the Bank also offers industrial and merchant banking services.

This study has tried to cover the various aspects of capital structure of the NIBL & HBL for the time period of seven years from FY 2000/01 to 2006/07.

5.2 MAJOR FINDINGS

The findings of the present investigation have been presented as below:

a) Findings related to capital structure analysis of NIBL & HBL.
b) Findings related to profitability analysis of NIBL & HBL.
c) Findings related to market analysis of NIBL & HBL.
d) Findings related to statistical analysis of NIBL & HBL.

a) Findings Related To Capital Structure Analysis Of NIBL & HBL

1) Total fixed deposits of NIBL were increasing during every fiscal year except in FY 2002/03. Thus, NIBL was giving more emphasis to increase fixed deposits during every fiscal year but due to high cost of fund, the bank has given importance to decrease fixed deposit in FY 2002/03. Similarly, fixed deposit of HBL was increased in FY 2001/02 and 2002/03. Then after, it decreased in FY 2003/04. In average, more funds

were collected as fixed deposits by NIBL than HBL over the study period. The variability of deposits was less in NIBL than That of HBL. Both the banks were found to be increasing their fixed deposits.

2) The fixed deposit to total liability of NIBL was decreased over the study period except in FY 2005/06 and 2006/07. But, fixed deposit to total liability of HBL was increasing over the study period except in FY 2003/04. In average, NIBL has higher portion of fixed deposits in total liability than that of HBL.
3) Fixed deposit in total debt of NIBL was decreased in FY 2002/03, 2003/04 and 2004/05 but increased in FY 2005/06 and 2006/07. Again, the fixed deposit in total debt of HBL was increased throughout the study period except in FY 2003/04. The average of fixed deposit in total debt of NIBL was a little higher than that of HBL. The volume of fixed deposits to total debt fluctuated more in NIBL and HBL.
4) The proportion of shareholders' equity i.e.net worth in total claims of assets (Total Liabilities) was much lower in both banks. But the shareholders' equity of both banks was increasing during every fiscal year. In average, the proportion of shareholders' equity of NIBL was higher than HBL. Also, fluctuation of shareholders' equity was more in NIBL than HBL.
5) Both the banks have more debt equity ratio (DER) i.e. Greater claims of creditors than owners. The proportion of DER was smaller in later FY than it was in 2000/01 of HBL, which shows that the banks have some how able to reduce the claim of creditors than that of owners. The average ratio of NIBL was lower than the average ratio of HBL. The variability of fixed deposit to net worth was higher in HBL and NIBL.
6) The portion of total debt in shareholders' equity was increasing throughout the study period except in FY 2002/03 and 2005/06. Similarly, the debt to equity ratio of HBL was decreasing except in FY 2005/06. The average ratio of NIBL was found below the average ratio of HBL. This indicates that HBL had employed higher total debt capital or outside funds as compared to equity fund because the bank is extremely levered than NIBL. The fluctuation in the ratio has been noticed in both the banks. However, the C.V. was higher in NIBL than in HBL. Therefore, the ratio of NIBL

was more consistent than HBL. Thus, both banks are extremely levered and facing heavy burden of interest payment due to the employment of more debts. Both the banks financial structure shows the dangerous signals to the creditors. In future, the banks may lead to inflexibility in the operation.

7) The ratio of fixed deposits to capital employed had been fluctuated in both the banks over the study period. Both the banks have higher ratio of DCR but in comparison, the ratio was higher in NIBL. The C.V. of NIBL was lower than that of HBL so that the variability of the ratio is more in HBL.
8) DCR in terms of total debt to total assets reveals that the assets of the banks have been financed more by fund collected from creditors. There was always decrement in the ratio of HBL except in the FY 2005/06, where it was increased. The average ration of HBL was a little bit higher than that of NIBL. The C.V. of NIBL was higher than that of HBL so that the variability of the ratio is more in NIBL. Both the banks are using higher debt capital to finance its assets. The creditors margin of safety is very low i.e. nearly 8% only, which indicates higher in both the banks.
9) The ICR of NIBL was fluctuating throughout the study period. On the hand, there was negative change in HBL throughout the study period. The average ICR of the HBL was lower than NIBL. Thus, NIBL was in better condition than HBL in their debt service capacity. Again, the variation of the ratio of NIBL was observed less in comparison to HBL. In banking business, interest coverage ratio should not be tight so that the bank could be able to service the debt capital. In this regard, HBL have not sufficient coverage ratio. So, the bank should pay more attention in this matter by increasing its EBIT or maintain minimum interest obligations (cost of fund).
10) The portion of debt capital to equity capital of NIBL was increasing throughout the study period because of increase in fixed deposits higher than equity share except in FY 2005/06. Similarly, the proportion of debt capital to equity capital of HBL was increasing throughout the study period except in FY 2003/04. This shows that the bank has managed to decrease the portion of fixed deposits in its capital structure to some extent.

11) The equity capitalization rate of NIBL was increasing in the middle FY of the study period. Again, the equity capitalization rate of HBL was continuously decreasing throughout the study period except in FY 2001/2002. The drastically decrease in the equity capitalization rate is due to the factor of lower EPS and higher MVPS. The average rate of the HBL was above the average rate of the NIBL. On observing CVs of both banks, there was more variation in the rate of NIBL than that of HBL. Thus, equity costs of both banks are diminishing in nature. This is because of lower EPS than MVPS. If the banks are unable to improve the situation, their performance will be power in the future.

b) Findings Related To Profitability Analysis Of NIBL & HBL

12) The ratio of interest and commission paid to its total operation expenses of NIBL was fluctuating in nature. In NIBL, the proportion of the expenses to total income was also fluctuating during the study period. On the other hand, the ratio of interest and commission paid to total expenses of HBL was decreasing throughout the study period. In HBL, the proportion of the expenses to total income was decreasing throughout the study period. Interest and commission expenses were the major expenses for the banks but the expenses of NIBL were lower than that of HBL. This shows that NIBL is paying proportionally less as interest and commission than HBL. However, the proportionate expenses to total income of both the banks were slightly close. It plays an important role to increase or decrease the profit of the bank. The variability in provision for interest & commission paid of NIBL was lower than that of HBL.

13) The office operation expenses over the total operating expenses of NIBL were fluctuating throughout the study period. On the other hand, the operating expenses of HBL were increasing over the study period except in FY 2001/02. In comparison, the proportionate office operating expenses were higher in NIBL than that of HBL. This shows that NIBL is paying more as operating expenses than HBL. The variability in office operating expenses of NIBL was lower than HBL. The conformity could be seen on office operating expenses in NIBL than HBL.

14) The staff expenses over the total operating expenses of NIBL were fluctuating over the study period. On the other hand, the staff expenses over the total operating expenses of HBL were increasing over the study period except in FY 2005/06. The staff expenses of NIBL were slightly higher than that of HBL. This shows that NIBL is paying proportionally more as staff expenses than HBL. The variability in staff expenses of NIBL was lower than HBL.
15) The provision for staff bonus of NIBL was fluctuating throughout the study periods. On the other hand, the provision for staff bonus of HBL was increasing throughout the study periods. In comparison, both the banks hand nearly same proportionate bonus. The variability in provision for staff bonus of NIBL was higher than HBL. The conformity could be seen on staff bonus in HBL than NIBL.
16) The return of deposits of NIBL was increasing throughout the study period except in the FY 2004/05. On the other hand, the return on deposits of HBL was fluctuating throughout the study period. The average return on deposits of NIBL was a little bit higher than HBL. The C.V. of NIBL was higher than that of HBL. Thus, there was more variation of return on deposits in HBL than NIBL. Thus, both the banks were getting lower return on its deposits and it shows that both the banks were not able to utilize their deposit in FY 2002/03 and 2003/04.
17) Return on assets of both the banks was fluctuating throughout the study period and are not satisfactory. In average, NIBL had more return on assets than HBL. The negative change in rate on return of assets shows that the bank had not been able to utilize its resources is most profitable projects. The C.V. of NIBL was more than that of HBL. Thus, there was more variation of return on deposits in NIBL than HBL.
18) The return on capital employed of NIBL was increasing over the study period except in the FY 2006/07. On the other hand, the ratio of HBL was fluctuating throughout the study periods. In comparison, NIBL has more average return on capital employed than HBL. Thus, NIBL is efficiently utilizing its long-term funds than that of HBL. Especially, HBL was unable to maintain profitability in the FY 2002/03, 2004/05 and 2005/06 and there was negative change in the ratio. The coefficient of variation of

NIBL was more than that of HBL. This indicates that ratio of NIBL is higher fluctuated and not able in handling long-term funds.

19) The ROE of both the banks was fluctuating over the study. The average ROE of NIBL was higher than HBL so HBL was unable to earn sufficient return from its internal source in the later fiscal years of the study period. The C.V. shows that the ROE of NIBL was more consistent than that of HBL. Both the banks had poor return on equity that shows the banks had been utilized its shareholders' equity is most efficient manner. But NIBL was better enough to maintain ROE compared to HBL in average.

c) Findings Related To Market Analysis of NIBL & HBL

20) The EPS of NIBL was increasing throughout the study period. The EPS of HBL was recorded higher than NIBL except in FY 2004/05 of the study period. In comparison, NIBL has lower average EPS than HBL. The coefficient of variations was EPS of NIBL than that of HBL. However, the EPS of NIBL was recorded lower than HBL. The number of share outstanding and low earnings in the middle fiscal years of the study period might be the factor of decreasing EPS of NIBL. The average EPS of HBL was better enough over NIBL, which increases the strength of the share and improve the market price of the share than NIBL.

21) The DPS of NIBL was decreasing throughout the study period except in FY 2006/07. The decrease in DPS of the bank indicates that the bank had low earning during those periods in comparison to previous years. The shareholders of the bank have not satisfied in terms of low cash dividend distributed by the bank. The DPS of HBL was also decreasing throughout the study period except in FY 2005/06. the coefficient of variation was much lower in NIBL. It predicts that there was little variation in DPS of NIBL than that of HBL. In comparison, HBL was paying more DPS than NIBL. Thus, HBL seems to be more efficient bank than NIBL in fulfilling shareholders' expectation offering higher dividend.

22) DPR of both the banks was decreasing in first five fiscal years of the study period due to distribution of bonus share in spite of cash dividend. It was increased in the later FY due to high earning per share than previous fiscal years. The average DPR of NIBL was higher than HBL. The C.V. of NIBL was higher than that of HBL. It indicates that there was high variation in DPR of NIBL. It can be concluded that NIBL is better than HBL in terms of DPR.

23) The MVPS of NIBL was fluctuating over the study periods. On the other hand, the MVPS of HBL was decreasing in the first four fiscal years and later on increasing. In average, the MVPS of HBL was higher than that of NIBL. The C.V. of NIBL was lower than that of HBL. Thus, there was high variation in MVPS of HBL over NIBL and ultimately encourages the investor to hold the share of NIBL rather than HBL.

24) The P/E ratio of NIBL & HBL was fluctuating over the study period. In average, NIBL had higher P/E ration than HBL. The P/E ratio of NIBL was above in all FY except in 2004/05. The coefficient of variation of the ratio of NIBL was higher than that of HBL. So, the fluctuation of the ratio was more in NIBL in comparison.

25) The BVPS of both the banks were fluctuating over the study period. The average BVPS of NIBL was lower than that of the HBL. HBL was in very good position as its BVPS was above the combined average in all periods. The net worth of NIBL was lower than that of HBL. The C.V. of NIBL was more than that of HBL. The HBL had very low CV than that of NIBL and so there was very low fluctuation in BVPS of HBL which is a good signal to its shareholders. In comparison, BVPS of HBL was better over NIBL.

e) Findings Related To Statistical Analysis Of NIBL & HBL

26) The correlation between EBIT & interest payment shows positive relationship of NIBL and negative relationship of HBL. Coefficient of determination (r^2) of NIBL indicates that 98.56% of the variation in the interest payment was explained by the independent variable (EBIT) whereas 1.66% the variation in the interest payment by the independent variable

(EBIT) of HBL. Considering the probable error (P.E.), the value of NIBL was greater than 6 (P.E.) so that value of 'r' was significant i.e. there was significant relationship between EBIT & interest payment of NIBL. But the value of HBL was lower than six times of the P.E. so the value of 'r' was not significant i.e. there was no relationship between EBIT & interest payment of HBL.

27) The correlation between return and debt capital of NIBL was highly positive. Therefore, increase in total debt capital increases return. Coefficient of determination (r2) of the bank was 97.26% indicates that 97.26% of the variation in the return was explained by the debt capital. The probable error (6 PE) of the bank was 0.0451, which is less than the value of 'r'. This indicates that there was significant relationship between the variables i.e. debt capital of the bank was significant in generating more returns. On the other hand, correlation between return and debt capital of HBL was less positive. Therefore, increase in total debt capital poorly increase return. Coefficient of determination (r2) of the bank increases that only 1.78% of the variation in the return was explained by the debt capital. The probable error (6 PE) pf the bank was 1.622m i.e. more than the value of 'r' so that there was no significant relationship between the variables of HBL.

28) The correlation between DER and ROE of NIBL was positive. Therefore, increase in leverage (DER) increases ROE. Coefficient of determination (r2) of the bank indicates that 34.06% of the variation in ROE was explained by DER. The probable error (6 PE) of the bank was 1.089, i.e. more than value of 'r' so that there was not significant relationship between the variable. Similarly, the correlations between DER and ROE of HBL were highly positive. Therefore, increase in leverage (DER) increases ROE. Coefficient of determination (r2) of the bank indicates that 84.52% of the variation in ROE was explained by DER. The probable error (6 PE) of the bank was 10.255, i.e. less than the value of 'r' so that there was significant relationship between the variables. Thus, DER was significant in generating more ROE.

29) Student's t-test analysis regarding capital structure of NIBL & HBL shows that there is no significant deference between the mean ratios of (i) fixed

deposits to total liabilities (II) fixed deposits to total debt (III) net worth to total liabilities (iv) fixed deposits to net worth (v) total debt to net worth (vi) fixed deposit to capital employed and (vii) total debt to total assets. But there is significant difference between the mean ratios of (i) interest coverage ratio and (ii) equity capitalization rate of NIBL & HBL.

30) Student's t-test analysis regarding market ratio of NIBL & HBL reveals that there is no significant difference between the mean ratio of (i)Dividend Per Share (ii) Dividend Payout Ratio and (iii) Market Value Per Share. But there is significant difference between the man ratio of (i) Earning Per Share (ii) Price Earning Ratio and (iii) Book Value Per Share of NIBL & HBL.

5.3 RECOMMENDATIONS

The following recommendations are made for the management of the two banks.

1) Both the banks were giving more emphasis to increase their fixed deposits. Also, the banks have more debt equity ratio (DER) i.e. greater claims of creditors than owners. The high cost of fund increases the interest burden and affected the profitability of the banks. It is, therefore recommended that the bank should give importance to decrease the cost of fund as well as debt portion from capital structure portfolio. The banks seem to be more risky because of maximum use of leverage so the bank's management should reduce the debt capital and give more attention to increase owner's capital.

2) The shareholders' equity of banks was increasing during every fiscal year but the proportion of shareholders' equity i.e. net worth in total claims of assets (total Liabilities) was much low in both banks. Thus, shareholders of both banks especially of HBL are not satisfied from the management. Because of low return on equity and low dividend payment they are worried about their investment. On the other hand the portion of total debt in shareholders' equity was increasing. HBL had employed higher total debt capital (Outside Funds) as compared to equity fund because the bank is extremely levered than NIBL. Thus, both banks are extremely levered

and facing heavy burden of interest payment due to the employment of more debts. Both the bank's financial structure shows the dangerous signals to the creditors. In future, the banks may lead to inflexibility in the operation. So, the management of the banks may lead to inflexibility in the operation. SO, the management of the banks should increase the return on shareholders equity for fulfilling the expectation of shareholders.

3) The ICR of NIBL was in better condition than HBL in their debt service capacity. In banking business, interest coverage ratio should not be tight so that the bank could be able to service the debt capital. In this regard, HBL have not sufficient coverage ratio. Therefore, the bank should increase EBIT in compare to interest expenses to increase its capacity to handle the fixed charges and the payment of interest to the creditors easily.
4) An expenses is the major factor to factor to affect the profitability of the banks. By decreasing the expenses, the banks can increase its profit. Interest and commission expenses were the major expenses for both the banks. The interest and commission expenses of NIBL were lower than that of HBL. Thus, HBL is paying proportionally more as interest and commission due to its higher and costly debt capital than NIBL. So, HBL should reduce its debt capital portfolio and its cost to decrease its expenses.
5) Both the banks were getting lower return on its deposits. SO, the banks were not able to utilize their deposits effectively. Also, both the banks had poor return on equity that shows that banks had been utilized its shareholders' equity in most efficient manner. But NIBL was better enough to maintain ROE compared to HBL in average. So that HBL was unable to earn sufficient return from its internal source. Likewise, the return on the asset of both the banks is not satisfactory. NIBL had more return on assets than HBL. The negative change in rate of return on assets shows that the bank has not been able to utilize its resources is most profitable projects. On the other hand, NIBL has more return on capital employed than HBL. Thus NIBL is efficient utilizing its long-term funds than that of HBL.
6) NIBL had lower EPS than HBL. The number of shares outstanding and low earnings might be the factor of decreasing EPS of NIBL, which increases

the strength of the share and improve the market price of HBL than NIBL. The management of NIBL should eager to increase its performance in the market so that investor should hold the share of NIBL like HBL.

7) The average MVPS and C.V. of NIBL was lower than that of HBL. There was high variation in MVPS of HBL over NIBL and ultimately encourages the investor to hold the share of NIBL rather than HBL.

8) Both the banks are more concentrating in the area of loan and advances. But due to the competitive market and present worse economic and political condition of the country, investment in the sector of loan and advances only is not favorable. So, both banks should also give the emphasis in the other commission based sector like bill purchase and discount, government security and other investment so that profit could be secure.

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APPENDICES

Here, X = NIBL & Y = HBL

Appendix: 1

Fixed Deposit Position

Fiscal Year	X	X^2	Y	Y^2
2000/01	-	-	-	-
2001/02	-	-	25.79	665.12
2002/03	(0.43)	0.18	11.23	126.11
2003/04	76.84	5,904.39	(41.52)	1,723.91
2004/05	37.17	1,381.61	46.95	2,204.30
2005/06	39.99	1,599.20	29.66	879.72
2006/07	68.51	4,693.62	-	-
Sum	**222.08**	**13,579.00**	**72.11**	**5,599.17**
Average	**44.42**		**14.42**	
Standard Deviation (S.D.)	**27.26**		**30.20**	
Coefficient Of Variance (C.V.)	**61.3706**		**209.3792**	

Appendix: 2

Fixed Deposit as a Percentage of Total Liability

Fiscal Year	X	X^2	Y	Y^2
2000/01	-	-	24.69	609.60
2001/02	32.35	1,046.52	25.25	637.56
2002/03	18.46	340.77	25.71	661.00
2003/04	18.25	333.06	13.25	175.56
2004/05	17.04	290.36	18.31	335.26
2005/06	19.60	384.16	21.15	447.32
2006/07	24.91	620.51	-	-
Sum	**130.61**	**3,015.39**	**128.36**	**2,866.30**
Average	**21.77**		**21.39**	
Standard Deviation (S.D.)	**5.3576**		**4.4769**	
Coefficient Of Variance (C.V.)	**24.6120**		**20.9266**	

Appendix: 3

Fixed Deposit as a Percentage of Total Debt

Fiscal Year	X	X^2	Y	Y^2
2000/01	-	-	26.13	682.78
2001/02	42.05	1,768.20	26.92	724.69
2002/03	20.54	421.89	27.66	765.08
2003/04	19.62	384.94	14.38	206.78
2004/05	18.02	324.72	20.10	404.01
2005/06	21.12	446.05	23.22	539.17
2006/07	26.64	709.69	-	-
Sum	**147.99**	**4,055.50**	**138.41**	**3,322.50**
Average	**24.67**		**23.07**	
Standard Deviation (S.D.)	**8.2192**		**4.6478**	
Coefficient Of Variance (C.V.)	**33.3233**		**20.1481**	

Appendix: 4

Net Worth to Total Liability

Fiscal Year	X	X^2	Y	Y^2
2000/01	10.81	116.8561	5.49	30.1401
2001/02	9.12	83.1744	6.14	37.6996
2002/03	10.22	104.4484	7.04	49.5616
2003/04	6.97	48.5809	7.88	62.0944
2004/05	5.41	29.2681	8.91	79.3881
2005/06	7.20	51.8400	8.90	79.2100
2006/07	6.51	42.3801	-	-
Sum	**56.24**	**476.5480**	**44.36**	**338.0938**
Average	**8.03**		**7.39**	
Standard Deviation (S.D.)	**1.90**		**1.32**	
Coefficient Of Variance (C.V.)	**23.62**		**17.80**	

Appendix: 5

Shareholders Equity Composition

Fiscal Year	X	X²	Y	Y²
2000/01	-	-	37.65	1,417.5225
2001/02	14.36	206.2096	25.31	640.5961
2002/03	11.59	134.3281	26.93	725.2249
2003/04	21.99	483.5601	26.93	725.2249
2004/05	14.17	200.7889	20.26	410.4676
2005/06	61.88	3,829.1344	12.06	145.4436
2006/07	19.94	397.6036	-	-
Sum	**143.93**	**5,251.62**	**149.14**	**4,064.48**
Average	**23.98**		**24.44**	
Standard Deviation (S.D.)	**17.32**		**8.40**	
Coefficient Of Variance (C.V.)	**72.20**		**34.34**	

Appendix: 6

Fixed Deposit to Net Worth (DER) Ratio

Fiscal Year	X	X²	Y	Y²
2000/01	353.58	125,018.8164	449.97	202,473.0009
2001/02	180.70	32,652.4900	411.21	169,093.6641
2002/03	261.97	68,628.2809	365.02	133,239.6004
2003/04	261.97	68,628.2809	168.18	28,284.5124
2004/05	314.79	99,092.7441	205.51	42,234.3601
2005/06	272.18	74,081.9524	237.79	56,544.0841
2006/07	382.42	146,245.0564	-	-
Sum	**2,027.61**	**614,347.6211**	**1,837.68**	**631,869.2220**
Average	**294.27**		**306.28**	
Standard Deviation (S.D.)	**66.00**		**107.26**	
Coefficient Of Variance (C.V.)	**22.43**		**35.01**	

Appendix: 7

Total Debt to Net Worth Ratio (DER)

Fiscal Year	X	X²	Y	Y²
2000/01	824.11	679,157.2921	1,722.30	2,966,317.2900
2001/02	993.03	986,108.5809	1,527.39	2,332,920.2121
2002/03	878.68	772,078.5424	1319.61	1,741,370.5521
2003/04	1,335.11	1,782,518.7121	1,169.65	1,368,081.1225
2004/05	1,746.80	3,051,310.2400	1,022.63	1,045,772.1169
2005/06	1,288.84	1,661,108.5456	1,024.10	1,048,780.8100
2006/07	1,435.35	2,060,229.6225	-	-
Sum	**8,501.92**	**10,992,511.5356**	**7,785.68**	**10,503,242.1036**
Average	**1,214.56**		**1,297.61**	
Standard Deviation (S.D.)	**308.55**		**258.34**	
Coefficient Of Variance (C.V.)	**25.40**		**19.90**	

Appendix: 8

Fixed Deposit to Capital Employed Ratio (DCR)

Fiscal Year	X	X²	Y	Y²
2000/01	-	-	81.82	6,694.5124
2001/02	77.96	6,077.2938	80.44	6,470.5936
2002/03	64.37	4,143.4969	78.5	6,162.2500
2003/04	72.37	5,237.9959	62.71	3,932.7949
2004/05	75.89	5,759.1403	67.27	4,524.9838
2005/06	73.13	5,348.2894	70.40	4,955.5968
2006/07	79.27	6,283.8914	-	-
Sum	**442.99**	**32,850.1078**	**441.14**	**32,740.7316**
Average	**73.83**		**73.52**	
Standard Deviation (S.D.)	**4.88**		**7.16**	
Coefficient Of Variance (C.V.)	**6.61**		**9.73**	

Appendix: 9

Total Debt to Total Assets Ratio

Fiscal Year	X	X^2	Y	Y^2
2000/01	89.91	8,083.8081	94.51	8,932.1401
2001/02	90.85	8,253.7225	93.86	8,809.6996
2002/03	89.78	8,060.4484	92.96	8,641.5616
2003/04	93.03	8,654.5809	92.13	8,487.9369
2004/05	94.58	8,945.3764	91.09	8,297.3881
2005/06	92.80	8,611.8400	91.10	8,299.2100
2006/07	93.49	8,740.3801	-	-
Sum	**644.44**	**59,350.1564**	**555.65**	**51,467.9363**
Average	**92.06**		**92.61**	
Standard Deviation (S.D.)	**1.74**		**1.30**	
Coefficient Of Variance (C.V.)	**1.89**		**1.40**	

Appendix: 10

Interest Coverage Ratio (%)

Fiscal Year	X	X^2	Y	Y^2
2000/01	2.038	4.1534	1.527	2.3317
2001/02	1.797	3.2292	1.587	2.5186
2002/03	2.175	4.7306	1.604	2.5728
2003/04	2.060	4.2436	1.650	2.7225
2004/05	1.989	3.9561	1.856	3.4447
2005/06	2.337	5.4616	1.930	3.7249
2006/07	2.240	5.0176	-	-
Sum	**14.636**	**30.792**	**10.154**	**17.315**
Average	**2.091**		**1.693**	
Standard Deviation (S.D.)	**0.165**		**0.148**	
Coefficient Of Variance (C.V.)	**7.888**		**8.741**	

Appendix: 11

Equity Capitalization Rate (%)

Fiscal Year	X	X^2	Y	Y^2
2000/01	3.830	14.6689	4.890	23.9121
2001/02	2.860	8.1796	6.240	38.9376
2002/03	4.420	19.5364	6.030	36.3609
2003/04	4.920	24.2064	5.920	35.0464
2004/05	5.500	30.2500	5.840	34.1056
2005/06	4.940	24.4036	5.210	27.1441
2006/07	4.710	22.1841	-	-
Sum	**31.180**	**143.429**	**34.130**	**195.507**
Average	**4.450**		**5.690**	
Standard Deviation (S.D.)	**0.810**		**0.474**	
Coefficient Of Variance (C.V.)	**18.180**		**8.340**	

Appendix: 12

Major Expenses to Total Operating Expenses (%) of NIBL

Fiscal Year	Interest & Commission Paid (Y1)	Operating Expenses (Y2)	Staff Expenses (Y3)	Provision for Staff Bonus (Y4)	$Y1^2$	$Y2^2$	$Y3^2$	$Y4^2$
2000/01	53.5936	30.7009	10.4702	5.2351	2,872.27	942.55	109.63	27.41
2001/02	58.1944	27.3958	10.7986	3.6111	3,386.59	750.53	116.61	13.04
2002/03	49.1317	31.8844	15.7143	3.2694	2,413.92	1,016.61	246.94	10.69
2003/04	50.1298	28.6244	16.2383	5.0074	2,513.00	819.36	263.68	25.07
2004/05	55.1805	25.2863	15.1822	4.3508	3,044.89	639.40	230.50	18.93
2005/06	52.7965	27.2373	14.4444	5.5216	2,787.47	741.87	208.64	30.49
2006/07	57.5752	23.4804	13.0231	5.9211	3,314.90	551.33	169.60	35.06
Sum	**376.6017**	**194.6095**	**95.8711**	**32.9165**	**20,333.04**	**5,461.64**	**1,345.60**	**160.69**
Average	**53.8002**	**27.8014**	**13.6959**	**4.7023**	**-**	**-**	**-**	**-**
Standard Deviation (S.D.)	**3.2023**	**2.7054**	**2.1567**	**3.5481**	**-**	**-**	**-**	**-**
Coefficient Of Variance (C.V.)	**5.9521**	**9.7312**	**15.7470**	**75.4524**	**-**	**-**	**-**	**-**

Appendix: 13

Major Expenses to Total Operating Expenses (%) of HBL

Fiscal Year	Interest & Commission Paid (Y1)	Operating Expenses (Y2)	Staff Expenses (Y3)	Provision for Staff Bonus (Y4)	Y1²	Y2²	Y3²	Y4²
2000/01	75.3514	14.3746	6.4940	3.7800	5,677.83	206.63	42.17	14.29
2001/02	72.7573	13.9781	8.4766	4.7879	5,293.62	195.39	71.85	22.92
2002/03	66.1299	17.8195	11.6143	4.4362	4,373.16	317.53	134.89	19.68
2003/04	62.1633	19.8709	13.4781	4.4876	3,864.28	394.85	181.66	20.14
2004/05	54.5051	23.4020	16.9111	5.1818	2,970.81	547.65	285.99	26.85
2005/06	52.2277	25.7786	16.5977	5.3960	2,727.73	664.54	275.48	29.12
2006/07	-	-	-	-	-	-	-	-
Sum	**383.1347**	**115.2237**	**73.5718**	**28.0695**	**26,684.98**	**1,715.40**	**1,227.00**	**160.97**
Average	**63.8557**	**19.2030**	**12.2619**	**4.6782**	**-**	**-**	**-**	**-**
Standard Deviation (S.D.)	**8.5836**	**4.3550**	**3.8710**	**0.5295**	**-**	**-**	**-**	**-**
Coefficient Of Variance (C.V.)	**13.4420**	**22.6000**	**31.5600**	**11.3180**	**-**	**-**	**-**	**-**

Appendix: 14

Major Expenses to Total Operating Income of NIBL (in %)

Fiscal Year	Int. & Comm. Paid (Y1)	Oper. Exp. (Y2)	Staff Exp. (Y3)	Provision for Staff Bonus (Y4)	Total Oper. Exp. (Y5)	Other Exp. (Y6)	Y1²	Y2²	Y3²	Y4²	Y5²	Y6²
2000/01	34.474	19.748	6.735	3.367	64.326	35.673	1,188.457	389.984	45.360	11.337	4,137.834	1,272.563
2001/02	39.753	18.714	7.376	2.466	68.311	31.688	1,580.301	350.214	54.405	6.081	4,666.393	1,004.129
2002/03	31.147	20.213	9.962	2.072	63.395	36.604	970.136	408.565	99.241	4.293	4,018.926	1,339.853
2003/04	32.739	18.694	10.605	3.270	65.308	34.691	1,071.842	349.4656	112.4660	10.6929	4,265.1349	1,203.4655
2004/05	35.700	16.359	9.822	2.814	64.697	35.303	1,274.490	267.6169	96.4717	7.9186	4,185.7018	1,246.3018
2005/06	30.948	15.965	8.466	3.236	58.617	41.382	957.779	254.8812	71.6732	10.4717	3,435.9527	1,712.4699
2006/07	33.593	13.700	7.598	3.454	58.347	41.652	1,128.490	187.6900	57.7296	11.9301	3,404.3724	1,734.8891
Sum	**238.354**	**123.393**	**60.564**	**20.679**	**443.001**	**256.993**	**8,171.4938**	**2,208.4164**	**537.3475**	**62.7243**	**28,114.3148**	**9,513.6714**
Average	**34.051**	**17.628**	**8.652**	**2.954**	**63.285**	**36.713**	**-**	**-**	**-**	**-**	**-**	**-**
S.D.	**2.813**	**2.180**	**1.380**	**0.483**	**3.351**	**3.351**	**-**	**-**	**-**	**-**	**-**	**-**
C.V.	**8.262**	**12.370**	**15.950**	**16.350**	**5.295**	**9.127**	**-**	**-**	**-**	**-**	**-**	**-**

Appendix: 15

Major Expenses to Total Operating Income of HBL (in %)

Fiscal Year	Int. & Comm. Paid (Y1)	Oper. Exp. (Y2)	Staff Exp. (Y3)	Provision for Staff Bonus (Y4)	Total Oper. Exp. (Y5)	Other Exp. (Y6)	$Y1^2$	$Y2^2$	$Y3^2$	$Y4^2$	$Y5^2$	$Y6^2$
2000/01	47.860	10.665	4.818	2.804	66.147	33.850	2,290.580	113.742	23.213	7.862	4,375.426	1,145.823
2001/02	46.629	8.958	5.432	3.068	64.088	35.910	2,174.264	80.246	29.507	9.413	4,107.272	1,289.528
2002/03	41.598	11.209	7.305	2.790	62.904	37.102	1,730.394	125.642	53.363	7.784	3,956.913	1,376.558
2003/04	38.102	12.179	8.261	2.750	61.294	32.705	1,451.762	148.3280	68.2441	7.5625	3,756.9544	1,069.6170
2004/05	32.346	13.888	10.036	3.075	59.345	40.654	1,046.264	192.8765	100.7213	9.4556	3,521.8290	1,652.7477
2005/06	31.917	15.753	10.143	3.297	61.112	38.887	1,018.695	248.1570	102.8804	10.8702	3,734.6765	1,512.1988
2006/07	-	-	-	-	-	-	-	-	-	-	-	-
Sum	**238.452**	**72.652**	**45.995**	**17.784**	**374.890**	**219.108**	**9,711.9579**	**908.9913**	**377.9286**	**52.9475**	**23,453.0706**	**8,046.4725**
Average	**39.742**	**12.109**	**7.666**	**2.964**	**62.482**	**37.518**	**-**	**-**	**-**	**-**	**-**	**-**
S.D.	**6.263**	**2.208**	**2.054**	**0.198**	**2.210**	**2.211**	**-**	**-**	**-**	**-**	**-**	**-**
C.V.	**15.760**	**18.241**	**26.804**	**6.684**	**3.538**	**5.893**	**-**	**-**	**-**	**-**	**-**	**-**

Appendix: 16

Return on Total Deposit (%)

Fiscal Year	X	X^2	Y	Y^2
2000/01	-	-	1.42	2.0164
2001/02	1.33	1.7689	1.60	2.5600
2002/03	1.37	1.8769	1.26	1.5876
2003/04	1.47	2.1609	1.01	1.0201
2004/05	1.32	1.7424	1.20	1.4400
2005/06	1.63	2.6569	1.24	1.5376
2006/07	1.85	3.4225	-	-
Sum	**8.97**	**13.63**	**7.73**	**10.16**
Average	**1.50**		**1.29**	
Standard Deviation (S.D.)	**0.15**		**0.18**	
Coefficient Of Variance (C.V.)	**9.85**		**14.15**	

Appendix: 17

Return on Total Assets (%)

Fiscal Year	X	X^2	Y	Y^2
2000/01	1.91	3.6481	1.26	1.5876
2001/02	1.10	1.2100	1.44	2.0736
2002/03	1.11	1.2321	1.14	1.2996
2003/04	1.27	1.6129	0.91	0.8281
2004/05	1.13	1.2769	1.02	1.0404
2005/06	1.42	2.0164	1.07	1.1449
2006/07	1.61	2.5921	-	-
Sum	**9.55**	**13.59**	**6.84**	**7.97**
Average	**1.36**		**1.14**	
Standard Deviation (S.D.)	**0.29**		**0.17**	
Coefficient Of Variance (C.V.)	**20.92**		**14.94**	

Appendix: 18

Return on Capital Employed

Fiscal Year	X	X²	Y	Y²
2000/01	-	-	4.16	17.3056
2001/02	2.65	7.0225	4.58	20.9764
2002/03	3.89	15.1321	3.37	11.3569
2003/04	5.05	25.5025	4.15	17.2225
2004/05	5.05	25.5025	3.76	14.1376
2005/06	5.29	27.9841	3.55	12.6025
2006/07	5.13	26.3169	-	-
Sum	**27.06**	**127.46**	**23.57**	**93.60**
Average	**4.51**		**3.92**	
Standard Deviation (S.D.)	**0.95**		**0.48**	
Coefficient Of Variance (C.V.)	**21.07**		**12.34**	

Appendix: 19

Return on Equity

Fiscal Year	X	X²	Y	Y²
2000/01	13.89	192.9321	22.90	524.4100
2001/02	12.67	160.5289	23.42	548.4964
2002/03	10.90	118.8100	15.65	244.9225
2003/04	18.29	334.5241	11.13	123.8769
2004/05	20.94	438.4836	11.48	131.7904
2005/06	19.67	386.9089	12.00	144.0000
2006/07	24.76	613.0576	-	-
Sum	**121.12**	**2,245.25**	**96.58**	**1,717.50**
Average	**17.30**		**16.10**	
Standard Deviation (S.D.)	**4.62**		**5.20**	
Coefficient Of Variance (C.V.)	**26.71**		**32.30**	

Appendix: 20

Earning Per Share in Rs.

Fiscal Year	X	X²	Y	Y²
2000/01	53.68	2,881.5424	83.80	7,022.4400
2001/02	33.18	1,100.9124	93.57	8,755.3449
2002/03	33.59	1,128.2881	60.26	3,631.2676
2003/04	39.56	1,564.9936	49.45	2,445.3025
2004/05	51.70	2,672.8900	49.05	2,405.9025
2005/06	39.50	1,560.2500	47.91	2,295.3681
2006/07	59.35	3,522.4225	-	-
Sum	**310.56**	**14,431.30**	**384.04**	**26,555.63**
Average	**44.37**		**64.01**	
Standard Deviation (S.D.)	**9.66**		**18.14**	
Coefficient Of Variance (C.V.)	**21.77**		**28.34**	

Appendix: 21

Dividend Per Share

Fiscal Year	X	X²	Y	Y²
2000/01	25.00	625.0000	50.00	2,500.0000
2001/02	-	-	27.50	756.2500
2002/03	-	-	25.00	625.0000
2003/04	20.00	400.0000	1.32	1.7424
2004/05	15.00	225.0000	-	-
2005/06	12.50	156.2500	11.58	134.0964
2006/07	20.00	400.0000	-	-
Sum	**92.50**	**1,806.25**	**115.40**	**4,017.09**
Average	**18.50**		**23.08**	
Standard Deviation (S.D.)	**4.36**		**16.45**	
Coefficient Of Variance (C.V.)	**23.56**		**71.29**	

Appendix: 22

Dividend Payout Ratio

Fiscal Year	X	X²	Y	Y²
2000/01	93.14	8,675.0596	90.27	8,148.6729
2001/02	-	-	61.45	3,776.1025
2002/03	89.31	7,976.2761	58.08	3,373.2864
2003/04	50.53	2,553.2809	50.56	2,556.3136
2004/05	29.01	841.5801	40.77	1,662.1929
2005/06	31.64	1,001.0896	65.92	4,345.4464
2006/07	93.45	8,732.9025	-	-
Sum	**387.08**	**29,780.19**	**367.05**	**23,862.01**
Average	**64.52**		**61.18**	
Standard Deviation (S.D.)	**28.31**		**15.32**	
Coefficient Of Variance (C.V.)	**43.87**		**25.04**	

Appendix: 23

Market Value Per Share of NIBL & HBL

Fiscal Year	X	X²	Y	Y²
2000/01	1,401.00	1,962,801.0000	1,700.00	2,890,000.0000
2001/02	1,150.00	1,322,500.0000	1,500.00	2,250,000.0000
2002/03	760.00	577,600.0000	1,000.00	1,000,000.0000
2003/04	795.00	632,025.0000	836.00	698,896.0000
2004/05	940.00	883,600.0000	840.00	705,600.0000
2005/06	800.00	640,000.0000	920.00	846,400.0000
2006/07	1,260.00	1,587,600.0000	-	-
Sum	**7,106.00**	**7,606,126.00**	**6,796.00**	**8,390,896.00**
Average	**1,015.14**		**1,132.67**	
Standard Deviation (S.D.)	**236.80**		**339.92**	
Coefficient Of Variance (C.V.)	**23.33**		**30.01**	

Appendix: 24

Price Earning Ratio

Fiscal Year	X	X²	Y	Y²
2000/01	26.10	681.2100	20.46	418.6116
2001/02	34.65	1,200.6225	16.03	256.9609
2002/03	22.62	511.6644	16.59	275.2281
2003/04	20.10	404.0100	16.91	285.9481
2004/05	18.18	330.5124	17.12	293.0944
2005/06	20.25	410.0625	19.20	368.6400
2006/07	21.23	450.7129	-	-
Sum	**163.13**	**3,988.79**	**106.31**	**1,898.48**
Average	**23.30**		**17.72**	
Standard Deviation (S.D.)	**5.17**		**1.57**	
Coefficient Of Variance (C.V.)	**22.19**		**8.88**	

Appendix: 25

Book Value Per Share ((n Rs.) of NIBL & HBL

Fiscal Year	X	X²	Y	Y²
2000/01	303.06	91,845.3636	362.72	131,565.7984
2001/02	275.97	76,159.4409	399.42	159,536.3364
2002/03	307.97	94,845.5209	385.00	148,225.0000
2003/04	216.24	46,759.7376	444.26	197,366.9476
2004/05	246.89	60,954.6721	427.44	182,704.9536
2005/06	200.80	40,320.6400	399.19	159,352.6561
2006/07	239.67	57,441.7089	-	-
Sum	**1,790.60**	**468,327.08**	**2,418.03**	**978,751.69**
Average	**255.80**		**403.01**	
Standard Deviation (S.D.)	**38.34**		**26.69**	
Coefficient Of Variance (C.V.)	**14.99**		**6.62**	

Appendix: 26

Correlation Coefficient Between EBIT and Interest Payment Of NIBL

(Rs. In Million)

Fiscal Year	X	Y	x = X - E(X)	y = Y - E(Y)	xy	x²	y²
2000/01	120.80	246.20	(133.45)	(296.3571)	39,548.855	17,808.903	87,827.531
2001/02	167.60	301.20	(86.65)	(241.3571)	20,913.593	7,508.223	58,253.250
2002/03	130.44	284.74	(123.81)	(258.8171)	32,044.145	15,328.916	66,986.291
2003/04	189.21	389.69	(65.04)	(152.8671)	9,942.476	4,230.202	23,368.350
2004/05	326.20	648.76	71.95	106.2028	7,641.291	5,176.803	11,279.035
2005/06	354.55	828.64	100.30	286.0828	28,694.105	10,060.090	81,843.368
2006/07	490.95	1,099.67	237.00	557.0000	132,009.000	56,169.000	310,249.000
Sum	**1,780.00**	**3,798.00**	**-**	**-**	**270,653.106**	**116,140.025**	**639,932.686**
Average	**254.25**	**542.56**					
Correlation Coefficient Between X and Y, rxy =	**0.9928**						
Coefficient of Determination (rxy)2 =	**0.9586**						
Probable Error, P.E. =	**0.0036**						
6 (P.E) =	**0.0219**						

Appendix: 27

Correlation Coefficient Between EBIT and Interest Payment Of HBL

(Rs. In Million)

Fiscal Year	X	Y	x = X - E(X)	y = Y - E(Y)	xy	x^2	y^2
2000/01	594.800	908.496	93.2468	(76.8926)	(7,169.989)	8,694.966	5,912.472
2001/02	734.518	1,165.880	232.9648	180.4913	42,048.120	54,272.598	32,577.109
2002/03	578.134	927.180	76.5808	(58.2086)	(4,457.661)	5,864.619	3,388.241
2003/04	554.128	914.153	52.5748	(71.2356)	(3,745.197)	2,764.110	5,074.511
2004/05	491.543	912.117	(10.0101)	(73.2716)	733.456	100.202	5,368.727
2005/06	56.196	1,084.506	(445.3572)	99.1173	(44,142.603)	198,343.036	9,824.239
2006/07	-	-	-	-	-	-	-
Sum	**3,009.319**	**5,912.332**	**-**	**-**	**(16,733.889)**	**270,039.532**	**62,145.356**
Average	**501.55**	**985.39**					
Correlation Coefficient Between X and Y, rxy =	**(0.1292)**						
Coefficient of Determination (rxy)2 =	**0.0167**						
Probable Error, P.E. =	**0.2707**						
6 (P.E) =	**1.6246**						

Appendix: 28

Correlation Coefficient Between Return and Debt Capital of NIBL

(Rs. In Million)

Fiscal Year	X	Y	x = X - E(X)	y = Y - E(Y)	xy	x²	y²
2000/01	-	-	-	-	-	-	-
2001/02	301.000	3,387.000	(290.7500)	(4,799.3430)	1,395,408.977	84,535.563	23,033,693.232
2002/03	284.000	4,658.000	(308.2100)	(3,527.5430)	1,087,224.028	94,993.404	12,443,559.617
2003/04	390.000	4,600.000	(202.2600)	(3,586.3230)	725,369.690	40,909.108	12,861,712.660
2004/05	649.000	8,525.000	56.8100	339.5170	19,287.961	3,227.376	115,271.793
2005/06	829.000	12,735.000	236.6900	4,549.0570	1,076,716.301	56,022.156	20,693,919.589
2006/07	1,100.000	15,210.000	508.00	7,025.0000	3,568,700.000	258,064.000	49,350,625.000
Sum	**3,552.000**	**49,115.000**	**-**	**-**	**7,870,555.655**	**537,467.204**	**118,493,681.900**
Average	**591.95**	**8,185.84**					
Correlation Coefficient Between X and Y, rxy =	**0.9862**						
Coefficient of Determination (rxy)2 =	**0.9727**						
Probable Error, P.E. =	**0.0075**						
6 (P.E) =	**0.0452**						

Appendix: 29

Correlation Coefficient Between Return and Debt Capital of HBL

(Rs. In Million)

Fiscal Year	X	Y	x = X - E(X)	y = Y - E(Y)	xy	x^2	y^2
2000/01	-	-	-	-	-	-	-
2001/02	908.000	14,993.000	(76.8927)	(5,863.9153)	450,892.280	5,912.487	34,385,502.646
2002/03	1,166.000	18,302.000	180.4913	(2,554.8203)	(461,122.837)	32,577.109	6,527,106.765
2003/04	927.000	19,814.000	(58.2086)	(1,042.8013)	60,700.004	3,388.241	1,087,434.551
2004/05	914.000	22,292.000	(71.2356)	1,434.9706	(102,220.992)	5,074.511	2,059,140.623
2005/06	912.000	23,438.000	(73.2716)	2,580.7386	(189,094.846)	5,368.727	6,660,211.722
2006/07	1,085.000	26,302.920	99.0000	5,446.0000	539,154.000	9,801.000	29,658,916.000
Sum	**5,912.000**	**125,143.000**			**298,929.035**	**62,145.356**	**80,376,436.450**
Average	**958.39**	**20,857.12**					
Correlation Coefficient Between X and Y, rxy =	**0.1337**						
Coefficient of Determination (rxy)2 =	**0.0178**						
Probable Error, P.E. =	**0.2704**						
6 (P.E) =	**1.6226**						

Appendix: 30

Correlation Coefficient Between DER and ROE of NIBL

(Rs. In Million)

Fiscal Year	X	Y	x = X - E(X)	y = Y - E(Y)	xy	x^2	y^2
2000/01	-	-	-	-	-	-	-
2001/02	353.580	12.670	59.3066	(5.2016)	(308.489)	3,517.273	27.057
2002/03	180.700	10.900	(113.5733)	(6.9716)	791.788	12,898.894	48.603
2003/04	261.970	18.290	(32.3033)	0.4183	(13.512)	1,043.503	0.175
2004/05	314.790	20.940	20.5166	3.0683	62.951	420.931	9.414
2005/06	272.180	19.670	(22.0933)	1.7983	(39.730)	488.114	3.234
2006/07	382.420	24.760	88.1466	6.8883	607.180	7,769.823	47.449
Sum	**1,765.640**	**107.230**			**1,100.193**	**26,138.570**	**135.934**
Average	**294.27**	**17.87**					
Correlation Coefficient Between X and Y, rxy =	**0.5836**						
Coefficient of Determination (rxy)2 =	**0.3406**						
Probable Error, P.E. =	**0.1815**						
6 (P.E) =	**1.0893**						

Appendix: 31

Correlation Coefficient Between DER and ROE of HBL

(Rs. In Million)

Fiscal Year	X	Y	x = X - E(X)	y = Y - E(Y)	xy	x²	y²
2000/01	449.970	22.900	143.6900	6.8003	977.139	20,646.816	46.244
2001/02	411.210	23.420	104.9600	7.3233	768.654	11,016.602	53.631
2002/03	365.020	15.650	58.7400	(0.4466)	(26.233)	3,450.388	0.199
2003/04	168.180	11.130	(138.1000)	(4.9666)	685.887	19,071.610	24.667
2004/05	205.510	11.480	(100.7700)	(4.6166)	465.215	10,154.593	21.313
2005/06	237.790	12.000	(68.4900)	(4.0966)	280.576	4,690.880	16.782
2006/07	-	-	-	-	-	-	-
Sum	**1,837.680**	**96.580**	**-**	**-**	**3,151.470**	**69,024.590**	**170.226**
Average	**306.28**	**16.07**					
Correlation Coefficient Between X and Y, rxy =	**0.9194**						
Coefficient of Determination (rxy)2 =	**0.8453**						
Probable Error, P.E. =	**0.0426**						
6 (P.E) =	**0.2556**						

Appendix: 32

Fixed Deposit to Total Liabilities (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	-	-	-	24.69	143.6900	20,646.8161
2001/02	32.35	10.5817	111.9724	25.25	104.9300	11,010.3049
2002/03	18.46	(3.3083)	10.9448	25.71	58.7400	3,450.3876
2003/04	18.25	(3.5183)	12.3784	13.25	(138.1000)	19,071.6100
2004/05	17.04	(4.7283)	22.3568	18.31	(100.7700)	10,154.5929
2005/06	19.60	(2.1683)	4.7015	21.15	(68.4900)	4,690.8801
2006/07	24.91	3.1417	9.8703	-	-	-
Sum	**130.61**	**0.0002**	**172.2243**	**128.36**		**69,024.5916**
Average	**21.7683**			**21.3933**		
S2	**29.2479**					
t	**0.1201**					

Appendix: 33

Fixed Deposit to Total Debt (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	-	-	-	26.13	3.0617	9.3740
2001/02	42.05	17.3850	302.2382	26.92	3.8517	14.8356
2002/03	20.54	(4.1250)	17.0156	27.66	4.5917	21.0837
2003/04	19.62	(5.0450)	25.4520	14.38	(8.6883)	75.4866
2004/05	18.02	(6.6450)	44.1560	20.10	(2.9683)	8.8108
2005/06	21.12	(3.5450)	12.5670	23.22	0.1517	0.0230
2006/07	26.64	1.9750	3.9006	-	-	-
Sum	**147.99**	**-**	**405.3296**	**138.41**	-	**129.6137**
Average	**24.6650**			**23.0683**		
S2	**53.4943**					
t	**0.3781**					

Appendix: 34

Net Worth to Total Liabilities (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	10.81	2.7758	7.71	5.49	(1.9033)	3.6226
2001/02	9.12	1.0858	1.1790	6.14	(1.2533)	1.5708
2002/03	10.22	2.1858	4.7777	7.04	(0.3533)	0.1248
2003/04	6.97	(1.0642)	1.1325	7.88	0.4867	0.2369
2004/05	5.41	(2.6242)	6.8864	8.91	1.5167	2.3004
2005/06	7.20	(0.8342)	0.6959	8.90	1.5067	2.2701
2006/07	6.51	(1.5242)	2.3232	-	-	-
Sum	**56.24**		**24.6998**	**44.36**		**10.1255**
Average	**8.0342**			**7.3933**		
S2	**3.1659**					
t	**0.6475**					

Appendix: 35

Fixed Deposit to Net Worth (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	-	-	-	449.97	143.6900	20,646.8161
2001/02	353.58	59.3100	3,517.6761	411.21	104.9300	11,010.3049
2002/03	180.70	(113.5700)	12,898.1449	365.02	58.7400	3,450.3876
2003/04	261.97	(32.3000)	1,043.2900	168.18	(138.1000)	19,071.6100
2004/05	314.79	20.5200	421.0704	205.51	(100.7700)	10,154.5929
2005/06	272.18	(22.0900)	487.9681	237.79	(68.4900)	4,690.8801
2006/07	382.42	88.1500	7,770.4225	-	-	-
Sum	**1,765.64**	**-**	**26,138.5720**	**1,837.68**	-	**69,024.5916**
Average	**294.2700**			**306.2800**		
S2	**9,516.3160**					
t	**(0.2132)**					

Appendix: 36

Total Debt to Net Worth (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	824.11	(390.450)	152,451.203	1,722.30	424.690	180,361.596
2001/02	993.03	(221.530)	49,075.541	1,527.39	229.780	52,798.848
2002/03	878.68	(335.880)	112,815.374	1,319.61	22.000	484.000
2003/04	1,335.11	120.550	14,532.303	1,169.65	(127.960)	16,373.762
2004/05	1,746.80	532.240	283,279.418	1,022.63	(274.980)	75,614.000
2005/06	1,288.84	74.280	5,517.518	1,024.10	(273.510)	74,807.720
2006/07	1,435.35	220.790	48,748.224	-	-	-
Sum	**8,501.92**		**666,419.580**	**7,785.68**		**400,439.927**
Average	**1,214.5600**			**1,297.6100**		
S2	**96,987.2280**					
t	**(0.4793)**					

Appendix: 37

Fixed Deposit to Capital Employed (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	-	-	-	81.82	8.297	68.845
2001/02	77.957	4.124	17.006	80.44	6.917	47.849
2002/03	64.376	(9.457)	89.439	78.50	4.977	24.774
2003/04	72.374	(1.459)	2.129	62.71	(10.813)	116.914
2004/05	75.889	2.056	4.226	67.27	(6.253)	39.096
2005/06	73.132	(0.701)	0.492	70.40	(3.123)	9.751
2006/07	79.271	5.438	29.570	-	-	-

Sum	**442.999**	**-**	**142.861**	**441.14**	-	**307.230**
Average	**73.8332**			**73.5227**		
S2	**45.0097**					
t	**0.0802**					

BIBLIOGRAPHY

Adhikari, S (2005). A comparative study on capital structure of selected joint venture

banks Kathmandu: T.U.

Alexander, G.J., Sharpe, W.F. & Bailey, J.V. (2002). Fundamentals of Investments.

New Delhi : Prentice-Hall Of India Private Limited.

Alexander, G.J., Sharpe, W.F. & Bailey, J.V. (2002). Investments. New Delhi :

Prentice. Hall of India Private Limited.

Barges, A. (1963). The effect of capital structure on the cost of capital. New Delhi:

Prentice Hall Inc.

Bhalla, V.K. (2004). Investment Management: Security Analysis and Portfolio

Management. New Delhi: S. Chand & Company Ltd.

Bhattarai, R. (2005). Capital structure Management: Theory and practice. Kathamndu:

Dhaulagiri Books and stationary.

Bhole, L.M. (2003). Financial institution and Markets. new Delhi: Tata Mcgraw-Hill.

Board of Directors' Report (2007). Annual Report, Fiscal year 2006/07.Kathmandu:

Himalayan Bank Ltd.

Board of Directors' Report (2007). Annual report, Fiscal Year 2006/07. Kathmandu:

Nepal Investment Bank Ltd.

Brealey, R.A. & Myers, S.C. (2002). Principle of Corporate Finance. New Delhi: Tata McGraw- Hill Publishing Co.Ltd.

Brigham, E.F. (1995). Fundamentals of Financial Management. Chicago: The Dryden press.

Brigham, E.F., Gapenski, L.C. & Ehrhardt, M.C. (1999). Financial Management: Theory and Practice. New Delhi: Harcourt Asia Pte. Ltd.

Brigham, E.F. & Houston, J.F. (2004). Fundamentals of Financial Management, Singapore: Thompson Asia Pte. Ltd.

Chandra, p. (1985). Managers Guide To Finance & Accounting. New Delhi: Tata Mc-Grew Hill Publishing Company Ltd.

Chenny, J.M. & Moses, E.A. (1992). Fundamental of Investment, New York: West Publishing Company.

Dahal, B. & Dahal, S. (2002). A Hand Book to Banking, Kathmandu: Ashmita Books and Stationary.

Dhakal, S. K. (2004). A comparative Analysis of Capital Structure Management between NBBL & HBL, Birganj: Thakur Ram Multiple Campus.

Donald, E.F., Ronald, J.J. (2002). Security Analysis and Portfolio Management. New Delhi: Prentice Hall of India Pvt. Ltd.

Francis, J.C. (1995). Investment analysis and Management. New York: McGrew-Hill.

Gautam, R.R. & Thapa K. (2002). Capital Structure Management, Kathmadu: Ashmita

Books Publishers & Distributors.

Gitman, L. & Meerschaun, D.M. (1991). Managing Financial Institutions. New Delhi: McGrew_Hill.

Gitman, L.J. (2001). Principles of Management Finance. New York: Harper Collins Publishing.

Government of Nepal. (2006). Economic Survey. Kathmandu: Ministry of finance.

Gurung, D.D. (2003). Analysis of capital structure in selected joint venture banks of Nepal. Kathmandu: T.U.

Hampton, J.J. (2001). Financial Decision_Making: Concepts, Problems and Cases. New Delhi: Prentice_Hall of India private limited.

Joshi, P.R. (20050. principle of Investments, Kathmandu: Ashmita Books Publishers and Distributors.

Judith B. (1993). How to complete your Research Project Successfully. New Delhi, USB Publisher.

Keown, M. & Petty, S. (2002). Financial Management: Principles and Application. New Delhi : Prentice – Hall of India Pte / Limited.

Khan. M. Y. & Jain, P.K. (2002). Financial Management : Texts and Problems. New Delhi: Tata McGraw – Hill Publishing Co. Ltd.

Kold, R. & Rodriguez, R. J. (1996). Financial Institutions and Markets. U. K.: Blackwell Publishers.

Kothari, C.R. (1991). Research Methodology Method and Techniques. New Delhi: Willy Eastern Limited.

Mathur, I. (1979). Introduction of Finance Management. New York: Mac Millan Publishing Co. Inc.

Michael, V.P. (2002). Research Methodology in Management, Kathmandu: Himalayan Publishing House.

Mishkin, F.S. (1998). Financial Markets, institutions and Money. New York: Harper Collins College Publishes.

Modigliani, F. & Miller, M.H. (1958). The Cot of Capital, corporation and Theory of the Investment. USA: American Economic Review.

Moyer, R.C., McGulgan, J.R. & Kretlow, W.J. (2003). Contemporary Financial Management. Singapore: South-Western College Publishing.

Nepal Rastra Bank. (2006). Economic Report, Kathmandu: NRB.

Pandey, I.M. (1985). Capital Structure and Cost of Capital. New Delhi: Vikas Publishing House Pvt. Ltd.

Pandey, I. M. (1985). Capital Structure and Cost of Capital. New Delhi: Vikas publishing House Pvt. ltd.

Pandey, I. M. (2003)/ financial management. New Delhi: Vikas Publishing House Pvt.Ltd.

Paudel, R.B., Baral, K.J., Gautam, R.R., Dahal, G.B. & Rana, S.B. (2005) Fundamental of Financial Management. Kathmandu: Asmita Books publishers and Distributors.

Pinches, G.E. & Singlton, J.C. (1998). The adjustment of stock price, Bond Rating change, USA: The Journal of Finance.

Pradhan, S. (2003). Basics of Financial Management. Kathmandu: Educational Enterprises.

Ranjit, K. (1999). Research Methodology. New Delhi: SAGA Publications India Pvt.
Ltd.

Reilly, F.K. (1990). Investment Analysis and Portfolio Management, New York: The
Dryden Press.

Richard, I.L. & David S.R. (1999). Statistics for Management. New Delhi: Prentice-
Hall of India Private Limited.

Robert, S.K. and Anthony A.A. (20020. Advances Management Accounting. New Delhi: Prentice- Hall of India Private Limited.

Ross, P.S. (2002). Commercial Bank Management, New Delhi: Irwin McGraw-Hill

Ross, P.S., Westerfield, R.W.& Jaffe, F.J. (2002). Corporate Financial. Boston: McGraw-Hill Irwin.

Ross, S.A., Westerfild, R.W. & Jorden, B.D. (2003). Fundamentals of Corporate Finance. Delhi: Tata McGraw-Hill Publishing Co. Ltd.

Selltiz, C. & Others (1962). Research Methods in Social Science. New York: Rinchard
& Winston.

Sharpe, W.F.,Aalexander, G. J., Bailey, J.V. (2002). Investment. New Delhi: Prentice
Hall of India Pvt.Ltd.

Shrestha, G.K. (2057 B.S.). Statistics and Quantitative Techniques for Management.
Kathmandu: Valley Publishers.

Shrestha, G.K. (2057 B.S.). The Financial System and the Rural Micro- Financial Services In Nepal. Nepal Rastra Bank Samachar.

Shrestha, K.N. & Manandhar K.D. (2056 B.S.). Statistics And Quantitative techniques
For Management. Kathmandu: Valley Publishers.

Shrestha, M.K. Analysis Of Capital Structure Of Selected Public Enterprises. Kathmandu: Nepalese Journal of Public Administration.

Solaman. E. (1969). The Theory Financial Management. Colombia: Colombia University Press.

Srivastava, R.M. (2002). Financial Management. Meerut: Pragiti Prakashan.

Thapa, K. (20020. Investments. Kathmandu: Asmita Books Publishers And Distributors.

Thapa, K. (2002). A Practice Book Of Business Finance, Kathmandu: Asmita Books
Publishers and Distributors.

Thapa, K. (2002). A practice Boo of Business Finance. Kathmandu: Asmita Books Publishers and Distributors.

Thapa, K. (2004). A Practical Book of Investment Analysis. Kathmandu: Asmita Books Publishers and Distributors.

Thapa, K. (20050. Fundamentals of Investments. Kathmandu; Asmita Books Publishers
and Distributors.

Thapa, K., & Koirala, N. (2004). Corporate Financial Management. Kathmandu: Khanal Books & Stationary.

Thapa, K., Bhattarai, R. & Banet, D. (2006). Investments Theory & Solution. Kathmandu: Asmita Books & Stationary.

Thygerson, K.J. (1992). Financial Market and Institutions: Managerial Approach. USA: Harper Collins College publishers.

Van Horne. J. C. (1976). Financial Management policy. new Delhi; Prentice-Hall of India.

Van Horne, J.C. (2000). Financial Management and Policy. New Delhi: Prentice-Hall of India Private Limited.

Van Horne, J.C. & Wachowiczz Jr., J. M. (2001). Fundamentals of Financial Management. New Delhi: Pearson Education Inc.

Weston, J.F. & Brigham, E.F. (1981). Managerial Finance. Chicago: The Dryden Press.

Weston, J.F. & Brigham, E.F. (1982). Essential Of Management Finance, Chicago: The Dryden Press.

Weston, J.F. & Brigham, E.F.(1982). Managerial Finance, Chicago: the Dryden Press.

Weston, J.F. & Copeland, T.E. (1992). Managerial Finance. new York: The Dryden Press.

Weston, j. F., Besley, S. & Brigham, E.F. (1996). Essential of Managerial Finance. Fort Worth: The Dryden Press.

Willim, F.S., Gordon, J.A. & Jaffery, V.B. (2003). Investments. New Delhi: Prentice-Hall of India Private Limited.

Wolf Howard, K. & Pant, P.R. (2002). Social Science Research& Thesis Writing. Kathmandu: Buddha Academic Publishers & Distributors Pvt.Ltd.

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Appendix: 38

Total Debt to Total Assets (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	89.91	(2.153)	4.635	94.51	1.902	3.618
2001/02	90.85	(1.213)	1.471	93.86	1.252	1.568
2002/03	89.78	(2.283)	5.211	92.96	0.352	0.124
2003/04	93.03	0.967	0.935	92.13	(0.478)	0.228
2004/05	94.58	2.517	6.336	91.09	(1.518)	2.304
2005/06	92.80	0.737	0.543	91.10	(1.508)	2.274
2006/07	93.49	1.427	2.037	-	-	-
Sum	**644.44**		**21.169**	**555.65**		**10.116**
Average	**92.0628**			**92.6080**		
S2	**2.8441**					
t	**(0.5814)**					

Appendix: 39

Interest Coverage Ratio (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	2.04	-	-	1.53	(0.165)	0.027
2001/02	1.797	(0.294)	0.086	1.59	(0.105)	0.011
2002/03	2.175	0.084	0.007	1.60	(0.088)	0.008
2003/04	2.060	(0.031)	0.001	1.65	(0.042)	0.002
2004/05	1.989	(0.102)	0.010	1.86	0.164	0.027
2005/06	2.337	0.246	0.061	1.93	0.238	0.057
2006/07	2.240	0.149	0.022	-	-	-
Sum	**14.636**	**-**	**0.188**	**10.15**	-	**0.131**
Average	**2.0908**			**1.6923**		
S2	**0.0292**					
t	**4.1889**					

Appendix: 40

Equity Capitalization Rate (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	3.83	(0.624)	0.390	4.89	(0.798)	0.637
2001/02	2.86	(1.594)	2.542	6.24	0.552	0.304
2002/03	4.42	(0.034)	0.001	6.03	0.342	0.117
2003/04	4.92	0.466	0.217	5.92	0.232	0.054
2004/05	5.50	1.046	1.093	5.84	0.152	0.023
2005/06	4.94	0.486	0.236	5.21	(0.478)	0.229
2006/07	4.71	0.256	0.065	-	-	-
Sum	**31.18**		**4.544**	**34.13**		**1.364**
Average	**4.4543**			**5.6883**		
S2	**0.5371**					
t	**3.0266**					

Appendix: 41

Return on Deposit (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	-	-	-	1.42	0.137	0.019
2001/02	1.330	(0.165)	0.027	1.60	0.317	0.100
2002/03	1.370	(0.125)	0.016	1.26	(0.023)	0.001
2003/04	1.470	(0.025)	0.001	1.01	(0.273)	0.075
2004/05	1.320	(0.175)	0.031	1.20	(0.083)	0.007
2005/06	1.630	0.135	0.018	1.24	(0.043)	0.002
2006/07	1.850	0.355	0.126	-	-	-
Sum	**8.970**	**-**	**0.218**	**7.73**	-	**0.203**
Average	**1.4950**			**1.2833**		
S2	**1.2833**					
t	**1.7441**					

Appendix: 42

Return on Total Assets (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	1.91	0.546	0.298	1.26	0.120	0.014
2001/02	1.10	(0.264)	0.070	1.44	0.300	0.090
2002/03	1.11	(0.254)	0.065	1.14	-	-
2003/04	1.27	(0.094)	0.009	0.91	(0.230)	0.053
2004/05	1.13	(0.234)	0.055	1.02	(0.120)	0.014
2005/06	1.42	0.056	0.003	1.07	(0.070)	0.005
2006/07	1.61	0.246	0.061	-	-	-
Sum	**9.55**		**0.560**	**6.84**		**0.177**
Average	**1.3640**			**1.1400**		
S2	**0.0699**					
t	**1.5583**					

Appendix: 43

Return on Capital Employed (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	-	-	-	4.16	0.232	0.054
2001/02	2.650	(1.860)	3.460	4.58	0.652	0.425
2002/03	3.890	(0.620)	0.384	3.37	(0.558)	0.312
2003/04	5.050	0.540	0.292	4.15	0.222	0.049
2004/05	5.050	0.540	0.292	3.76	(0.168)	0.028
2005/06	5.290	0.780	0.608	3.55	(0.378)	0.143
2006/07	5.130	0.620	0.384	-	-	-
Sum	**27.060**	**-**	**5.420**	**23.57**	-	**1.011**
Average	**4.5100**			**3.9283**		
S2	**0.6431**					
t	**1.2563**					

Appendix: 44

Return on Equity (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	13.89	(3.413)	11.647	22.90	6.803	46.285
2001/02	12.67	(4.633)	21.463	23.42	7.323	53.631
2002/03	10.90	(6.403)	40.996	15.65	(0.447)	0.200
2003/04	18.29	0.987	0.975	11.13	(4.967)	24.668
2004/05	20.94	3.637	13.229	11.48	(4.617)	21.314
2005/06	19.67	2.367	5.604	12.00	(4.097)	16.783
2006/07	24.76	7.457	55.610	-	-	-
Sum	**121.12**		**149.523**	**96.58**		**162.880**
Average	**17.3028**			**16.0967**		
S2	**28.4003**					
t	**0.4068**					

Appendix: 45

Earning Per Share (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	53.68	-	-	83.80	19.793	391.775
2001/02	33.180	(11.186)	125.120	93.57	29.563	873.989
2002/03	33.590	(10.776)	116.116	60.26	(3.747)	14.038
2003/04	39.560	(4.806)	23.095	49.45	(14.557)	211.898
2004/05	51.700	7.334	53.792	49.05	(14.957)	223.703
2005/06	39.500	(4.866)	23.675	47.91	(16.097)	259.104
2006/07	59.350	14.984	224.529	-	-	-
Sum	**310.560**	**-**	**566.327**	**384.04**	-	**1,974.505**
Average	**44.3657**			**64.0067**		

S2	**238.8716**
t	**2.2842**

Appendix: 46

Dividend Per Share (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	25.00	6.500	42.250	50.00	26.920	724.686
2001/02	-	-	-	27.50	4.420	19.536
2002/03	-	-	-	25.00	1.920	3.686
2003/04	20.00	1.500	2.250	1.32	(21.760)	473.498
2004/05	15.00	(3.500)	12.250	-	-	-
2005/06	12.50	(6.000)	36.000	11.58	(11.500)	132.250
2006/07	20.00	1.500	2.250	-	-	-
Sum	**92.50**		**95.000**	**115.40**		**1,353.657**
Average	**18.5000**			**23.0800**		
S2	**181.0821**					
t	**(0.5381)**					

Appendix: 47

Dividend Payout Ratio (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	93.14	28.622	819.202	90.27	29.095	846.519
2001/02	-	-	-	61.45	0.275	0.076
2002/03	89.310	24.792	614.628	58.08	(3.095)	9.579
2003/04	50.560	(13.958)	194.834	50.56	(10.615)	112.678
2004/05	29.010	(35.508)	1,260.839	40.77	(20.405)	416.364
2005/06	31.640	(32.878)	1,080.983	65.92	4.745	22.515
2006/07	93.450	28.932	837.043	-	-	-
Sum	**387.110**	**-**	**4,807.529**	**367.05**	-	**1,407.731**
Average	**64.5183**			**61.1750**		

S2	**621.5260**
t	**0.2322**

Appendix: 48

Market Value Per Share (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	1,401.00	385.857	148,885.702	1,700.00	567.333	321,866.733
2001/02	1,150.00	134.857	18,186.437	1,500.00	367.333	134,933.533
2002/03	760.00	(255.143)	65,097.899	1,000.00	(132.667)	17,600.533
2003/04	795.00	(220.143)	48,462.896	836.00	(296.667)	88,011.309
2004/05	940.00	(75.143)	5,646.455	840.00	(292.667)	85,653.973
2005/06	800.00	(215.143)	46,286.467	920.00	(212.667)	45,227.253
2006/07	1,260.00	244.857	59,954.999	-	-	-
Sum	**7,106.00**		**392,520.857**	**6,796.00**		**693,293.333**
Average	**1,015.1429**			**1,132.6670**		
S2	**98,710.3810**					
t	**(0.6723)**					

Appendix: 49

Price Earning Ratio (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	26.10	2.796	7.816	20.46	2.742	7.517
2001/02	34.650	11.346	128.727	16.03	(1.688)	2.850
2002/03	22.620	(0.684)	0.468	16.59	(1.128)	1.273
2003/04	20.100	(3.204)	10.267	16.91	(0.808)	0.653
2004/05	18.180	(5.124)	26.257	17.12	(0.598)	0.358
2005/06	20.250	(3.054)	9.328	19.20	1.482	2.195
2006/07	21.230	(2.074)	4.302	-	-	-
Sum	**163.130**	**-**	**187.167**	**106.31**	-	**14.847**
Average	**23.3042**			**17.7183**		
S2	**18.6490**					
t	**2.3429**					

Appendix: 50

Book Value Per Share (%)

Fiscal Year	X1	x1	$x1^2$	X2	x2	$x2^2$
2000/01	303.06	47.260	2,233.508	362.72	(40.285)	1,622.881
2001/02	275.94	20.140	405.620	399.42	(3.585)	12.852
2002/03	307.97	52.170	2,721.709	385.00	(18.005)	324.180
2003/04	216.24	(39.560)	1,564.994	444.26	41.255	1,701.975
2004/05	246.89	(8.910)	79.388	427.44	24.435	597.069
2005/06	200.80	(55.000)	3,025.000	399.19	(3.815)	14.554
2006/07	239.67	(16.130)	260.177	-	-	-
Sum	**1,790.57**		**10,290.395**	**2,418.03**		**4,273.512**
Average	**255.800**			**403.005**		
S2	**1,324.1015**					
t	**(7.2713)**					

BIBLIOGRAPHY

Adhikari, S (2005). A comparative study on capital structure of selected joint venture

banks Kathmandu: T.U.

Alexander, G.J., Sharpe, W.F. & Bailey, J.V. (2002). Fundamentals of Investments.

New Delhi : Prentice-Hall Of India Private Limited.

Alexander, G.J., Sharpe, W.F. & Bailey, J.V. (2002). Investments. New Delhi :

Prentice. Hall of India Private Limited.

Barges, A. (1963). The effect of capital structure on the cost of capital. New Delhi:

Prentice Hall Inc.

Bhalla, V.K. (2004). Investment Management: Security Analysis and Portfolio

Management. New Delhi: S. Chand & Company Ltd.

Bhattarai, R. (2005). Capital structure Management: Theory and practice. Kathamndu:

Dhaulagiri Books and stationary.

Bhole, L.M. (2003). Financial institution and Markets. new Delhi: Tata Mcgraw-Hill.

Board of Directors' Report (2007). Annual Report, Fiscal year 2006/07.Kathmandu:

Himalayan Bank Ltd.

Board of Directors' Report (2007). Annual report, Fiscal Year 2006/07. Kathmandu:

Nepal Investment Bank Ltd.

Brealey, R.A. & Myers, S.C. (2002). Principle of Corporate Finance. New Delhi: Tata McGraw- Hill Publishing Co.Ltd.

Brigham, E.F. (1995). Fundamentals of Financial Management. Chicago: The Dryden press.

Brigham, E.F., Gapenski, L.C. & Ehrhardt, M.C. (1999). Financial Management: Theory and Practice. New Delhi: Harcourt Asia Pte. Ltd.

Brigham, E.F. & Houston, J.F. (2004). Fundamentals of Financial Management, Singapore: Thompson Asia Pte. Ltd.

Chandra, p. (1985). Managers Guide To Finance & Accounting. New Delhi: Tata Mc-Grew Hill Publishing Company Ltd.

Chenny, J.M. & Moses, E.A. (1992). Fundamental of Investment, New York: West Publishing Company.

Dahal, B. & Dahal, S. (2002). A Hand Book to Banking, Kathmandu: Ashmita Books and Stationary.

Dhakal, S. K. (2004). A comparative Analysis of Capital Structure Management between NBBL & HBL, Birganj: Thakur Ram Multiple Campus.

Donald, E.F., Ronald, J.J. (2002). Security Analysis and Portfolio Management. New Delhi: Prentice Hall of India Pvt. Ltd.

Francis, J.C. (1995). Investment analysis and Management. New York: McGrew-Hill.

Gautam, R.R. & Thapa K. (2002). Capital Structure Management, Kathmadu: Ashmita

Books Publishers & Distributors.

Gitman, L. & Meerschaun, D.M. (1991). Managing Financial Institutions. New Delhi: McGrew_Hill.

Gitman, L.J. (2001). Principles of Management Finance. New York: Harper Collins Publishing.

Government of Nepal. (2006). Economic Survey. Kathmandu: Ministry of finance.

Gurung, D.D. (2003). Analysis of capital structure in selected joint venture banks of Nepal. Kathmandu: T.U.

Hampton, J.J. (2001). Financial Decision_Making: Concepts, Problems and Cases. New Delhi: Prentice_Hall of India private limited.

Joshi, P.R. (20050. principle of Investments, Kathmandu: Ashmita Books Publishers and Distributors.

Judith B. (1993). How to complete your Research Project Successfully. New Delhi, USB Publisher.

Keown, M. & Petty, S. (2002). Financial Management: Principles and Application. New Delhi : Prentice – Hall of India Pte / Limited.

Khan. M. Y. & Jain, P.K. (2002). Financial Management : Texts and Problems. New Delhi: Tata McGraw – Hill Publishing Co. Ltd.

Kold, R. & Rodriguez, R. J. (1996). Financial Institutions and Markets. U. K.: Blackwell Publishers.

Kothari, C.R. (1991). Research Methodology Method and Techniques. New Delhi: Willy Eastern Limited.

Mathur, I. (1979). Introduction of Finance Management. New York: Mac Millan Publishing Co. Inc.

Michael, V.P. (2002). Research Methodology in Management, Kathmandu: Himalayan Publishing House.

Mishkin, F.S. (1998). Financial Markets, institutions and Money. New York: Harper Collins College Publishes.

Modigliani, F. & Miller, M.H. (1958). The Cot of Capital, corporation and Theory of the Investment. USA: American Economic Review.

Moyer, R.C., McGulgan, J.R. & Kretlow, W.J. (2003). Contemporary Financial Management. Singapore: South-Western College Publishing.

Nepal Rastra Bank. (2006). Economic Report, Kathmandu: NRB.

Pandey, I.M. (1985). Capital Structure and Cost of Capital. New Delhi: Vikas Publishing House Pvt. Ltd.

Pandey, I. M. (1985). Capital Structure and Cost of Capital. New Delhi: Vikas publishing House Pvt. ltd.

Pandey, I. M. (2003)/ financial management. New Delhi: Vikas Publishing House Pvt.Ltd.

Paudel, R.B., Baral, K.J., Gautam, R.R., Dahal, G.B. & Rana, S.B. (2005) Fundamental of Financial Management. Kathmandu: Asmita Books publishers and Distributors.

Pinches, G.E. & Singlton, J.C. (1998). The adjustment of stock price, Bond Rating change, USA: The Journal of Finance.

Pradhan, S. (2003). Basics of Financial Management. Kathmandu: Educational Enterprises.

Ranjit, K. (1999). Research Methodology. New Delhi: SAGA Publications India Pvt.
Ltd.

Reilly, F.K. (1990). Investment Analysis and Portfolio Management, New York: The
Dryden Press.

Richard, I.L. & David S.R. (1999). Statistics for Management. New Delhi: Prentice-
Hall of India Private Limited.

Robert, S.K. and Anthony A.A. (20020. Advances Management Accounting. New Delhi: Prentice- Hall of India Private Limited.

Ross, P.S. (2002). Commercial Bank Management, New Delhi: Irwin McGraw-Hill

Ross, P.S., Westerfield, R.W.& Jaffe, F.J. (2002). Corporate Financial. Boston: McGraw-Hill Irwin.

Ross, S.A., Westerfild, R.W. & Jorden, B.D. (2003). Fundamentals of Corporate Finance. Delhi: Tata McGraw-Hill Publishing Co. Ltd.

Selltiz, C. & Others (1962). Research Methods in Social Science. New York: Rinchard
& Winston.

Sharpe, W.F.,Aalexander, G. J., Bailey, J.V. (2002). Investment. New Delhi: Prentice
Hall of India Pvt.Ltd.

Shrestha, G.K. (2057 B.S.). Statistics and Quantitative Techniques for Management.
Kathmandu: Valley Publishers.

Shrestha, G.K. (2057 B.S.). The Financial System and the Rural Micro- Financial Services In Nepal. Nepal Rastra Bank Samachar.

Shrestha, K.N. & Manandhar K.D. (2056 B.S.). Statistics And Quantitative techniques
For Management. Kathmandu: Valley Publishers.

Shrestha, M.K. Analysis Of Capital Structure Of Selected Public Enterprises. Kathmandu: Nepalese Journal of Public Administration.

Solaman. E. (1969). The Theory Financial Management. Colombia: Colombia University Press.

Srivastava, R.M. (2002). Financial Management. Meerut: Pragiti Prakashan.

Thapa, K. (20020. Investments. Kathmandu: Asmita Books Publishers And Distributors.

Thapa, K. (2002). A Practice Book Of Business Finance, Kathmandu: Asmita Books
Publishers and Distributors.

Thapa, K. (2002). A practice Boo of Business Finance. Kathmandu: Asmita Books Publishers and Distributors.

Thapa, K. (2004). A Practical Book of Investment Analysis. Kathmandu: Asmita Books Publishers and Distributors.

Thapa, K. (20050. Fundamentals of Investments. Kathmandu; Asmita Books Publishers
and Distributors.

Thapa, K., & Koirala, N. (2004). Corporate Financial Management. Kathmandu: Khanal Books & Stationary.

Thapa, K., Bhattarai, R. & Banet, D. (2006). Investments Theory & Solution. Kathmandu: Asmita Books & Stationary.

Thygerson, K.J. (1992). Financial Market and Institutions: Managerial Approach. USA: Harper Collins College publishers.

Van Horne. J. C. (1976). Financial Management policy. new Delhi; Prentice-Hall of India.

Van Horne, J.C. (2000). Financial Management and Policy. New Delhi: Prentice-Hall of India Private Limited.

Van Horne, J.C. & Wachowiczz Jr., J. M. (2001). Fundamentals of Financial Management. New Delhi: Pearson Education Inc.

Weston, J.F. & Brigham, E.F. (1981). Managerial Finance. Chicago: The Dryden Press.

Weston, J.F. & Brigham, E.F. (1982). Essential Of Management Finance, Chicago: The Dryden Press.

Weston, J.F. & Brigham, E.F.(1982). Managerial Finance, Chicago: the Dryden Press.

Weston, J.F. & Copeland, T.E. (1992). Managerial Finance. new York: The Dryden Press.

Weston, j. F., Besley, S. & Brigham, E.F. (1996). Essential of Managerial Finance. Fort Worth: The Dryden Press.

Willim, F.S., Gordon, J.A. & Jaffery, V.B. (2003). Investments. New Delhi: Prentice-Hall of India Private Limited.

Wolf Howard, K. & Pant, P.R. (2002). Social Science Research& Thesis Writing. Kathmandu: Buddha Academic Publishers & Distributors Pvt.Ltd.

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