CHAPTER – - ONE

INTRODUCTION

1.1 General Background:

Finance is the life blood of the economic development of any country. Every kinds of organization such as profit making or non- profit making organization need finance to achieve its objectives and goal. Financial analysis is a technique of analyzing the financial statement i.e. income statement, balance sheet, trial-balance and cash flow statements etc. of any organization by which we can identify the financial strength and weaknesses of the concern organization by establishing proper relationship between the items of the financial statements. Balance sheet shows the financial position of the concerned organization at a particular date in terms of assets structure and liability and capital structure. At the same time, income statement shows the profitability of the concern organization during the specified period.

The focus of the financial analysis is on the key items of the financial statement and significant relationship between them. Financial analysis helps to obtain the better understanding about the firms, financial position and its performance.

By means of financial analysis, we can assess the present and future strength and weaknesses of the concern organization in terms of liquidity, solvency, profitability, operational efficiency etc.

In general, bank means an institution that deals with money. It is a kind of financial institution that plays a significant role in the development of the country. The history of banking transaction is as old as our civilization. The concept of banking had emerged an ancient period with the best effort of goldsmith who practiced storing peoples gold and valuables goods for nominal charge against the deposit. At that time people deposited their gold and valuable goods for the sake of security rather than interest earning. Now a day people deposit their money at bank not only for the sake of security but to earn interest. Mostly at that time goldsmith performed this task, but now a day various types of bank have been acting in this field. The word Bank was originated from the French word 'Banque' Bank plays vital role for the economic

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development of the country by collecting money from the different parts of the country as a small part of the saving of the people and investing them as a huge parts of investment to the profitability opportunity through the businessman of the country. Bank helps to mobilize the ideal resources to the profitable opportunity and economic development of the country.

The origin of traditional banking is traced bank to the Babylonians and Athenians period but the first modern banks are the Bank of Venice (1171 A.D.), the Bank of Geneva (1320 A.D.) and Bank of Amsterdam (1609 A.D.).

Commercial banks deserve special recognition because of their capacity to create money in the form of demand deposit. Commercial banks are mainly established to facilitate the development of trade and commercial sectors of the country. The first commercial bank was Bank of England (1694 A.D.), the central bank of Britain.

"A Bank is a business organization that receives and holds deposits from others, lends loans or extends credit and transforms funds by written orders of depositors"- (Encyclopedia, The World Book America, 1984).

"The business in banking is one of the collecting funds from the community and extending credit (making loans) to people for useful purpose. Banks have played a pivotal role in moving money from lenders to borrowers. Banking is a profit seeking business not a community charity. As a profit seeker it is expected to pay dividends and otherwise add to the wealth of its shareholders". (Edimister, 1980).

"Banking institutions are inevitable for the resources mobilization and all around development of the country. They have resources for economic development and they maintain economic confident of various segments and extend credit to people"- (Grywnshki, 1993).

Banking concept existed even in the ancient period when the goldsmith and the rich people used to issue receipt to the common people against the promise to safe keeping of their valuable items on the presentation of the receipt, the depositors would get back their gold and valuable goods after paying a small amount for the safe-keeping and saving. (Samuelson).

Banks give different types of services to the people such as collection of deposit from the public, granting loans to the investors in different profitable sectors, overdraft

guarantee, letter of credit, discounting bills, promissory notes, selling of shares, agency functions etc.

Development history of the financial institutions in Nepal is not very long. The history of banking in Nepal begins with the establishment of Nepal Bank Limited in 1994 B.S. as the first commercial in Nepal. After that Nepal Rastra Bank, the central bank of Nepal was established in 2013 B.S. That was fully owned by the government. After that so many commercial banks were established gradually. The development of financial institutions was accelerated, when the Nepal government adopted liberal economic policy in 1980's A.D. After that so many private banks are coming into operation.

"A commercial bank is the one which exchange money, deposit money, accept deposits grant loan and performs commercial banking functions and which is not a bank meant for co-operative, agriculture, industries as for such specific purpose." (Nepal Commercial Bank Act, 2031 B.S.).

Indian company Acts defines banking as the accepting for the purpose of lending or investment of deposit of money from the public repayable on demand or otherwise, and withdraw able by cheque, draft or otherwise.

After adopting the liberal economic policy by the Nepal government so, many private joint-venture banks were established. The first joint-venture bank in Nepal is Nepal Arab Bank Limited (2041 B.S.).

Now there are about 26 commercial banks in operation. Out of which two are under the government control and rest 24 are joint- venture and non government owned.

Bank can be defined as a financial intermediary between depositors and entrepreneurs. It is a financial institution that accepts deposits and channels the money into leading activities. Commercial banks are the supplier of funds for the development of trade and industry in the country. Banks play a vital role in the economic and financial life of the country. Banks help to formulate capital by collecting the deposit from the general public and investing these deposits into the productive sectors.

Capital is the most important and key factors for the development, overall growth and prosperity of the nation. Banks make easier to formulate capital. So "A sound banking

system is important because of the key roles it plays in the economy: intermediation, maturity, transformation, facilitating payment flows, credit allocation and maintaining financial discipline among borrowers. Banks provide important positive externalities as gathering of saving, allocation of resources and provides of liquidity and payment services." (Lindgreen, Gilliam and Soal, 1996).

Modern banks do not perform only the traditional functions but also perform the vital roles for developing of the country. The roles of the commercial banks are significant not only in making investment on the development of different sectors of the economy but also important in reducing poverty by providing the employment opportunities and minimizing disparity income and wealth.

It has already been stated that commercial banks are the most effective means for mobilizing the country's resources efficiently and effectively to accelerate the development of the national economy. The commercial banks therefore are called the engine of economic growth in the modern age of liberalization and privatization and they play as such as important role for capital formation as the heart plays in the circulation of blood in the human body.

1.2 Statement of the Problem:

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In response to the liberal economic policy adapted by the Nepal government, so many private owned commercial banks, development banks, finance companies, co-operatives and insurance companies has been established. But most of the financial institutions like commercial banks are concerned at urban area of the country. These types of establishment can not contribute to the socio-economic development of the country where 90% of the population lives in rural area and about 80% population depends upon agriculture. So, it is necessary that, these commercial banks should extend their operation to the rural area of the country. But these banks ignored the aspect of Nepal Rastra Bank. Which is compulsory investment of 12% of the total investment in the rural area; these banks are inclined to pay fines rather than investing their resources in the less profitable sectors. This problem remains to be solved, if they follow NRB's introduction then the small investors in the rural area will be benefit able from the service of such bank. Besides these problem, resources are not properly utilized due to some reasons i.e. not able to perform the activities for which they have been established. Out of so many commercial banks, two commercial banks i.e. Nepal Investment Bank Limited and Himalayan Bank Limited are selected as

sample to analysis the problem associated with these banks in terms of their financial performance.

Environment is dynamic in nature. So, these banks should explore their strength and weaknesses and try to improve their performance to remain effective, well performing, competitive and profitable in the changing environment accordingly.

The following specific problems have been identified associated with these two sample banks:

- What are the competitive position of these two banks in terms of liquidity, leverage standing, profitability and capital structure?
- Whether these two sample banks Nepal Investment Bank Ltd. and Himalayan Bank Ltd. are able to mobilize the resources into investment properly or not?
- Is the return provided by the Nepal Investment Bank Limited and Himalayan Bank Limited adequate to bear the risk level satisfactorily?
- Whether the two sample banks Nepal Investment Bank Limited and Himalayan Bank Limited manage their capital structure very optimally?

1.3 Objectives of the Study:

This study is the comparative study of financial performance of the two commercial banks, Nepal Investment Bank Limited and Himalayan Bank Limited. All the financial information of bank is shown by the financial analysis. Therefore the main objective of this study is to find out exact financial performance of these two commercial banks over the periods of time. Again the basic objective of this study is to examine the overall financial performance of the selected commercial bank. More specifically, the study has been under taken:

- To analyze ~~explore~~ the financial performance of Nepal Investment Bank Ltd. and Himalayan Bank Ltd.

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- To ~~compare~~ examine the liquidity position, profitability status, leverage standing and activity of these banks.

- To ~~compare~~ analyze the growth trends of total deposit collection, loan disbursement and investment pattern of these sample banks.

1.4 Importance of the Study:

This study is the comparative study of two commercial banks Nepal Investment Bank Limited and Himalayan Bank Limited in terms of financial performance so; this study will be beneficial to the concerned two banks and other interested stakeholders by the following way:

- This study will help to the management of the concerned banks to know their key competitiveness of their banks.

- Policy maker of these banks will also be benefited by knowing the key strength and weakness of their banks. That helps them to formulate the appropriate policy.

- Lenders and borrowers of these banks will also be benefited by knowing the actual liquidity position and leverage rating of the banks.

- From this study share holders will come to know the actual profitability and actual worth of the bank in terms of their investment.

- Nepal Rastra Bank will also be able to know whether these banks were followed the rules and regulation.

- Likewise, other similar commercial banks will also be benefited from this study etc.

1.5 Limitation of the Study:

In this study, I tried my best for carry out the factual result. Despite sample efforts on the part of the researcher, this study is also not free from limitations. This is mainly

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due to the time and resources constraints on the part of the researcher which can be presented as follows:

- This study is based on the secondary data provided by Nepal Investment Bank Ltd. and Himalayan Bank Ltd. As far as the output concerned, any research based on secondary data is not far from limitations due to inherent character.
- The result of this study is based upon only the five years financial data of concerned bank.
- This study is limited only to the financial performance of the concerned bank. It could not cover the overall performance of the bank.
- In this study, just two commercial banks are selected as sample bank.
- In this study appropriate methods and techniques could not be used.
- This study may not able to show the real financial performance of all the commercial bank due to small number of samples.

1.6 Organization of the Study:

This study has been organized into five chapters, the overall background of the study has been included in chapter one. Chapter one further contains statement of the problem, objectives of the study, significance of the study, limitations of the study and general introduction of selected sample bank. Where as chapter two contains conceptual review, brief review to related literature available, it also included the review of article, journals, books and major studies.

Research methodology employed in the study is stated in chapter three. It consists of research design, sources of data, popular and sample. Statistical and financial tools of which will be used to analyze the data. Collected data were presented and analyzed in chapter four with logical manner.

At last in chapter five, summary and conclusion of the study are presented. Moreover, suggestion for problem improvement will also be recommended in the same chapter. Bibliography and appendixes have been incorporated at the end of this study.

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CHAPTER - TWO -2

REVIEW OF LITERATURE

2.1 Introduction:

Review of literature is the study of previous research report, article, books, and journals in the related field or topic for finding the past study's conclusion and deficiencies that may be known for further research. It will help to find gap between the previous study and current research topic. So literature review is the most essential part of every study. It helps to know what other study in the area of our problem has uncovered. So, literature review avoids the investigating problems that have already been answered.

Therefore, more specifically, in this chapter the following areas have been reviewed:

- Conceptual Review.
- Review of Books.
- Review of Journals and Articles.
- Review of previous thesis.
- Research Gap etc.

2.2 Conceptual Review of Financial Analysis:

Every business organization is established with the objective of earning the profit. Bank is also established with the same motives. Profit is necessary for the long term existence of the business. Every investor wants to invest their money in profitable area. Financial statement is the indicator of business performance in terms of its strength and weaknesses and profitability. Therefore, the financial analysis reflects the financial position of a firm; financial statement analysis is helpful to the decision maker for finding out favorable or unfavorable situation of a business concern.

"The main function of financial analysis is the pointing out the strength and weaknesses of a business undertaking by regrouping and analysis the figures contains

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in financial statement by making composition of various components and by examining their content. This can be used by financial managers as the basis to plan future financial requirements by means of forecasting budgeting procedures" (Man Mohan and Goyal S.N. 1997).

Financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single set of statement and study of trends of these factors as shown in a series of statements (Myer, 1961).

"Financial statement analysis involves a comparison of a firm's performance with that of other firms in the same line of business, which offers is identified by the firm's industry classification. Generally, speaking the analysis is used to determine the firms financial position in order to identify its current strength and weakness and to suggest actions that might enable the firm to take advantage of its strength and correct its weakness" (Weston, Besley and Brigham, 1996).

"Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by property establishing relationship between the items of the balance sheet and the profit and loss account. Management of the firm can undertake it or by parties outside the firm" (Pandey, 1997).

Financial analysis focused on the key figure contained in the financial statement and significant relationship between them. Management of the firm is generally interested in every aspect of the financial analysis, which is responsible for the overall efficient and effective utilization of the available resources and financial position of the firm.

By analyzing the financial statement, every firm can determine their financial soundness in terms of profitability, interest payment ability, debt maturity dividend policy, capital structure and so on.

"Financial analysis is used primarily to gain insight into operating financial problems confirming the firms, with respect to this problem, we must be careful to distinguish between the causes of problem and symptom of it" (Hampton, 1998).

It is thus an attempt to direct the financial statements into their components on the basis of purpose in hand and establish relationship as between these components and totals of these items on the other. Among with this a study of various important

factors over the past several years is also undertaken to have clear understanding of changing profitability and financial condition of the business organization.

"It is the process of determining the significant of operating and financial statement. The goal of such analysis is to determining the efficiency and performance of the firm's management. As reflected in the financial records and reports" (Hampton,, 1998).

"Financial analysis is to analyze the achieved statement to see, if the results meet the objectives of the firm, to identify problem. If any, in the past or present and or likely to be in the future and to provide recommendation to solve the problem." (Pradhan, 2000).

"Financial analysis is process of identifying the financial strength and weakness of the firm by establishing relationship between the items of the balance sheet, which represents analysis snapshot of the firm's financial position analysis at analysis moment in the time and text, income statement, that depots analysis summary of the firm's profitability overtime" (Vanhom and Watchowlcz, 1997).

"Thus, the analysis of financial statement is an important aid to financial analysis. It is helpful in assessing the financial position and profitability of concerned business organization" (Pandey, 1979).

"For the finanancial analysis of any firm, the vertical and horizontal analysis would be done. The vertical analysis consists of financial balance sheet. Profit and loss account of certain period of time only which is know as static analysis. And the horizontal analysis consist of a series of statement relating to the number of years are reviewed and analyzed. It is also known as dynamic analysis that measure the changes of the position trend of business over the number of years" (Thapa, 2003). Here, horizontal study has been done for the purpose of finding out the key financial indicators of the NIBL and HBL over the period of fiscal year 2003/04 to 2007/08.

To find and evaluate the financial performance of the firm, raio analysis is taken as an effective tool. Ratio analysis is a way of establishing the relationship between items which are expressed as percentage, fraction or proportion of numbers. Ratio analysis enables us to summarize the large number of quantities date and analysis it in a simple way. "Financial ratio helps us to find out the symptoms of the operational and

financial problem of a corporation which can be ascertained by examining the behavior of these ratios" (Dr. Pradhan, 1986).

"A ratio helps to the researcher to make quantities judgment about the firms' financial position and performance" (Webster's, 1975).

"Ratio analysis is the systematic use of financial information of the firm's strength and weakness as its historical performance and current financial condition can be determined." (Weston and Brigham, 1987)

Ratio analysis is a powerful tool of financial analysis, which helps in identifying strength and weakness of business concerns. It is an important way to present the meaningful relationship between components of financial statement. So, ratio analysis is a major tool which can be used to interpret and evaluate the financial statement.

2.3 Review of Books:

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In this section relevant books have been reviewed.

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The oxford dictionary define bank as "An establishment for keeping money and valuable goods safely, the money being out the customers order by means of cheque."

The Cambridge dictionary define bank as "An organization where people and business can invest or borrow money, change it to foreign money etc; or a building where these service are offered."

The Encyclopedia American define bank as "A business organization that receives and holds deposits of fund from other makes lean or extends credit and transforms fund by written order of deposits" (1984).

Dr. Mali Ram defines bank in traditionally "Banking means the accepting, for the purpose of lending or investing the deposit of money from the public repayable by cheques, drafts, and orders or otherwise" (Dr. Mali Ram, 1969).

R.S. Sayer defines modern bank as "Ordinary banking business consist of changing cash for bank deposit and bank deposits from one person to corporation come depositor to another, giving bank deposit in exchange for bill of exchange. Government banks, secured and unsecured promises businessman to repay" (Sayers,1976).

E.S. Klise define bank as “A bank’s business is basically to buy and sell credit, credit instruments are its stock in trade. Also on the banks of its credit a bank created money by transferred by credit instruments” (Klise, 1972).

American Institute of Banking defines commercial bank as “Commercial bank is a corporation which accepts demand deposits, subject to cheques and makes shot-term loan to business enterprises regardless of the scope of its other service” (American Institute of Banking, 1972).

Reed, Cotter and Smith say in their book Commercial Banking, “Commercial banks are the heart of financial system. They hold the deposits of money of persons, government establishment and business units. They make fund available through their landing and investing activities to borrowers, individuals, business firms, services, from the producer to customers and for the government too. These facts show that the commercial banking system of the nation is important to the fractioning of the economy” (Reed, Cotter and Smith, 1976).

I.M. Pandey in his book, Financial Management says, liquidity is other financial indicator of the business enterprises, “A firm should ensure that it does not suffer from lack of liquid. And also that it is not too much highly liquid. The failure of a company to meet its obligations, due to lack of sufficient liquidity will result in bad credit image. Loss of creditor’s confidences or even in low suits resulting in the closure of the company. A very high degree of liquidity is also bad; idle assets earn nothing. The firm’s fund will be unnecessarily tied up in current assets. Therefore, it is necessary to strike a proper balance between liquidity and lack of liquid” (Pandey, 1994).

Weston, Besley and Brigham in their book, Essentials of Managerial Finance say “Financial Statement analysis is useful both as a way to anticipate future conditions and more important as a starting point for planning actions that will influence the future course of action” (Wleston, Besley and Brigham, 1996).

Metcalf and Titard say, “Analysis of financial performance is a process of evaluating financial statement obtains a better understanding of a firm’s position and performance” (Metcaff and Tilard, 1976).

James C. Van Horne in his book Financial Management and policy says, “Analysis and interpretation of various ratios should give experienced, skilled, analysis a better

understanding of the financial condition and performance of the firm that they would obtain from analysis of the financial data alone" (Van Horne, 2005).

Weston, Basley and Brigham in their book Essentials of Managerial Finance say, "An analysis of the firm's ratios generally is the first step in a financial analysis. The ratios are designed to show relationship between financial statement accounts within firm and between the firms" (Weston, Basley, and Brigham, 1996).

Madhav Prasad Aryal in his book "Nepalese Banking System" highlights the following characteristics of the commercial bank operating in Nepal:

- Commercial banks having limited liability are established under the company Act 2001 with the approval of the Nepal Rastra Bank.
- Commercial banks are established with the objective of profit maximization are managed to shareholders.
- Commercial banks, except performing functions of accepting deposit and lending, also deal in the foreign exchange and trade finance activities.
- Commercial banks in Nepal are established in government, semi-government, private and joint-venture sectors.
- Nepal Rastra Bank recommends, directs and controls the establishment, operation and dissolutions of all the commercial bank in Nepal.

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R.M. Dangol and Jeetendra Dangol in their book "Management Accounting" says "Analysis of financial statement means a study of relationship among the various financial factors. It is a process of classifying and arranging mass date of financial statement. The objectives of this process is to understand the financial position, profitability, operational efficiency and growth potential of the business" (Dangol and Dangol, 2062 B.S.).

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Prof. Dr. Pushkar Bajracharya, Khagendra, P. Ojha, Joginder Goet and Sagar Sharma, in their book. Named "Managerial Accounting, Nepalese Perspective" say "Financial statement analysis is an in-depth scanning of the economic health of the firm. The analysis consist of the applying analytical tools and techniques to financial statements and other relevant data to obtain useful information. This information concerns the significant relationship between data and trends in those data assessing the company's past performance and correct financial position" (Bajracharya, Ojha, Goet and Sharma, 2005).

2.4 Review of Journals and Articles:

In this section related journals and articles are briefly reviewed which are as follows:

The article Financial Analysis; "An Approach to Evaluate Bank's Performance" which was published in Nepal Rastra Bank Samachar (An annual publication. 1997) by Mr. NP Poudel is reviewed as follows.

Mr. Poudel said that Balance-sheet, profit and loss account and the accompanying notes are the most useful aspects of the banks. It need to understand the major characteristics of bank's balance-sheet and profit and loss account. The banks balance-sheet is composed of financial claims as liabilities in the form of deposit and as asset in the form of loans. Fixed assets account forms a small portion of the total assets. Financial innovations, which are generally contingent in nature, are considered as off-balance sheet item.

Interest received on loans and advance and investment and paid on deposit liabilities are the major components of profit and loss account. The other sources of income are fee, commission, discount and service charges. The users of the financial statement of a bank need relevant, reliable and comparable information which assist them in evaluating the financial position and performance of the banks and which is useful to them in making economic decisions. The disclosure requirement of bank's financial statement has been expressly laid down in the concerned etc. commercial Act 1974 requires the audited balance sheet and profit and loss account to be published in the leading newspaper for the information to the general public.

According to Mr. Poudel, the principle objectives of analyzing financial statement are to identify liquidity position, profitability and solvency. Most users of the financial statements are interested in accessing the banks overall performance which is affected by the following factors:

- The structure of Balance Sheet and Profit and Loss Account.
- Operating efficiency and internal management system.
- Managerial decision taken by top management regarding interest rate, exchange rate and lending policies etc.

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- Environmental change (Technology, Government, Competition and Economy).

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The other factor to be considered in analyzing the financial statement of bank is to assess the capital adequacy ratio and liquidity position. In the line of adequacy of bank is assessed on the basis of risk weighted assets. It indicates a bank's strength and solvency. Bank facing with capital adequacy problem may increase capital or reduce assets or reallocate the existing assets structure in order to maintain the desired level of capital base.

Liquidity is measured by the speed with which a bank's asset can be converted into cash to meet deposit withdrawals and other current obligations. It is also important in view of survival and growth of a bank.

In the article Entitled "Commercial Bank's Comparative Performance Evaluation" which was published in Karmachari, Sanchaya Kosh Publication in 2047, Dr. M.K. Shrestha stressed on a proper risk management with appropriate classification of loans under performing and non performing category. Researcher further clarify that adequate provisioning is the safest way to get relief from sinking loan and careful consideration of portfolio risk. A clear out criteria is necessary to treat interest surprise account and it is advisable that all interest unpaid for more than six month need to be treated as unearned income. Regarding the risk management of the bank Dr. Shrestha's other suggestion are as follows:

- Any customer having over due loan of two or more in his account should not be given other loan facilities.
- Strong provisioning or reservations are required in restructuring portfolio relating to overdue loan.
- All creditors including overdraft should be given maturity date and should be subjected to revision at that date and consequently categorize as good, substandard or doubtful loans.
- Financial credit worthiness of borrower must be evaluated properly before granting the loans.

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In the journal "The Finnish Journal of Business Economics" by Salmi and Martikainen about the financial ratio analysis, authors have mentioned that, financial

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ratio is widely used for modeling purpose both by practitioners and researchers. The firm involves many interested parties like the owners, management, personnel, customers, suppliers, competitors, regulatory agencies and academic, each having their views in applying financial statement analysis in their evaluations. Practitioners use financial ratios, for instant, to forecast the future success of companies, while the researchers' main interest has been to develop models exploiting these ratios. Many distinct areas of research involving financial ratios can be discerned. It is to racially one can observe several major theories in the financial analysis literature. There is overlapping in the observable themes and they do not necessarily coincide with what theoretically might be the best founded area. The existing themes include:

- The functional form of the financial ratios, i.e. the proportionality discussion,
- Distributional characteristics of financial ratios,
- Classification of financial ratios,
- Comparability of ratios across industries and industry effects,
- Time-series properties of individual financial ratios,
- Bankruptcy prediction model,
- Explaining others firm characteristics with financial ratios,
- Stock market and financial ratios,
- Forecasting ability of financial analysis verses financial models, and
- Estimation of internal rate of return from financial statement.

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In the paper by Charles J. Hadlok and Christopher M. James, entitled "Do Banks Provide Financial Stack?" their main hypothesis is that the bank has ability to accurately price financial claims. This inducing a preference for under valued firm to choose bank debt as their marginal financial sources. They refer to this motivation for using bank debt as the information benefit of bank finance. They expect that this information benefit will be weighted against a variety of contracting costs in a firm's ultimate financing choice. [Charles and Christopher, the Journal of Finance, 2002].

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Mr. K.C. in his article "The Financial System: The Evaluation of Nepalese Financial Institution." has stated in reference to the Joint Venture in Nepal. Joint Venture started in 1980s in Nepal. He said that there must be a favorable investment climate in the country to benefit from such ventures. In Nepal, it started with three dramatic reforms carried out in 1980s. That was allowing the foreign bank to open as joint

venture banks fitting control on interest rate and introduction to the auctioning of government securities (Premesh K.C., 2048 B.S.).

Dr. Bishwombher Pyakural presented a paper on "Workshop on Banking and National Development". He writes that, "the present changing contest of economy calls for a substantial revitalization of the resources. How much they have gained over the year depends chiefly on how far they have been able to utilize their resources in an efficient manner. Therefore, the task of efficient utilization of resources is as much crucial the mobilization. The under utilization of resources not only results in loss of income but also goes further to discourage the collection of deposit (Pyakural, 1987)." In his paper he emphasized on the paper utilization of mobilized resources and profitability increment. He indicates that the under utilization of resources is an opportunity loss of the banks and commercial banks will not motivated to collect public deposit.

Mr. Govinda B. Thapa in his article "Financial System of Nepal" has been expressed his view the commercial banks including foreign joint venture banks seem to be doing pretty well in mobilization deposit. Likewise, loans and advances of these banks are also increasing. But compared to the high credit needs particularly by the newly emerging industries, the banks still seem to lack adequate funds. The banks are increasing their lending to non-traditional along with traditional sectors.

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In this article he concludes that by its very nature of public enterprises, the domestic bank could not complete with private banks. So, only remedy to the problem is to handover the ownership as well as, the management of these banks to the private banks (Thapa, 1994).

Dr. R.S. Pradhan conducted research on the financial management practices in Nepal for which he surveyed 78 different enterprises. He concluded that banks and retained earnings are two most frequently and widely used financing courses of most of two enterprises. Most of them find banks flexible in interest rates. Short-term bank loans having maturity period of less than one year is popular in public sectors where as maturity periods of one to five years are popular in private sectors. Most of the enterprises do not borrow from one bank only. They switch between banks to bank which offer best interest rate. He also affirmed that the most important financial to be working capital management and the least important one is maintaining good relation with stockholders" (Pradhan, 2003).

Meaning of ratio analysis in "investopedia.com" has stated that: "Fundamentals Analysis has a very broad scope. One aspect looks at the general (qualitative) factors of a company. The other side considers tangible and measurable factors (quantitative). This means crunching and analyzing number from the financial statement. If used in conjunction with other methods, quantitative analysis can produce excellent result. Ratio analysis is not just comparing different numbers from the balance sheet, income statement and cash flow statement. It's comparing the industry or even the economy in general. Ratios look at the relationship between individual values and relate them to how a company has performed in the past and might perform in the future.

Mr. Upendra Kumar Poudel, in the article, "Present Condition of Financial Companies" has presented with compared to the commercial bank, the interest rate is relatively high that is provided and accepted by financial companies. The financial companies should not be confined only in the valley. They should extend their service to the rural sectors of hill and tarai to reduce regional imbalance. The collection of deposit and loan investment done by the commercial bank also, to sustain themselves in the environment of competitors, they should introduce novel technology and equipments to collect deposit and investment. They should learn from the draw banks failure and success of commercial banks to effectively maintain as alternative status.

Mr. D.P. Poudel gives more emphasis on financial performance of financial companies in the article "An Overview Financial Companies of Nepal." He had written that at the time 1996, the ratio of capital funds to deposit had been increasing over the time but no top of this, it is substantially below than the authorize level of deposit mobilization, which is ten times of the capital base. Nevertheless, some of the finance companies have even mobilized the deposit by more than ten times of their capital base by violating the regulatory norms issued by NRB. The credit/deposit ratio has remained quite high leaving the room for doubt about the quality of loan especially in the absence of repayment schedule. The loan diversification has been improved, however, during a short span of time. As such, the hire purchase housing and term loan are the major sectors, which all together received more than 95% of the total loan and advance in mid July 1996. Because of the mushrooming growth of the number of finance company, the average sources of funds for each company are natural to decline. Since the varying factors, it is too early to evaluate the performance of finance companies in Nepal but equally important factor is that the regulatory and supervisory authority should keep close eyes to monitor their activities.

Dr. Sunity Shrestha in her article "Demand and Supply of Credit in Nepalese Commercial Banks" published in Nepal Bank Patrika, 2056, Baishak, concluded that demand of credit is positively offered by the lending rate and non-agriculture income of the country where as the supply of the trading is positively related with the total deposit of the bank and the lending rate. Thus, these variables can be considered as a determining variable for demand and supply of the credit of the commercial banks of Nepal and it can be forecasted based on these variables. This is the analytical study based on secondary of all the commercial banks in Nepal (Shrestha, 2056).

2.5 Review of Previous Thesis:

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Various thesis has been done on the topic "Financial Performance of Commercial Banks" out of which some thesis are briefly reviewed as follows.

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In a study entitled "A Study on Financial Performance of Commercial banks" by K.R. Joshi (1989), he found the satisfactory liquidity position of the commercial banks. He found that the local commercial banks have been relatively high geared compare to joint venture banks. Loan and advance have been the main form of the investment and two third of the asset have been used for earning purpose. Profitability position of NABL was found stronger than that of other commercial banks.

"A Comparative Study of financial performance of HBL and NSBIBL" was prepared by L. N. Ghimire (2000), with the objective of analyzing and interpreting the financial performance. The major uncovered facts of this research was that the overall liquidity, earning and growth position of HBL was stronger than that of NSBIBl's capital adequate liquidity of assets as well as turnover position was found to be superior to that of HBL. HBL was more efficient in creating in comparison to NSBIBL. Comparative analysis revealed the facts that NSBIBL was able to utilize its resources more efficiently and profitably. Income and operating expenses were in increasing trend and were dominated by interest income of both the banks.

Mr. Shree Ram Ghimire (1999) in the thesis "A Study of Financial Performance of Finance Company in Nepal" concludes that Nepalese finance companies face several problem related to fund mobilization and investment. They work with traditional approach. Finance companies have to revitalize their role require encouraging environment to be innovative and diversify their business to other depending only on time bound fixed deposit that can not always with the long term lending maturity

structure. Financial companies continue to have a gradual diversification of their functions by shifting a considerable profit of their assets. In this way he gives force to reallocation the funds and diversify such funds innovate and higher profitable area.

Mr. Dev Raj Adhikari (1993) in his study "Evaluating the Financial Performance of Nepal Bank Limited" has calculated and analyzed the different ratios by observing figures of balance sheet of Nepal Bank Limited for the period of Fiscal Year 2038/39 to 2046/47. He remarked that the bank is not found to have been able to utilize its fund effectively and efficiently for the up liftment of the economy. He also stated in his report that "The bank has been unable to utilize its resources on high yielding investment portfolio to maximize returns. Operational efficiency of the bank is indicate by the operational loss has been found unsatisfactory. Hence, the bank is indicate by the operational loss has been found unsatisfactory. Hence the bank has been suggested to manage its investment portfolio efficiency. He recommended that the bank should try to mobilize its resources efficiently by creating new business and service idea which will certainly help for the better utilization of ideal resources and for the economic development of the country." He has focused on utilization and mobilization of funds and resources of Nepal Bank Limited. It is study especially concerned on the deposit collection of the bank and disbursement of the fund as loan and advance. Therefore, his main study area uses and sources of funds and income and expenses trends of the bank.

Mr. Pradhan Shrestha (2002) concluded research entitled "A Comparative Analysis of Financial Performance of Selected Commercial Banks." He concluded that many of the banks are of the view that political instability in the country is mainly responsible for the decline of the lending opportunities. Few banks ascribed to the economic crisis that occurred in Asia Pacific Region. No one feel that higher rate on interest on lending to be a major factor. Commercial bank plays an important role in the economic development of the country. At the same time it should tangent not only the urban sectors, it should go to the rural sectors also. They have to explore all the potential sectors like tourism etc. in order to generate high rate of portfolio.

Mr. Bal Krishna Shrestha (2002) in his thesis entitled "An Evaluation of Financial Performance of Nepal Bank Limited." The basis objectives of the study are to analyze the financial performance on NBL i.e. ratio analysis of liquidity, leverage activity and profitability to examine the trend of deposit, lending and the deposit mobilization with

reference to investment, loan and advance. After calculating the above ratios along with trend analysis, Mr. Shrestha had come out with major findings, which are outlined below:

- The liquidity position of NBL is higher than the requirement of it. The liquidity position is sound and high level compared to the directives prescribed by NRB time to time.
- The capital adequacy position in terms of total debt to total assets is found much higher in an average of 96.58%.
- The shareholder's equity to total assets ratio is very low which indicate NBL is utilizing a low shareholder's equity.
- The net profit on deposit ratio is very poor, it means that the bank is not earning more than half percentage of its total deposit.
- As the net profit of the bank is very low and fluctuates each year tremendously, the earning per share also swings rapidly. This indicates EPS is not constant and it is uncertain, cannot predict hoe much the NBL will earn coming years.
- The bank is distributing the dividends equally each year in any kinds of adverse situation in EPS. The dividend is distributing without earning or nominal earning, how long will it possible, it is uncertain.

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Mr. Tej Bahadur Thapa (2004) conduct a study entitled "A Comparative Study on Financial Soundness of Nepal SBI Bank Ltd and Everest Bank Ltd." in this study he has analyzed financial position of the banks measuring various ratios to elaborate the banks soundness. He recommended that the both banks have unsatisfactory liquidity performance. In the sense of the activity ratio, both banks are efficient in utilizing total assets. The profitability ratios of both banks are in the increasing trends. The liquidity, profitability and dividend payout ratio of two banks are favorable position. But EBL seems to be slightly better position in terms of liquidity, profitability and capital structure compared to the Nepal SBI Bank Limited. In this evidence he has concluded that the EBL promises a better future than Nepal SBI Bank Limited.

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Mr. Bhoj Raj Bohara (1992) conducted a study entitled "A Comparative Study of Financial Performance of Nepal Arab Bank Ltd. and Nepal Indosuez Bank Ltd." in this thesis he analyzed liquidity ratio, activity ratio, coverage ratio, profitability ratio, Earning per Share (EPS), Dividend per Share (DPS) etc. he use the secondary data provided by these two banks for the period of 1986/87 to 1990/91 for his analysis

purpose. It was concluded that the bank's profit cannot be judged solely by profit. It was earned by maintaining adequate liquidity and safety but also by group of contribution to community, to the government and to national economy or to social and national priorities. It was found that both the banks are maintaining adequate liquidity to meet short term obligations and capital adequacy requirements are met by both. The recommendation given by the writer to both the banks was that they should come forward to earn operating profit by increasing operating efficiency. Another thing was that both Nepal Arab Bank Ltd and Nepal Indosuez Bank Ltd should increase their equity base. Since their equity base is not increasing faster as compared to the deposit growth at present.

In the research study conducted by Nagendra Bahadur Amatya (1993) "An Appraisal of Financial Position of NBL" refers that the liquidity position of the bank has been fairly maintained and the has found to have adopted the conservative financing policy i.e. low portion of equity capital has been resorted to finance total assets. The bank has successfully operated beyond the break-even point over the period. The researcher suggested that the bank is required to use proportionately more equity capital.

Mr. R. Jha with the thesis in a topic "A Comparative Analysis of Financial Performance of the HBL, NABIL, NIBL, and NGBL" has examined the comparative strength and weakness of four competitive joint venture banks. He has studied the operational aspects of these joint venture banks taking into account the product they offer. According to this study, NIBL had better results incase of profitability except return on net worth. Similarly, it had better liquidity, credit deposit and capital adequacy position as compared to HBL, NABIL and NGBL. NGBL holds highest rang regarding performing assets ratio and other indicators like D/P ratio, EPS and BVPS. All the selected joint venture banks are extremely levered, though NIBL and NABIL had relatively lower ratios. Trend analysis showed NABIL's growth in terms of PBI loans and advances and total deposits had been increasing rapidly that of remaining three selected joint venture banks.

2.6 Research Gap:

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Commercial banks invest its deposit in different profitable sector according to the directives and circulars of the Nepal Rastra Bank and guidelines and policy of their own bank. Financial statement has to be prepared according to directions of Nepal Rastra Bank. Nepal Rastra Bank's policy and guidelines are changing according time.

So, updated study over the change of time is major concern for the researcher and concerned organization as well as industry as a whole. This study covers the more resent financial data and analysis is done within the latest guidelines of Nepal Rastra Bank.

The present study tries to focus on Financial Performance of Nepal investment Bank and Himalayan Bank. It is cleared that probably there was no research work on the comparative study of these two banks. From the study of these two banks, researcher will try to find out the real performance of commercial banks in Nepal in terms of financial position strength and weaknesses, liquidity position, leverage standing, capital structure, profitability etc. which were not cleared in previous study.


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CHAPTER - THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the way to solve the research problem systematically. It facilitates the research work by providing reliability and validity. It refers to the various sequential steps to be adopted by a researcher in the study problem with certain objectives in view. It would be appropriate to mention that research projects are not susceptible to any one complete, in flexible sequence of step and the types of problem to be studied, which determines the particular steps to be taken.

This chapter has been divided into four sections. First section gives the brief account of research design, while second section describes the sources of data. The detail about population and sample has been provided in section three and finally section four explains the methods of analysis which will be employed in interpretation of data.

3.2 Research Design:

"A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is the plan, structure and strategy on investigations conceived for obtaining answers to research questions and to control variances. General objectives of this research study is to examine and evaluate the financial performance of commercial bank in Nepal especially that of Nepal Investment Bank Ltd. and Himalayan Bank Ltd. in order to achieve the objectives, both the descriptive and analytical research design have been used. This study is focused on the wide range of variables and factors influencing financial decisions of the bank. Comparative data banks are presented in such a way so as to make the research informative to the reader. Some financial and statistical tools have been applied to examine, analyze and interpret the financial statements of the bank.

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3.3 Source of Data:

Basically this study is conducted on the basis of secondary data. The data relating to investment, deposit, loan and advance and profits etc are directly obtained from the balance sheet and profit and loss account of concerned banks' annual report which were published on web sites of concern banks. Other supplementary data and information are collected from number of institutions, regulating authorities, publications and websites like Nepal Rastra Bank, www.nepalstockexchange.com etc.

According to the need and objectives all the secondary data are compiled, processed and tabulated in time series. In order to judge the reliability of data provided by the banks and other sources, they were compiled with annual reports of auditor.

Similarly various periodical economic journals, financial journals, managerial magazines and other published and unpublished reports, documents and websites have also been utilized for the research purpose.

3.4 Population and Sample:

It is not possible to study all the data related with all commercial banks in Nepal. There are all together 26 commercial banks operating in Nepal. So out of the population of existing 26 commercial banks, two commercial banks i.e. Nepal Investment Bank Ltd. and Himalayan Bank Ltd are taken as sample banks for this study. And financial statements of last five years have also been taken as sample for the comparative analysis of financial performance of selected banks.

3.5 Method of Data Analysis:

To achieve the objectives of the study, various financial statistical tools have been used in this study. The analysis of the data will be done according to pattern of data available. Various calculated results obtained through financial and statistical tools are tabulated under different headings. Then they are compared with each other to interpret the result.

3.5.1 Financial Tools:

Financial tools are those which used for the financial analysis and interpretation of financial data. These tools can be used to get the pratice knowledge of business,

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which are fruitful in exploring the strength and weakness of the financial policies and strategies. In order to meet the purpose of the study following financial tools have been used:

3.5.1.1 Ratio Analysis:

Ratio analysis is commonly used to analyze the financial performance. According to T.S. Grewal "Ratios are relationships expressed in mathematical terms between figures which have cause effect relationship or which are connected with each other in some other manner" (Grewal).

"A ratio is simply a number expressed in terms of another number and it expresses the quantitative relation between any two variables" (Kothari, 1994).

Ratio analysis points out the problem in any operational area and provides a basis to recommend corrective action. The purpose of ratio analysis is to satisfy the interest of shareholders to make them clear about the picture of the firm. Ratio analysis also satisfies the interest of creditors, government institutions and other to form their opinion or enables them to have guideline toward effective decision making.

"Financial statements are examined using various ratios to make sure that the business operation is carried out properly and results are within the expected range." (Pradhan, 1996)

There is variety in ratio calculation data contained in financial statement as the requirements of the types of ratios are as follows:

- Liquidity Ratio
- Activity Ratio
- Leverage or Capital Structure Ratio
- Profitability Ratio
- Valuation Ratio

3.5.1.1.1 Liquidity Ratio:

Liquidity ratio is also known as working capital ratio. It is extremely essential for a firm to be able to meet its short terms obligations as they became due. "The liquidity

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ratios measure the ability of the firm to meet its current obligation. In fact, liquidity needs the preparation of cash budget and funds flow statement, but liquidity ratios by establishing a relationship between cash and other current assets to current obligation provided a quick measure of liquidity" (Pandey, 1997).

Commercial banks need liquidity to meet loan demand and deposit withdrawal. Liquidity is also needed for the purpose of meeting Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR), requirement are prescribed by the central bank. The following ratios are calculated under the liquidity ratio.

Current Ratio:

This is commonly used to measure the liquidity position and short-term solvency of the firm. It is calculated by dividing current assets by current liabilities.

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Current Ratio = $\frac{\text{Currnet Assets}}{\text{Current Liabilities}}$

Current Assets
Current Liabilities

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Current assets indicate cash and bank balance, money at all or short notices, investment on government securities, account receivables, bills purchased and discounted, loan and advance and overdraft and miscellaneous current assets.

Current liability refers to the short-term maturity obligation. It includes borrowings from other banks, current and saving deposit, bills payable, tax payable, dividend payable, inter bank reconciliation account, provisions and miscellaneous current liability.

Cash and Bank Balance to Total Deposit Ratio:

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Cash and bank balance are the most liquid current assets. This ratio measures the percentage of most liquid funds with the bank to make immediate payment to the deposit. This ratio is calculated by dividing cash and bank balance by total deposit.

Cash and bank balance to total deposit ratio = $\frac{\text{Cash and bank balance}}{\text{Total deposit}}$

~~Cash and bank balance~~

~~=~~

~~Total deposit~~

Cash and bank balance include cash on hand, cheques and other cash items, balance with domestic banks, balance held in foreign banks and other financial institutions.

Total deposit encompass current deposit, fixed deposit, saving deposit, investment in other financial institution, money at call and short deposit and other deposit. A high ratio indicates the great ability to meet their deposit liability and vice versa. But too high ratio is unfit as capital will be tied up and opportunity cost will be higher.

= Cash and Bank Balance to Current Assets Ratio:

Since cash and bank balance is most liquid assets, a financial analyst may examine the ratio of cash and bank balance to current assets. The ratio shows the percentage of readily available fund within the banks. It is calculated by dividing cash and bank balance by current assets, which is as follows:

~~Cash and bank balance~~

Cash and bank balance to current assets ratio = $\frac{\text{Cash and bank balance}}{\text{Current Assets}}$

~~Current assets~~

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A high ratio indicates the sound ability to meet their daily requirements of their customer deposit and vice versa. Both very high and very low ratios are not desirable. The reason is that, if a bank maintain high ratio of cash and bank balance, it has to pay interest on deposit but could not invest its cash or current assets in a profitable area. So, if a bank maintain low ratio of cash, it may fail to make the payment for presented cheques by its customers. So, sufficient and appropriate cash reserve should be maintained properly.

3.5.1.1.2 Assets Management Ratio (Activity Ratio):

Activity ratio is also known as utilization ratio. It measures the degree of effectiveness in use of resources of funds by an enterprise. “These ratios are very important for a concern to judge how well facilities at the disposal of the concern are being used or to measure the effectiveness with which a concern uses its resources at its disposal.” (Jain and Narang, 1988)

These ratios are also called turnover ratio as they indicate the speed with which assets are being converted or turned over into income. Large amount of income is the result of better management of the assets. Low volume of asset decreases income opportunity while high volume of asset increases the interest expenses depressing their profit. The following ratios are calculated under this ratio

=) Loan and Advance to Total Deposit Ratio:

The ratio is compiled by dividing total loans and advances by total deposit liability.

~~Loan and Advance~~

Loan and Advance to Total Deposit Ratio = ~~Loan and Advance~~ - Total Deposit -

~~Total Deposit~~

Loan and advance consists of loans, advances, cash credit, overdraft and foreign bills purchased and discounted. And total deposit refers to total of all kinds of deposits.

This ratio measures the extent to which the banks are successful to utilize the outsiders' funds (total deposit) for the profit generating purpose on the loans and advance. Generally, a high ratio reflects higher efficiency to utilize the fund and vice versa.

Loan and Advance to Fixed Deposit Ratio:

The ratio is calculated by dividing loan and advance by fixed deposit liabilities.

$$\text{Loan and Advance to Fixed Deposit Ratio} = \frac{\text{loan and Advance}}{\text{Fixed Deposit}}$$

This ratio indicate the what proportion of fixed deposit has been use for loan and advances. Since fixed deposit carry high interest rate of interest, funds so yield at least sufficient return to meet the obligation. High ratio means utilization of the fixed deposit in form of loans.

Investment to Total Deposit Ratio:

This ratio can be calculated by dividing investment by total deposit collected in the bank.

$$\text{Investment to Total Deposit Ratio} = \frac{\textit{Investnent}}{\textit{Total Deposit}}$$

Investment is one of the major forms of credit created to earn return. It measures the utilization of deposits in investment. Higher the ratio, it indicates managerial efficiency regarding the utilization of deposits. Lower the ratio; it is the result of less efficiency in use of funds.

Loan and Advance to Total Working Fund Ratio:

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Loan and advance is the major components in the total working fund, which indicate the ability of banks to mobilize their loan and advance on the working fund for purpose of income generation. This ratio is computed by dividing loan advance by total working funds. This is stated as follows:

$$\text{Loan and advance to Total Working Fund Ratio} = \frac{\text{Loan and Advance}}{\text{Total Working Funds}}$$

Here, total working funds include all the items of assets side of the balance sheet. In other wokds, this includes current assets, fixed assets. Loan for development banks and other investment in shares, debentures and others etc. a high ratio indicates the better mobilization of funds as loan and advances and vice versa.

3.5.1.1.3 Leverage/Capital Structure Ratio:

This ratio is also called Solvency Ratio. A firm should have strong short-term and long-term financial position. To judge the long term financial position of the firm, these ratios help to measure the financial contribution of owners and creditors comparatively. This ratio indicates the situation of capital structure. It shows the proportion of debt capital and equity capital. It shows the long-term solvency of the firm. In financial term, a large amount of debt capital related to equity is called high capital gearing where as a large amount of equity related to debt is called low capital gearing shareholders stand to gain with high capital gearing during the time of good profit as the debt capital is paid fixed interest and all the balance of profit is available to equity holders. But in terms of profit, the payments of fixed interest on high debt capital may absurd all the profit leaving nothing for the shareholders. That's why at the time of high profit leverage is favorable and unfavorable when profit is too low. Hence the leverage ratios are calculated to measure the financial risk and the firm's ability if using the debt for the benefits of the shareholders which are as follows:

= Total Debt to Total Assets Ratio:

This ratio exhibits the relationship between creditors fund and owners capital. This ratio shows the proportion of outside funds used in financing total assets. It also provides security, financial safety to the outsiders i.e. potential shareholders, depositors or investors.

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High debt ratio indicate higher financial risk as well as increasing claims of outsiders in total assets and lower ratio indicate lower financial risk as well as decreasing claims of outsiders over the total assets of the firm. This ratio implies a finance company's success in exploiting debt to more profitable area, which calculated by dividing total debt by total assets as follows:

$$\text{Total Debt to Total Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Debt – Equity Ratio:

Debt-equity ratio examines the relative claims of creditors and owners over the firm's assets. Alternatively, the debt equity ratio indicates the contribution of debt capital and equity capital to the total capital and structure. The ratio is calculated by dividing total debt by total equity as follows:

$$\text{Debt-Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Capital Adequacy Ratio:

This ratio is used to measure the strength of the capital adequacy of the available capital. To operate the firm affectivity efficiency in the modern competitive environment adequate capital is required. This ratio is one of the most significant ratio and especially to assess the banks strength of the capital structure of the adequacy of the capital. In-adequate capital limits the firm to meet the public demand of loan and low earning capacity while holding excess capital keeps the firm in low profit position, capital refers to the paid up capital, general reserve and undistributed profit. So capital adequacy is determined as:

$$\text{Capital Adequacy Ratio} = \frac{NetWorth}{TotalDeposit} x100$$

Total Debt to Net Worth Ratio:

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This ratio measured the proportion of interest-debt and owners' fund. "This relationship describing the lender's contribution for each rupee of owner's contribution is called debt equity ratio." (Pandey, 1997) this ratio reflects he relative claims of the creditors and shareholders against the assets of the firm. It is calculated as:

$$\text{Total Debt to Net Worth Ratio} = \frac{\text{Total Debt}}{\text{Net Worth}} \times 100$$

3.5.1.1.4 Profitability Ratios:

These ratios measure the capacity of generating revenue and search for the income of the firm. The operating efficiency of the bank and its ability to ensure adequate return to its shareholders depends ultimately on the profit earned by the bank. It measures the success of the firm in terms of profit margin, returns on equity and returns total investment and reflects the overall efficiency and effectiveness of the management. To measure the efficiency of the bank following major profitability ratios are calculated:

- **Return on Assets Ratio (ROA):**

This is an appropriate base for assessing the effectiveness of the operating management. It seeks to measure the effectiveness with which the firm has employed its total resource. The operating management has control over the total assets of the firm. So return on assets can be calculated as:

$$\text{Return on Assets Ratio (ROA)} = \frac{\text{Net Operating Profit}}{\text{Total Assets}}$$

Here higher ratio is preferable.

- **Commission and Discount Income to Personnel Expense Ratio:**

This ratio measures the efficiency of the staff or cost paid for taking services from staff to earned income by providing services to the customers. This ratio is calculated by using the following formula:

$$X\frac{\text{Commission and Discount income}}{\text{Personnel Expenses}}$$

Interest Income to Interest Expenses Ratio:

This ratio measure the effective use of deposit to generate revenue in proportion of the expenses occurred on collected deposit major sources of finance for the bank is deposit collection, which are mobilize on loan and advances to earn profit. Bank has to pay interest on interest bearing deposits and received interest through its investment policies on loan and advances and others. This ratio can be calculated as:

$$\text{Interest Income to Interest Expenses Ratio} = \frac{\text{Interest Income}}{\text{Interest Expenses}}$$

Return on Shareholder's Equity Ratio:

It measures the effectiveness of the management with respect to both its operating and financial decision. "The rate of return earned on the firm's common equity is the rate that the firm earn on the funds invested in the firm by its owners." (Bowlin, Martin and Scott, 1990) which can be calculated as follows:

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

Interest Earned to Total Assets Ratio:

This ratio measures the ability of the banks to earn interest with respect to total assets which can be calculated as follows:

$$\text{Interest Earned to Total Assets Ratio} = \frac{\text{Interest Earned}}{\text{Total Assets}}$$

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3.5.1.1.5 Valuation Ratios:

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These ratios result the overall performance of the bank measuring the combined effect of risk and return. "The valuation ratio indicates the market value of the firm as compared to the book value and measure the stock price relative to earnings." (Pradhan, 1969) following valuation ratios can be calculated:

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Price Earning Ratio (P/E Ratio):

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Price earning ratio is widely used by the security analyst to value the firm's performance as expected by investors. "It shows how much the investors are willing to pay per dollar of reported profit." (Weston and Brigham, 1987) which can be calculated as:

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$$\text{Price Earning Ratio} = \frac{\text{Market Price Per Share}}{\text{Earning Per Share}}$$

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Earning per share is calculated by dividing profit after tax by total number of common shares outstanding.

Market Value Per Share to Book Value Per Share Ratio:

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This ratio measures the price the outsider is paying for each rupee, reported by the balance sheet of the bank. It can be calculated as:

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$$X\frac{\text{Market Value Per Share}}{\text{Book Value Per Share}}$$

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The book value per share is net worth dividend by the number of shares outstanding.

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3.5.2. Statistical Tools:

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Statistics may be defined as the collection presentation, analysis and interpretation of the numerical data. Various statistical tools used for the evaluation of financial performance of the bank such as measure of central tendency theory of dispersion, correlation analysis, and trend analysis etc. whatever is required. “Statistical analysis is one of particular language which describes the data and make possible to take about the relations and the difference of the variables without the adequate understanding of statistics, the investigator in social science may frequently be like a blind man grouping in a dark closer for a black cat that is not there. The method of statistic is useful in an ever widening range of human activities in any field of through in which numerical data may be had.” (Gupta, 1991) the following statistical tools can be used for the purpose of financial analysis:

3.5.2.1 Arithmetic Mean or Average

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The average value is a single value within the range of the data that is used to represent all of the values in the series. Since, the average is somewhere within the range of that data, it is also called a measure of central tendency. Since average represents the entire data, its value lies somewhere in between the two average. Among them I use the arithmetic mean which is more popular to denote particular type of average. It is obtain dividing sum of obtained observation by the number of items which is presented as follows:

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$$X=\frac{\sum XN}{N}=\frac{\phi x}{N}$$

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Where,

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X = Arithmetic Mean

∑X = summation for total values of the observation

N = Number of items.

3.5.2.2 Standard Deviation:

The standard deviation is the most important and widely used measure of studying dispersion. It is also known as root mean square deviation for the reason that the square root of the mean of the standard deviation from the arithmetic mean. The standard deviation measures the description or variability of a distribution. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a distribution and vice versa. It can be calculated as follows:

$$\sigma = \frac{\sqrt{\phi d^2}}{n}$$ ~~$\frac{\sum d^2 n}{}$~~

Where,

σ = standard deviation

∑d2 = sum of square of the deviation measured from the ~~arithmatic~~arithmetic average.

N = number of items.

3.5.2.3 Coefficient of Variation

The coefficient of variation is the corresponding relative measure of dispersion comparable across distribution, which is defined as the ratio of the standard deviation to mean expressed in resulting percentage. It is used in such a problem where we want to compare the variability of two or more than two series. The series for which the coefficient of variation is greater is said to be more variable or conversely less consistent, less uniform, less stable or less homogeneous. On the other hand, the series for which coefficient of variation is less is said to be less variable or more

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consistent, more uniform, more stable or more homogenous. Symbolically it can be presented as:

C.V. = $\frac{\sigma}{\bar{x}} = \sigma x$

Where,

C .V. = coefficient of variation

σ = standard deviation

$\bar{x}$ = arithmetic mean

3.5.2.4 Correlation Analysis:

The term correlation analysis is the analysis, which reflect that the variables of the two different data are related or we can say that correlation is the analysis of reflection between more than one variable. “When the relation is of quantities nature, the appropriate statistical tools for discovering and measuring the relationship and expressing it in a belief formula is known as correlation.” (Gupta, 1997/98) the relation between the data may be either positive or negative, it can’t be determined by different ways such as graphical presentation, formula methods etc. when both variables are moving upward or downward. In the same proportion it is said to be the condition of positive correlation and if the condition is vice versa then the condition is said to be negative correlation. The main purpose of this study is to find out the correlation between selected ratios with each other over the study period.

The widely used methods of statistical tools; Karlperson’s coefficient of correlation has been adopted to measure the significance of the relation between the selected ratios. This can be symbolically denoted as:

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

Where,

N = number of observation

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

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

$\sum X^2$ = sum of sequence of variable in series 'X'

$\sum Y^2$ = sum of sequence of variable in series 'Y'

$\sum XY$ = sum of the product of the observation in series X & Y.

3.5.2.5 Probable Error:

The probable error of the coefficient of correlation helps in interpreting the value and measuring the reliability of the coefficient of correlation. Probable error of correlation usually denoted by P.E. (r) is an old measure of testing the reliability of an observed value of correlation coefficient, in so far as it depends on the conditions of random sampling. It is worked out as:

P.E.= **Error!**

If r is less than P.E., it is not significant at all. If r is more than P.E., there is significant correlation. And if r is more than six times its P.E. and r equals to greater than 15 then correlation is considered significant.

3.5.2.6 Trend Analysis:

"Trend analysis is an analysis of financial ratio over time used to determine the improvement of determination of its financial situation." (Weston and Brigham, 1987)

Trend analysis informs about the expected future return, future achievement of the bank, future credit worthiness of the bank, financial capacity of the bank and many other information which would be helpful to concern parties of the bank such as shareholders, professional banks, depositors and borrowers. In this study, least square method is selected as statistical tools for the analysis of selected banks. The formula of least square method for the straight line is represented by the equation:

Y_c = trend value

a = Y intercept or the computable trend figure of the y variables, where X=0

b = slope of the trend line of the amount of change in y variables that is associated with change in 1 unit in X variables.

X = variable that represent time i.e. time variable.

The value of constants a & b can be determined by solving the following two normal equations:

$\sum y = na+b\sum x$ ---------- (i)

$\sum xy = a\sum x+b\sum x^2$ ---------- (ii)

Where,

N = number of years

Since,

$\sum x = 0$

$a=\frac{\sum y}{n}$ ~~$-\sum yn$~~

$b=\frac{\sum xy}{\sum x^2}$

After reviewing the relevant literatures and highlighting research methodology now the analysis part of the research is going to be undertaken.

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CHAPTER-FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

In this chapter data of sample banks are presented and analyzed according to the objectives of this study which are stated in chapter one. To make the study more realistic, complete, and qualitative and quantities analysis is done through different financial ratios and statistical tools. However there are so many ratios, only some important ratios have been taken for analyzing the financial performance of the selected banks.

4.2 Financial Analysis:

It is a process of evaluating relationship between components of financial analysis i.e. balance-sheet and profit and loss account to obtain a better understanding of bank's position and performance, under the financial analysis, ratio analysis will be done to obtain the objectives of the study.

4.2.1 Ratio Analysis:

Ratio analysis is the expression of the relationship between the mutually independent figures. It shows the quantitative relation between two variables. Ratio analysis is very much powerful tools of financial analysis. Financial ratios are frequently and widely used in practice to assess the company's financial performance and condition. Ratio analysis is defined as the systematic use of a firm as well as its historical performance and current financial condition can be determined. Out of so many ratios, some important ratios can be calculated from balance sheet and profit and loss account. These calculated ratios can be useful for analyzing and assessing the performance and position of the banks, which reflect the relative strength and weakness of any particular bank over others.

4.2.1.1 Liquidity Ratio:

Liquidity ratios measure the ability of the firm to meet its maturing short term obligations. It is well known fact that assets very with respect to time and effort required to liquidate them. Liquidity thus refers to "nearness to cash". Every firms

need to maintain liquidity position at satisfactory level. Holding too much liquidity means holding large size of current assets which will be an expensive affair to the firm. And there will also be the possibility of misuse of current assets. While holding the large size of the current assets, besides it, holding too little liquidity, firm cannot able to meet its short term obligation caused by short term liability and it will lead to liquidation to the firm. So if the firm can't meet the short term obligations, its continuous existence becomes doubtful. So, liquidity ratio measures the short-term solvency of the firm.

The liquidity positions of banks are comparatively studied through the following liquidity ratios.

Current Ratio:

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Current ratio is one of the most widely used measures of liquidity of the firm. It measures the degree to which current assets cover the current liability.

Generally 2:1 is considered as the optimal standard of current ratio but it is not true all the time. Higher current ratio means holding large size of current assets which lead to underutilization of firm's resources. And, low ratio indicates that the firm can't meet its short-term obligation.

Bank is not a productive industry of any physical goods that's why it has its own nature. Current ratio is calculated by dividing current assets by current liability as follows:

$$\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

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Current ratios of selected banks have been tabulated below:

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Table-1: Current Ratio Table

(Rs in million)

Year	HBL			NIBL		
	Current Assets	Current Liabilities	Ratio (in times)	Current Assets	Current Liabilities	Ratio (in times)
2003/04	16881.45	21899.94	0.7708	7464.30	8359.48	0.8929
2004/05	18495.85	23030.88	0.8031	11103.34	12206.95	0.9096
2005/06	21228.89	25942.97	0.8183	13950.95	14778.85	0.9440
2006/07	23030.25	27334.21	0.8425	17877.09	19350.84	0.9238
2007/08	27446.51	31012.64	0.8850	23555.96	24899.13	0.9461
Mean Ratio(x)			0.8239			0.9233
S.D.			3.74%			2.0%
C.V.			4.54%			2.17%

Source: Annual Report of concerned bank, Refer Annex-1&2.

The above table-1 gives us a clear picture about the liquidity position of the selected sample bank by means of current assets, current liabilities and current ratio. Table-1 shows that the current ratio of HBL is in increasing trend with the higher increment in current assets than current liabilities over the study period. Which means HBL is able to increase its liquidity position over the period of time. C.V. of HBL regarding current ratio is 4.54% with 0.8239 mean ratios and 3.74% standard deviation, which shows that HBL's current assets and current liabilities have adopted increasing trend. Similarly, from the above table we can say that current ratio of NIBL is also increasing with the higher increment in current assets than current liabilities except the fiscal year 2006/07. It also indicates that NIBL is trying to maintain higher liquidity. C.V. of NIBL regarding current ratio is 2.17% with the 0.9233 mean ratios and 2.00% standard deviation, which also shows that NIBL's current assets and current liabilities have adopted increasing trend. But both the banks could not able to maintain the conventional standard of 2:1. Since the mean ratio of NIBL is higher than that of HBL, NIBL has slightly strong liquidity position than that of HBL, Which can be shown with the help of bar-diagram as follows:

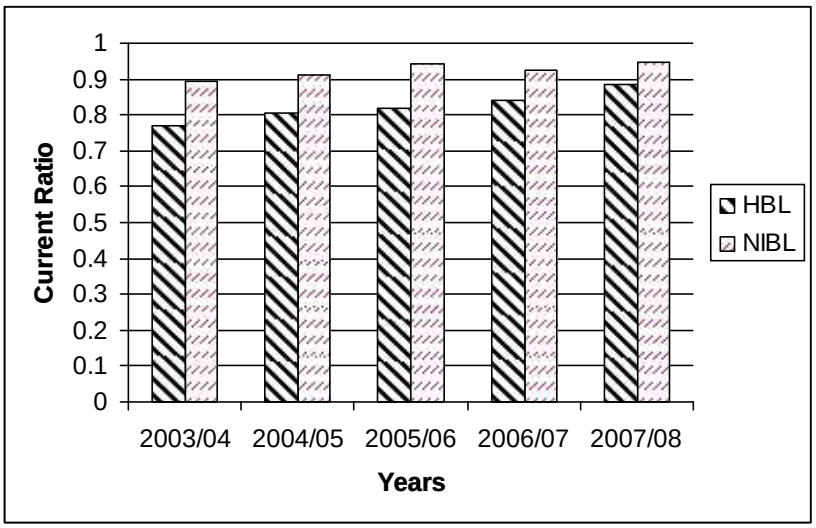

Figure-1 Comparative Presentation of Current Ratios of HBL & NIBL

The above diagram helps us to conclude that NIBL has slightly more margin of safety for its creditors than HBL. The liquidity position of NIBL is slightly better than HBL. But this ratio only measures the quantity and not the quality of assets. Hence, we can conclude that the current ratio of the selected bank is very poor. It measures both the sample banks are following aggressive policy, which means maintaining low level of working capital as current assets.

=) Cash and Bank balance to total deposit ratio:

Cash and Bank balance are the most liquid assets. So, the main purpose of this ratio is to measure the bank's ability to immediately fund the withdrawal of their depositors. A high ratio indicates a greater ability to cover their depositor's withdrawal and vice versa. It is determined by dividing cash and bank balance by total deposits.

$$\text{Cash and Bank Balance to Total Deposit Ratio} = \frac{\text{cash and bank balance}}{\text{total deposits}}$$

The cash and bank balance to total deposit ratio of selected banks have been tabulated below:

Table-2: cash and bank balance to total deposit ratio table

(Rs in million)

Year	HBL			NIBL		
	Cash and bank balance	Total Deposits	Ratio (in times)	Cash and bank balance	Total Deposits	Ratio (in times)
2003/04	1979.21	21007.37	0.0942	926.53	7922.76	0.1169
2004/05	2001.19	22010.33	0.0909	1226.92	11524.68	0.1065
2005/06	2014.47	24814.01	0.0812	1340.49	14254.57	0.0940
2006/07	1717.35	26490.85	0.0648	2336.53	18927.31	0.1234
2007/08	1757.43	30060.33	0.0585	2441.51	24488.86	0.0997
Mean Ratio(x)			0.0779			0.1081
S.D.			1.48%			1.1%
C.V.			19.00%			10.13%

Source: Annual report of concerned banks, Refer Annex-1&2.

Table-2 shows the cash and bank balance to total deposit ratio of both the HBL and NIBL. Cash and bank balance to total deposit ratio of HBL is in decreasing trend over the study period. It means, the bank maintain lower cash and bank balance with respect to its total deposit and invest most of the parts of the deposit. Average ratio of HBL is 0.0779 times with 1.48% of standard deviation and 19% of coefficient of variation. Likewise cash and bank balance to total deposit ratio of NIBL is also decreasing trend upto fiscal year 2005/06 (i.e. 0.1169 times to 0.0940 times) and increased to 0.1234 times in fiscal year 2006/07 then again it decreased to 0.0997 in fiscal year 2007/08. It also shows that NIBL also maintain minimum cash and bank balance with respect to its total deposit. It means it also invest most of the parts of the deposit into different sectors. The average ratio of NIBL is 0.1081 with 1.10% S.D. and 10.13% C.V. if we compare the average ratio of these two banks NIBL has slightly higher ratio, which means NIBL maintain slightly higher cash and bank balance with respect to total deposit than that of HBL. It can also be said that, due to lower S.D. and C.V., the cash and bank balance to total deposit ratio of NIBL seems more consistence than that of HBL, which can also be shown in bar diagram as follows:

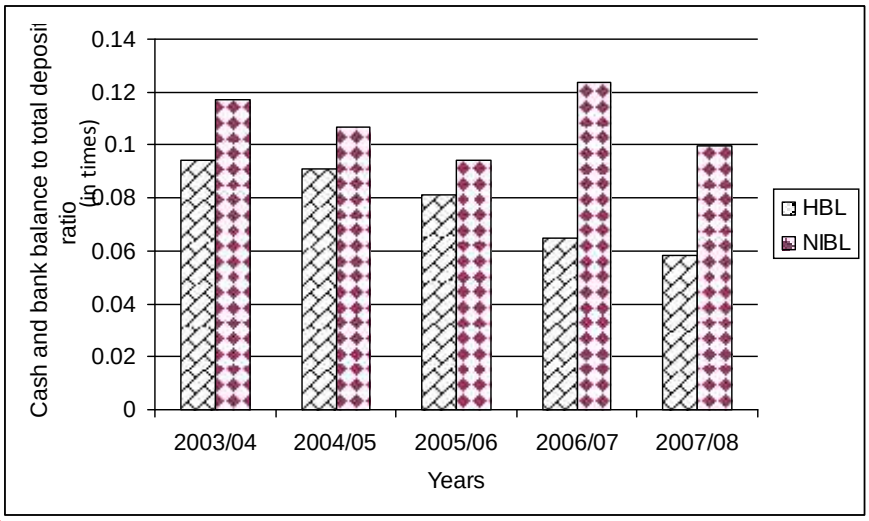

Figure-2: comparative presentation of cash and bank balance to total deposit ratio of HBL and NIBL

The table -2 helps us to conclude that cash and bank balance position with respect to total deposit of NIBL is better than HBL. It means the customers of NIBL are more satisfy, i.e. the bank has high ability immediately fund the withdrawal of its customers.

Cash and Bank Balance to Current Assets:

This ratio indicates the proportion of cash and bank balance in total current assets of the concerned banks. It shows the percentage of readily available fund within the bank. It is calculated by dividing cash and bank balance by total current assets.

$$\text{cash and bank balance to current assets} = \frac{\text{cash and bank balance}}{\text{current assets}}$$

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Cash and bank balance to current assets ratio of selected bank have been tabulated below:

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Table-3: cash and bank balance to current assets ratio table.

(Rs in million)

Year	HBL			NIBL		
	Cash and bank balance	Current Assets	Ratio (in times)	Cash and bank balance	Current Assets	Ratio (in times)
2003/04	1979.21	16881.45	0.1172	926.53	7464.30	0.1241
2004/05	2001.19	18495.85	0.1082	1226.92	11103.34	0.1105
2005/06	2014.47	21228.89	0.0949	1340.49	13950.95	0.0961
2006/07	1717.35	23030.25	0.0746	2336.53	17877.09	0.1307
2007/08	1757.43	27446.51	0.0640	2441.51	23555.96	0.1036
Mean Ratio(x)			0.0918			0.1130
S.D.			4.47%			2.83%
C.V.			48.93%			25.04%

Source: Annual report of concerned banks, Refer Annex-1&2.

The above table shows that cash and bank balance to current assets ratio of HBL is in decreasing trend over the study period. i.e. 0.1172 in 2003/04 to 0.0640 in 2007/08, it has mean ratio of 0.018 times. It means HBL invest most of the parts of the funds in different sectors and maintain low level of cash and bank balance. Similarly cash and bank balance to current assets ratio of NIBL also in decreasing trend from 2003/04 to 2005/06 i.e. (0.124 to 0.961) than in fiscal year 2006/07 it increased to 0.1307. It has mean ratio of 0.1130 times. In comparison with HBL, NIBL maintain high level of cash and bank balance with respect to total current assets. it means more cash will available with NIBL than HBL to meet daily cash requirement with the calculated S.D. and C.V. of HBL and NIBL, we can say that NIBL able to maintain stable cash and bank balance with respect to total current assets, which can be shown in bar diagram as follows:

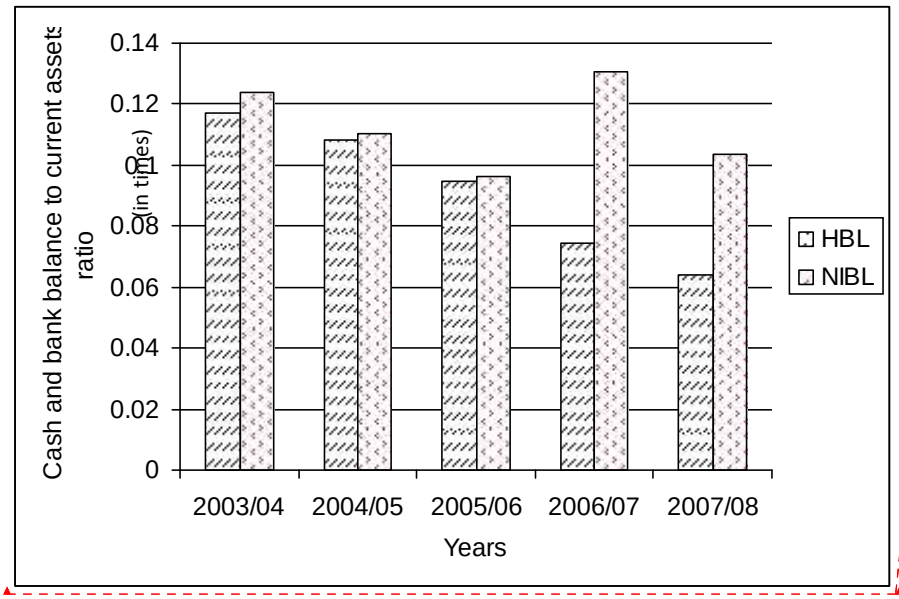

Figure-3: cash and bank balance to current assets ratio of HBL&NIBL

The above diagram helps us to conclude that cash and bank balance position with respect to total current assets of NIBL is better than HBL. It means NIBL will able to maintain higher cash balance to meet its daily cash requirements than that of HBL.

4.2.1.2 Assets Management Ratio (Activity Ratio):

Assets Management Ratio indicates the efficiency with which a bank employs its resources. Activity ratios are used to evaluate the efficiency of firm to what extent the firm manage and utilize its assets in profitable sectors. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into profit generating assets. The following assets management ratios are used in this study:

Loan and Advances to Total Deposit Ratio:

Loan and advances to total deposit ratio measures the extent to which banks are successful to utilize the outsider's fund (total deposit) for the profit generating purpose. The core banking function is to mobilize the funds from depositors to borrower banks make profit by lending the deposited fund by charging higher interest

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rate to the borrower then they pay to the depositors. So, they are known to be efficient in mobilizing the fund if they can advance a great proportion of deposited fund into risk assets. This ratio can be calculated by dividing total loan and advance by total deposit as follows:

$$\text{loan and advance to total deposit ratio} = \frac{\text{loan and advance}}{\text{total deposits}}$$

Loan and advance to total deposit ratio of selected banks have been tabulated below:

Table-4 loan and advance to total deposit ratio table

(Rs in million)

Year	HBL			NIBL		
	Loan and advances	Total deposits	Ratio (in times)	Loan and advances	Total deposits	Ratio (in times)
2003/04	10001.85	21007.37	0.4761	5772.14	7922.76	0.7286
2004/05	11951.87	22010.88	0.5430	7130.13	11524.68	0.6187
2005/06	12424.52	24814.01	0.5007	10126.06	14254.57	0.7104
2006/07	14642.56	26490.85	0.5527	12776.21	18927.31	0.6750
2007/08	16998.00	30060.33	0.5655	17286.43	24488.86	0.7059
Mean Ratio(x)			0.5276			0.6877
S.D.			7.48%			8.66%
C.V.			14.18%			12.59%

Source: Annual report of concerned banks, Refer Annex-1&2.

From the above comparative ratio table we can say that loan and advance to total deposit ratio of sample marks are more fluctuating over the study period. The table-4 shows that HBL has maximum ratio in fiscal year 2007/08 i.e. 0.5655 and minimum ratio in fiscal year 2003/04 i.e. 0.4761 with mean ratio of 0.5276, S.D. of 7048% and C.V. of 14.18%. Similarly, NIBL has highest ratio in fiscal year 2003/04 i.e. 0.7286 and lowest ratio in fiscal year 2004/05 i.e. 0.6187 with the mean ratio of 0.6877, S.D. of 8.66% and C.V. of 12.59%. From the above table, it can be said that, NIBL become successful to mobilize the large proportion of total deposit as loan and advance compared to HBL. As concerned with the consistency, HBL is failed to maintain the

consistency in comparison to NIBL because it has a higher C.V. than NIBL i.e. 14.18% > 12.59%, which can be shown in bar diagram as follows:

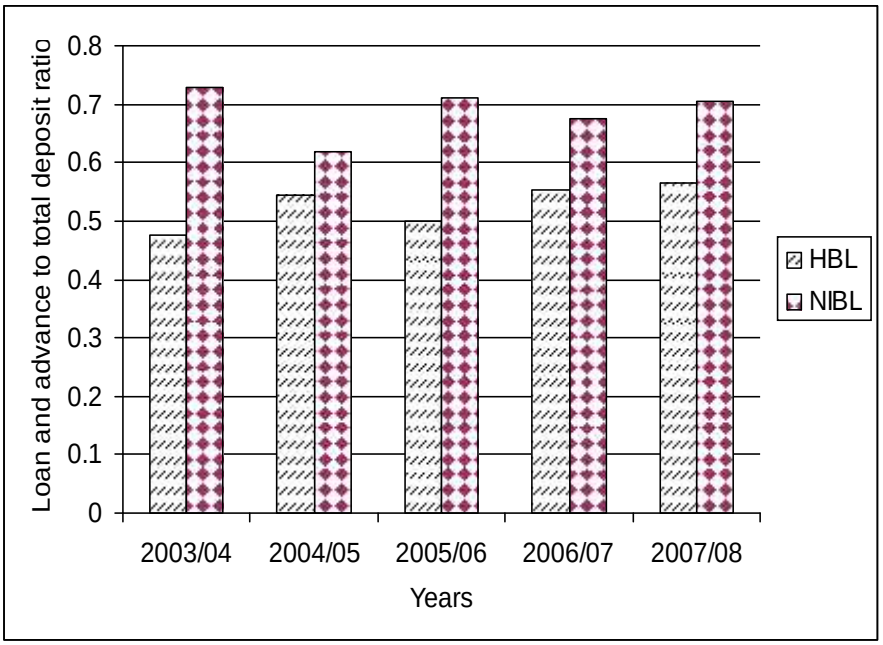

Figure- 4: loan and advance to total deposit ratio of HBL&NIBL

From the above figure-4, we can conclude that NIBL had been able to efficiently us the outsiders fund in profit generating purpose. It had been successful in advancing the favorable proportion of its deposit towards loan and advance. But HBL had not been able to use the outsiders fund in profit generating purpose efficiently.

Loan and Advance to fixed Deposit Ratio:

This ratio indicates how many times the amount is used in loan and advances in comparison to fixed deposits. Fixed deposits are the main sources of deposit of bank and are high interest bearing obligation where as loan and advances are the main sources of investment to generate income for the commercial banks. This ratio can be calculated by dividing loan and advance by fixed deposits as follows:

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loan and advance to fixed deposit ratio = $\frac{\text{loan and advance}}{\text{fixed deposit}}$

Loan and advance to fixed deposit ratio of selected banks have been tabulated below:

Table-5: Loan and Advance to Fixed Deposit Ratio Table

(Rs in million)

Year	HBL			NIBL		
	Loan and advances	Fixed deposits	Ratio (in times)	Loan and advances	Fixed deposits	Ratio (in times)
2003/04	10001.85	3205.37	3.1203	5772.14	1672.83	3.4505
2004/05	11951.87	4710.18	2.5375	7130.13	2294.68	3.1072
2005/06	12424.52	6107.43	2.0343	10126.06	3212.27	3.1523
2006/07	14642.56	6350.20	2.3058	12776.21	5414.97	2.3594
2007/08	16998.00	8201.13	2.0726	17286.43	7516.69	2.2997
Mean Ratio(x)			2.4141			2.8738
S.D.			88.68%			103.08%
C.V.			36.73%			35.87%

Source: Annual report of concerned banks, Refer Annex-1&2.

Table-5 shows that both the sample bank have fluctuation ratio over the study period. HBL has highest ratio in fiscal year 2003/04 i.e. 3.1203 and lowest ratio in fiscal year 2005/06. It has mean ratio of 2.4141 with 88.68% standard deviation and 36.73% of C.V. NIBL has highest ratio in fiscal year 2003/04 i.e. 3.4505 and lowest ratio in fiscal year 2007/08 i.e. 2.2997. It has mean ratio of 2.8738 with 103.08% standard deviation and 35.87% of C.V. from the above analysis, NIBL has been able to utilize customer's fund with respect to fixed deposit. NIBL has slightly lower C.V. than that of HBL (i.e. 35.87<36.73), so it has been able to maintain stability in loan and advance with respect to fixed deposit. It can be shown with the help of bar diagram as follows:

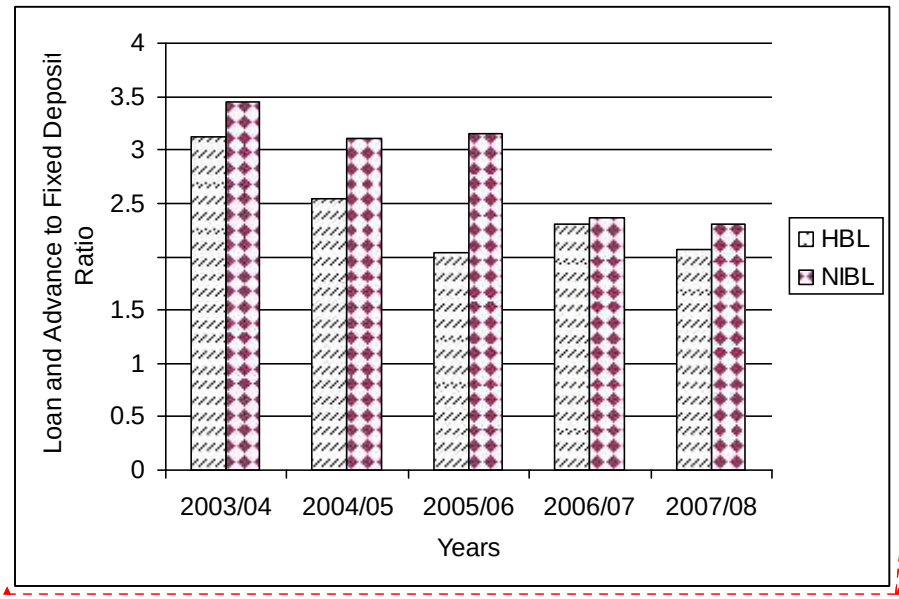

Figure-5: loan and advance to fixed deposit ratio of HBL and NIBL

From the above figure – 5, we can conclude that the loan and advance to fixed deposit ratio of both the sample bank has been fluctuating over the study period. NIBL has been able to mobilize its fund (fixed deposit) as loan and advance more effectively than that of HBL.

Loan and Advance to Total Working Fund Ratio:

This ratio indicate the extent to which the banks are successful in mobilizing their total assets on loan and advance for income generating purpose, which can be calculated by dividing the loan and advance by total working fund (total assets) as follows:

$$\text{loan and advance to total working fund ratio} = \frac{\text{loan and advance}}{\text{total working fund}}$$

Loan and advance to total working fund ratio of selected banks have been presented below:

Table-6: loan and advance to total working fund ratio table

(Rs in million)

Year	HBL			NIBL		
	Loan and advances	Total working funds	Ratio (in times)	Loan and advances	Total working funds	Ratio (in times)
2003/04	10001.85	23355.23	0.4282	5772.14	9014.26	0.6403
2004/05	11951.87	24762.04	0.4827	7130.13	13255.50	0.5379
2005/06	12424.52	27844.69	0.4462	10126.06	16274.08	0.6222
2006/07	14642.56	29460.39	0.4970	12776.21	21330.14	0.5990
2007/08	16998.00	33519.14	0.5071	17286.43	27590.85	0.6265
Mean Ratio(x)			0.4722			0.6052
S.D.			6.71%			8.06%
C.V.			14.21%			13.32%

Source: Annual report of concerned banks, Refer Annex-1&2.

From the table-6, loan and advance to total working fund ratio of HBL is in increasing trend. It has highest ratio in fiscal year 2007/08 and lowest ratio in fiscal year 2003/04 i.e. 0.5017 and 0.4282, S.D. of 6.71% and C.V. of 14.21%. From this analysis we can say that HBL utilize less than 50% of its total working funds as loan and advance. But the NIBL has fluctuating ratio over the study period. It has highest ratio in fiscal year 2003/04 and lowest ratio in fiscal year 2004/05 with the mean ratio of 0.6052, S.D. of 8.06% and C.V. of 13.32%. It means NIBL has been able to utilize more than 50% of its total working funds as loan and advance. From the table-6, NIBL has able to utilize more working fund as loan and advance in comparison to HBL. NIBL also able to maintain stable loan and advance with respect to total working fund than HBL, which is indicated by lowest C.V. of 13.32%. The above analysis can be shown with the help of bar diagram as follows:

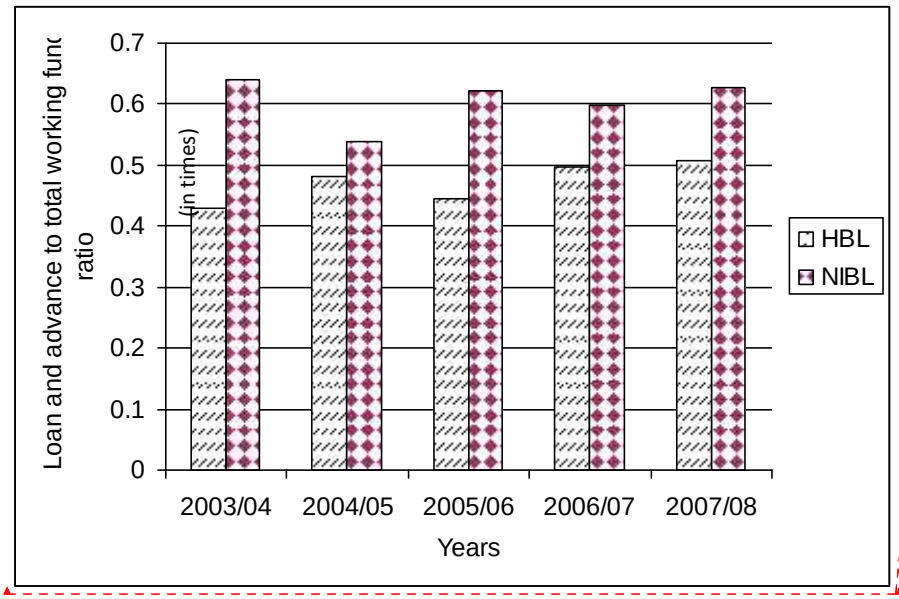

Figure-6: loan and advance to total working fund ratio of HBL and NIBL

From the figure-6, we can conclude that HBL has loan and advance to total working fund ratio in increasing trend. But NIBL has fluctuating ratio. Although the NIBL has fluctuating ratio, it has been able to utilize its total working fund as loan and advance more effectively than that of HBL.

Total Investment to Total Deposit Ratio:

It indicate the extent to which the bank utilize its total deposit collect from the outsider as long-term investment, which can be calculated by dividing investment by total deposit as follows:

$$\text{total investment to total deposit ratio} = \frac{\text{total investment}}{\text{total deposit}}$$

Total investment to total deposit ratio of selected banks have been tabulated below:

Table-7: total investment to total deposit ratio table

(Rs in million)

Year	HBL			NIBL		
	Total investment	Total deposit	Ratio (in times)	Total investment	Total deposit	Ratio (in times)
2003/04	10175.44	21007.37	0.4844	1705.25	7922.76	0.2152
2004/05	9292.11	22010.88	0.4222	3862.48	11524.68	0.3351
2005/06	11692.34	24814.01	0.4712	3934.19	14254.57	0.2760
2006/07	10889.04	26490.85	0.4110	5602.87	18927.31	0.2960
2007/08	11822.99	30060.33	0.3933	6505.68	24488.86	0.2657
Mean Ratio(x)			0.4364			0.2776
S.D.			7.87%			8.72%
C.V.			18.64%			31.40%

Source: Annual report of concerned banks, Refer Annex-1&2.

From the table-7, HBL has fluctuating ratio over the study period. HBL has highest ratio in fiscal year 2003/04 and least ratio in fiscal year 2007/08 i.e. 0.4844 and 0.3933 respectively. It had mean ratio of 0.4364 with 7.83 S.D. and 18.64 % of C.V. it means HBL utilize most of its total deposit as investment to earn profit. Similarly, NIBL also has fluctuating ratio over the study period. It has highest ratio of 0.3351 in fiscal year 2004/05 and least ratio of 0.2152 in fiscal year 2003/04 with mean ratio of 0.2776, S.D. of 8.72% and C.V. of 31.40%. It means NIBL utilize small part of its total deposit as investment comparison to HBL in comparison to NIBL, HBL is successful to maintain the consistency in investment with respect to total deposit which is indicated by lower C.V. i.e. 18.64%. It can be shown with the help of bar diagram as follows:

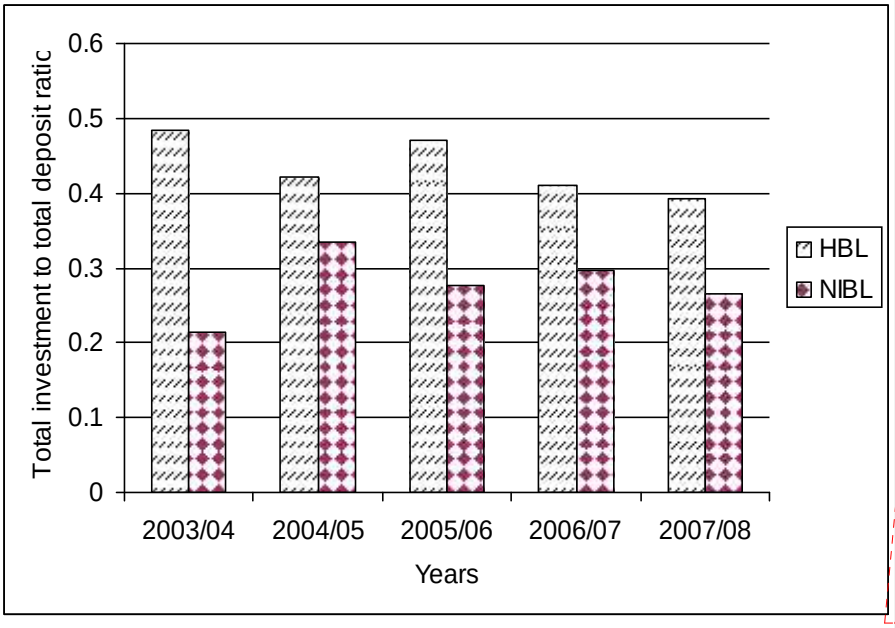

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Figure-7: total investment to total deposit ratio of HBL and NIBL

From figure-7, we can conclude that HBL has been able to utilize its total deposits as investment more effectively than NIBL. It utilizes most of the parts of the total deposit as investment. The bank with larger volume of foreign currency deposit relies more on investment as these deposits can not be utilized into loans and advance easily.

4.2.1.3 Leverage/Capital Structure Ratio:

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Leverage ratio reveals the proportion of funds used by the institution either creditor's side or owner's side. It shows how much of the firm's assets are financed by debt and equity. Firm employed higher proportion of debt than it is called levered firm and firm with lower debt capital is called un-levered firm. If the firm employed excessive debt in its capital structure, additional debt financing will be difficult in future. The use of the debt enables the owners to maintain their control over the firm. But if the firm rises its capital through the equity then the owner will lose the control over the

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firm, while analyzing the financial performance of commercial bank, the following leverage ratio can be calculated:

Total Debt to Total Assets Ratio:

This ratio measures proportion of the creditor's fund used by the institution to acquire the assets. The increased proportion of debt indicated the riskiness or burden to the institution. Total debt to total assets ratio can be calculated by dividing total debt by total assets as follows:

$$\text{total debt to total assets ratio} = \frac{\text{total debt}}{\text{total assets}}$$

Total debt to total assets ratio of selected bank have been presented below:

Table-8: total debt to total assets ratio table

(Rs in million)

Year	HBL			NIBL		
	Total Debt	Total Assets	Ratio (in times)	Total Debt	Total Assets	Ratio (in times)
2003/04	22292.10	23355.23	0.9545	8375.72	9014.26	0.9292
2004/05	23437.86	24762.04	0.9465	12526.45	13255.50	0.9450
2005/06	26302.97	27844.69	0.9446	15093.91	16274.08	0.9275
2006/07	27694.21	29460.39	0.9400	19914.70	21330.14	0.9336
2007/08	31372.64	33519.14	0.9360	25712.73	27590.85	0.9319
Mean Ratio(x)			0.9443			0.9334
S.D.			1.41%			1.0%
C.V.			1.5%			1.07%

Source: Annual report of concerned banks, Refer Annex-1&2.

The table-8 shows that the total debt to total assets ratio of both the sample banks are high. It can also be said that total debt to total assets ratio of both the banks are quite consistent over the study period of five years. HBL has its average ratio of 0.9443

with 1.41% of S.D. and 1.5% of C.V. likewise, NIBL has its average ratio of 0.9334 with 1.00% of S.D. and 1.07% of C.V. although the both sample banks has consistency in total debt to total assets ratio, NIBL has been able to maintain high consistency in their total debt to total assets ratio, which can be shown with the help of bar diagram as follows:

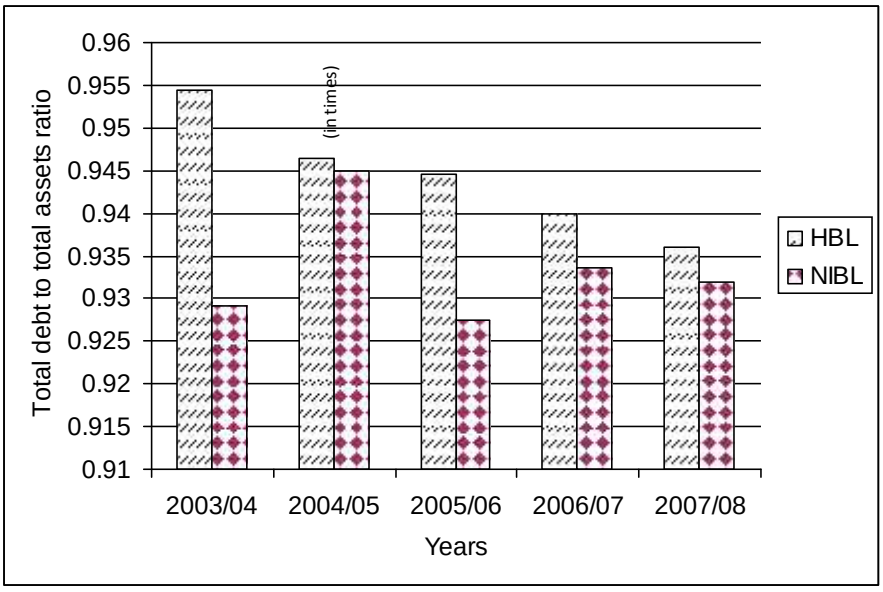

Figure-8: total debt to total assets ratio of HBL and NIBL

The above analysis helps us to conclude that the sample banks are aggressive and are using high portion of their debt capital. HBL financed 94.43% of its total assets by debt capital. Likewise, NIBL also financed 93.34% of its total assets by debt capital. The high total debt to total assets ratio implies that the bank's succession exploiting debts to the more profitable assets. Since both the banks have been extensively using their debt financing to finance their total assets, it ca be conclude that these banks are highly leveraged.

Debt-Equity Ratio:

The debt equity ratio implies that debt equity proportion used by the institution. High debt equity ratio indicates more used of money from creditor's side and vice versa.

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High debt equity ratio considered good if the institution is able to earn higher return than the cost paid on debt. It can be calculated by dividing total debt by total equity as follows:

$$\text{debt-equity ratio} = \frac{\text{total debt}}{\text{total equity}}$$

Debt-Equity ratio of selected banks have been tabulated below

Table-9: debt – equity ratio table

(Rs in million)

Year	HBL			NIBL		
	Total Debt	Total Equity	Ratio (in times)	Total Debt	Total Equity	Ratio (in times)
2003/04	22292.10	1063.13	20.9684	8375.72	638.54	13.1170
2004/05	23437.86	1324.18	17.6999	12526.45	729.05	17.1819
2005/06	26302.97	1541.74	17.0606	15093.91	1180.17	12.7896
2006/07	27694.21	1766.16	15.6805	19914.70	1415.44	14.0696
2007/08	31372.64	2146.50	14.6157	25712.73	1878.12	13.6907
Mean Ratio(x)			17.2050			14.1698
S.D.			484.33%			359.5163%
C.V.			28.1505%			25.372%

Source: Annual report of concerned banks, Refer Annex-1&2.

Table-9 shows that debt- equity ratio of HBL is in decreasing trend over the study period. It has mean ratio of 17.2050 with 484.33% of S.D. and 28.1505% of C.V. and debt equity ratios of NIBL are in fluctuating trend. Sometimes it increases and sometime it decreases. NIBL has highest ratio in fiscal year 2004/05 i.e. 17.1819 times and least ratio in fiscal year 2005/06 i.e. 12.7896 times. NIBL has mean ratio of 14.1698 with 359.5763% of S.D. and 25.372% of C.V. in comparison with HBL, NIBL employed more equity capital and less debt capital in its capital structure. NIBL

has lower C.V. than HBL so; NIBL has able to maintain consistency in debt equity ratio, which can be shown with the help of bar diagram as follows:

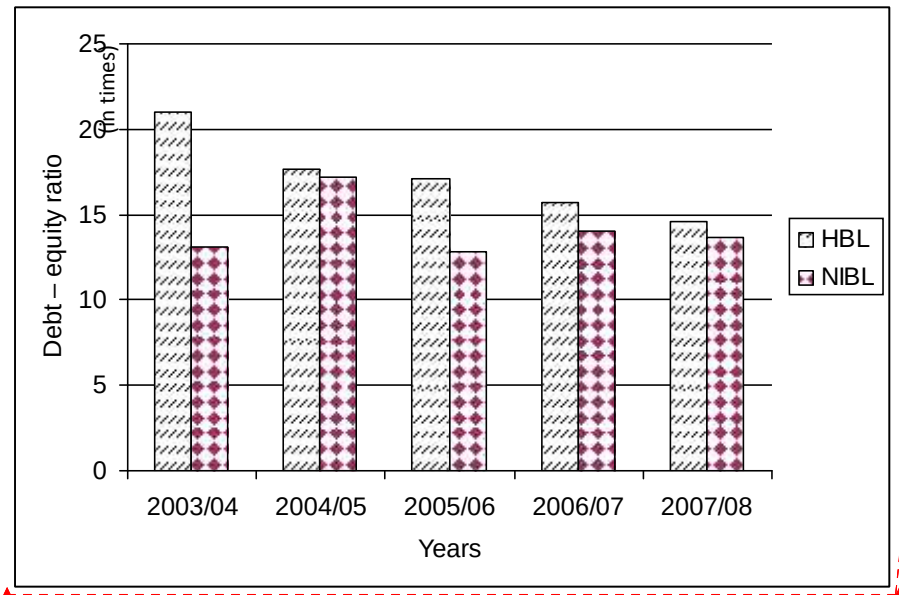

Figure- 9: debt-equity ratio of HBL and NIBL

From the figure-9, it will be concluded that debt equity ratio of HBL has been decreasing over the study period. It means HBL try to employ more equity and less debt to its capital structure. But the debt-equity ratio of NIBL is in fluctuating trend. It means the sometime NIBL employed more debt sometimes less debt in its capital structure. But NIBL employed less debt capital in its capital structure as compared with HBL.

Capital Adequacy Ratio:

This ratio is used to measure the strength of the capital adequacy of the available capital to operate the firm effectively and efficiently in the modern competitive environment adequate capital is required. This ratio is one of the most significant ratio and especially to assess the bank's strength of the capital structure. Capital adequacy has remained one of the highest issues in banking industry and shows whether the commercial banks are maintaining sufficient amount of net worth in comparison total

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amount of their deposit, which can be calculated by dividing net worth by total deposit.

$$\text{capital adequacy ratio} = \frac{\text{net worth}}{\text{total deposit}} \mid 100\%$$

The capital adequacy ratio of the selected banks has been tabulated below:

Table-10: capital adequacy ratio table

(Rs in million)

Year	HBL			NIBL		
	Net Worth	Total Deposit	Ratio (in %)	Net Worth	Total Deposit	Ratio (in %)
2003/04	1063.10	21007.37	5.06%	638.54	7922.76	8.06%
2004/05	1324.18	22010.88	6.02%	729.05	11524.68	6.33%
2005/06	1541.74	24814.01	6.21%	1180.17	14254.57	8.28%
2006/07	1766.16	26490.85	6.67%	1415.44	18927.31	7.48%
2007/08	2146.50	30060.33	7.14%	1878.12	24488.86	7.67%
Mean Ratio(x)			6.20%			7.56%
S.D.			156.10%			151.65%
C.V.			25.18%			20.06%

Source: Annual report of concerned banks, Refer Annex-1&2.

The table shows that the capital adequacy ratio of HBL is in increasing trend over the study period. The capital adequacy ratio of HBL has increased from 5.06% to 7.14%. It has mean ratio of 6.20% with 156.10 of S.D. and 25.18% of C.V. but capital adequacy ratio of NIBL is in fluctuating trend over the study period. It has highest ratio in fiscal year 2005/06 and least ratio in fiscal year 2004/05. NIBL has mean ratio of 7.56% with 151.65% of S.D. and 20.06% of C.V. after conducting the above analysis it can be concluded that NIBL has able to maintain high capital adequacy ratio in comparison with HBL. It means NIBL is in safer position to absorb

unexpected losses arising from various risks that can create instability in banks earning compared to HBL. The analysis of C.V. of both the banks shows the NIBL has more control over assets by shareholder's fund in compare to HBL and NIBL shows consistency than HBL: which can be shown with the help of bar diagram as follows:

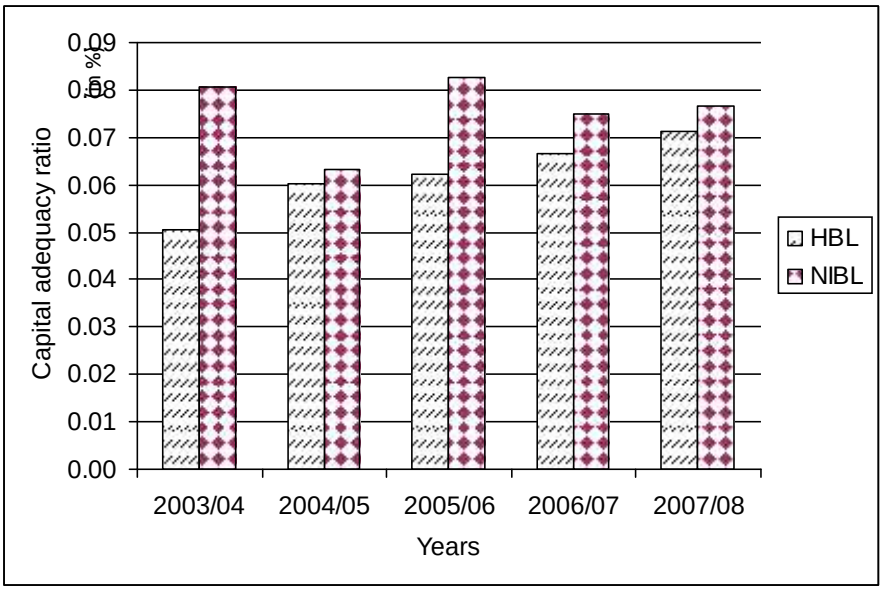

Figure-10: capital adequacy ratio of HBL and NIBL

From table-10, we can conclude that NIBL has higher capital adequacy ratio than HBL. Although HBL has less capital adequacy ratio than that of NIBL, it has the ratio in increasing trend, which indicates that HBL has tried to make its position safety to absorb unexpected losses arising from various risks that can create instability in bank's earning.

4.2.1.4 Profitability Ratios:

The main objective of a bank is to generate profit by providing different types of services to its customer. So profitability is the major concern of all the banks. It is an obvious that profitability ratios are the best indicators of overall efficiency of the

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bank. These ratios enable to judge the overall performance of the bank. The various profitability ratios, which reflect the operating efficiency of the banks, are analyzed below:

Return on Assets Ratio:

This ratio is a measuring tool of profitability with respect to each financial resource invested in assets. This is an appropriate base for assessing the effectiveness of the operating management. This ratio can be calculated by dividing net profit after tax by total assets of the firm as follows:

$$\text{return on assets ratio ROA} = \frac{\text{net profit after tax}}{\text{total assets}} \times 100\%$$

Return on assets ratio of selected banks has been tabulated below:

Table-11: return on assets ratio table

(Rs in million)

Year	HBL			NIBL		
	Net profit	Total assets	Ratio (in %)	Net profit	Total assets	Ratio (in %)
2003/04	212.13	23355.23	0.91%	116.82	9014.26	1.30%
2004/05	263.05	24762.04	1.06%	152.67	13255.50	1.15%
2005/06	308.28	27844.69	1.10%	232.15	16274.08	1.43%
2006/07	457.46	29460.39	1.55%	350.54	21330.14	1.64%
2007/08	491.82	33519.14	1.48%	501.40	27590.85	1.82%
Mean Ratio(x)			1.22%			1.47%
S.D.			55.86%			53.32%
C.V.			45.78%			36.27%

Source: Annual report of concerned banks, Refer Annex-12&3.

Table – 11 shows the return on assets (ROA) ratio of HBL & NIBL. Return on assets of HBL is in increasing from the fiscal year 2003/04 to 2006/07 from 0.91% to 1.55% and then decreased to 1.48% in fiscal year 2007/08. HBL has 1.22% of mean ratio with 55.86% of S.D. and 45.78% of C.V. return on assets ratio of NIBL also in increasing trend except in fiscal year 2003/04. It has minimum ratio in fiscal year

2004/05 i.e. 1.15% and highest ratio in fiscal year 2007/08 i.e. 1.82%, NIBL has mean ratio of 1.47% with 53.32% of S.D. and 36.27% of C.V. from the above analysis, return on assets of both banks have minimum return on assets. Although both the banks have least rate of return, NIBL has higher profitability with comparison to HBL. From the analysis of C.V., NIBL has able to generate consistent profit with respect to total assets than HBL-as NIBL has lower C.V. than HBL, which can be shown with the help of bar diagram as follows:

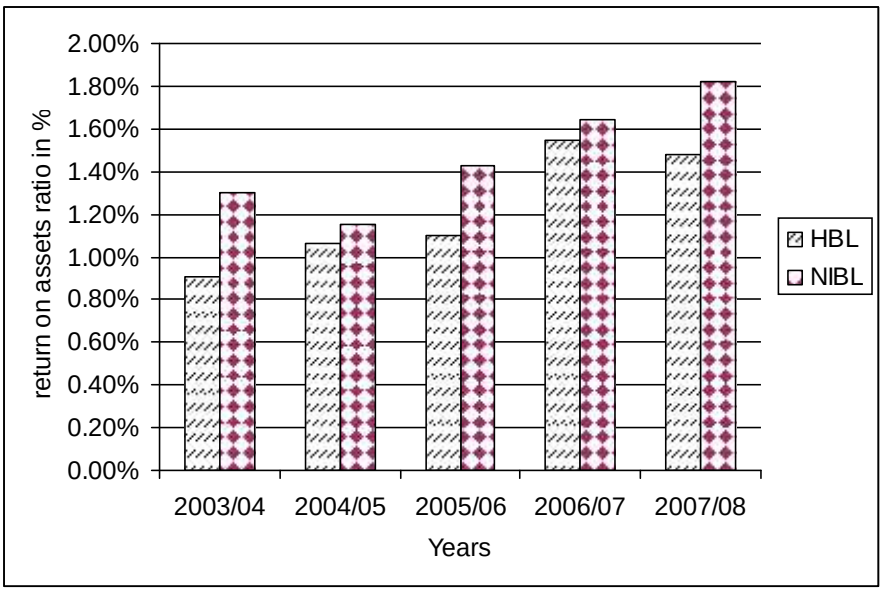

Figure-11: return on assets ratio of HBL&NIBL

Figure-11 shows the comparative and clear picture of return on assets of HBL and NIBL. In the above figure-11, it is clear that return on assets of both the banks is in increasing trend. It means both the banks increase their total earnings with respect to its total assets. Although the both banks have increasing trends in return on assets, NIBL has higher return on assets than that of HBL. From the above analysis, we can conclude that, NIBL has good profitability position than HBL.

Commission and Discount income to Personnel Expenses Ratio:

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Earning of any firm is highly influenced by knowledge, skill and motivation of its staffs. Personnel expenses are the reward provided to the staff for their effort and performance which they employed in favor of the organization. Commission and discount income are the cost paid by the customer to the organization for taking the services from the staff of the organization. So, while analyzing the financial performance of any organization it is better to calculate this ratio. It can be calculated by dividing the commission and discount income by the personnel expenses as follows:

commission and discount income to personnel expenses ratio

$$= \frac{\text{commission and discount}}{\text{personnel expenses}}$$

Commission and discount income to personnel expenses ratio of selected banks have been tabulated below:

Table-12: commission and discount income to personal expenses ratio table

(Rs in million)

Year	HBL			NIBL		
	Commission and discount income	Personnel expenses	Ratio (in times)	Commission and discount income	Personnel expenses	Ratio (in times)
2003/04	102.56	120.15	0.8536	40.81	61.29	0.6659
2004/05	123.93	152.51	0.8126	55.75	89.75	0.6212
2005/06	132.82	178.59	0.7437	93.55	97.00	0.9644
2006/07	165.45	234.59	0.7053	115.94	111.05	1.0440
2007/08	193.22	272.23	0.7098	163.90	145.37	1.1275
Mean Ratio(x)			0.7650			0.8846
S.D.			13.11%			68.08%
C.V.			17.14%			74.70%

Source: Annual report of concerned banks, Refer Annex-4&5.

The above table -12 shows the comparative and clear picture of commission and discount income to personnel expenses ratio of HBL and NIBL. Table -12 shows that

the ratio of HBL is in decreasing trend over the study period. It means increment in commission and discount income. HBL has average ratio of 0.765 with S.D. of 13.11% and C.V. of 17.14%. Inversely the ratio of NIBL is in increasing trend over the study period except in the fiscal year 2004/05. It means the increment in commission and discount income is higher than the increment in staff expenses. NIBL has average ratio of 0.8846 with S.D. of 66.08% and C.V. of 74.70%. From the above analysis efficiency of staff of NIBL is better than that of HBL as it has higher average ratio than that of HBL. And though the staff of NIBL has more efficiency, it's income from commission and discount is less consistent with respect to staff expenses than HBL as it has greater C.V. than HBL (i.e. 74.70%>17.14%). It can be shown with the help of bar diagram as below:

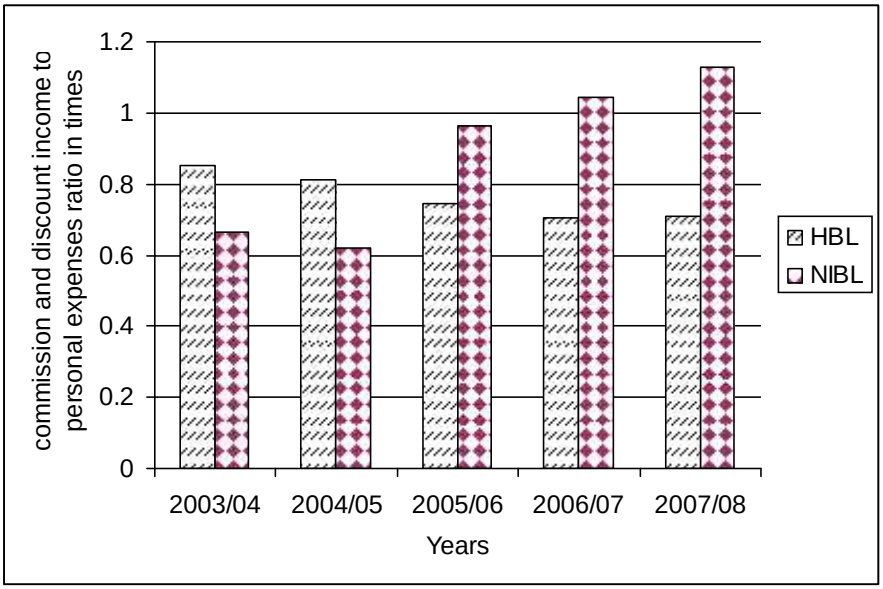

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Figure-12: commission and discount income to personnel expenses ratio of HBL & NIBL

From the above analysis, it can be conclude that HBL has the ratio in decreasing trend which means HBL invest more for its staff but the bank can not able to earn as much as it invest for its staff. But NIBL can able to earn more than the bank invest for its staff. Out of the five years study period, first two years HBL has higher ratio than

NIBL and rest three years NIBL has higher ratio than HBL. So the efficiency of staff on NIBL has higher than that of HBL.

=) **Interest Income to Interest Expenses Ratio:**

This ratio measures the effective use of deposit collected from outsider depositors to generate income (interest earned) in proportion of the expenses (interest paid) occurred on collected deposit. Higher ratio indicates the effective utilization of collect deposit for income generating purpose. It can be calculated by dividing total interest earned by total interest paid as follows:

$$\text{interest income to interest expenses ratio} = \frac{\text{interest income}}{\text{interest expenses}}$$

Interest income to interest expenses ratio of selected bank have been tabulated below:

Table-13: interest income to interest expenses ratio table

(Rs in million)

Year	HBL			NIBL		
	Interest income	Interest expenses	Ratio (in times)	Interest income	Interest expenses	Ratio (in times)
2003/04	1201.23	554.13	2.1678	459.51	189.21	2.4286
2004/05	1245.90	491.54	2.5347	731.40	326.20	2.2422
2005/06	1446.47	561.96	2.5740	886.80	354.55	2.5012
2006/07	1626.47	648.84	2.5067	1172.74	490.95	2.3887
2007/08	1775.58	767.41	2.3137	1584.99	685.53	2.3121
Mean Ratio(x)			2.4134			2.3746
S.D.			34.55%			20.12%
C.V.			14.32%			8.47%

Source: Annual report of concerned banks, Refer Annex-6&7.

Table -13 shows the comparative and clear picture of interest income to interest expense ratio of both the selected banks. Table-13 shows that the ratio of HBL is increased up to the fiscal year 2005/06 from 2003/04 and then start to decrease to the fiscal year 2007/08. It has mean ratio of 2.4134 times with the S.D. of 34.55% and C.V. if 14.32%. It means HBL has interest income 2.4134 times greater than its interest expenses. NIBL has the ratio in fluctuating trend. NIBL has highest ratio in fiscal year 2005/06 and least ratio in fiscal year 2007/08. NIBL has average ratio of 2.3746 times with 20.12% of S.D. and 8.47% of C.V. It means NIBL earn 2.374% times more interest with respect to its interest expenses. From the above analysis HBL has able to earn more interest with respect to interest expenses than NIBL as HBL has higher average ratio. But HBL has less consistent ratio than NIBL as HBL has higher C.V. than NIBL, which can be shown with the help of bar diagram as follows:

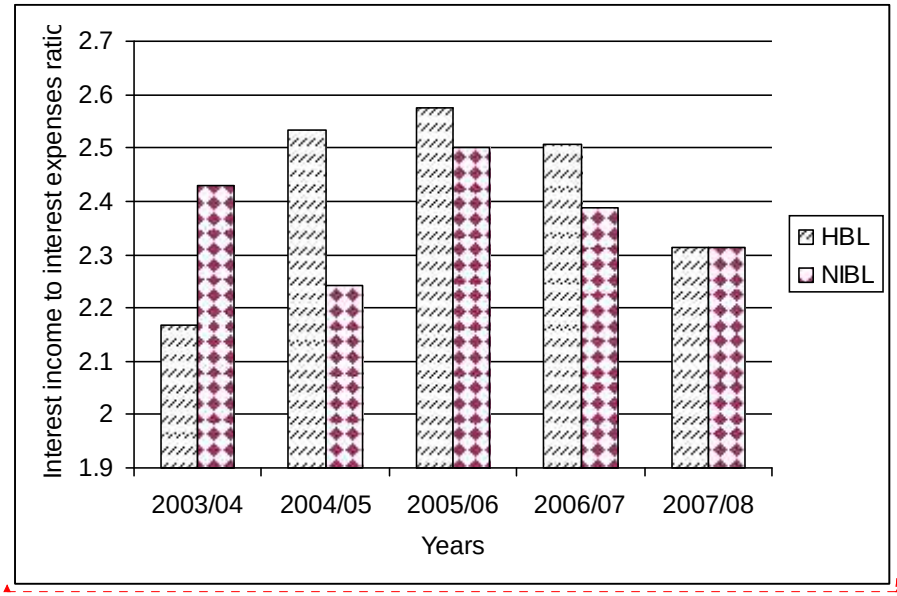

Figure-13: interest income to interest expenses ratio of HBL and NIBL

Figure-13 shows the clear picture about the interest income to interest expenses ratio of the selected banks. The ratio of HBL has increase trend and after reaching the highest point in fiscal year 2005/06 it is in decreased trend. But the NIBL has fluctuating trend in its interest income to interest expenses ratio. From the figure-13, it can be concluded that HBL has higher ratio than that of NIBL. It means HBL able to earn more interest with respect to interest expenses than NIBL.

=) Return on Shareholders Equity Ratio:

Major objective of any business firm is to maximize its shareholder's wealth. Shareholder's wealth will be maximized by earning adequate return on the shareholder's fund. This ratio measures the effectiveness of utilization of its ownership fund. It measures whether the business earns return at satisfactory level on its equity holder or not: so, it will be an important indicator while analyzing the financial performance of any business firm. It is also called return on equity (ROE). This ratio can be calculated by dividing net profit after tax by total shareholder's equity as follows:

$$\text{return on shareholder's equity} = \frac{\text{net profit after tax}}{\text{shareholder's equity}} \times 100\%$$

Return on shareholder's equity ratio of both the selected banks has been tabulated below:

Table-14: return on shareholder's equity ratio table

(Rs in million)

Year	HBL			NIBL		
	Net profit after tax	Shareholder's equity	Ratio (in %)	Net profit after tax	Shareholder's equity	Ratio (in %)
2003/04	212.13	1063.13	19.95%	116.82	638.54	18.30%
2004/05	263.05	1324.18	19.87%	152.67	729.05	20.94%
2005/06	308.28	1541.74	20.00%	232.15	1180.17	19.67%
2006/07	457.46	1766.16	25.90%	350.54	1415.44	24.77%
2007/08	491.82	2146.50	22.91%	501.40	1878.12	26.70%
Mean Ratio(x)			21.73%			22.08%
S.D.			5.26%			7.07%
C.V.			24.21%			32.02%

Source: Annual report of concerned banks, Refer Annex-1,2&3.

Table-14 shows that the comparative picture of return on shareholder's equity of both sample banks. HBL has the ratio in increasing trend except in the fiscal year 2004/05. It means the bank has able to increase its net profit with respect to its shareholder's equity. HBL has average ratio of 21.73% with the 5.26 standard deviation and 24.21% of C.V. ratio of NIBL also in increasing trend except 2005/06. NIBL has the mean ratio of 22.08% with S.D. of 7.07 and C.V. of 32.02%. Above table shows both the bank has it ratio in an increasing trend and both the bank earns satisfactory level of profit with respect to its shareholder's fund. NIBL has higher average ratio than HBL, it means NIBL earn more with respect to shareholder's fund than HBL. But NIBL unable to maintain consistence in its net profit with respect to shareholder's fund; which can be shown with the help of bar diagram as follows:

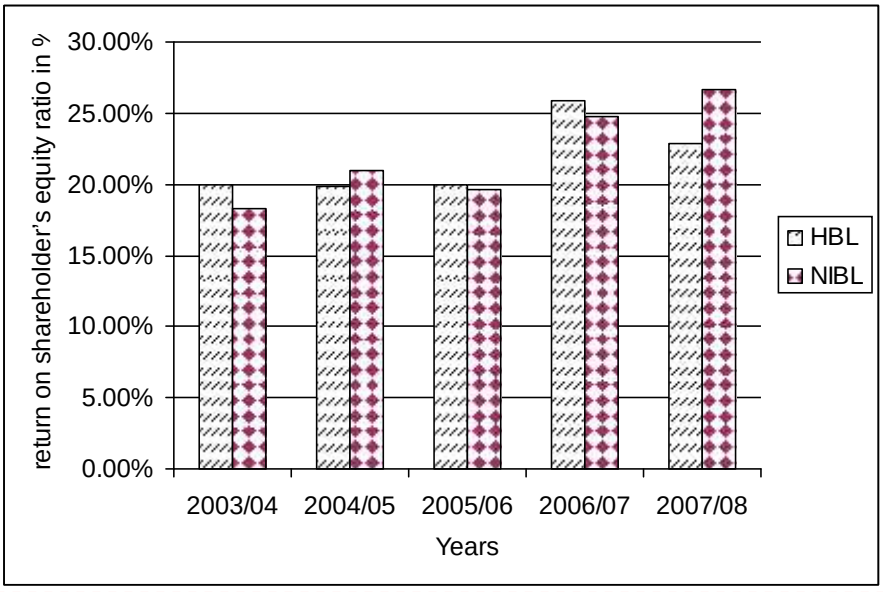

Figure-14 return on shareholder's equity ratio of HBL and NIBL

From the above figure-14, we can conclude that return on shareholder's equity of both the banks have been increasing over the study period, from fiscal year 2003/04 to 2006/07. HBL has higher ratio but in fiscal year 2007/08 NIBL has good ratio. From the above diagram, it can be concluded that both the banks able to earn satisfactory level of return.

Interest Earned to Total Assets Ratio:

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This ratio measures the earning capacity of a bank on its total assets. This ratio exhibits the extent on which banks are successful in mobilizing their total assets to generate income as much as possible. It can be calculated by dividing total interest earning by total assets as follows:

$$\text{interest earned to total assets ratio} = \frac{\text{interest earned}}{\text{total assets}} \times 100\%$$

Interest earned to total assets ratio of selected bank has been tabulated below:

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Table-15: interest earned to total assets ratio table

(Rs in million)

Year	HBL			NIBL		
	Interest earned	Total assets	Ratio (in %)	Interest earned	Total assets	Ratio (in %)
2003/04	1201.23	23355.23	5.14%	459.51	9014.26	5.14%
2004/05	1245.90	24762.04	5.03%	731.40	13255.50	5.03%
2005/06	1446.47	27844.69	5.19%	886.80	16274.08	5.19%
2006/07	1626.47	29460.39	5.52%	1172.74	21330.14	5.52%
2007/08	1775.58	33519.14	5.30%	1584.99	27590.85	5.30%
Mean Ratio(x)			5.24%			5.46%
S.D.			0.3723%			0.4618%
C.V.			7.10%			8.46%

Source: Annual report of concerned banks, Refer Annex-1,2&6.

Table-15 shows the comparative position of interest earned to total assets ratio of HBL and NIBL. Interest earned to total assets ratio of HBL is in fluctuating trend. The highest ratio of HBL is 5.52% which occurred in fiscal year 2006/07 and least ratio is 5.03%, which occurred in fiscal year 2004/05. HBL has mean ratio of 5.24% with 0.3723 S.D. and 7.10% of C.V. NIBL has the ratio in increasing trend except in the fiscal year 2005/06. NIBL has highest ratio of 5.74% which occurred in fiscal year 2007/08 and least ratio of 5.10% which occurred in fiscal year 2003/04. NIBL has mean ratio of 5.46% with 0.4618 S.D. and 8.46% C.V. from the above analysis it can be concluded that NIBL able to earn more interest with respect to its total assets than HBL as NIBL has higher mean ratio but NIBL does not able to maintain consistency in its ratio, which is shown by its higher C.V. though the HBL earn less interest with respect to total assets in comparison with NIBL, it has been able to maintain consistency in its ratio which is proved by its less C.V. After analyzing the C.V. of both the banks it can be concluded that HBL has consistency in earning interest by mobilizing a total assets effectively.

4.2.1.5 Valuation Ratios:

These ratios result the overall performance of the bank measuring the combined effect of risk and return. "The valuation ratio indicates the market value of the firm as compared to the book value and measure the stock price relative to earning". Various valuation ratios like price earning (P/E) ratio and market value per share (MPS) to book value per share (BVS) have been calculated to indicate the market value of the bank as compared to the book value and to measure the stock price relative to earnings.

- **Price Earning Ratio (P/E Ratio):**

Price earning ratio is widely used by the security analyst to value the firm's performance as expected by investor price earning ratio indicates investor's judgment or expectation about the firm's performance. It can be calculated by dividing market price per share (MPS) by Earning per share (EPS), which can be written in symbolically as follows:

$$\text{P/E ratio} = \frac{\text{MPS}}{\text{EPS}}$$

P/E ratio of selected banks has been tabulated below:

Table-16: P/E ratio table

(Rs in million)

Year	HBL			NIBL		
	MPS	EPS	Ratio (in times)	MPS	EPS	Ratio (in times)
2003/04	836.00	49.45	16.91	795.00	39.56	20.10
2004/05	840.00	49.05	17.12	940.00	51.70	18.18
2005/06	920.00	47.91	19.20	800.00	39.50	20.25
2006/07	1100.00	59.24	18.57	1260.00	59.35	21.23
2007/08	1740.00	60.66	28.69	1729.00	62.57	27.63
Mean Ratio(x)			20.10			21.50
S.D.			9.38			7.22
C.V.			46.67%			33.58%

Source: Annual report of concerned banks, Refer Annex-8&9.

Table-16 shows the comparative picture of P/E ratio of selected banks. P/E ratio of HBL has in increasing trend except in the fiscal year 2006/07. It has maximum ratio of 28.69 times in fiscal year 2007/08 and minimum ratio of 16.91 times in fiscal year 2003/04. HBL has mean ratio of 20.10 times with 9.38 S.D. and 46.67% C.V. similarly; the P/E ratio of NIBL has also in increasing trend over the study period except in fiscal year 2004/05. Maximum ratio of NIBL is 27.63 times in fiscal year 2007/08 and minimum ratio is 18.18 times in fiscal year 2004/05. NIBL has mean ratio of 21.50 with 7.22 S.D. and 33.58% C.V. from the above comparative table, NIBL has higher P/E ratio than HBL. It means the value of the stock of NIBL is better than that of HBL. According to the C.V. analysis of the banks, NIBL has able to maintain consistency in its MPS with respect to EPS than that of HBL. It can be shown with the help of bar diagram as follows:

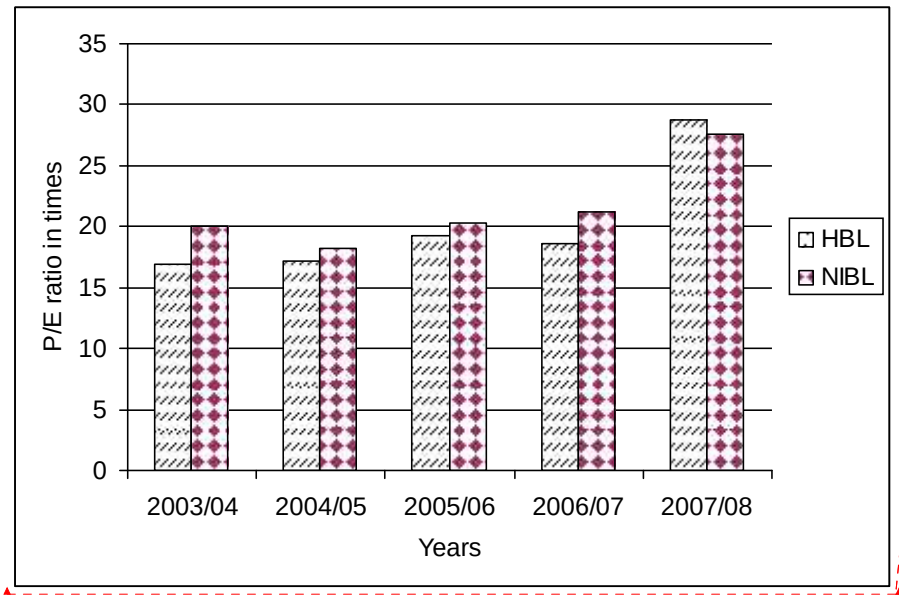

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Figure-15: P/E ratio of HBL & NIBL

Figure-16 shows the clear picture of P/E ratio of HBL and NIBL. From the above figure, P/E ratio of HBL is increasing throughout the study period except in fiscal year 2006/07. Similarly, P/E ratio of NIBL is also increasing over the study period except in fiscal year 2004/05. In the figure-16, NIBL has higher P/E ratio than HBL in

most of the year. So, it can be concluded that, the price of NIBL is better than that of HBL with respect to its EPS.

Market Price per Share to Book Value per Share Ratio:

This ratio is a relative measure of how the growth option for a company is being valued opposite to its physical assets. it can be calculated by dividing market price per share by its book value per share. Higher ratio indicates higher growth and higher value of the firm. Symbolically it can be written as:

$$\text{MPS to BVS Ratio} = \frac{\text{MPS}}{\text{BVS}}$$

MPS to BVS ratio of selected banks has been tabulated below:

Table-17: MPS to BVS ratio table

(Rs in million)

Year	HBL			NIBL		
	MPS	BVS	Ratio (in times)	MPS	BVS	Ratio (in times)
2003/04	836.00	100.00	8.36	795.00	100.00	7.95
2004/05	840.00	100.00	8.40	940.00	100.00	9.40
2005/06	920.00	100.00	9.20	800.00	100.00	8.00
2006/07	1100.00	100.00	11.00	1260.00	100.00	12.60
2007/08	1740.00	100.00	17.40	1729.00	100.00	17.29
Mean Ratio(x)			10.87			11.10
S.D.			7.6			7.94

C.V.	70.01%		71.53%

Source: Annual report of concerned banks, Refer Annex-8.

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Table-17 shows the MPS to BVS ratio of HBL and NIBL. MPS to BVS ratio of HBL is in increasing trend over the study period. HBL has mean ratio of 10.87 with S.D. of 7.61 and C.V. of 70.01%. Likewise NIBL also has the ratio in increasing trend except in the fiscal year 2005/06. NIBL has mean ratio of 11.10 with S.D. of 7.94 and C.V. of 71.53%, since NIBL has higher mean ratio, its growth rate in its MPS with respect to BVS is higher than that of HBL. C.V. analysis shows that HBL has consistency in growth rate in MPS with respect to BVS, since it has less C.V. comparatively the investor's attitude towards NIBL is more positive than that of HBL. It can be shown with the help of bar diagram as follows:

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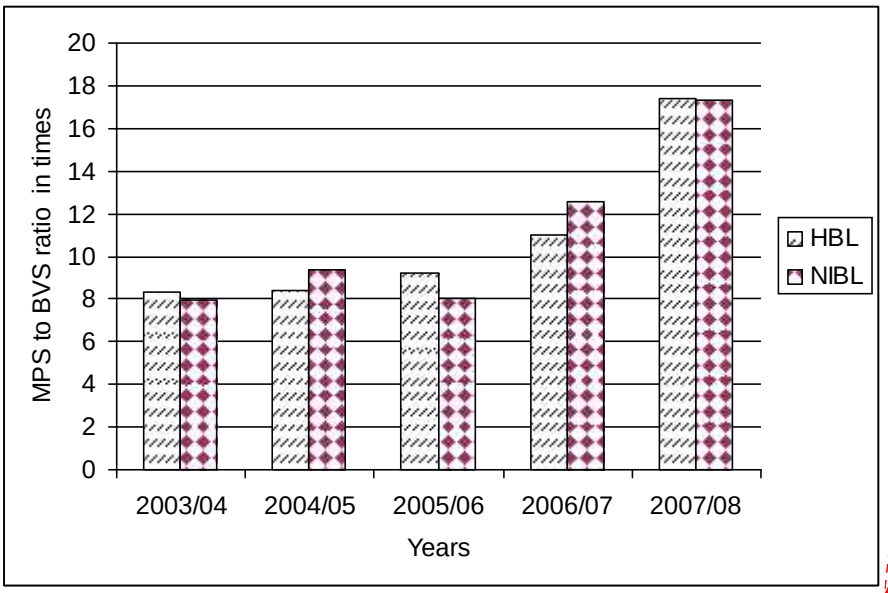

Figure-16: MPS to BVS ratio of HBL and NIBL

Figure-16 shows the clear picture of MPS to BVS ratio of HBL and NIBL. MPS to BVS ratio of both the banks have been increasing through out the study period. It means growth rate market value per share with respect to book value per share has

been increasing over the study period. The above analysis helps us to conclude that NIBL is worth more than the fund put into it by the shareholders. This clearly indicates that the NIBL is earning more than the requirement of financial market than HBL. Comparatively the investor's attitude towards NIBL is more positive than that of HBL.

4.3 Statistical Tools:

Statistics may be defined as the collection, presentation, analysis and interpretation of the numerical data. We can use various types of statistical tools to measure the financial performance of any organization. Some statistical tools such as arithmetic mean. Standard deviation (S.D.) and coefficient of Variation (C.V.) have already used to measure the financial performance of commercial banks as a part of financial tools. Now, in this section two statistical tools such as correlation coefficient (r) and trend analysis are used for the purpose of measuring the financial performance of commercial.

4.3.1 Coefficient of Correlation Analysis:

Coefficient of correlation measures the degree of relationship between two variables. It can be defined as the degree of linear relationship existing between two or more variables. Two variables are said to be correlated when the change in the value of one variable is accompanied by the change of another variable.

The widely used method of correlation coefficient is karlperson's coefficient of correlation. Symbolically it can be presented as follows:

~~r=NΣXY-ΣXΣYNΣX2-ΣX2-[NΣY2-ΣY2]~~

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

Where,

r= Karlperson's coefficient of correlation.

N= no of observation.

ΣX= sum of the observation in series 'X'.

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ΣY= sum of the observation in series 'Y'.

ΣX^2= sum of square of the observation in series 'X'.

ΣY^2= sum of square of the observation in series 'Y'.

ΣXY= sum of product of observation of series 'X' and 'Y'.

Here correlation coefficient analysis has been done between different variables of HBL and NIBL.

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4.3.1.1 Coefficient of correlation between deposits and loan and advance:

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Deposit is the main source of fund available in the bank for investing as loan and advance. Likewise loan and advance are the key part to mobilize the collected deposit. Correlation of coefficient between deposit and loan and advance measure the degree of relationship between these two variables. In this study deposit is taken as independent variable which is denoted by 'X' and loan and advances are taken as dependent variables which are denoted by 'Y'. By analyzing the coefficient of correlation between these two variables enable us to justify whether deposits are significantly used as loan and advance in proper way are not. Correlation coefficient between deposits and loan and advance of HBL and NIBL over the study period is presented in the following table:

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Table-18: coefficient of correlation between total deposits and total loan and advance of HBL and NIBL

(Rs in million)

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Year	HBL	NIBL

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	Total Deposit (X)	Loan and Advance (Y)	Total Deposit (X)	Loan and Advance (Y)
2003/04	210.0737	100.0185	79.2276	57.7214
2004/05	220.1033	119.5187	115.2468	71.3013
2005/06	248.1401	124.2452	142.5457	101.2606
2006/07	264.9085	146.4256	189.2731	127.7621
2007/08	300.6033	169.9800	244.8886	172.8643
R		0.97		0.99
P.E.= $[(1-r^2)/n]$		0.0264		0.0089
6. P. E.		0.1586		0.0534
Level of significant		Significant		Significant

Source: Annual report of concerned banks, Refer Annex-11.

The coefficient of correlation for both the banks found to be almost '1' which indicates there is proportional relationship between the deposit and loan and advance for both the banks i.e. HBL and NIBL. While testing the level of significant correlation coefficient between deposit and loan and advance of both the banks found to be significant as the value of σ. P. E. is less than that the value of coefficient of correlation (r). Above analysis shows that both the banks have perfect correlation between deposit and loan and advance. The correlation is positive correlation, it implies the amount of loan and advance will increase as the increment in total deposit occurs.

4.3.1.2 Correlation coefficient between deposit and investment:

No doubt, deposit is the major sources of fund available in the bank for investment purpose. Besides loan and advance, investment is also a major way by which banks mobilize their deposit collected from the outsider depositors. By investing it collected fund in a profitable area like, share and debenture, government securities, foreign investment, banks can maximize the profit. Therefore, while analyzing the financial performance of the commercial bank, it is important to analyze the relationship between total deposit and investment. For this analysis deposit is taken as independent

variable which is denoted by (X) and investment is taken as dependent variable which is denoted (Y). Coefficient of correlation between deposit and investment measure the degree of relationship between these two variables. Total deposit, investment, correlation coefficient and probable error of selected banks can be presented.

Table-19: coefficient of correlation between deposit and investment.

(Rs in 100 million)

Year	HBL		NIBL	
	Deposits (X)	Investment (Y)	Deposits (X)	Investment (Y)
2003/04	210.0737	101.7544	79.2276	17.0524
2004/05	220.1033	92.9210	115.2468	38.6248
2005/06	248.1401	110.9234	142.5457	39.3419
2006/07	264.9085	108.8903	189.2731	56.0287
2007/08	300.6033	118.2299	244.8886	65.0568
R		0.79		0.97
P.E. =[(1-r²)/n]		0.17		0.03
6. P. E.		1.02		0.18
Level of significant		Insignificant		Significant

Source: Annual report of concerned banks, Refer Annex-12.

HBL has the coefficient of correlation of 0.79 between its deposits and investment. It suggests that deposit and investment of HBL is highly correlated. But while testing the significance, it is found that the correlation is not significant as it has the higher value of σ. P. E. than r. NIBL has the coefficient of correlation of 0.97 between its deposits and investment, which implies that deposit and investment of NIBL is perfectly correlated. Positive correlation coefficient is positive; it means amount of investment will increase with the increment in the total amount of deposit. While analyzing the significance of correlation coefficient, it is significant as it has lesser value of σ. P. E. than r. from the above analysis, it can be concluded that NIBL has higher correlated deposit and investment than HBL as NIBL has higher value of 'r' than HBL.

4.3.1.3 Correlation coefficient between investment and net profit

Organization invests its fund in different profitable area to maximize the profit of the firm. From the investment organization received some earnings. With out profit no one firm can survive. Profit is the key element for survive in the market. Commercial bank is a firm which established for the purpose of earning profit through the collection money from outsider and granting loan to the outsider and investing in different profitable sectors. Profit, therefore is a key part for the bank. Investment and profit have some relation. So, it is important to measure the degree of relationship between these two variables, while analyzing the financial performance of any commercial bank. In this study investment is taken as independent variable which is denoted by 'X' and net profit is taken as dependent variable which is denoted by 'Y'. Coefficient of correlation, probable error and significance level of both the selected banks are shown in the following table:

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Table-20: coefficient of correlation between investment and net profit

(Rs in 100 million)

Year	HBL		NIBL	
	Investment (X)	Net profit (Y)	Investment (X)	Net profit (Y)
2003/04	101.7544	2.1213	17.0524	1.1682
2004/05	92.9210	2.6305	38.6248	1.5267
2005/06	110.9234	3.0828	39.3419	2.3215
2006/07	108.8903	4.5746	56.0287	3.5054
2007/08	118.2299	4.9182	65.0568	5.0140
R		0.64		0.93
P.E. =$[(1-r^2)/n]$		0.26		0.06
6. P. E.		1.56		0.36
Level of significant		Insignificant		Significant

Source: Annual report of concerned banks, Refer Annex-13.

HBL has the positive correlation coefficient of 0.64, which implies that the investment and net profit of the bank are positively correlated. But while analyzing the significant level with the help of P.E., it is found insignificant due to lower value of r than σ. P. E. NIBL has the positive correlation coefficient (r) of 0.93 which means the investment and net profit of the banks are positively correlated with high degree. While analyzing the level of significant with the help of P.E., it is found significant due to more value of r than σ. P. E. After analyzing this table comparatively it can be concluded that correlation between investment and net profit of NIBL is higher than HBL because NIBL has higher value of 'r' than HBL.

4.3.1.4 Correlation coefficient between total assets and net profit.

Profit is a major source of earning of the owner of the firm. Owner of the firm invest in the firm as assets. They expect to receive high return on their assets. So, while analyzing the financial performance of the commercial bank, it is important to measure relationship between total assets and net profit. For this purpose, total assets

are taken as the independent variable which is denoted by 'X' and net profit is taken as dependent variable which is denoted by 'Y'. Correlation coefficient between total assets and net profit of HBL and NIBL, P.E. and level of significant are tabulated below:

Table-21: coefficient of correlation between total assets and net profit.

(Rs in100 million)

Year	HBL		NIBL	
	Total Assets (X)	Net profit (Y)	Total Assets (X)	Net profit (Y)
2003/04	233.5523	2.1213	90.1426	1.1682
2004/05	247.6204	2.6305	132.5550	1.5267
2005/06	278.4469	3.0828	162.7408	2.3215
2006/07	294.6039	4.5746	213.3014	3.5054
2007/08	335.1914	4.9182	275.9085	5.0140
r		0.94		0.99
P.E.= $[(1-r^2)/n]$		0.05		0.01
6. P. E.		0.30		0.06
Level of significant		Significant		Significant

Source: Annual report of concerned banks, Refer Annex-14.

In table 20 it is clear that coefficient of correlation of both the sample banks are almost '1' with positive sign. It means the total assets and net profit of these two sample banks are perfectly correlated with positive sign. It implies that both the banks able to earn net profit by using its total assets. Correlation between these two variables of both the sample banks is significant as both the banks have higher value of 'r' than value of σ. P. E.

4.3.2 Trend Analysis:

Trend analysis is a statistical tool which will highlight the previous trend of the financial performance and in the great extent, because instrumental in forecasting the future financial results of these banks.

Trend analysis is very effectively in form various personal directly or indirectly related to the bank. For shareholders of the bank, it informs about the expected future trend returns which help them to decide whether to stick in the present investment or to search for alternative investment opportunity. For professional bankers it indicates the future achievement of the bank. For depositors, it provides degree of safety in the form of financial credit worthiness of the bank in the future. For the borrower, it assures about the financial capacity of the bank to furnish their loans and advances in future provided at the present will continue. In this section, we have analyzed the trends of the four basic financial indicators i.e.

- Total deposit
- Loan and advance
- Investment
- Net profit

Since, for any bank these indicators are very crucial financial variables with which we can relate the financial performance these indicators have been chosen. The trend of previous five years period and the expected future results for the period of five years have been calculated and analyzed which will be helpful to the various parties concerned with the bank. Lastly, the summary of the comparative financial trends of the HBL and NIBL have been presented in such a manner, so as the reader know which of the bank is expected to perform better in the coming years.

4.3.2.1 Trend Analysis of Total Deposit:

Deposits are the main sources of fund available in the bank. So while analyzing the financial performance of the commercial bank, it is important to analyze the growth trend of the total deposit of commercial banks. Forecasted value of total deposits of HBL and NIBL for next five years based on the trend of last five years is tabulated below:

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Table-22: value of total deposit of HBL and NIBL

(Rs in million)

Fiscal year	Total deposit	
	HBL	NIBL
Average Deposit (a)	24876.58	15423.64
Rate of charge (b)	2258.64	4053.48
2003/04	21007.37	7922.76
2004/05	22010.33	11524.68
2005/06	24814.01	14254.57
2006/07	26490.85	18927.31
2007/08	30060.33	24488.86
2008/09	38428.42	39744.54
2009/010	40687.06	43798.02
2010/011	42945.70	47851.50
2011/012	45204.34	51904.99
2012/013	47462.92	55958.47

Source: Annual Report of the concerned bank, Refer annex-15.

The above table shows that the forecasted value of total deposits of HBL and NIBL of last five years and for next five years. Table-22 shows that the total deposits of selected banks have been increasing trend. From the above analysis, total deposit of HBL will be Rs. 38428.42 in fiscal year 2008/09, Rs. 40687.06 in fiscal year 2009/010, Rs. 42945.70 in fiscal year 20010/011, Rs. 45204.34 in fiscal year 2011/012 and Rs. 47462.98 in fiscal year 2012/013 respectively. HBL has average deposit of Rs. 24876.58 and change rate in deposit of Rs. 2258.64 on the basis of last five year's value. Likewise, NIBL also has its total deposits in increasing trend. It is expected to be Rs. 39744.54 in fiscal year 2008/09, Rs. 43798.02 in fiscal year 2009/010, Rs. 47851.50 in fiscal year 2010/011, Rs. 51904.99 in fiscal year 2011/012 and Rs. 55958.47 in fiscal year 2012/013 respectively. NIBL has average deposit of Rs. 15423.64 and rate of changes in deposit is Rs. 4053.48 on the basis of last five year's value. From the above analysis, although the average deposit of NIBL is lower than HBL, NIBL has higher rate of changes in total deposit due to higher rate of changes in total deposit; NIBL has higher total deposit than HBL. The trend line can be drawn as follows:

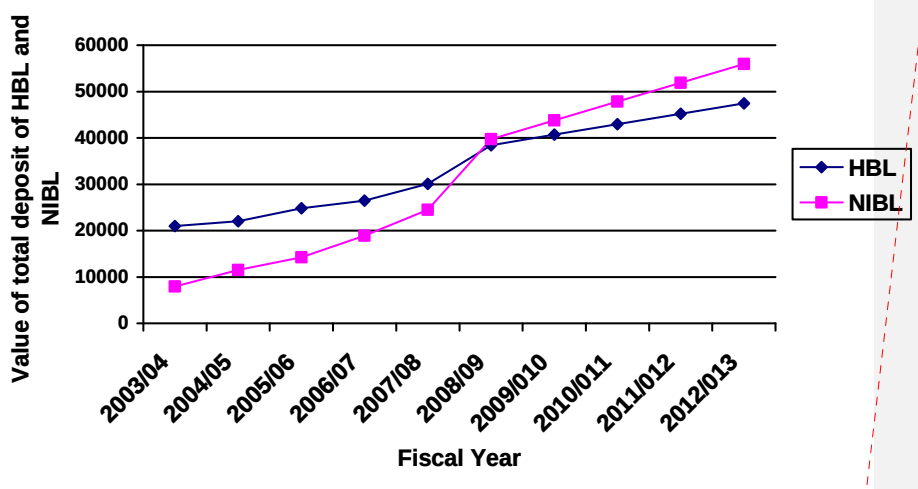

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Figure-17: trend line of total deposit of HBL and NIBL

Figure 17 shows that growth trend of NIBL has higher than that of HBL. From the figure 17 it is clear that total deposits of NIBL is lower than HBL up to fiscal year 2006/07 and expected total deposits of NIBL is higher than that of HBL. From this analysis it can be concluded that NIBL will able to collect more fund from outsider depositors than HBL.

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4.3.2.2 Trend Analysis of Loan and Advance:

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Loan and advance is also an important part of its invested fund. Bank as a financial institution invests its most of the part of the fund collected from outside as loan and advance. Banks receive interest against the loan and advance which is the major portion of its income. So, while analyzing the financial performance of commercial banks it is important to analyze its growth trend of loan and advance. Now, the amount of loan and advance of selected banks of last five years and expected value of loan and advance for next five years of selected banks can be tabulated as below:

Table-23: value of total loan and advance of HBL and NIBL

(Rs in million)

Fiscal year	Total loan and advance	
	HBL	NIBL
Average loan and advance (a)	13203.76	10618.19
Rate of charge (b)	1668.30	2867.47
2003/04	10001.85	5772.14
2004/05	11951.87	7130.13
2005/06	12424.52	10126.06
2006/07	14642.56	12776.21
2007/08	16998.00	17286.43
2008/09	23213.56	27823.01
2009/010	24881.86	30690.48
2010/011	26550.16	33557.95
2011/012	28218.46	36425.42
2012/013	29886.76	39292.89

Source: Annual Report of the concerned bank, Refer annex-16.

Table 23 shows the value of total loan and advance of last five year and expected value of loan and advance for next five years. This table shows that, loan and advance of selected banks have been increasing trend. From the trend analysis of loan and advance of HBL it's expected value will be Rs. 23213.56 in fiscal year 2008/09, Rs. 24881.86 in fiscal year 2009/010, Rs. 26550.16 in fiscal year 2010/011, Rs. 28218.46 in fiscal year 2011/012, and Rs. 29886.76 in fiscal year 2012/013 respectively. HBL has average deposit of Rs. 13203.76 and growth rate on loan and advance of 1668.30 based on last five years data. Likewise, NIBL will expected to have loan and advance of Rs. 27823.01 in fiscal year 2008/09, Rs. 30690.48 in fiscal year 2009/010, Rs. 33557.95 in fiscal year 2010/011, Rs. 36425.42 in fiscal year 2011/012, and Rs. 39292.89 in fiscal year 2012/013 respectively. NIBL has average loan and advance of Rs. 10618.19 and growth rate on loan and advance of Rs. 2867.47 based on last five years data. From the above analysis, though the average loan and advance of NIBL is lower than HBL, NIBL has higher expected value of loan and advance due to higher growth rate in loan and advance as compared to HBL. The trend line for loan and advance can be drawn as follows:

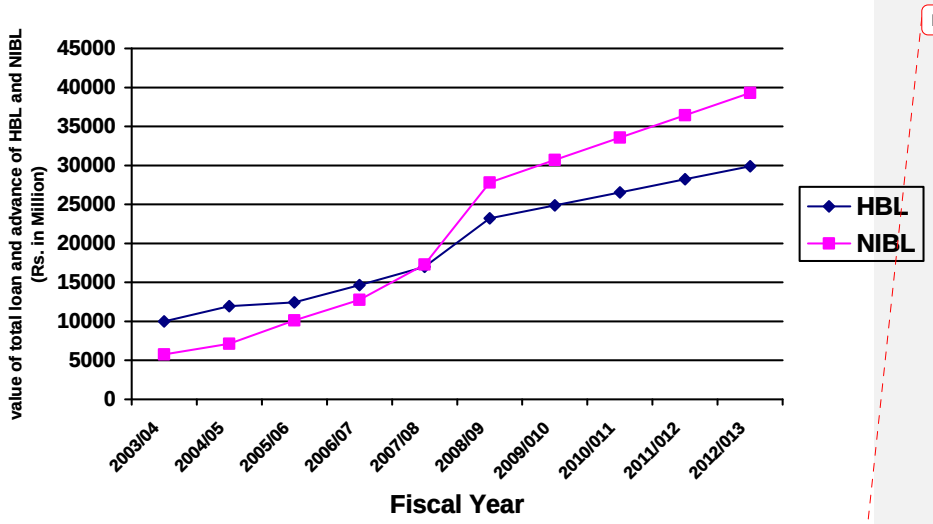

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Figure-18: trend line of value of total loan and advance of HBL and NIBL

Figure-18 shows that growth trend of NIBL have higher than that of HBL. After analyzing the figure 18, total loan and advance of NIBL has lower than HBL up to fiscal year 2006/07 and than it has higher amount of loan and advance. From the above analysis it can be conducted that NIBL will able more to invest its total collected fund as loan and advance than HBL.

4.3.2.3 Trend Analysis of Investment:

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Banks invest significant part of its collected deposit in various securities such as government securities, shares, debentures, foreign securities as long term investment to earn profit. So, while analyzing the financial performance of the bank it is important to analyze the growth trend of investment of the commercial bank. Now, the amount of investment of selected bank of last five year and expected value of investment for next five year of selected banks can be tabulated below:

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Table-24: value of investment of HBL and NIBL

(Rs in million)

Fiscal year	Total investment	
	HBL	NIBL
Average investment (a)	10774.38	4322.09
Rate of charge (b)	489.20	1134.13
2003/04	10175.44	1705.24
2004/05	9292.10	3862.48
2005/06	11692.34	3934.19
2006/07	10889.03	5602.87
2007/08	11822.99	6505.68
2008/09	13709.58	11126.87
2009/010	14198.78	12261.00
2010/011	14687.98	13395.13
2011/012	15177.18	14529.27
2012/013	15666.38	15663.39

Source: Annual Report of the concerned bank, Refer annex-17.

Table-24 shows that the value of investment of last five years and expected value of investment for next five years of selected banks. The above analysis shows that HBL and NIBL will have increasing trend in their investment. HBL will have expected investment of Rs. 13709.58 in fiscal year 2008/09, Rs. 14198.78 in fiscal year 2009/10, Rs. 14687.98 in fiscal year 2010/011, Rs. 15177.18 in fiscal year 2011/012, and Rs. 15666.38 in fiscal year 2012/013 respectively. HBL has average investment of Rs. 10774.38 and its investment will grow by Rs. 489.20 million per year. Likewise, NIBL will expect to have the investment of Rs. 11126.87 in fiscal year 2008/09, Rs. 12261.00 in fiscal year 2009/010, Rs. 13395.13 in fiscal year 2010/011,

Rs. 14529.27 in fiscal year 2011/012, and Rs. 15663.39 in fiscal year 2012/013 respectively. NIBL has average investment of Rs. 4322.09 and growth rate of Rs. 1134.13 per year. From the above analysis it shows that HBL has higher average investment than NIBL. But HBL has lower growth rate per year than NIBL. From this analysis, it can be concluded that NIBL able to mobilize its collected fund as investment more effectively than HBL. And NIBL will have higher value of investment than HBL due to its higher growth rate. Trend line for investment of selected banks can be drawn as follows;

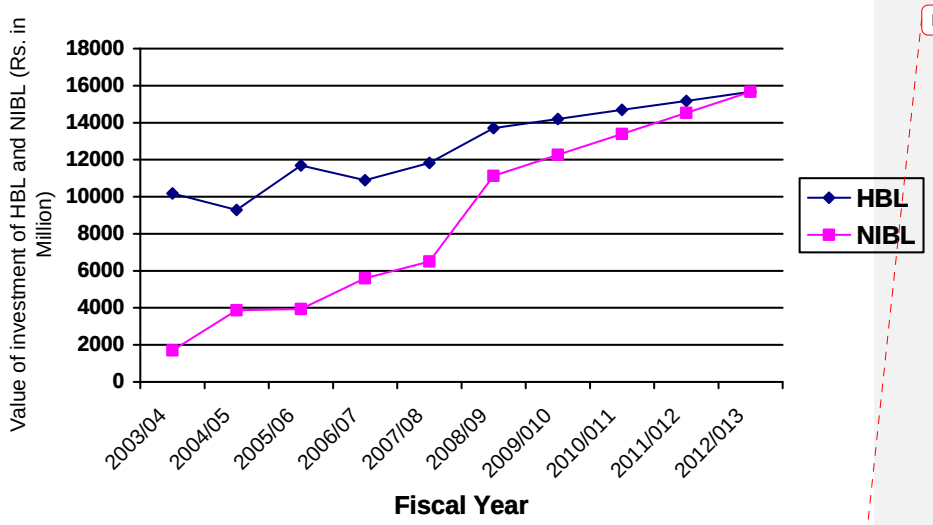

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Figure-19: trend line of investment of HBL and NIBL

Figure-19n shows that growth rate of NIBL have higher than that of HBL. After analyzing the figure-19, total investment of NIBL is increasing higher than that of

HBL, which helps to conclude that NIBL will able more to invest its collected fund into different securities as long term investment than HBL.

4.3.2.4 Trend Analysis of Net Profit after Tax:

Banks earn profit from different activities such as interest from loan and advance, dividend from long term investments, commission, and service charge etc. profit is the key indicator which measures the effectiveness of management system and operation system of the bank. Bank also can satisfy its owner. If the bank able to earn sufficient profit as required by its owner. Bank with higher profit is considered more effective and successful than the bank with lower profit. So, while analyzing the financial performance of the bank, it is important to analyze the trend of net profit after tax of last five years and expected value of net profit for next five years of concerned banks can be tabulated below:

Table-25: value of net profit after tax of HBL and NIBL

(Rs in million)

Fiscal year	Total net profit after tax	
	HBL	NIBL
Average net profit after tax(a)	346.55	270.72
Rate of charge (b)	75.38	96.70
2003/04	212.13	116.82
2004/05	263.05	152.67
2005/06	308.28	232.15
2006/07	457.46	350.54
2007/08	491.82	501.40
2008/09	798.83	850.92
2009/010	874.21	947.62
2010/011	949.59	1044.32
2011/012	1024.97	1141.02
2012/013	1100.35	1237.72

Source: Annual Report of the concerned bank, Refer annex-18.

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Table-25 shows the amount of net profit after tax of last five years and expected amount of net profit after tax for next five years of HBL and NIBL. The above table shows that both the banks have their net profit after tax in increasing trend. HBL has average net profit after tax is Rs. 346.55 and the growth rate per year is 75.38. HBL will expect to have net profit of Rs. 798.83 in fiscal year 2008/09, Rs. 874.21 in fiscal year 2009/010, Rs. 949.59 in fiscal year 2010/011, Rs. 1024.97 in fiscal year 2011/012 and Rs. 1100.35 in fiscal year 2012/013 respectively. In the same way, NIBL has average net profit of Rs. 270.72 with annual growth rate of Rs. 96.70. NIBL will expect to have Rs. 850.92 in fiscal year 2008/09, Rs. 947.62 in fiscal year 2009/010, Rs. 1044.32 in fiscal year 2010/011, Rs. 1141.02 in fiscal year 2011/012, and Rs. 1237.72 in fiscal year 2012/013. From the above analysis HBL has lower annual growth rate in net profit although HBL has higher average net profit. It implies that NIBL will be able to earn more profit than HBL by investing its fund to the different profitable area. Trend line for net profit of HBL and NIBL can be drawn as follows:

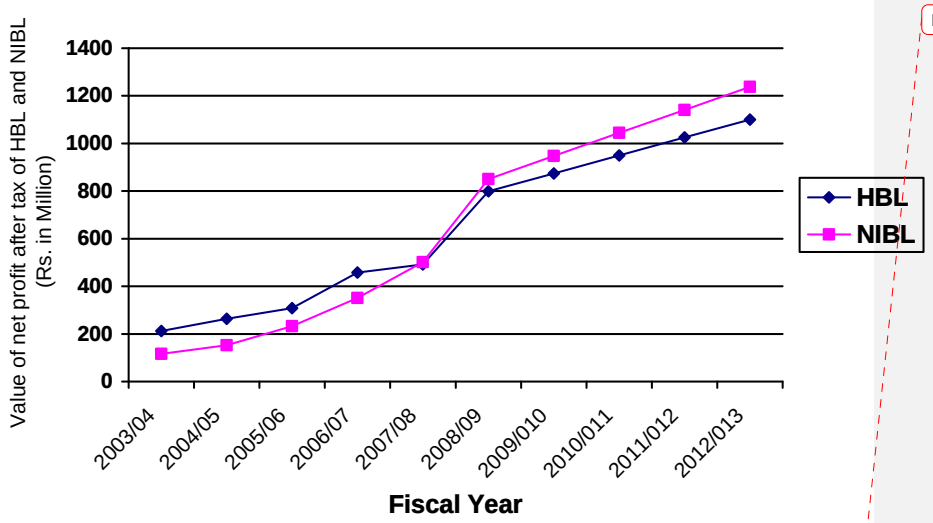

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Figure-20: trend line of net profit after tax of HBL and NIBL

Figure 20 shows that growth rate of NIBL has higher than that of HBL. From the above analysis net profit of NIBL is increasing more than HBL, which help to conclude that NIBL has good earning power of its total assets. NIBL has been able to operate its operation more effectively than HBL.

With the completion of trend analysis, we come to the end of analytical section in this study. In this chapter, we dolt with ratio analysis, arithmetic mean, standard deviation, coefficient of variation, correlation coefficient analysis and trend analysis.

4.4 Major Findings of this Study:

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From the above analysis of concerned bank, the following findings have been derived:

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1) Current ratio of both of the banks showed consistent trend. Both the banks could not maintain the conventional standard of 2:1. NIBL has higher average ratio which implies that NIBL is more capable to meet short term obligation in comparison to HBL. Normally, the ratio remained consistent in both the banks.

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2) NIBL has slightly higher average cash and bank balance to total deposit than HBL, which indicate that NIBL use slightly more portion of its total deposit to meet short-term obligation as cash and bank balance. C.V. of NIBL remain consistent which means NIBL has maintained cash and bank balance with respect to total deposit more consistently than HBL.

3) NIBL has more cash and bank balance to current assets ratio than HBL. It implies that NIBL is more capable to meet the daily cash requirements for payment of daily obligation. Over the study period HBL has the ratio in decreasing trend which means HBL has practiced to maintain lower level of cash with respect to current assets.

4) From the analysis of liquidity ratio of selected bank, NIBL has comparatively better liquidity position than HBL. However, from the working capital policy view point, both the banks are very much aggressive.

5) Mean ratio of loan and advance to total deposit ratio of NIBL has higher than HBL, which indicate that NIBL mobilize most of the part of its total deposit to loan and advance. However the average ratio of both the banks found to be at satisfactory level and able to maintain the consistency in ratio.

6) The mean value of loan and advance to fixed deposit ratio of both the banks is found to be at satisfactory level. However, NIBL has higher average ratio than that of HBL which indicate that turnover of fixed deposit as loan and advance is better in NIBL than that of HBL.

7) Both the selected banks are successful to mobilize their fund as loan and advance with respect to total assets. However, NIBL has higher mean ratio than HBL over the study period which implies that NIBL can be taken as better investor than HBL as concerned to consistency, both the sample banks able to maintain consistency.

8) The mean value of total investment to total deposit ratio of HBL is found to be satisfactory level. NIBL has lower mean value of the ratio. From this analysis it can be said that HBL is able to invest in different sectors from its deposit. But NIBL is not found to be good in this part.

9) From the analysis of assets management ratio, it can be concluded that both the banks are successful in on-balance sheet utilization. Out of these two banks NIBL is found to be best in mobilizing the assets to the profitable sector.

10) The mean value of total debt to total assets ratio of HBL is higher than that of NIBL. It indicates that HBL used more debt fund than NIBL. Although HBL has higher mean value of the ratio, both the banks have employed debt fund at high level in their capital structure.

11) HBL has more value of debt-equity ratio than NIBL. This indicates that HBL has used more debt fund with respect to equity capital than NIBL. Although HBL has higher mean ratio than NIBL, both the banks have higher mean ratio. It means both the banks used debt fund with respect to equity fund at higher level.

12) The mean value of capital adequacy ratio is higher in NIBL than HBL. It means NIBL is in safer position from the unexpected loss arising from the various risk.

13) From the analysis of leverage ratio, it can be said that HBL has used more debt fund than that of NIBL. It means HBL is more levered than NIBL. Capital adequacy ratio is taken into consideration. NIBL is in safer position.

14) Average value of return on assets ratio is higher in NIBL than HBL. It indicates NIBL is able to earn more profit with respect to total assets than HBL.

15) The mean value of commission and discount income to personnel expenses of NIBL is higher than that of HBL. It indicates that NIBL is able to earn income in term of commission and discount with respect to its personnel expenses than HBL. From this analysis it can be concluded that NIBL has more efficient staff than HBL with respect to payment made to the staff.

16) HBL has higher average value of interest income to interest expenses ratio than NIBL. It implies that HBL is using outsider's fund properly on the profit generating activities. But the ratio is more consistent in NIBL, as shown by C.V.

17) NIBL has higher mean value of return on shareholder's equity than HBL, which indicates that NIBL is able to earn more profit in its shareholder's fund than HBL. Although NIBL had higher ratio, ratio of NIBL is fluctuating more than HBL as shown by C.V.

18) The average value of interest income to total assets ratio of NIBL is slightly higher than HBL, which indicates that NIBL is able to earn more interest with respect to its total assets. it means NIBL mobilize its assets more effectively in profit generating area as loan and advance than HBL.

19) From the analysis of profitability ratio, NIBL has able to earn more profit than HBL by mobilizing its total assets into different profitable sectors. So, NIBL has better profitability than HBL.

20) Average price earning ratio of NIBL is higher than HBL. It indicates that value of NIBL's stock is better than HBL's stock.

21) In average market value per share to book value per share of NIBL is high than HBL. It indicates that market value of NIBL's stock is at higher level than that of HBL.

22) By analyzing the valuation ratio of selected bank, it can be concluded that market value of NIBL is higher position than HBL.

23) Total deposits and loan and advances of both the bank are almost positively perfect correlated. It indicates that loan and advance of both the selected banks will proportionally increase with the increment in total deposit.

24) Correlation coefficient between total deposit and total investment of both the banks are more than 0.5 with positive sign, which means investment will increase proportionally with the increment in total deposit. Out of these two banks NIBL has higher value of correlation coefficient between total deposit and total investment than HBL.

25) Investment and net profit of both the banks are almost positively correlated. Out of these two banks, the two variables of NIBL are highly correlated than HBL.

26) Value of correlation coefficient between total assets and net profit of both the banks are almost '1' which means net profit of both the banks is directly proportional to its total assets.

27) Both the selected banks i.e. HBL and NIBL have its total deposit in increasing trend. But NIBL has higher growth trend than HBL.

28) Loan and advance of both the banks are also in increasing trend. Here also NIBL has higher growth trend than HBL.

29) Both the selected banks i.e. HBL and NIBL have its total investment in increasing trend.

30) Net profit of the selected banks is also in increasing trend. NIBL also have higher growth trend in its net profit than HBL.

31) The above trend analysis shows that NIBL is better than that of HBL in all the cases. The growth rate of total deposit, total loan and advance, total investment and total net profit of NIBL is higher than that of HBL.

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CHAPTER-FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

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5.1 Summary

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Industrialization is an important factor foe achieving the target of a country's economic and social progress. Industrialization not only provides necessary products and services to the community but also provide the employment opportunities. Industrialization thus has multiplier effect. Banking industry has been regarding as one of the most parts of industrialization. It transfers the scattered funds collected from saving of the public into various productive sectors.

Economic activities remain half in the absence of banking industries as it play the role of catalyst for economic development of the country. So, commercial banks have played significant role in the economic development of the country. They have introduced new technology in the banking system to mobilize the saving of the community. They have focused their services on commerce, trade and industry along with general public. But the cut-throat competition and lack of sufficient investment opportunities have created threats to the bank.

This study has conducted to evaluate the financial performance of the commercial bank especially, that of Himalayan Bank Ltd. and Nepal Investment Bank Ltd; the objectives of the study is identified as to come up with conclusion in the study, various existing books, previous thesis, articles, journals and concerned policy act and policies have been reviewed. This study is based on secondary data. This study covers only two banks that are Himalayan Bank Ltd and Nepal Investment Bank Ltd among 26 commercial banks. This study is based on last five years data of concerned banks i.e. from fiscal year 2003/04 to 2007/08. In this study descriptive and analytical research design has been used. For analyzing the financial data of the sample bank, financial tools i.e. ratio analysis and statistical tools i.e. arithmetic mean, standard deviation. Coefficient of variation, coefficient of correlation, trend analysis has been used.

Liquidity position of both the banks seems to be satisfactory. Overall liquidity position of NIBL appears slightly stronger than that of HBL. It shows that NIBL can meet its short term obligation more efficiently than HBL. However, lacking up more fund as working capital is also not good because it has negative impact on

profitability of the bank. From the working capital policy view point both the banks are very much aggressive.

Both the banks have used higher proportion of debt in their capital structure. Overall capital structure of HBL seems to be more levered than that of NIBL. It shows that HBL has been trying to follow the "more risk-more gain" strategy. This will be in favor of stockholders of the bank; while there will be smooth business operation. Capital adequacy position of NIBL seems stronger than that of HBL. NIBL is found slightly more successful to mobilize its deposit in profitable sectors.

Value of most of the assets management ratio seems to be higher in NIBL than HBL. It shows that NIBL has more successful to mobilize its assets to the different profitable sectors. Value of loan and advance to total deposit ratio, loan and advance to fixed deposit ratio, loan and advance to total assets ratio are higher in NIBL than HBL.

Value of return on assets in NIBL is higher than that of HBL. NIBL has higher value of commission and discount income to personnel expenses which implies that NIBL has more successful to get the task effectively from their staff than HBL. NIBL also has higher value of return on shareholder's equity and interest income to total assets ratio. But NIBL has lower value of interest income to interest expenses ratio, which shows that, NIBL need to pay more interest to the depositors than it earn interest from its creditors in comparison with HBL.

Income and expenses of both the banks have in increasing trend. Interest seems to occupy significant part in income and expenses of both the banks.

Total deposit from the outsider depositor is the major sources of fund of both the banks. Both of the banks invest their significant part of the fund as loan and advances. Both of the selected banks HBL and NIBL have their, total deposit, total investment, loan and advance in increasing trend. But NIBL is better than that of HBL in all the cases because growth rate of total deposit, total loan and advance, total investment and net profit is higher in NIBL.

Correlation coefficient between total deposit and total investment, investment and net profit, total deposit and loan and advance and total assets and net profit are almost '1' with positive sign in both the banks, which implies that these variables have perfectly positive correlation.

5.2 Conclusion:

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Slowly private sector banks are initiating to move every corner of the country. But, there are cut-throat competitions among the banks due to easy entry barrios caused by the government liberal policy. This competition is expected to be more intense in the near future, as there is always the possibility of a new player entering this sector. So, due to that types of increasing competition banks are forces to innovate new product to their customer and they are also shifting from the traditional service producer to various sophisticated services like ATM card, debit card, credit card, housing loan, educational loan and vehicle financing etc.

The overall performance of sample banks found to be satisfactory. Although both the banks have satisfactory performance, NIBL has slightly better performance than HBL. From the above analysis, most of the ratios of NIBL are better than that of HBL, only few ratios are better in HBL than NIBL. From the view point of liquidity position, NIBL has better position to meet its short term obligation than HBL which is reflected by higher current ratio, cash and bank balance to total deposit ratio and cash and bank balance to current assets ratio. NIBL also less aggressive than HBL in term of working capital policy, which also implies that NIBL has better position in terms of liquidity.

From the view point of assets management, here is also NIBL has better position than HBL, which is reflected by higher loan and advance to total deposit ratio, loan and advance to fixed deposit ratio and loan and advance to total working fund ratio. It means NIBL has able to mobilize its assets into different profitable sectors.

Both the sample banks have employed higher debt capital into their capital structure. But HBL has slightly higher ratio, than NIBL, which means HBL has employed slightly more debt fund in its capital structure. More levered strategy is consider as good while these are not any inverse condition in the environment. But it will be harmful if there are any inverse conditions in the operating environment. The capital base of bank is stronger in NIBL, since they have higher capital adequacy ratio.

From the profitability view point, NIBL has in better position than HBL. Because it earn more return on its total assets, shareholders equity. NIBL also has earned more commission and discount income with respect to personal expenses, more interest on its total assets than HBL. But HBL has higher interest income to interest expenses than NIBL which implies that HBL has earn more interest from its borrowers than the interest paid to its depositors with the comparison of NIBL.

P/E ratio of NIBL is higher than that of HBL, which means investors have higher expectation in terms of value of the firm than HBL.

NIBL has higher positive growth rate on its total deposit, total investment, total loan and advance and net profit, which implies that NIBL has able to collect more deposit from its depositors and mobilize it as loan and advance and long term investment in government security and foreign security than HBL. From the trend line analysis expected value of total deposits, loan and advance, investment and net profit will be higher in NIBL than HBL.

From the above analysis deposits are the main tool for developing banks performance and investment and loan and advance is the key to mobilize the deposit. Both the banks have positive relation between the deposits and loan and advance, deposit and investment, investment and net profit and total assets and net profit.

There is no doubt that both the banks have been operating smoothly and have been successful in becoming the pillars of economic development of the country. Their direct contribution to the economy includes high amount of the corporate tax paid by them, matching good payment to their shareholders and employee and providing employment to the qualified persons in order to make them equipped with all the technical knowledge of banking. Indirectly, both the banks are financial intermediaries that provide a link between borrowers and lenders, there by mobilizing the idle resources towards productive sectors.

Though, commercial banks are achieving the height of success, living standard, of the general public have not even seem a marginal growth. The methods of earning of commercial banks have very little or no return to the economy and result in a huge disparity between two class of people. Therefore, the statement ‘figures prosper but people suffer’’ becomes true. NRB, the central bank of Nepal in order to develop the country uniformly has necessitated the commercial banks to invest 12% of their total

credit outstanding to the priority and deprived sectors of the country. In some cases, the joint venture banks were even happy to pay the penalty, because the penalty amount is lower than their opportunity cost of the fund to the invested in the priority and deprived sectors. Again this kind of activity leads to no returns for the country.

In conclusion, it can be said that both the selected banks have satisfactory level of financial performance. Although both the banks have satisfactory performance, the performance of NIBL is better than that of HBL as indicated by the above financial and statistical analysis of selected banks based on the last five years' financial data.

5.3 Recommendation

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From the above findings and analysis it is clear that both the banks are not strong enough regarding financial performance. Therefore, on the basis above analysis and major findings, the following recommendations have been forwarded. So that they will help the sample banks to strengthen weaker aspects of financial activities:

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1) Both of the banks i.e. HBL and NIBL have maintain NRB balance to deposit ratio significantly higher than the standard prescribed by NRB. The fund tied up in NRB balance can not yield good return. So both of the banks are suggested to lower this ratio and invest the surplus fund in other current assets such as loan and advances, bills purchase and discounted, money at call and short notice as long as secure opportunity to obtain.

2) Bank should maintain the liquidity for daily cash requirements. So, it is suggested that banks should hold the fund as cash or cash equivalent as their requirement. Though it is difficult to determine the optimal or exact level of cash requirements, it should be done on the basis of past experiences, nature of depositors, situation in financial market and nature of competition.

3) Both the sample banks have employed significantly large portion of the debt in their capital structure. So, they should be aware of the possible risk associated with these higher size of debt i.e. slackness in the business activities.

4) Capital adequacy ratio of HBL seems less than that of NIBL. That's why HBL need to raise its net worth. It will better for both of the banks to distribute stock dividend rather than cash dividend to their stockholders, which help to raise the net worth of the bank.

5) Significant portion of income in HBL has spent for staff and office operations. It is suggested to minimize the office and staff expenses by searching the 100 photos.

6) Fixed deposits are deposited for long period and need to pay higher interest. Therefore fixed deposit can use for long time investment and generate large income for the bank. HBL has mobilized less amount its total deposit as loan and advances. So, HBL should increase its investment as loan and advance to different productive and profitable sectors.

7) The overall investment of banks should be concentrated on productive sector such as business and industrial loan rather than consumer product such as hire purchasing and housing loan. Because industry and business sectors will create the employment opportunity which is necessary for capital formation and economic growth.

8) It is suggested to expand their new branches at the different parts of the country i.e. rural area which helps to the banks to get the profitable opportunity as well as for the elevation of deprived community and to develop the economy of the nation.

9) HBL is not successful as NIBL to earn a net profit by utilizing its assets and deposits. So, HBL should invest its deposits into different profitable sectors on the basis of portfolio management. Portfolio management means allocation of funds into different components of banking assets having different degree of risk.

10) The economic liberalization has made all the banks to determine the own interest ratio but now days due to unhealthy competition the spread between the deposit and lending interest has been higher than Nepal Rastra Bank's policy.

Both of the banks should keep into consideration that if the interest rate on deposit is very low, depositors may not interested to deposit their saving. Therefore, the spread should be fixed according to NRB.

11) Although, profit is considered as the key for survival and growth of any institution, it should not be the one and only goal. The country has expected from the financial sectors in such a way that it encompasses the balance development. Economic level of the country can be raised only when the level of the people depending upon the agriculture increased. So, the banks are suggested to divert their loans in priority and deprived sectors as per the directives of NRB.

12) These are the days of competition. Bank should be survive within this competition. Therefore to survive in the competitive environment, they should brought different alternative programmed, facilities, technologies etc. such as ATM card, credit card, 365 days banking, shadhyakalin banking counter etc. as much as possible.

13) Banks are recommended to activate foreign technology and investment in napalm by means of their wide internationals banking sectors and make Nepalese personnel capable of operating these banks as efficiently as international banks.

14) Complaint box should be kept in each and every branch of the banks and bank personnel effort to eliminate those deficits which are in the complaint box in order to maintain better relation with its customers.

15) Banks should treat its personnel as human capital of the organization not as the servant. So, they should invest enough amounts for the advancement of their employee capability.

~~16)~~It is also suggested to develop systematic plan and programs for increasing the operating efficiency of the employee. Such as incentives like training and reward, that is well and clearly structured and implemented. These banks also require formulating new services, ideas and policies such as women's

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development program, small entrepreneur development program, poverty alleviation program, plenty sector development programs etc.

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LIST OF ABBREVIATIONS

HBL - Himalayan Bank Ltd.
NIBL - Nepal Investment Bank Ltd.
NRB - Nepal Rastra Bank.
NABIL - Nepal Arab Bank Ltd.
S. D. - Standard Deviation
C. V. - Coefficient of Variation
B. S. - Bikram Sambat
i. e. - That is
P. E. - Probable Error
EPS - Earning Per Share
DPS - Dividend per Share
MPS - Market Price per Share
BPS - Book Value per Share
ROA - Return on Assets
P/E ratio - Price Earning Ratio
etc - Etceteras
T. U. - Tribhuvan University
A. D. - Anno Dumini
Ltd. - Limited
Pvt. - Private
Rs. - Rupees
r - Coefficient of Correlations

Annex-1

HIMILAYAN BANK Ltd.
Five Years Financial Summary
Balance-Sheet

(Rs in million)

Years / Items	2003/04	2004/05	2005/06	2006/07	2007/08
Assets:					
2 Current Assets:	16881.45	18495.85	21228.89	23030.25	27446.51
– Cash and bank balance	1979.21	2001.19	2014.47	1717.35	1757.43
– Money at call & short notes	150.10	368.90	441.08	1005.28	1710.02

– Loans advance & bills purchased	10001.85	11951.87	12424.52	14642.56	16998.00
– Investment	3998.87	3431.73	5469.73	5142.98	6454.88
– Interest receivables	418.46	526.65	511.18	62.42	0
– Other current assets	332.96	215.51	367.91	459.66	526.18
3 Fixed Assets	6473.78	6266.19	6615.80	6430.14	6072.63
– Net fixed assets	229.87	299.64	295.82	540.82	574.06
– Investment	6176.57	5860.38	6222.61	5746.06	5368.11
– Other fixed assets	67.34	106.17	97.37	143.26	130.46
4 Total assets (working funds) (A+B)	23355.23	24762.04	27844.69	29460.39	33519.14
Liabilities:					
5 Current liabilities	21899.94	23030.88	25942.97	27334.21	31012.64
– Deposits and other A/C's	21007.37	22010.33	24814.01	26490.85	30060.33
– Current	3503.14	4145.45	5045.16	5028.15	5589.58
– Saving	10870.54	11759.60	12852.41	14582.86	15784.77
– Fixed	3205.37	4710.18	6107.45	6350.20	8201.13
– Call and short deposit	3041.49	970.08	222.96	41.61	97.91
– Others	386.83	425.02	586.04	488.03	375.03
– Short-term loan	285.85	299.01	146.05	144.62	235.97
– Bills payable	46.73	64.38	68.40	73.58	91.30
– Provision for staff bonus	40.00	46.73	58.06	67.24	71.74
– Dividend payable	7.86	6.32	5.61	238.41	130.94
– Other current liability	512.13	604.11	850.84	319.51	434.27
6 Long term liability	392.16	406.98	360.00	360.00	360.00
7 Total liabilities (D+E)	22292.10	23437.86	26302.97	27694.21	31372.64
8 Net assets (C-F)	1063.13	1324.18	1541.74	1766.16	2146.50
Shareholder's fund					
9 Paid-up capital	429.00	536.25	643.50	772.20	810.81
10 Reserves	511.64	617.96	740.07	837.40	1151.30
– General reserve	329.18	381.79	443.44	534.94	633.30
– Capital reserve	0.00	0.00	0.00	0.00	0.00
– Other reserve	182.46	236.17	296.63	302.46	518
11 Profit and loss A/C	122.49	169.97	158.17	156.56	184.39
12 Total shareholder's funds (H+I+J)	1063.13	1324.18	1541.74	1766.16	2146.50

Annex-2

NEPAL INVESTMENT BANK Ltd.
Five Years Financial Summary
Balance-Sheet

(Rs in million)

Years / **Items**	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**

Assets:					
– **Current Assets:**	7464.30	11103.34	13950.95	17877.09	23555.96
1. Cash and bank balance	926.53	1226.92	1340.49	2336.53	2441.51
– Money at call & short notes	40.00	310.00	140.00	70.00	362.97
– Loans advance & bills purchased	5772.14	7130.13	10126.06	12776.21	17286.43
– Investment	400.00	2001.10	1948.50	2522.30	3256.40
– Interest receivables	83.47	77.01	81.58	0	0.00
– Other current assets	242.16	358.18	314.32	172.05	208.65
– **Fixed Assets**	1549.96	2152.16	2323.13	3453.06	4034.89
– Net fixed assets	191.12	249.79	320.59	343.45	759.46
– Investment	1305.25	1861.38	1985.69	3080.57	3249.28
– Other fixed assets	53.59	40.99	16.85	29.04	26.15
– **Total assets (working funds) (A+B)**	9014.26	13255.50	16274.08	21330.14	27590.85
Liabilities:					
– **Current liabilities**	8359.48	12206.95	14778.85	19350.84	24899.13
– Deposits and other A/C's	7922.76	11524.68	14254.57	18927.31	24488.86
– Current	979.01	1500.11	1583.03	1705.67	2175.03
– Saving	2434.06	4886.10	6703.51	8081.98	10742.33
– Fixed	1672.83	2294.68	3212.27	5414.97	7516.69
– Call and short deposit	2610.42	2556.81	2469.74	3448.21	3683.15
– Others	226.44	286.98	286.04	278.48	371.66
– Short-term loan	6.83	61.50	50.00	0.00	0.00
– Bills payable	31.64	57.84	15.01	18.82	32.40
– Provision for staff bonus	18.91	25.72	37.08	50.49	72.34
– Dividend payable	1.69	5.25	5.89	121.63	43.65
– Other current liability	377.65	531.96	416.29	232.59	261.88
– **Long term liability**	16.24	319.50	315.06	563.86	813.60
– **Total liabilities (D+E)**	8375.72	12526.45	15093.91	19914.70	25712.73
– **Net assets (C-F)**	638.54	729.05	1180.17	1415.44	1878.12
Shareholder's fund					
– **Paid-up capital**	295.29	295.29	587.74	590.59	801.35
– **Reserves**	314.85	419.09	567.51	778.9	955.42
– General reserve	268.71	299.24	345.67	415.78	516.06
– Capital reserve	29.53	59.06	117.83	0.00	0.00
– Other reserve	16.61	60.80	104.01	363.12	439.36
– **Profit and loss A/C**	28.40	14.66	24.92	45.95	121.35
– **Total shareholder's funds (H+I+J)**	638.54	729.05	1180.17	1415.44	1878.12

Annex-3: Net Profit after tax table of selected banks

(Rs in million)

Year / Banks	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	212.13	263.05	308.28	457.46	491.82
NIBL	116.82	152.67	232.15	350.54	501.40

Annex-4: commission and discount income of selected banks

(Rs in million)

Year / Banks	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	102.56	123.93	132.82	165.45	193.22
NIBL	40.81	55.75	93.55	115.94	163.90

Annex-5: personnel expenses of selected banks

(Rs in million)

Year / Banks	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	120.15	152.51	178.59	234.59	272.23
NIBL	61.29	89.75	97.00	111.05	145.37

Annex-6: interest income of selected banks

(Rs in million)

Year / Banks	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	1201.23	1245.90	1446.47	1626.47	1775.58
NIBL	459.51	731.40	886.80	1172.74	1584.99

Annex-7: interest expenses of selected banks

(Rs in million)

Year / Banks	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	554.13	491.54	561.96	648.84	767.41
NIBL	189.21	326.20	354.55	490.95	685.53

Annex-8: MPS of selected banks

(Rs in million)

Year / Banks	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	836.00	840.00	920.00	1100.00	1740.00
NIBL	795.00	940.00	800.00	1260.00	1729.00

Annex-9: EPS of selected banks

(Rs in million)

Year / Banks	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	49.45	49.05	47.91	59.24	60.66
NIBL	39.56	51.70	39.50	59.35	62.57

Annex-10: total investment of selected banks

(Rs in million)

Year / Banks	2003/04	2004/05	2005/06	2006/07	2007/08
HBL	101.7544	92.9210	116.9234	108.8903	118.2299
NIBL	17.0524	38.6248	39.3419	56.0287	65.0568

Annex-11: correlation coefficient between deposit and loan and advance

- **Himalayan bank Ltd.**

(Rs in million)

Year	Deposits (X)	Loan and advance (Y)	X^2	Y^2	XY
2003/04	210.0737	100.0185	44130.96	10003.70	21011.26
2004/05	220.1033	119.5187	48445.46	14284.72	26306.46
2005/06	248.1401	124.2452	61573.51	15436.87	30830.22
2006/07	264.9085	146.4256	70176.51	21440.46	38789.39
2007/08	300.6033	169.9800	90362.34	28893.20	51096.53
	$\Sigma X=1243.83$	$\Sigma Y=660.19$	$\Sigma X^2=314688.78$	$\Sigma Y^2=90058.95$	$\Sigma XY=168033.88$

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

$$= \frac{5\times168033.88-1243.83\times660.19}{\sqrt{5\times314688.78-(1243.83)^2[5\times90058.95-(660.19)^2]}}$$

$$r = \frac{19005.27}{19501.80}$$

Or, $r=0.97$

$$P.E. = \frac{[1-0.97^2]}{\sqrt{5}}$$

$$P.E. = 0.03$$

- **Nepal Investment Bank Ltd.**

(Rs in million)

Year	Deposits (X)	Loan and advance (Y)	X^2	Y^2	XY
2003/04	79.2276	57.7214	6277.01	3331.76	4573.13
2004/05	115.2468	71.3013	13281.82	5083.88	8217.25
2005/06	142.5457	101.2606	20319.28	10253.71	14434.26
2006/07	189.2731	127.7621	35824.31	16323.15	24181.93
2007/08	244.8886	172.8643	59970.43	29882.07	42332.50
	$\Sigma X=771.18$	$\Sigma Y=530.91$	$\Sigma X^2=135672.85$	$\Sigma Y^2=64874.57$	$\Sigma XY=93739.07$

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

$$r = \frac{5 \times 93739.07 - 771.18 \times 530.91}{\sqrt{5 \times 135672.85 - (771.18)^2 [5 \times 64874.57 - (530.91)^2]}}$$

$$= \frac{59268.18}{59628.53}$$

$$r = 0.99$$

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

$$= \frac{1 - 0.99^2}{\sqrt{5}}$$

$$P.E. = 0.01$$

Annex-12: correlation coefficient between deposit and investment

– Himalayan Bank Ltd.

(Rs in million)

Year	Deposits (X)	Investment (Y)	X^2	Y^2	XY
2003/04	210.0737	101.7544	44130.96	10353.96	21375.92
2004/05	220.1033	92.9210	48445.46	8634.31	20452.22
2005/06	248.1401	116.9234	61573.51	13671.08	29013.38
2006/07	264.9085	108.8903	70176.51	11857.10	28845.97
2007/08	300.6033	118.2299	90362.34	13978.31	35540.30
	ΣX=1243.83	ΣY=538.72	ΣX^2=314688.78	ΣY^2=58494.76	ΣXY=135227.79

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

$$r = \frac{5\times 135227.79 - 1243.83 \times 538.72}{\sqrt{5\times 314688.78 - (1243.83)^2 [5\times 58494.76 - (538.72)^2]}}$$

$$= 6062.857704.83$$

$$r = 0.79$$

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

$$= \frac{1-0.79^2}{\sqrt{5}}$$

$$P.E. = 0.17$$

– Nepal Investment Bank Ltd.

(Rs in million)

Year	Deposits (X)	Investment (Y)	X^2	Y^2	XY
2003/04	79.2276	17.0524	6277.01	290.78	1351.02
2004/05	115.2468	38.6248	13281.82	1491.88	4451.38
2005/06	142.5457	39.3419	20319.28	1547.79	5608.02
2006/07	189.2731	56.0287	35824.31	3139.22	10604.73
2007/08	244.8886	65.0568	59970.43	4232.39	15931.67
	ΣX=771.18	ΣY=216.10	ΣX^2=135672.85	ΣY^2=10702.06	ΣXY=37946.82

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

$$r = \frac{5\times 37946.82 - 771.18\times 216.10}{\sqrt{5\times 135672.85 - (771.18)^2[5\times 10702.06 - (216.10)^2]}}$$

$$= \frac{23082.10}{23868.77}$$

R = 0.97

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

$$= \frac{1-0.97^2}{\sqrt{5}}$$

P.E. = 0.03

Annex-13: correlation coefficient between investment and net profit

- **Himalayan Bank Ltd.**

(Rs in million)

Year	Investment (X)	Net Profit (Y)	X^2	Y^2	XY
2003/04	101.7544	2.1213	10353.96	4.50	215.85
2004/05	92.9210	2.6305	8634.31	6.92	244.43
2005/06	116.9234	3.0828	13671.08	9.50	360.45
2006/07	108.8903	4.5746	11857.10	20.93	498.13
2008/08	118.2299	4.9182	13978.31	24.19	581.48
	ΣX=538.72	ΣY=17.33	ΣX^2=58494.76	ΣY^2=66.04	ΣXY=1900.34

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

$$r = \frac{5\times 1900.34 - 538.72\times 17.33}{\sqrt{5\times 58494.76 - (538.72)^2[5\times 66.04 - (17.33)^2]}}$$

$$= \frac{165.68}{259.21}$$

$$r = 0.64$$

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

$$= \frac{1-(0.64)^2}{\sqrt{5}}$$

$$P.E. = 0.26$$

– **Nepal Investment Bank Ltd.**

(Rs in million)

Year	Investment (X)	Net Profit (Y)	X^2	Y^2	XY
2003/04	17.0524	1.1682	290.78	1.36	19.92
2004/05	38.6248	1.5267	1491.88	2.33	58.97
2005/06	39.3419	2.3215	1547.79	5.39	91.33
2006/07	56.0287	3.5054	3139.22	12.29	196.40
2007/08	65.0568	5.0140	4232.39	25.14	326.19
	$\Sigma X=216.10$	$\Sigma Y=13.54$	$\Sigma X^2=10701.98$	$\Sigma Y^2=46.51$	$\Sigma XY=692.81$

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

$$r = \frac{5\times692.81-216.10\times13.54}{\sqrt{5\times10701.98-216.10^2[5\times46.51-13.54^2]}}$$

$$= \frac{538.065}{78.97}$$

$$r = 0.93$$

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

$$= \frac{1-0.93^2}{\sqrt{5}}$$

$$P.E. = 0.06$$

Annex- 14: correlation coefficient between total assets and net profit

- **Himalayan Bank Ltd.**

(Rs in million)

Year	Total Assets (X)	Net Profit (Y)	X^2	Y^2	XY
2003/04	233.5523	2.1213	54546.68	4.50	495.43
2004/05	247.6204	2.6305	61315.86	6.92	651.37
2005/06	278.4469	3.0828	77532.68	9.50	858.12
2006/07	294.6039	4.5746	86791.46	20.93	1347.70
2007/08	335.1914	4.9182	112353.27	24.19	1648.54
	ΣX=1389.41	ΣY=17.33	ΣX^2=392539.95	ΣY^2=66.04	ΣXY=5001.16

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

$$r = \frac{5 \times 5001.16 - 1389.41 \times 17.33}{\sqrt{5 \times 392539.95 - (1389.41)^2 [5 \times 66.04 - (17.33)^2]}}$$

$$= \frac{927.32}{981.34}$$

$$r = 0.94$$

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

$$= \frac{1 - 0.94^2}{\sqrt{5}}$$

$$P.E. = 0.05$$

– **Nepal Investment Bank Ltd.**

(Rs in million)

Year	Total Assets (X)	Net Profit (Y)	X^2	Y^2	XY
2003/04	90.1426	1.1682	8125.69	1.36	105.30
2004/05	132.5550	1.5267	17570.83	2.33	202.37
2005/06	162.7408	2.3215	26484.57	5.39	377.80
2006/07	213.3014	3.5054	45497.49	12.29	747.71
2007/08	275.9085	5.0140	76125.50	25.14	1383.41
	$\Sigma X=874.65$	$\Sigma Y=13.54$	$\Sigma X^2=10701.98$	$\Sigma Y^2=46.51$	$\Sigma XY=2816.59$

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

$$r = \frac{5\times2816.59-874.65\times13.54}{\sqrt{5\times173804.08-(874.65)^2[5\times46.51-(13.54)^2]}}$$

$$= \frac{2240.19}{2262.54}$$

$$r = 0.99$$

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

$$= \frac{1-(0.99)^2}{\sqrt{5}}$$

$$P.E. = 0.01$$

Annex-15: trend analysis of total deposit

– Himalayan Bank Ltd.

(Rs in million)

Year	Total Deposit (Y)	Deviation from 2005 (X)	X^2	XY
2003/04	21007.37	-2	4	-42014.74
2004/05	22010.33	-1	1	-22010.33
2005/06	24814.01	0	0	0
2006/07	26490.85	1	1	26490.85
2007/08	30060.33	2	4	60120.66
N=5	ΣY=124382.89	ΣX=0	$\Sigma X^2=10$	ΣXY=22586.44

Here,
Number of year (N) = 5
When, ΣX = 0, from the two normal equation.

$$a=\frac{\Sigma Y}{N}$$

$$=\frac{124382.89}{5}$$

$$= 24876.58$$

$$b=\frac{\Sigma XY}{\Sigma X^2}$$

$$=\frac{22586.44}{10}$$

$$= 2258.64$$

Thus,
Average total deposit (a) = 24876.88
Rate of change of deposit (b) = 2258.64

Here,
The equation of straight line trend is,

$$Y= a + bx$$
$$= 24876.58 + 2258.64x$$

For fiscal year 2008/09 i.e. x=6
Y = 24876.58 + 2258.64×6
= Rs. 38428.42

For fiscal year 2009/10 i.e. x=7
Y = 24876.58 + 2258.64×7
Y= Rs. 40687.06

For fiscal year 2010/011 i.e. x=8

Y = 24876.58 + 2258.64×8
Y = Rs. 42945.70

For the fiscal year 2011/012 i.e. x=9

Y = 24876.58 + 2258.64×9
Y = Rs. 45204.34

For the fiscal year 2012/013 i.e. x=10

Y = 24876.58 + 2258.64×10
Y = Rs. 47962.98

- **Nepal Investment Bank Ltd.**

(Rs in million)

Year	**Total Deposit (Y)**	**Deviation from 2005 (X)**	**X^2**	**XY**
2003/04	7922.76	-2	4	-15845.52
2004/05	11524.68	-1	1	-11524.68
2005/06	14254.57	0	0	0
2006/07	18927.31	1	1	18928.31
2007/08	24488.86	2	4	48977.72
N=5	ΣY=77118.18	ΣX=0	ΣX^2=10	ΣXY=40534.83

Here, number of year N=5
Where,
ΣX = 0,
From the two normal equation

a=ΣY/N
=77118.18/5
=Rs.15423.64

b=ΣXY/ΣX²
=40534.8310
=Rs.4053.483

Thus, average total deposit (a) = 15423.64
Rate of change of deposit (b) = 4053.483

Now,
The equation of straight line trend is

Y = a+bx
Y = 15423.64+4053.483x

For the fiscal year 2008/09 i.e. x=6
Y = 15423.64+4053.483×6
Y = Rs. 39744.54

For the fiscal year 2009/10 i.e. x=7
Y = 15423.64+4053.483×7
Y = Rs. 43798.02

For the fiscal year 2010/11 i.e. x=8
Y = 15423.64+4053.483×8
Y = Rs. 47851.50

For the fiscal year 2011/12 i.e. x=9
Y = 15423.64+4053.483×9
Y = Rs. 51904.99

For the fiscal year 2012/13 i.e. x=10
Y = 15423.64+4053.483×10
Y = Rs. 55958.47

Annex-16: trend analysis of loan and advance

Himalayan Bank Ltd.

(Rs in million)

Year	Total Loan and Advance (Y)	Deviation from 2005 (X)	X^2	XY
2003/04	10001.85	-2	4	-20003.70
2004/05	11951.87	-1	1	-11951.87
2005/06	12424.52	0	0	0
2006/07	14642.56	1	1	14642.56
2007/08	16998.00	2	4	33996.00
N=5	ΣY=66018.80	ΣX=0	$\Sigma X^2=10$	ΣXY=16682.99

Here,
Number of year (n) = 5
When, ΣX = 0,
From two normal equation

$a=\Sigma Y/N$

$=66018.80/5$

$=Rs.13203.76$

$b=\Sigma XY/\Sigma X^2$

$=16682.99/10$

$= Rs. 1668.30$

Thus, average total loan and advance (a) = 13203.76
Rate of change in loan and advance (b) = 1668.30

Now,
The equation of straight line trend is,
Y = a+bx
Y = 13203.76+1668.30x

For fiscal year 2008/09 i.e. x=6
Y = 13203.76+1668.30×6
Y = Rs. 23213.56

For fiscal year 2009/10 i.e. x=7
Y = 13203.76+1668.30×7
Y = Rs. 24881.86

For fiscal year 2010/11 i.e. x=8
Y = 13203.76+1668.30×8
Y = Rs. 26550.16

For fiscal year 2011/12 i.e. x=9
Y = 13203.76+1668.30×9
Y = Rs. 28218.46

For fiscal year 2012/13 i.e. x=10
Y = 13203.76+1668.30×10
Y = Rs. 29886.76

Nepal Investment Bank Ltd.

(Rs in million)

Year	Total Loan and Advance (Y)	Deviation from 2005 (X)	X^2	XY
2003/04	5772.14	-2	4	-11544.28
2004/05	7130.13	-1	1	-7130.13
2005/06	10126.06	0	0	0
2006/07	12776.21	1	1	12776.21
2007/08	17286.43	2	4	34572.86
N=5	ΣY=53090.97	ΣX=0	$\Sigma X^2=10$	ΣXY=28674.66

Here,
Number of year (N) = 5
When, ΣX=0,
From two normal equations,

$a=\Sigma Y/N$

$=53090.97/5$

= Rs. 10618.19

$b=\Sigma XY/\Sigma X^2$
=28674.6610

= Rs. 2867.47

Thus,
Average total loan and advance (a) = Rs. 10618.19
Rate of change in loan and advance (b) = Rs. 2867.47
Now,
The equation of straight line trend is

$Y = a+bx$
$Y = 10618.19+2867.47x$

For fiscal year 2008/09 i.e. x=6
$Y = 10618.19+2867.47\times6$
Y = Rs. 27823.01

For fiscal year 2009/10 i.e. x=7
$Y = 10618.19+2867.47\times7$
Y = Rs. 30690.48

For fiscal year 2010/11 i.e. x=8
$Y = 10618.19+2867.47\times8$
Y = Rs. 33557.95

For fiscal year 2011/12 i.e. x=9
$Y = 10618.19+2867.47\times9$
Y = Rs. 36425.42

For fiscal year 2012/13 i.e. x=10
$Y = 10618.19+2867.47\times10$
Y = Rs. 39292.89

Annex-17: trend analysis of investment

- **Himalayan Bank Ltd.**

(Rs in million)

Year	Total Investment (Y)	Deviation from 2005 (X)	X^2	XY
2003/04	10175.44	-2	4	-20350.88
2004/05	9292.10	-1	1	-9292.10
2005/06	11692.34	0	0	0
2006/07	10889.03	1	1	10889.03
2007/08	11822.99	2	4	23645.98
N=5	ΣY=53871.90	ΣX=0	$\Sigma X^2=10$	ΣXY=4892.03

Here,
Number of year (N) = 5
When, $\Sigma X=0$,
From two normal equations,

$a=\Sigma Y/N$

$=53871.9/5$

= Rs. 10774.38

$b=\Sigma XY/\Sigma X^2$

$=4892.0310$

= Rs. 489.20

Thus,
Average total investment (a) = Rs. 10774.38
Rate of change in investment (b) = Rs. 489.20
Now,
The equation of straight line trend is
$Y = a+bx$
$Y = 10774.38+489.20x$

For fiscal year 2008/09 i.e. x=6
$Y = 10774.38+489.20\times6$
Y = Rs. 13709.58

For fiscal year 2009/10 i.e. x=7
$Y = 10774.38+489.20\times7$
Y = Rs. 14198.78

For fiscal year 2010/11 i.e. x=8
$Y = 10774.38+489.20\times8$
Y = Rs. 14687.98

For fiscal year 2011/12 i.e. x=9
$Y = 10774.38+489.20\times9$

Y = Rs. 15177.18

For fiscal year 2012/13 i.e. x=10
Y = 10774.38+489.20×10
Y = Rs. 15666.38

- **Nepal Investment Bank Ltd.**

(Rs in million)

Year	Total Investment (Y)	Deviation from 2005 (X)	X^2	XY
2003/04	1705.24	-2	4	-3410.48
2004/05	3862.48	-1	1	-3862.48
2005/06	3934.19	0	0	0
2006/07	5602.87	1	1	5602.87
2007/08	6505.68	2	4	13011.36
N=5	ΣY=21610.46	ΣX=0	$\Sigma X^2=10$	ΣXY=11341.27

Here,
Number of year (N) = 5
When, ΣX=0,
From two normal equations,

$a=\Sigma Y/N$

$=21610.46/5$

= Rs. 4322.09

$b=\Sigma XY/\Sigma X^2$

$=11341.27/10$

= Rs. 1134.13

Thus,
Average total investment (a) = Rs. 4322.09
Rate of change in investment (b) = Rs. 1134.13
Now,
The equation of straight line trend is

Y = a+bx
Y = 4322.09+1134.13x

For fiscal year 2008/09 i.e. x=6
Y = 4322.09+1134.13×6
Y = Rs. 11126.87

For fiscal year 2009/10 i.e. x=7
Y = 4322.09+1134.13×7
Y = Rs. 12261.00

For fiscal year 2010/11 i.e. x=8
Y = 4322.09+1134.13×8
Y = Rs. 13395.13

For fiscal year 2011/12 i.e. x=9
Y = 4322.09+1134.13×9
Y = Rs. 14529.27

For fiscal year 2012/13 i.e. x=10
Y = 4322.09+1134.13×10
Y = Rs. 15663.39

Annex-18: trend analysis of net profit after tax

32)Himalayan Bank Ltd.

(Rs in million)

Year	Net Profit (Y)	Deviation from 2005 (X)	X^2	XY
2003/04	212.13	-2	4	-424.26
2004/05	263.05	-1	1	-263.05
2005/06	308.28	0	0	0
2006/07	457.46	1	1	457.46
2007/08	491.82	2	4	983.64
N=5	ΣY=1732.74	ΣX=0	$\Sigma X^2=10$	ΣXY=753.79

Here,
Number of year (N) = 5
When, ΣX=0,

From two normal equations,

$a=\Sigma Y/N$

$=1732.745$

$= Rs. 346.55$

$b=\Sigma XY/\Sigma X^2$

$=753.7910$

$= Rs.75.38$

Thus,
Average total net profit after tax (a) = Rs. 346.55
Rate of change in net profit after tax (b) = Rs. 75.38
Now,
The equation of straight line trend is
$Y = a+bx$
$Y = 346.55+75.38x$

For fiscal year 2008/09 i.e. x=6
$Y = 346.55+75.38\times6$
$Y = Rs. 798.83$

For fiscal year 2009/10 i.e. x=7
$Y = 346.55+75.38\times7$
$Y = Rs. 874.21$

For fiscal year 2010/11 i.e. x=8
$Y = 346.55+75.38\times8$
$Y = Rs. 949.59$

For fiscal year 2011/12i.e. x=9
$Y = 346.55+75.38\times9$
$Y = Rs. 1024.97$

For fiscal year 2012/13 i.e. x=10
$Y = 346.55+75.38\times10$
$Y = Rs. 1100.35$

33)Nepal Investment Bank Ltd.

(Rs in million)

Year	Net Profit (Y)	Deviation from 2005 (X)	X^2	XY
2003/04	116.82	-2	4	-233.64
2004/05	152.67	-1	1	-152.67
2005/06	232.15	0	0	0
2006/07	350.54	1	1	350.54
2007/08	501.40	2	4	1002.80
N=5	ΣY=1353.58	ΣX=0	$\Sigma X^2=10$	ΣXY=967.03

Here,
Number of year (N) = 5
When, ΣX=0,
From two normal equations,

$a=\Sigma Y/N$

$=1353.58/5$

= Rs. 270.72

$b=\Sigma XY/\Sigma X^2$

$=967.0310$

= Rs. 96.70

Thus,
Average total net profit after tax (a) = Rs. 270.72
Rate of change in net profit after tax (b) = Rs. 96.70
Now,
The equation of straight line trend is
$Y = a+bx$
$Y = 270.72+96.70x$

For fiscal year 2008/09 i.e. x=6
$Y = 270.72+96.70\times6$
Y = Rs. 850.92

For fiscal year 2009/10 i.e. x=7
Y = 270.72+96.70×7
Y = Rs. 947.62

For fiscal year 2010/11 i.e. x=8
Y = 270.72+96.70×8
Y = Rs. 1044.32

For fiscal year 2011/12 i.e. x=9
Y = 270.72+96.70×9
Y = Rs. 1141.02

For fiscal year 2012/13 i.e. x=10
Y = 270.72+96.70×10
Y = Rs. 1237.72

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