## CHAPTER - I

## INTRODUCTION

### 1.1 Background of the Study:

Nepal is a developing country. Nepal is not being able to develop its economic condition due to various factors like political, Socio-cultural, technological environment of the country. The landlocked nature made it deprived form access to sea which is very essential for trade with foreign country as sea transportation is considered as cheapest source of transportation. Not only that it has very less amount of resources which are not utilized properly due to poor policies of government and lack of sufficient of capital.

In Nepal economic development is not possible without development of agriculture because agriculture is major occupation of the Nepalese people. Since agriculture is the backbone of the Nepalese economy, Nepal has given the top priority to this sector. It provides employment of more than $80 \%$ of the labor force and contributes over $40 \%$ of the total gross domestic product.
[Joshi Shyam, 1999:12]
Industrialization is an important factor to achieving the basic objective of country's economic and social progress. Industrialization not only provides necessary products and services to the community but also create employment opportunities. If facilitates an effective mobilization of resources of capital and skill, which might otherwise remain unutilized. It also acts as vehicle for fostering innovation and technological improvement. Industrial development thus has a multiplier effect on the economy.

Banking industries is also regarded as one component of economy. It transfers the scattered funds collected from saving of the public into various productive sectors. Economic activities remains halt in absence of banking industries. It plays the role of catalyst for economic development of the country in the developing country where there prevail unorganized transactions. It helps to enhance economic activities of the country by providing capital funds for the smooth operation of business activities, create employment opportunities, investing agriculture, industry. At present there are altogether twenty five commercial banks operating in the country among which Nepal Bank Limited (NBL) and Rastriya Banjiya Bank (RBB) has occupied wide range of the business due to access to most of the corner of the country. Slowly private banks are also initiating to move toward every corner of the country but due to prevailing political crisis they are not being able to meet their objects to reach to every corner of the country. Due to increasing competition banks are forced to innovate new products to their customer and they are also shifting from traditional service procedure to various sophisticated services like Automatic Teller Machine (ATM) card, debit cards, housing loan educational loans, vehicle financing.

People deposit their saving in trust of banks repay their deposits promptly when they demand for it. If one banks fails to repay the deposited amount to the public then their will be run in the banks and it leads to insolvency of the banks. So as the regulator, supervisor and inspector NRB always dictate the activities of the banks in the country. It chances its directives from time to time in order to have fair competition between the banks and to safeguards the deposits of the public.

As number of banks in the country increases NRB has to be more active towards its regulative and supervising role.

To depict the performance of any firm financial analysis is essential.Past performance often a good indicator of future performance. Therefore, all parties are interested know the trend of past variable such as sales, expenses, net income, cash flow and return on investment and so on. Financial analysis is the process of critical judgment of detail accounting information given in the financial statement.
Financial analysis is the process of determining the significant operation and financial characteristics of a firm from accounting data. It shows the relationship between the various components, which can be found in balance sheet and profit and loss statement. The analyze statement contain those information which is useful for management, shareholder, creditors, investors, depositors etc.

### 1.1.1 Introduction to Bank:

The word bank is originated from the Italian word 'Banco' In Italian language its meaning is bench. At that time people were doing monetary transaction by sitting on bench thereafter the trade is known as Bank. A bank is one who, in the ordinary course of his business, receives money which he pays by honoring cheque of person from whom pr whose account receives. As Nepal is a developing country where many people are under poverty line. Even though banks and co-operatives plays paramount rule for making people life standard better by making them habit of saving, providing loans and other facility. There are different types of bank. They are as follows:-

1. Central bank
2. Commercial Bank
3. Development Bank

1 Agriculture Development Bank
2 Industrial Development Bank
4. Saving Bank
5. Exchange Bank
6. Rural Development Bank
7. Co-operative Bank
8. Miscellaneous Banks:

1. Labour Bank
2. Student Bank
3. Regional Bank
4. Indigenous Bank

As the commercial banks are multi-facilitated and popular the study is all about the analytical and comparative study on financial performance of Himalayan Bank Limited (HBL) and Nepal Investment Bank Limited (NIBL).

### 1.1.2 Functions of Commercial Banks:

Receiving deposits and giving loans are the two main functions of commercial banks. Commercial banks generally perform following functions:
a) Accepting deposits: Accepting deposits by banks is the basic and most important function. A bank accept deposits in three forms namely savings, current and fixed deposits. The bank is free to make use of fixed deposits for gaining loans and advances, as it is aware of the repayment of such fixed deposits.
b) Advancing Loans: After collecting money by way of deposits, a bank invests it or lends it out. Money is lent to business persons and traders usually for short periods only. This is so because the bank must keep it-self ready to meet the demand of the depositors, who have deposited money for short periods. Money is advanced by the banks in the form of allowing on overdrafts creating a deposit of cash credit and discounting bills.
c) Extension of Credit: They are extending credits to the worthy borrowers. Bank lending contributes a lot to the economy in terms of financing agricultural, commercial and industrial activities of the nation.
d) Facilities for the financing of foreign trade: The commercial banks arrange for foreign exchanges required by business organizations and travelers, moreover, foreign trade transactions have been facilitating by the issuance of commercial letter of credit.
e) Creating Money: As per the directive of the central bank, commercial banks should have ability to create and dispose money. The power of the commercial banking system to create money is of great economic significance as it helps to create and elastic credit system that is necessary for the economic progress.
f) Payment Mechanism: Commercial banks perform this function to transfer the fund by means of checks and credit cards facilities and efficient transaction.
g) Safe custody: Banks arrange for the safekeeping of ornaments, jeweler, and securities important documents etc. of its customers in secure vaults.
h) References: They provide references about the financial position of their customers when required. They supply this information confidentially. This is done when their customers want to establish business connections with some new firms within or outside the country.
i) Agency function: The bank works as an agent of their constituents. They receive payments on their behalf. They collect rent, dividends on shares etc. they pay insurance premium and make other payments as instructed by their depositors. They accept bills of exchange on behalf of their customers. They pass bill of lading or railway receipts to the purchases of goods when they pay for them. This amount is passed on to the suppliers of goods.

Besides all these facilities, in case of commercial banks, they issue credit cards and arrangement for issue of Visa International Card. Some of them have priority to lend educated and unemployed youth to small projects.

### 1.1.3 Private Commercial Banks in Nepal:

The bank, which is operated, by general public or non-government financial institution under commercial bank act 2031 B.S. is called private commercial bank. It should follow the rules and regulation according to commercial bank act. Commercial bank should comply the directives and policy of NRB, which is the central bank of Nepal. Currently there are twenty five commercial banks. Among them HBL and NIBL are fast growing and successful banks.
Since the government has taken initiative for the growth and development of the industrial sector, it has provided suitable environment to enable foreign investors to undertake Joint Venture operation with Nepalese investors. The government has encouraged private participation in several infrastructure activities such as private airline, hydro power, computer software, textiles, readymade garments and carpets, telecommunication, radio services, pharmaceutical, medical companies etc. so to enable to meet the needs of capital and resources, role of the private commercial banks has been emerging day by day.
Nepal government has formed the policy to make easy to establish the private commercial bank to meet the demand of capital and resources for the development of economy to give the impetus to existing government owned commercial banks since late eighty. At the beginning, private commercial banks were opened as a joint venture banks getting financial and technical support with different foreign banks. They enhanced the bankable capacity through competition, modernization, efficiency, and mechanization, via computerization. Consequently traditionally operated banks were compelled to improve their service system to survive in the competition age.

### 1.1.4 Brief Introduction of Himalayan Bank Ltd. and Nepal Investment Bank Ltd.

Himalayan Bank Limited (HBL) was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities loans and deposits. Legacy of Himalayan lives on in an institution that is known throughout Nepal for its innovative approaches to merchandising and customer service. Products such as premium savings account, HBL proprietary card and millionaire deposit scheme besides services such as ATMs and Tele Banking were first introduced by HBL. Therefore, the banks stand for the innovations that we bring about in this country to help out customers besides modernizing the banking sector. Hence, it is celebrating its $15^{\text {th }}$ anniversary successfully in the competitive market.

Nepal Investment Bank Ltd (NIBL), previously Nepal Indosuez Bank Ltd; was established in 1986 as a joint venture between Nepalese and French partners. The French partners holding $50 \%$ of the capital of NIBL) was credit Agricole Indosuez, a subsidiary of one the largest banking group in the world. With the decision of credit Agricole Indosuez to divest a group of companies comprising of bankers, professionals industrialists, businessmen, has acquired on April 2002 the 50\% shareholding of credit Agricole Indosuez Bank Ltd. The name of the bank has been changed to Nepal investment bank Ltd upon approval of bank's annual general meeting. Nepal Rastra Bank and company Registar's Office.

### 1.2. Statement of Problem:

As we know Nepal is a developing country and its economy is much depends on the agriculture. Most of the industries are based on the agriculture, which provide employment opportunities and assist in improving national economy. Poverty has been a main problem in the country. Therefore, public enterprises are established but most of the public enterprises are not able to run in profit. Even though the government has given the subsidy to run public enterprises, they are not able to contribute to society at desirable rate.
This research will highlight the problems relating with banking sector with respect to two ample joint venture banks they are Himalayan Bank Limited (HBL) and Nepal Investment Bank Limited (NIBL).
Joint venture banks are recently set up in Nepal but in short span of time number of JVBs are increase rapidly. The first JVBs in Nepal is Nepal Arab Bank Limited (NABIL). However, the available banking business is not increased to that extent. But there are aggressive competition between the JVBs in terms of service, interest etc.
The sample banks, which are chosen for the studies, have achieved success in terms of market share and profitability. However it cannot always predict that these banks will continue maintain profitability and stability of earnings. Thus the management of bank should evaluate financial performance pf the banks to prepare the sound financial policies.
Ratio analysis is a analytical tool for evaluating the financial performance. It is also a process of determining and interpreting numerical relationship with the help of financial statement. Management use effective strategies through financial tools and analysis for achieving optimal goal. Financial analysis satisfies the interest of common stock holders, equity investors, creditor and management of the banks.
As every business is established with a view to maximize earnings/profits. In the present competitive environment in banking and every sector it is very difficult to obtain expected earning/profits. Every commercial bank has to follow by the regulations and provision made by Nepal Rastra Bank. They have to maintain specific capital structure, Infrastructure, Cash Reserve Ratio, Credit Creation Limitation, Liquidity ratio etc. The major problems in Nepalese banking sector are as follows:

- Whether or not banking sector is able to maintain different ratios?
- What level of ratios has to maintain by bank?
- What are the papers hassles in different banking activities?
- Why recruitment of professionals is not transparent and fair?
- What type of role a bank has to play for emerging new business?
- To what extents these bank are able to raised and maintain their profitability?
- Whether sample banks are more effective and efficient in mobilization of fund for better financial performance?
- Is there any stability in various ratio policies of the sample banks?
- How far is the current political and economic situation of the country affecting the performance of the sample banks?
- Do financial ratios indicate any strength and weakness of the banks?


### 1.3. Scope or Significance of study:

The banking sector is one of the major sectors of the country. It helps to emerge new business in industries by providing different facilities to businessmen. It provides different facility so that businessmen can run their business smoothly. At present context, a offers wide range of facility such as any branch banking facility, Internet banking and SMS banking, ATMs and Tele-banking, Small business enterprises loan, pre-paid visa card, L/C, Bank Guarantee etc. These all facility including other temporary facility has made people life very convenience and easy.

### 1.4. Objectives of Study:

Commercial banks are established with intention of earning profit so that the wealth their shareholder is maximized and earning depends upon efficient the mobilization resources. Financial analysis is tools for measuring the successes of any business performance. All the detail financial information or bank is shown by the financial analysis. Therefore the main objectives of this study are to analyze, examine and interpret the financial position of HBL and NIBL with the help of ratio analysis and other portfolios. In addition the study tries to evaluate the efficiency and progress of the sample banks comparatively.
The specific objectives of the study can be pointed out as follows:
a) To analyze the financial position of HBL and NIBL.
b) To analyze the comparison of financial performance of HBL and NIBL.
c) To analyze the financial strength and weakness of the sample banks.
d) To analyze the different types of risk associated with the banks.
e) To suggest and recommend on the basis of study.

### 1.5. Limitation of Study:

This study is simply for partial fulfillment of the requirement of Master in Business Studies (MBS). However there are some limitations, which narrowed the generalization.For instant inadequate coverage of industries, time periods taken reliability of statistical tools used and other variations. The study is completely based on the data collected from the banks. The following are the some limitations of the study:-

1. The study will cover only five fiscal year historical data of HBL and NIBL.
2. The study will be based on the secondary data; if there is necessary of primary data then it would be collected and analyzed.
3. The study will depend upon the true response and the data provided by the management of the banks.
4. Time and resources lack are the main limitation to the study.
5. This study would only concern with fulfilling in partial requirement in masters of business studies (MBS).

### 1.6. Scheme of Study:

The study is divided into five chapters. They are as follows:
a) The first chapter is concern with the introduction of the study, which covers the general background, problem of study, limitation of study, objectives of study and scheme of study.
b) The second chapter is review of literature. This part deals with different article; books and relevant thesis related to financial performance are also study.
c) The third chapter deals with the research methodology where process of research is mention. This part is concern with research question, research design, sources of data, population and sample, sources of data, data collection process and method analysis. In method analysis there are two parts. One is financial analysis where different ratio analysis concern with financial performance is study. Another is statistical analysis where different statistical tool like trend analysis, correlation analysis, and simple regression analysis are mention.
d) The Fourth chapter is financial analysis and interpretation of data where different part of ratio analysis is analyzed like liquidity ratio, profitability ration, assets management ratio and growth ratio. Statistical analysis and interpretation of data where study analyze the trend analysis, correlation analysis between different variable terms like total deposit, investment net profit and loan and advance.
e) The last chapter is deal with summary and conclusion and recommendation. In this chapter summary of whole chapter and different results find in data analysis and recommendation to bank for nation development are included.

## CHAPTER - II

## REVIEW OF LITERATURE

A literature review is a body of text that aims to review the critical points of current knowledge on a particular topic. In this chapter, we find what kind of study has been done before to the related topic. What kind of conclusion and findings has made before. We can compare and make better the topic by furthermore research and find major findings. The financial performance analysis has been done but comparison study is done very few. So the study will be helpful to know the HBL and NIBL financial position and their major differences. The study sources are books, journals, report, internet etc
Review of literature is the study of previous research or article or book in related field or topics for finding the past studies conclusion and deficiencies that may be known for further research. This chapter will help to check the chances of duplication in the present study. Thus the gap between the previous research and current research can be filled.
Therefore, the chapter is categorized under three main heading. Conceptual framework is concern with fundamental of supportive text that will ensure the interpretation whether it is under the principles and doctrine of the theories related to the topic. Review of related studies is about the studies is about the studies of previous thesis, related books and previous researches in similar topics. The last is research gap, which will describe the difference between the previous thesis and current thesis. The purposes of the literature review are as follows:-

- To define and limit the problem working on.
- To place the study in an historical perspective.
- To avoid unnecessary duplication.
- To evaluate promising research methods.
- To relate the findings to previous knowledge and suggest further research.


### 2.1. Review of Related Studies:

### 2.1.1. Meaning of Financial Analysis:

Financial Analysis is an evaluation of both a firm's past financial performance and its prospectus for the future. Financial statement analysis involves the calculation of various ratios. In mathematics a ratio is the relationship between two quantitative figures. In financial management the ratio is the relationship of two accounting figures. The ratio analysis is the financial tool by which the financial strength and weakness are measured by relating two accounting data.
The relationship between two accounting figure, expressed mathematically is known as ratio. In financial analysis a ratio is used as an index or yardstick for evaluation the financial position and performance of a firm. Absolute figures and valuable but they are standing alone convey no meaning unless compared with other. Accounting ratio shows inter-relationship among various data supplied by financial statements are worked out, they are known as accounting ratio.
Every business organization is established with view of earning the profit. Bank is also established with objectives of maximizing the profit. Profit is necessary for long-
term existence of any business. An investor always invests in that area where profit can be maximized. Financial statement is the indicator of business performance that whether business is profitable or not. Therefore, financial analysis reflects the financial position of a firm, which is the process of determining the operational and financial characteristics of a firm. Different types of financial statement analysis can be used on the basis of this researcher's objectives. Financial statement analysis is helpful to the decision maker for finding out favorable or unfavorable situation of a business concern. Financial performance is the main indicator of success or failure of the company.
The main function of financial analysis is the pinpointing of the strengths and weakness of a business undertaking by regrouping and analysis of figures contained in financial statements, by making comparison of various components and by examining their content. Financial managers can use this as the basis to plan future financial requirements by means of forecasting and budgeting procedures.
[ Man Mohan and Goyal S.N.,1997:356]
According to the Hampton "Financial analysis is used primarily to gain insight in to operating and financial problems conforming the firms, with respect to these problems, we must be careful to distinguish between the cause of problem and symptom of it". It is thus an attempt to direct the financial statements in to their components on the basis of purpose in hand and establish relationship as between these components on the on the one hand as between individual components and totals of these items on the other. Along 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.
[ Hampton J.J..op. Cit::99]
Financial analysis is the process of determining financial strengths and weakness analysis of company by establishing strategic relationship between the components of analysis balance sheet and other operative data.[ Pandey I.M., 1994:96]

Weston, Besley and Brigham have stated, "Financial statement analysis involves a comparison of analysis firm's performance with that of other firms in the same line of business which often is identified by the firm's industry classification. Generally speaking, the analysis is used to determine the firm's financial position in order to identify its current strengths and weakness and to suggest actions that might enable the firm to take advantage of the strength and correct its weakness.
[Weston J.F.,Besley S. \& Brigham, E. F., 1996, p. 78]
Financial statement analysis is largely analysis study of relationship among the various factors in analysis business as disclosed by the single set of statement and analysis study of the trend of these factors as shown in analysis series of statement.
[Myer J.N., 1961:4]

Financial analysis is process of identifying the financial strength and weakness of the firm by property establishing relationship between the items of the balance sheet, which represents analysis snapshot of the firm's financial position analysis at analysis moment in time and next income statement, that depots analysis summary of the firm's profitability overtime.[ Vanhorn,J.C. \& Watchowtch, J.M. 1997:120]

Thus, the analysis of financial statement is an important aid to financial analysis. It is helpful in assessing the financial position and profitability of analysis business concern.[Pandey I.M., 1979:500]
"It is the process of determining the significant operating and financial statements. 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 J.J., 1998:98]
"It is both analytical and judgmental process that helps answer questions that have been posed. Therefore, it is means to end. Apart from the specific analytical answer, the solutions to financial problems and issues depend significantly on the views of the parties involved in the related importance of the issue and on the nature and reliability of the information available." $[$ Helfert E. A., 1992:2]

According to Surendra Pradhan, "Financial analysis is to analyze the achieved statements to see if the result meets the objectives of the firm, to identify problems, if any, in the past or present and/or likely to be in the future, and to provide recommendation to solve the problems." $[$ Pradhan S.,2000:120]
Thus, financial analysis stands for the process of determining and presenting the relationship of items and groups of items in the financial statement it is a way by which financial stability and health of a concern can be judged.

### 2.1.2. Significance of Financial Analysis:

Significance of analysis lies on the objectives of financial analysis of any firm. Different groups associated with the concern perceive the facts discovered by the analysis differently. The facts and relationship concerning managerial performance, corporate efficiency, financial strength and weakness and credit worthiness are interpreted based on objective in the hand. Such an analysis leads management of an enterprise to take crucial decisions regarding operative policies, investment value of the firm, inter-financial control system and bargaining strategy for funds from external sources. (Agrawal, 1993, P. 582).The importance of financial analysis is as follows:
a) Useful in financial position analysis:

Ratio analysis is an important technique of financial analysis. It is also reveal the financial position of the concern. This helps the bank, insurance company and other financial institutions in leading and making investment decision.
b) Useful in comparison of performance:

Through accounting ratio comparison can be made between one departments of a firm with another of the same firm in order to evaluate the performance of various departments in the firm. Manager is naturally interested in such comparison in order to know the proper sand smooth functioning of such department. Ratio also helps to make any change in the organization structure.
c) Useful in forecasting purposes:

If accounting ratio is calculated for a number of years then a trend is established. This trend helps in setting up at future plans and forecasting. The ratio calculation of past year works as a guideline for the future.
d) Useful in communication:

Ratio analysis provides the information about strength and weakness of concern (firm) to the internal and external parties.
e) Useful for decision in making classification of ratio: -

1. Liquidity ratio
2. Capital structure ratios (Average ratio)
3. Activity ratios
4. Profitability ratios

The parties that are benefited by the results or conclusion draw from the analysis of financial performance can be enumerated as:
a) Top management
b) Creditors
c) Shareholders
d) Economist
e) Labor union

## a) Top Management:

The responsibility of the top management is to evaluate are as follows:
Are the resources of the firm used effectively and efficiently?
Is the financial condition of the firm should enough?
Based on past facts firms can anticipate their future.Hence,top management can measure the success or otherwise of a company's operations, determine the relative efficiency of various departments; process and products appraise the individual's performance and evaluate the system of internal audit.

## b) Creditors:

The creditors can find out the financial strengths and capacity of the borrower to meet their claims. Trade creditors are interested in the firm's ability to meet their claims over a short span of time, the suppliers of long-term debt focus upon the firm's longterm solvency and survival. A lending bank through and analysis of these statements can decide whether the borrower retains the capacity of refunding the principle and paying interest in time or not.

## c) Shareholders:

The shareholders, who have invested their money in the firm's shares, are most concerned about the firm's earning. They evaluate the efficiency of the management and determine about the necessity for the change. In large company, the shareholder's interest is to decide whether to buy, sell or hold the shares. They wish to buy the shares in case of sound performance of the firm where as they simply intend to hold the shares in the condition of satisfactory performance. However, they are curious to sell the shares in case of poor performance.

## d) Economist:

The diagnose the prevailing status of business and economy; economists analyze the financial statements of any firm. The government agencies analyze them for them for the purpose of price regulation; rate setting and similar other purpose.
e) Labor union:

Productivity is the synonym of well-motivated labors. Labor unions are interested in rights and benefits of labor to enhance the moral of labors. To motivate the labors
they expect increase in wages, fringe benefits and so on. These benefits are affected by the company's profitability condition. Therefore, the union assesses the financial condition of the firm to determine whether the firm is in the situation or not to make such facilities available.(Srivastav R. M. 1993:45).

### 2.1.3. Financial Performance Analysis Bank:

Traditionally, banks act as financial intermediaries to channel funds from surplus units to deficit units. Unlike other non-banking financial companies, commercial banks do not produce any physical goods. They produce loans and financial innovations to facilitate trade transactions. Because of special role they play in the economy, concerned authorities heavily regulate them. Analysis of banks financial statement is different from threat of other companies due to the special nature of assets and liabilities.[ Paudel N.P., 2053 :64-69]

Balance sheet profit and loss account and the accompanying notes are the most widely aspects of financial statements of the bank. The bank's balance sheet includes financial claims as liabilities in the form of deposit and as assets in the form of loans. Fixed assets appear in small portion out of the total assets. Financial innovations, which are generally contingent in nature, are considered as off balance sheet items. Interest received on loans, advances and investment and paid in deposit liabilities are major components of profit and loss account. The other sources of income are fee, commission and discounts, foreign exchange income, dividend on investment, other service charge etc.
The users of financial statements of bank require relevant, reliable and comparative information to evaluate the financial performance and position and hence make economic decision regarding the bank. According to Commercial Bank Act 1974 the audited balance sheet and profit and loss account must be published in the leading national newspaper for the information of general public.
Most of the users of financial statements seek to assets the bank's overall performance. Following factors affect the evaluation of bank overall performance:

- The structure of balance sheet and profit and loss account.
- Operating efficiency and internal management system.
- Managerial decisions taken by the top management regarding interest rate, lending policies exchange rates etc.
- Environment changes such as changes in Technology, Government, Competition, and Economy etc.


### 2.1.4. Technique of Financial Analysis:

The fundamental of the analytical technique is to simplify or reduce the data under review to the understandable terms. There are various tools and technique of financial statement analysis, each of which is used according to purpose for which the analysis is carried out. The widely technique used is as follows:

- Ratio Analysis
- Statement of changes in financial position
- Cash flow statement
- Among them ratio analysis is used by most companies. Therefore in this study we discuss only about ratio analysis.


### 2.1.5. Types of Ratio Analysis:

Simply, ratio refers to the numerical or quantitative relationship between two items or variables. In simple language ratio is one number expressed in terms of another and can be worked out by dividing the number to the other. Therefore ratio is the expression of one figure in terms of another. It is a expression of the relationship between mutually independent figures. It is a simple mathematical expression of the relationship of one item to another.
A ratio helps to the researcher to make qualitative judgment about the firm's financial position and performance.[Webster's, 1975:958]

Ratio analysis is an important way to state meaningful relationships between components of financial statement. Ratios are guided or shortcuts that one useful in evaluation the financial position and operations of a company and in comparing then to previous year or to other business concerns. The term ratio refers to the numerical or quantitative relationship between two variables. The rational of ratio analysis lies in the fact that it makes related information comparable.[Khan M.Y. and Jain P.K.:80]

Ratio analysis is a technique of analysis and interpretation of financial statement evaluate the performance of an organization by creating the ratio from the figures of different accounts consisting in balance sheet and income statement is known as ratio analysis.[Dangol.,2052:12]

Ratio analysis is an analytical tool of financial analysis, which helps in identifying strength ad weakness of business concerns. It is a important way to state meaningful relationship between components of financial statements. The primary purpose of ratio is to point out area for further investigation. Ratio analysis has been a major tools used in the interpretation and evaluation of financial statements since late 1800 A.D.

Ratio analysis involves comparison for a useful interpretation of the financial statement. Ratio is the quantitative relationship between items. A ratio is defined as and indicated quotient of two mathematical expressions and is the relationship between two or more thing. [Van Horn.:753]

It is undertaken of various parties engaged such as trade creditors, bondholders, investor and management in the firm according to their specific purpose. It is defined as a systematic use of ratio to interpret the financial statement so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined.
Ratio analysis involves basic understands of comparison to a useful interpretation of the financial statements. A single ratio by itself does not indicate favorable or unfavorable condition of a firm unless it is compared to some appropriate standard. Selection of a proper standard of comparison is a most important element of the ratio analysis. Ratio analysis provides guides specially in spotting trends toward better or poor performance and in finding out significant deviation from any average or relatively applicable standard.[Dangol, 2052:370]

Ratio analysis is widely used but no one ratio gives exact picture. In other hand ratio by them is not conclusion, as they are only means and not and end. Ratio analysis is in conceivable that accounting in into ratio.

A single ratio itself does not indicate favorable or unfavorable condition. It should be compared with some standard as:

- Time series analysis
- Cros-sectional analysis
- Industry analysis
- Perform analysis
[Pandey,.:97]
Among the large number of financial ratio existing they have been categorized into following group:
- Liquidity ratio
- Activity ratio
- Profitability ratio
- Leverage ratio


## Liquidity Ratio:

Liquidity ratio measures the ability of firm to meet its current obligations. In fact, analysis of liquidity needs the preparation of cash budget and cash and fund, but liquidity ratio, by establishing a relationship between cash and other current assets to current obligation, provides a guide measure of liquidity. [Pandey: 145] Liquidity ratios give insight into the present cash solvency of the firm and its ability to remain solvent in the event of adversities. It is the comparison between the short-term obligation and the short firm resources. In case of bank, liquidity management is widely used to analyze liquidity position of banks.
A bank should ensure that it does not suffer from lack of liquidity and it does not have excess liquidity. Both conditions of liquidity are unfavorable for a bank.
Banks can experience lack of liquidity when cash outflows (due to deposit withdraws, loans etc.) exceed cash inflows (new deposits loan repayments etc.).They can resolve any cash deficiency either by creating additional liabilities or by selling assets.[ Madhura Jeff, 1989] To analyze the ability of banks, the following ratios are calculated:

- Current ratio
- Cash and bank balance to Total deposit ratio
- Cash and bank balance to Current ratio


## Activity Ratio/Assets and Investment Management:

Traditionally, assets and investment management ratios have been called activity ratios or turnover ratios. Whatever designation, the idea is to measure how effectively the firm utilizes the investments and the economic resources at its command. Investments are made in order to produce profitable sales.acheiving profitable sales, therefore, involves making sound investments. At the practical level, this involves comparisons between the sales and the investment in various assets accounts. The methodology postulates an optimal relationship between sales and the various types of asset investment.[Weston J. Fred \& Copland Thomas:199]

This ratio evaluates the efficiency with which the firm manages and utilizes its assets. They indicate the speed with which assets are being converted or turned over. Thus, these ratios are used to measure the banks ability to utilize their available resources. Various activity ratios are used to predict the effectiveness of asset utilization. Some selected ratios for this research can be illustrated as follows:

- Loan and advances to Total deposit ratio
- Loans and advances to Fixed deposit ratio
- Loans and advances to Total working fund ratio
- Total investment to Total deposit ratio
- Investment on government securities to Total working fund ratio
- Investment to Shares and debenture to Total working fund ratio


## Profitability Ratio:

Profit is the difference between total revenues and total expenses. Profit is the ultimate output of a commercial bank and it will have no future if it fails to make sufficient profits .Therefore, the financial manager continuously evaluates the efficiency of the banks in terms of profit. The profitability ratios in this study are calculated to measure the operating efficiency and performance of two banks comparatively.
The future stream of cash flows is the result of a large number of policies and decisions. We start with historical data about cash flow and profitability but emphasize that these represent only the starting point. Further strategic and operating analysis is required to make meaningful projections for the future.
[Weston J. Fred \& Copland Thomas E.,Ninth Edition:193]
Some major profitability identifying ratios used in this study are as follows:

- Net profit to Total assets ratio
- Net profit to Total deposit ratio
- Net profit to Net Worth Ratio
- Total Interest Earned to Total Working Fund Ratio
- Total Interest Paid to Total Working Fund Ratio


## Leverage Ratio:

Leverage ratio has a number of implications. First, creditors look at equity, or owner supplied funds, as cushion or base for the use of debt. If owners provide only a small proportion of total financing, the risks of the enterprise are borne mainly by the creditors. Second, by raising funds through debt the owners of the firm with a limited commitment. Third, the use of debt with a fixed interest rate magnifies both the gains and losses to the owners. Fourth, the use of debt with fixed interest cost and with a specified maturity increases the risks that the firm may both be able to meet its obligations.

In practice, leverage is approached in two ways. One approach examines balance sheet ratios and determines the extent to which borrowed funds have been used to finance the firm. The other approach measures the risks of debt by income statement ratios designed to determine the number of times fixed charges are covered by operating profits. These sets of ratio are complementary, and most analysts examine both.[Weston J. Fred \& Copland Thomas E.,Ninth Edition:203]

Following are ratios, which are used in this study:

- Debt Asset Ratio
- Debt Equity Ratio


### 2.2.Review of Journal:

Mr. N. P. Poudel, in the journal entitled," Financial Statement Analysis: An Approach to Evaluate Bank's Performance" which was published NRB Samachar (An annual publication-2065) is reviews as follows:
According to Mr. Poudel, Balance sheet, profit and loss a/c and the accompanying notes are the most useful aspects of the banks. It needs to understand the major characteristics of bank's balance sheet and profit and loss a/c. The bank's balance sheet is composed of financial claims as liabilities in the form of deposits and as assets 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 bank 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 act. Commercial banking act 1974 requires the audited balance sheet and profit and loss account to be published in the leading newspaper for the information of general public.
According to Mr. Poudel, the principle objectives of analyzing financial statement are to identify: Liquidity, Profitability and Solvency. Most of users of the financial statements are interest in assessing the bank's 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, lending policies etc.
- Environmental changes (Technology, Government, Competition and Economy)
The other factors to be considered in analyzing the financial statement of bank are to assess the capital adequacy ration 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 assets can be converted in to cash to meet deposit withdrawals and other current obligations. It is also important view of survival and growth of a bank.

Dr. M. K. Shrestha, in the journal entitled," Commercial Bank's Comparative performance evaluation", which was published in Karmachari Sanchay Kosh Publication 2047 is review as follows:

The journal stresses on a proper risk management with appropriate classification loans under performing and non-performing category. Researcher further clarifies adequate provisioning is the surest way to get relief from sinking loan after care consideration of portfolio risk. A clear out criteria is necessary to treat interest suspense 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 is as follows:

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

The above journals focus in the various aspects of the bank's economic environment. Mr. N. Poudel's work stresses in effective way of evaluating the financial performance and Dr. Shrestha's suggestions are focused towards proper risk management. Whatsoever, aspects of the bank the above journals target, they all have to be combinable assessed and kept in strict consideration for effective and efficient financial performance of the banks in the Nepalese economy.

### 2.3. Review of Article:

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 finance companies. The financial companies should not be confined only in the valley. They should extend their services to the rural sectors of hill and terai to reduce regional imbalance. The collection of deposit and loan investment done by the commercial banks also to sustain themselves in the environment of competitions, they should introduce novel technology and equipment's to collect deposits and investments. They should learn form the draw banks, failure and success of commercial banks to effectively maintain as alternative status.

Mr. Krishan Pradhan in the article, "Transaction Analysis of Financial Companies in Nepal. "Has concluded that the finance companies are centered in the city as like commercial banks. If this trends remains, the central bank is to consider novel strategy. However, financial and banking transaction don't take place in zero, it favors of financial intermediaries. The emergence of closure of financial companies in market economy in common sense. But keeping in mind, the social and economic structure of our country, we should not turn a deaf ear to regional balance.

Mr. R. L. Shrestha in the article "Capital Adequacy of bank in the Nepalese context" has suggested that the banks deal in highly risky transactions to maintain strong capital base. He concluded that the capital base should neither be too much leading to inefficient allocation of scarce resources nor so weak degree of risk associated with them are subject to changes country wish, bank wish and time period wise.

Mr. D. P. Poudel give more emphasis of 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 deposits have been increasing over the time but to of this, it is substantially below than the authorized level of deposit mobilization, which is ten times of the capital base. Never the less, some of the finance companies have even mobilize the deposits by more then 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 3especially 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 loans are the major sectors, which all together received more than $95 \%$ of the total loan and advances in mid July 1996. Because of the mushrooming growth of the number of finance companies, the average sources of funds for each company are natural to decline. Since the varying factor, it is too early to evaluate the performance of financial companies in Nepal but equally important factor is that the regulatory and supervisory authority should keep close eyes to monitor their activities.

### 2.4. Review of Thesis:

Mr. Lekh Nath Ghimire in the thesis "A comparative study if financial performance of HBL and NSBIBL" was prepared 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 NSBIB's capital adequacy, quality 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.Corrective analysis revealed the facts that NSBIBL was able to utilize its resources more efficiently and profitability. Income and operating expenses were in increasing trend and were dominated by interest incase of both the banks.

Mr. Dev Raj Adhikari in his study entitled "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 FY 20383/39 to 2046/47.He remarked that the bank is not found to have been able to utilize its fund effectively and efficiently for the development 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 ideas 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. His study especially concentrated on the deposit collection of the bank and disbursement of the fund as loan and advances. Therefore, his main study areas are uses and sources of funds and income and expenses trends of the banks

Sangeeta Shakya in the thesis "Comparative analysis of Financial Performance of selected JVBs, A case study of NGBL and HBL" has familiar with comparative
strength and weakness and their ability through the analysis of liquidity ratios. The major findings drawn from the study are HBL is more efficient in case of liquidity as well as it is more levered than NGBL where as HBL as HBL is in better condition from the aspect of capital adequacy, activity and profitability ratios. The study showed positive correlation between loans and advances to total debts of both banks. According to the trend analysis, profit before tax of NGBL has been increasing at the higher rate than that of HBL.

A thesis entitled "Financial performance analysis of commercial banks in Nepal in the framework of camel (A comparative study of Kumari Bank Ltd and Machhapuchhre Bank) by Manisha Bhyshal;

Objectives:
I. To analyze capital adequacy of KBL and MBL.
II. To assess the quality of assets of KBL and MBL.
III. To evaluate whether KBL and MBL is managing its expenses with respect to incomes
IV. To study the trend of earning performance made by KBL and MBL.
V. To measure the liquidity position of KBL and MBL.

Major Findings:
I. Higher average return on equity ratio.
II. Higher average earning per share ratio.
III. Capital adequacy ratios meet the standard.
IV. ROE below the benchmark ( $15 \%$ ).
V. Net interest margin have met the benchmark ( 3 to $4 \%$ ).
VI. Earning per employee ratio is in increasing trend.

Recommendations:
I. Total capital adequacy ratio is adequate. It should maintain.
II. Assets quality ratio at satisfactory level.
III. Liquidity position is low so it should increase.
IV. Total expenses to total income ratio is fluctuating. It should try to constant.

A thesis entitled "Financial performance of joint venture banks (with special reference to SCBNL and NABIL bank) by Pratikshya Ghimire;

Objectives:
i. To find out operational efficiency of SCBNL and NABIL bank.
ii. To analyze the different types of risk associated with the banks.
iii. To find out the compliance of NRB directives.
iv. To provide suggestions and recommendations on the basis of study.

Major Findings/Recommendations:
i. Unable to earn a satisfactory level of profit.
ii. Leverage ratio to increase so increasing debt financing will generate profit through the utilization of deposits.
iii. Unsatisfactory liquidity level.
iv. EPS and DPS should increase by increasing MPS.
v. Operating income level is not satisfactory so increase operating efficiency.
vi. $\quad$ CRR are below the standard of NRB directives.

## A thesis entitled "Financial performance analysis CAMEL TEST of NABIL.NIBL, SCBNL) by Kamal Bahadur Chand;

Objectives:
i. To analyze capital structure and capital adequacy position.
ii. To assess assets management system, profitability and liquidity.
iii. To assess organizational investments, social responsibilities and services.
iv. To provide the suggestion on the basis of the findings.

Major Findings/Recommendations:
i. Study indicates that people value high quality of services of private sector commercial banks.
ii. Majority of population is found still unaware of all products and services that are affected by commercial banks.
iii. Minimum balance requirement to open saving a/c should decrease to attract many customers.
iv. Each commercial bank should increase interest on deposit.

A thesis entitled "comparative Analysis of financial status \& performance evaluation of HBL and NABIL bank" by Rakesh Sangel;
Objectives:
i. To analyze capital adequacy and liquidity position of the banks.
ii. To analyze quality of assets and evaluate risk weighted assets.
iii. To evaluate the level, trend and stability of HBL and NABIL.

Major Findings/Recommendations:
i. The total capital adequacy ratio is fluctuating.
ii. Assets composition remained largely in the loan and investment.
iii. The both banks managerial and operating efficiency since the total expenses to total revenue ratio are in decreasing trend.

A thesis entitled "Financial performance analysis of commercial banks of NIBL and NABIL) by Anita Sherstha;

Objectives:
i. To conduct cash flow analysis and measure the operating efficiency, stability and profitability.
ii. To measure the ability to meet the short term and long term obligations.
iii. To pint out the week and strength areas of the business performance.
iv. To analyze financial strength and weakness.

Major findings:
i. Liquidity ratio shows that the liquidity position of NIBL is better than NIBL.
ii. NABIL has utilized the debt more than NIBL.
iii. Total deposit and total assets are higher in NIBL than that of NABIL.

Recommendation:
i. Banks are suffered from liquidity position.
ii. Bank can earn more by adding debt in its capital structure.
iii. Managerial efficiency and assets utilization position of the sampled banks seems unsatisfactory.
iv. Profitability position of NIBL is much weaker than NABIL.
v. Banks are suggested to review their overall capital structure and investment portfolio to make better combination of capital structure.
vi. The banks are suggested to not limit their activities within the urban areas only.
In this way review of literature is important before selecting topic so that after selecting topic we can justify the topic by suggesting new findings.

### 2.5. Research Gap:

Commercial Bank invests 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 analysis statement has to prepare according to the direction of NRB.Nepal Rastra Bank's policy and guidelines are changing according time to time. So, the up to dated study over the changes of time frame is major concern for the researcher and concerned organization as well as industry as a whole. This study covers the more recent financial data and analysis is done within the latest guidelines and curriculum of Nepal Rastra Bank.

No research has been undertaken regarding the comparative analysis of financial performance between the Himalayan Bank and Nepal Investment Bank. Some researcher has done the comparative studies of other joint venture bank. But within this bank, study is not found. Financial analysis is the major function of every commercial bank for evaluating the financial performance. Therefore it is the major concern of stakeholders to know the financial situation of the bank.

HBL and NIBL are the leading joint venture commercial banks of the country having the huge market share and its investment activities and these banks has significant impact on developing the economy of the country.Every year the financial performance of changing according to the environment of the country. Hence, this study fulfills the prevailing research gap about the in depth analysis of the financial performance which is the major concern of the shareholders and stakeholders.

## CHAPTER - III

## RESEARCH METHODOLOGY

This chapter contains research designs, data collection techniques tools and methods used method of presentation and analysis.

### 3.1. Research Design:

A research design is the logical and systematic planning and direction of a piece of research. Research design is like blue-print to the researcher. There are different views regarding research design but overall it contains whole report contents. It is the overall plan of proposal study to specify the appropriate research method and procedures for obtaining specific finding valid objectively accurate and economically as possible.
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 to achieve the objective of this study, descriptive and analytical research designs have been used. Some statistical and accounting tools have also been applied to examine facts and descriptive techniques have been adopted to evaluate financial performance of the banks.

### 3.2. Sources of Data:

This study is conducted on the basis of secondary data. The data relating to investment, deposit, loan and advances and profit are directly obtained from the balance sheet and profit and loss account of the concerned Bank's annul reports published on wed sites of concern banks. Supplementary data and information are collected from number of institutions and regulating authorities like Nepal Rastra Bank, website www.nepalstockexchange.com and different related website.

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 banks and other sources, they were complied with the annual reports' of auditor.

Similarly, various data and information are collected form the periodicals, economic journals, managerial magazines and other published and unpublished reports and documents from various sources and websites.

### 3.3. Data Collection Process:

As explained in previous chapters, the main sources of secondary data are the reports of the Banks published in their respective annual general meetings and web site www.nepalstockexchange.com and relevant bank's website. In addition to that some of the relevant data are also collected from the non-bank financial statistics published by the non-bank regulation department of Nepal Rastra Bank.

### 3.4. Population and Sample:

The large group about which the generalization is made is called the population under study or the universe and small portion on which the study is made is called the sample of the study. There are altogether twenty five commercial banks in Nepal. In this study, the focus will be on the analytical and comparative study of financial performance of HBL and NIBL. There are so many commercial banks in the market but it is impossible to study all of them so two commercials bank has been selected for the analysis among them on the basis of reputation of the banks and to limit on organization. So the study is based on sample based on sample basis not on the population.
It is not possible to study all the data related with all bank of Nepal. There are altogether twenty-five listed commercial banks in the country and their stocks are traded actively in stock market. So the financial analysis of listed two banks is being compared with that average of the same, which are selected from population. From the above listed commercial banks are considered as population.
To calculate industry average the selected sample are as follows:

1. Himalayan Bank Ltd. (HBL)
2. Nepal Investment Bank Ltd. (NIBL)

### 3.5. Methods of Analysis:

To achieve the objectives of the study, various financial, statistical and accounting tools have been used in this study. The analysis of data will be done according to pattern of data available. With the available tools and resources, analytical statistical tools such as Karl Person's coefficient of correlation, simple \& multiple regression as well as corresponding hypothesis are adopted in this study. Similarly some strong accounting tools such as ratio analysis and trend analysis have also been used for financial analysis.
The various calculated results obtained through financial, accounting and statistic tools are tabulated under different headings. Then they are compared with each other to interpret the results.

### 3.5.1. Financial Tools:

There are various financial tools to measure the performance of a organization. The following financial tools have been used for the analysis:

### 3.5.1.1 Ratio Analysis:

The relationship between two accounting figures expressed mathematically is known as a financial ratio "Ratio analysis is used to compare a firm's financial performance and status to that of other firms or to itself over time. " From the help of ratio analysis, the qualitative judgment can be done regarding financial performance of a firm. In this study, following ratios are calculated and analyzed.

### 3.5.1.1.1 Liquidity Ratio:

A name denotes the liquidity refers to the ratio between liquid assets and liability. The ability of firm to meet its obligation in the short term is known as liquidity. The ability of a firm to meet its obligation in the short term is known as liquidity. It reflects the short term strength of the business. In order to ensure short-term solvency,
the company maintain adequate liquidity. But liquidity ratio must be optimum. If the company maintain unnecessary high liquidity ratio then it may adversely effect in the profitability of the company will invest all its assets in safe liquid assets, which can lose the opportunity to earn high profit. Means everybody knows that investing all assets in safe liquid assets doesn't have a good return. As well as high liquidity may unnecessary tied up in the current assets. In the other hand if a company doesn't maintain adequate liquidity then it will result in bad credit ratings, less creditors, confidence, eventually may lead to bankruptcy. Thus the company should endeavor to maintain proper balance between inadequate liquidity and unnecessary liquidity for the survival and for avoiding risk.

## 1. Current Ratio:

The current ratio is the ration of total current assets to total current liabilities. It is calculated by dividing current assets by current liabilities, which is presented as follows

## Current Assets

Current Liabilities
Current assets those assets which can be converted into cash and bank balance within analysis accounting period such as cash and bank balance, investment in treasury bill, money at call or placement, loans and advances, bills purchased and discount, inter branch account, other short term loans, receivable and prepaid expenses. Etc.

Current liabilities refer to the short-term maturing obligations. This includes all deposit liabilities; inter bank reconciliation account, bills payable, tax provision, staff bonus, dividend payable, bank overdrafts, provisions and accrued expenses.

## 2. Cash and Bank Balance to Total Deposit Ratio:

Cash and bank balances are the most liquid current assets. This ration measures percentage of most liquid fund with the bank to make immediate payment to the depositors. This ratio is computed by dividing cash and bank balances by total deposit. This can be presented as follows:

Cash and Bank Balance<br>Total Deposit

Cash and Bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic banks, balance held in foreign banks and other financial institutions. The total deposits encompass current deposits, fixed deposits, investment in other financial institution, money at call and short deposit and other deposits. A high ration indicates the greater ability to meet their deposits liability and vice versa. Moreover, too high ratio is unfit, as capital will be tied - up and opportunity cast will be higher.

## 3. Cash and Bank Balances to Current Assets:

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

## Current and Bank Balance

Current Assets
A high ratio indicates the sound ability to meet their daily cash requirements of their customer deposits and vice versa. Both higher and lower ratio is not desirable. The reason is that if a bank maintain higher ratio of cash, it has to pay interest on deposits but couldn't invest its cash or current assets in a profitable are so it may lost opportunity to earn something. In the opposites, if a bank maintain low ratio of cash, it may fail to make the payment for presented cheques by its customer. So, sufficient and appropriate cash reserve should be maintained properly.

### 3.5.1.1.2 Assets Management Ratio (Activity Ratio):

Activity ratio evaluates the efficiency with which the firm manages and utilizes its assets. This ratio is also known as turnover ratio. It measures how effectively the company employees the resources at its command. Funds are creates by the collection of share as debt from the owner, creditors and outside parties. Those funds are invested in various kinds of assets to generate profits or income. Activity ratios are the creditors of a concern with regard to its efficiency in assets management, hence they often referred to as efficiency ratio are computed to assess finance companies in utilizing available resources.

## 1. Loan and Advances to Total Deposit Ratio:

This ratio measures the extent to which the banks are successful to utilize the outsiders' fund (Total deposit) for the profit generating purpose on the loans and advance. Generally, a high ratio reflects higher efficiency to the utilization of fund and vice-versa. It can be calculated by dividing the amount of loans and advances by the amount of total deposits, which is given as below:

Loan and Advance
Total Deposits
Here loan and advances refers to total of loan, advances and overdraft and total deposits refer to total of all kinds of deposits.

## 2. Loans and Advances to Fixed Deposit Ratio:

This ratio indicates how many times the amount is used in loans and advances in comparison to fixed deposits. Fixed Deposits are the main source of deposit of bank and are high interest bearing obligation whereas loans and advances are the major sources of investment to generate income for the commercial banks. This ratio is calculated by dividing the amount of loans and advances by fixed deposits that are given below.

Loans and Advances
Fixed Deposit

## 3. Loans and Advances to Total Working Fund Ratio:

Loan and advances is the major components in the total working fund, which indicates the ability of banks are successful in mobilizing their loan and advances on the working fund ratio for the purpose of income generation. This ratio is computed by dividing loan and advance by total working fund. This is sated as below:

Loans and Advances
Total Working Fund
Here Total working fund includes all assets of on balance sheet items. In other words, this includes current assets, net fixed assets, loans for development bonds and other investment in share, debenture and other etc. A high ratio indicates a better mobilization of fund as loan and advances and vice - versa.

## 4. Total investment to Total Deposit Ratio:

Investment is one of the major forms of credit created to earn income. This implies the utilization of firm's deposit of investment in government securities and share, debenture of the other companies and banks. This ratio measure the extent to which the bank are successful in mobilizing total investment on the total deposits, the amount of deposits should be soundly investment as the bank has to put only provide interest on its deposits but also has to declare a handsome divided to its owners and shareholders. This ratio can be calculated by dividing total investment by total deposit. This ratio is mention as below:

Total Investment
Total Deposit
Investment consists of investment of government securities, investment on debenture and bonds, shares in subsidiary companies, share in other companies and other investment. A high ratio indicates that the Bank's efficiency is more investing on its deposit and low indicates in ability to put its deposits for the lending activities.

## 5. Investment on Government Securities to Total Working Fund Ratio:

The ratio measures to what extent, Banks are successful in mobilizing their total working fund on different types of govt. securities to grow income. All the deposits of Banks should not be utilized as loans and advances and other credits form liquidity as well as company's security point of view. That's why some of the investments should be invested in such kind of investments that has lower risk in comparison to loans. If the ratio results, better the mobilization of fund as investment on government securities and vice versa. This ratio is calculated by dividing investment on government securities by total working fund.

Investment on government securities
Total working fund
The purpose of this ratio is to measure the successfulness of mobilizing the total working fund to shares and debenture. Share and Debenture are long-term investment. Banks should invest in long-term securities by maintaining a liquidity position. The
investment risk can diversify with the help of portfolio management. This ratio can be computed by dividing investment on shares and debentures by total working fund. This can be stated as:

Investment on shares and debentures
Total working fund

### 3.5.1.1.3 Profitability Ratios:

Profit is the difference between total revenues and total expenses over a period of time. Profit is the ultimate output of a commercial bank and it will have no future if it fails to make sufficient profits. Therefore, the financial manager continuously evaluates the efficiency of the banks in terms of profits. Profitability shows the overall efficiency of the business concerns. The relation of the return of the firm to either its sales or equity of its assets is known as profitability ratio. Profit is necessary to survive in any business field fir its successful operation and further expansion. It measures management's overall effectiveness as shown by the return generated on sales and investment. Higher the profitability ratio, better the financial performance of the bank and vice versa. Profitability ratio can be calculated by following different ratio:

## 1. Net profit to Total Assets:

Net profit refers the profit after interest and taxes. It is also known as Return on total assets (ROA). This ratio evaluates the efficiency of company in utilizing and mobilizing of assets and its survival. It is useful for measurement of the profitability of all financial resources invested in the bank assets. It also provides the necessary foundation for company to deliver a good return on equity. Higher return on assets (ROA) indicates higher efficiency in utilization of total assets and vice-versa. ROA is calculated by dividing the amount of net profit by the total assets.

## Net profit

Total assets

## 2. Net profit to Total Deposit Ratio:

Net profit to total deposit ratio evaluate whether management has been capable to mobilizes and utilize the deposit. It also helps to know the overall performance and generation of profit of bank. This ratio is most important to identify whether the organization well efficient or not in mobilizing its total deposits. So that corrective action could be taken. Higher ratio indicates better utilization of deposit and viceversa. Here net profit is profit after taxes and total deposit means total amount of deposit in various account i.e. saving, current, fixed and other. The return on total deposits ratio can be computed by dividing net profit by total deposit. This can be express as follows:

Net profit<br>Total Deposit

## 3. Net Profit to Net worth ratio:

Net worth or shareholders equity refers to the owners claim on the assets of the bank. It can be found by deducting total liabilities from total assets (excluding intangible assets and accumulated losses).This ratio measures the profit earned by the commercial banks by utilizing owner's equity and there by generating return to satisfy the owners. This ratio indicates how well the banks have used the resources of the owners. Higher the ratio indicates sound management and efficiency and wealth maximization of the banks, which in turn is the wealth maximization of the banks. It is calculated by dividing net profit by net worth, which is express as follows.

Net Profit
Net Worth

## 4. Total interest earned to Total working fund ratio:

The ratio shows the earning capacity of a bank on to total assets (working fund).This ratio exhibits the extent on which banks are successful in mobilizing their working funds to generate income as much as possible. The higher ratio will indicate the high earning power of the banks on its total assets. Total interest earned is calculated by adding the total income from loans, advances cash, credit, overdrafts and government securities etc. This ratio is calculated by dividing net profit by total working fund.

## Total interest earned

## Total working fund

## 5. Total interest paid to Total working fund ratio:

The ratio is used to measure the percentage of total interest expenses against the total assets. Higher the ratio, higher will be the indication of interest expenses on total assets and vice versa. Total interest expenses consists the expenses on total deposits, loan and advances, borrowings and other deposits. The ratio is calculated as follows:

Total interest paid
Total working fund

### 3.5.1.1.4. Leverage Ratios:

This ratio is also called solvency ratio or capital structure ratio. A firm should have strong short-term as well as 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. These ratios indicate the situation of the capital structure, which is calculated to measure the company's ability of using debt for benefit of shareholders. Long-term creditors like debenture holders. Financial institutions etc. are more interested to the firm's long-term financial wealth, debt servicing capacity ad strength and weakness of the concerns. This ratio may be calculated from the balance sheet items to determine the proportion of debt in total financing. In summary debt ratio tell us the relative proportions of capital contribution by creditors and owners.

## 1. Debt-Assets Ratio:

This ratio exhibits the relationship between creditors fund and owners capital. This ratio shows the proportion of outside fund used in financing total assets. It also provides security/financial safety to the outsider's that is potential shareholder, depositor or investors. Higher debt ratio indicates higher financial risk as well as increasing claims of outsiders in total assets and lower ratio indicates lower financial risk as well as decreasing claims of outsider over the total asset of the firm. Generally 1:2 ratios are considered good however no hard and fast rule is prescribed. This ratio implies a finance company success in exploiting debt to more profitable areas. This ratio represents as follows:
Total Debt
Total Assets

## 2. Debt Equity Ratio:

Debt equity ratio examines the relative claims of creditors and owners against the firm assets. Alternatively, the debt equity ratio indicates the combinations of debt capital and equity capital fund to the total investment. The ratio is computed by using following formula:
Total Debt
Total Equity

### 3.5.1.1.5 Capital Adequacy Ratio:

The capital adequacy ratio is used to measure the strength of the capital adequacy of the available capital. It is measured by the capital (Paid up capital + Free reserves) to the total assets explains the strengths of the capital base of commercial banks. A high or low capital adequacy ratio undesirable items of lower return or lowered solvency respectively. Therefore, appropriate capital adequacy is needed but it is a controversial matter. According to NRB's prescription bank has to keep capital adequacy ratio. NRB's standard of capital adequacy ratio is changing over the time period. The capital adequacy is measured by analyzing following ratio:

## 1. Shareholders fund to total assets ratio:

This ratio is concerned with the sufficiency of shareholders fund against the total assets. It is very essential for every financial institution to have a balance of required percentage of total assets at shareholders fund i.e. capital fund. Generally this ratio measures the fund claims of owners of the bank over its assets. A high ratio indicates that out of total assets shareholders have more controlled owner command and viceversa. This ratio is calculated by dividing shareholders fund by total assets which is presented as follows:
Shareholder's Fund
Total Assets

## 2. Shareholders fund to Total deposit ratio:

Shareholders fund to total deposit ratio shows how well bank are maintain sufficient account as shareholder's fund is comparison to the amount of the total deposit. This ratio is calculated by shareholders fund divided by total deposit, which is presented as follows:
Shareholder's Fund
Total Deposit

### 3.5.1.1.6 Market Value Ratio (Growth Ratio):

Market value ratio represents how well the banks are maintaining their economic and financial position. The ratios can be calculated by dividing the last period dividend by the first period dividend, then by referring to the compound interest tables. Alternatively, it is calculated by using the following formulas,
$\mathrm{FV}=\mathrm{PV}(1+\mathrm{r}) \mathrm{n}$
Where,
FV = Future Value
PV $=$ Present Value
r = Rate of interest
$n=$ No. of year
A high ratio generally indicates better performance and vice-versa. To examine and analyzed the expansion analysis growth of company, following growth ratio are calculated in this study.

## 1. Net Profit:

Net profit is the main indicator of financial position of any business organization. Net profit is essential for its survival and growth and to maintain capital adequacy through profit retention. This indicator is computed by subtracting total expenditure including tax from operating income and interest. It is also called net profit after tax and interest.
$\mathrm{NP}=\mathrm{OI}-(\mathrm{TE}+\mathrm{IP}+\mathrm{T})$
Where,
$\mathrm{NP}=$ Net profit after tax and interest
$\mathrm{OI}=$ Operating Income
TE = Total Expenditure
IP = Interest Paid
$\mathrm{T}=$ Taxes

## 2. Earning Per Share:

The earning per share exhibits that the owner is theoretical entitles to get from company. EPS is also identifying to measure the profitability of the shareholders investment. It simply shows that the profitability of bank on a per share basis, This ratio can be calculated by dividing net profit after interest and taxes less preference dividend by the total number of equity shares outstanding of bank. It is calculated by using following formula:

EPS $=\frac{\text { NPAIT }- \text { PD }}{\mathrm{n}}$
Where,
EPS = Earning per share
NPAIT $=$ Net profit after interest and tax
PD = Preference Dividend
n $\quad=$ Number of equity shares

## 2. Dividend Per Share:

The term dividend refers to distribute earning to the shareholders of the bank in return to their investment. Generally, dividend implies that portion of net profit, which is allocated to shareholders as their return in term of cash or share. The difference fund between EPS and DPS is retaining in the company as retain earning. It is calculated total dividend by number of share.
$\mathrm{DPS}=\frac{\mathrm{TDD}}{\mathrm{n}}$
Where,
DPS = Dividend per share
TDD = Total distributed dividend
n $\quad=$ No. of common share outstanding

### 3.5.2 STASTICAL TOOLS:

Various statistical tools related to this study will be drawn out to make the conclusion more reliable according to the available financial data. For this following statistical tools are used.

### 3.5.2.1 Arithmetic Mean:

The average value is a single value with in the range of the data that is used to represent all of the values in the series. Since an average is somewhere with in the range of the data, it is also called a measure of central value. 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 obtained by dividing sum of obtain observations by the number of items which is presents as follows:

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

Where,
$\mathrm{X}=$ Arithmetic average
$\sum \mathrm{x}=$ Summation for total values of the variable / observation
$\mathrm{n} \quad=$ 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. It is also denoted by the small Greek Letter $\partial$ (Sigma).The standard deviation measures the absolute dispersion/ or variability of a distribution. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a series, a large standard deviation means just the opposite. Hence, standard deviation is extremely useful in judging the representative of the mean.

Symbolically,

$$
\partial \quad=\frac{\sqrt{ } \sum \mathrm{d} 2}{\mathrm{n}}
$$

Where,
д = Standard deviation
$\sum \mathrm{d} 2=$ Sum of squares of the deviation measured from the arithmetic average
n $\quad=$ Number of items

### 3.5.2.3 Coefficient of Variation (C.V.):

The co-efficient of variation is the corresponding relative measure of dispersion, comparable across distribution, which is defines as the ratio of the standard deviation to the mean expressed in resulting percentage. It is used in such problems where we want to compare the variability of two or more than two series. The series for which the co-efficient 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 co-efficient of variation is less is said to be less variable or more consistent, more uniform, more stable or more homogeneous.
We can denote this by following formula,
CV $=\partial / x * 100$
Where,
CV = Coefficient of Variation
д = Standard deviation
x = Mean/Average

### 3.5.2.4 Correlation Analysis:

Correlation is the statistical tool that we can use to describe the degree to which one variable is linearly related to another. The co-efficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the study. The result of coefficient of correlation is always between +1 and -1 . When $r=+1$.it means there is perfect relationship between two variables and vice-versa. When $\mathrm{r}=0$, it means there is no relationship between two variables. The Pearson's formula is:

```
\(r=N \sum \mathrm{dxdy}-\sum \mathrm{dx} \times \sum \mathrm{dy}\)
    \(\mathrm{N} \sum \mathrm{dx} 2\)
```

Where,
$r=$ coefficient of correlation
$\mathrm{x}=$ independent variable
$y=$ dependent variable
$\mathrm{N}=$ no. of periods

### 3.5.2.5 Probable Error of the Co-efficient of Correlation:

After the calculation of co-efficient of correlation the next thing is to find out the extent to which it is dependable. For this purpose the probable error of the coefficient of correlation is calculated. It the probable error is added to and subtracted from the co-efficient of correlation it would be give two such limits with in which we can reasonably except the value of co-efficient of correlation to vary. The formula for finding out the probable of error of the Karl Pearson's co-efficient of correlation is :
P. E. $\mathrm{r}=$

Where,
P. E. $r=$ Probable error of co-efficient of correlation

R = Co-efficient of correlation
$\mathrm{N}=$ Number of pairs of observations
In order to conclude whether the co-efficient of correlation is significant or not. The following points should be kept in mind.

- If the co-efficient of correlations is less than it probable error, it is not at all significant.
- It the co-efficient of correlations is more than six times of probable error, it is definitely significant.
- It the probable error is not much and it the co-efficient of correlation is 0.5 or more it is generally to be significant.


### 3.5.2.6 Coefficient of Determination:

The Co-efficient of determination is the measure of the degree of linear association or correlation between two variables, one of which happens to be independent and other being dependent variable. In other words, co-efficient of determination measures the percentage of total variation in dependent variable explained by independent variable. The co-efficient of determination can have value ranging from zero to one. A value of one can occur only if the unexplained variation is zero which simply means that all the data points in the scatter diagram fall exactly on the regression line. Co-efficient of determination is the square of the Co-efficient of correlation.

Symbolically,
$\mathrm{R}^{2}=(\mathrm{r})^{2}$
Where,
$\mathrm{R}^{2}=$ Co-efficient of Determination
$R=$ Co-efficient of correlation

### 3.5.2.7 Trend analysis:

Trend analysis describes the average relationship between series where the one series related to time and other series to the value of the variable. It is generally shows that the line of the best-fit or straight line is obtained or not. The line of the best fit describes the changes in a given accompanying a unit change in time. Another word, it gives the best possible mean values of dependent variable for a given value of independent variable.

For calculation of the "line of the best fit" following equation should be kept in mind.
$Y c=a+b x$
Where,
$\mathrm{Yc}=$ the estimated value of Y for given value of x obtained form the line of regression of Y on X
$\mathrm{a}=$ " $\mathrm{Y}=$ intercept" / mean of Y value
$\mathrm{b}=$ "slope of line $/$ rate of change
$\mathrm{x}=$ the variable in time series analysis represent time.
The term best fit is interpreted in accordance with the principle of least squares which consists in minimizing the sum of squares of the residual or the errors of estimates i.e. the deviation between the given observed value of the variable and their corresponding estimated values as given by the line of best fit.

This topic will be used to forecast the ratios between net profit and deposit, net profit and investment, net profit and loan \& advances of the banks for next five years on the base of past five years. The analysis is done under limited factors which are as follows.

- The economy will remain unchanged as of present the stage.
- Banks will run as of present position
- The guidelines by NRB for banks will remain unchanged.
- The forecast will be true only when the limitations of least square method are carried out.
- The main assumption is that other factors are constant.


### 3.5.2.8 Regression Analysis:

Sometimes, the correlation between two variables may be insufficient to determine reliable estimation equation. Yet, if we add the data from more independent variables we may be able to determine an estimating equation that describes the relationship with greater accuracy. In regression analysis, we use independent variables utilizing more of the information available to us to estimate the dependent variable.

### 3.5.2.9 Testing of Hypothesis:

The method of statistics, which help in arriving at the criterion for such decision, is called test of hypothesis or statistical decision-making. A hypothesis is analysis assumption that make about the population parameter. Alternatively, a hypothesis is a
conjectural statement of the relationship between two or more variables. Hypothesis statement should be able to show the relationship between variables.

The test of hypothesis is a process of testing of significance regarding the parameter of the population on the basis of the sample drawn form the population. The computed value of the statistics may differ from the hypothetical value of parameter due to sampling fluctuation. If the difference is small, it has arisen due to sampling fluctuations. Hence the difference is considered to be insignificant and the hypothesis is accepted. If the difference is large, it has not arisen due to sampling fluctuations but it is due to some other reasons. Hence the difference is considered to be significant but it is due to some other reasons. Hence the difference is considered to be significant and the hypothesis is rejected. Thus the test of hypothesis discloses whether the difference between the computed statistic and hypothetical parameter is significant or not.

There are different types of hypothesis, among them t-test is to test the validity of our assumption, if sample size is less than 30 , t -test is used. For applying t-test in the context of small sample, the ' $t$ ' value is calculated first and compared with the table value of ' $t$ ' at a certain level of significance for value of ' $t$ ' exceeds the table value (say 0.05 ) we infer that the difference is significant at $5 \%$ level. But if ' $t$ ' is less than the concerning table value of the ' $t$ ' the difference is not treated as significant.

## CHAPTER - IV

## DATA PRESENTATION AND ANALYSIS

In this chapter data of sample banks are presented and analyzed according to the objectives set in the introduction chapter. To make a data more realistic and complete qualitative and quantitative analysis is done through different financial ratio and statistical analysis. However there are many ratios but due to some sort coming and constraints, only selected ratios have been taken for analyzing the strength weakness of the sample banks.

This chapter also helps for presenting a major finding, proper recommendation for researcher, which needs to define in next chapter. In this way analysis effort is made to make proper linkage of every chapter.

In order to find out the strengths and weakness and financial performance of the sample banks various ratios and variable have been calculated that are as follows:

### 4.1 Presentation of Data:

### 4.1.1 Five year comparative Balance Sheet of HBL:

Table No: 4.1
Himalayan Bank Limited
Five-Year Comparative Balance Sheet

| Particulars | $\begin{gathered} \text { FY } \\ 2002-03 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2003-04 \\ \hline \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2004-05 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2005-06 \\ \hline \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2006-07 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital \& Liabilities: <br> Share Capital <br> (Paid up capital @ 100 each) | 429 | 536.25 787.92 | 643.5 | 810.81 1335.69 | 772.2 |
| Reserve Funds | 634.13 | 787.92 | 898.25 | 1335.69 | 993.97 |
| A.TotalShareholder capital/Net Worth | 1063.13 | 1324.17 | 1541.75 | 2146.5 | 1766.17 |
| Deposit(Except Fixed) | 17839.72 | 17300.15 | 18706.58 | 21847.28 | 20140.65 |
| Other Liability | 516.26 | 704.14 | 914.49 | 494.1 | 386.75 |
| Bills Payable | 46.73 | 64.38 | 68.40 | 91.30 | 73.58 |
| Proposed \& Dividend Payable |  |  |  | 130.94 | 238.41 |
| Income tax Liabilities |  |  |  | 11.91 |  |
| B.Total Current Liabilities | 18402.71 | 18068.67 | 19689.47 | 22575.53 | 20839.39 |
| Fixed Deposit | 3205.37 | 4710.18 | 6107.43 | 8201.14 | 6350.20 |
| Borrowing | 608.13 | 659 | 506.05 | 235.97 | 144.62 |
| Debentures and Bond |  |  |  | 360 | 360 |
| C. Long-term Debt | 3813.50 | 5369.18 | 6613.48 | 8797.11 | 6854.82 |
| $\begin{array}{ll} \text { Total } & \text { Liabilities } \\ (\mathrm{A}+\mathrm{B}+\mathrm{C}) \end{array}$ | 23279.34 | 24762.02 | 27844.69 | 33519.14 | 29460.38 |
| Assets: |  |  |  |  |  |
| Cash Balance | 397.18 | 274.23 | 286.53 | 177.24 | 305.43 |
| Bank Balance | 1582.02 | 1726.95 | 1727.94 | 1580.09 | 1411.92 |
| Money at call \& Short Notice | 150.10 | 368.9 | 441.08 | 1710.02 | 1005.28 |
| Loan,advances \& Bills Purchased | 10001.85 | 11951.87 | 12424.52 | 16997.98 | 14642.56 |
| Other Assets | 742.88 | 848.33 | 976.46 | 643.97 | 643.61 |
| A.Total Current | 12874.03 | 15170.28 | 15856.53 | 21109.33 | 18008.8 |
|  | 229.87 | 299.64 | 295.82 | 574.06 | 540.82 |
| Fixed Assets | 10175.44 | 9292.10 | 11692.34 | 11822.98 | 10889.03 |
| Investment (Long-term) |  |  |  | 12.77 | 21.73 |
| Non Banking Assets <br> B. Total Fixed Assets | 10405.31 | 9591.74 | 11988.16 | 12409.81 | 11451.58 |
| Total Assets (A+B) | 23279.34 | 24762.02 | 27844.69 | 33519.14 | 29460.38 |

[^0]
### 4.1.2 Five year comparative Profit $\&$ Loss A/c of HBL:

Table No: 4.2
Himalayan Bank Limited
Five-Year Comparative Profit \& Loss A/c
(NPR In Million)

| Particulars | FY |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 0 2 - 0 3}$ |  |\(\left.\quad \begin{array}{c}FY <br>

\mathbf{2 0 0 3 - 0 4}\end{array} \quad $$
\begin{array}{c}\text { FY } \\
\mathbf{2 0 0 4 - 0 5}\end{array}
$$\right)\)

Source: Annual Report of the Bank

### 4.1.3 Five year comparative Balance Sheet of NIBL:

Table No: 4.3
Nepal Investment Bank Limited
Five-Year Comparative Balance Sheet

| (NPR In Million) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | $\begin{gathered} \text { FY } \\ 2002-03 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2003-04 \\ \hline \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2004-05 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2005-06 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2006-07 \end{gathered}$ |
| Capital \& Liabilities: <br> Share Capital <br> (Paid up capital @ 100 each) <br> Reserve Funds | 295.29 343.25 | 295.29 433.76 | 587.74 592.43 | 590.59 824.85 | 801.35 1076.77 |
| A.TotalShareholder capital/Net Worth | 638.54 | 729.05 | 1180.17 | 1415.44 | 1878.12 |
| Deposit (Except Fixed) | 6249.94 | 9230 | 11042.31 | 13514.34 | 16972.17 |
| Other Liability | 414.48 | 582.43 | 474.31 | 287.63 | 347.52 |
| Bills Payable | 31.64 | 57.84 | 15 | 18.82 | 32.40 |
| Proposed \& Dividend Payable Income tax Liabilities |  |  |  | $\begin{gathered} 121.63 \\ 9.32 \end{gathered}$ | $\begin{aligned} & 43.65 \\ & 0.295 \end{aligned}$ |
| B.Total Current Liabilities | 6696.06 | 9870.27 | 11531.62 | 13951.73 | 17396.03 |
| Fixed Deposit | 1672.83 | 2294.68 | 3212.27 | 5412.97 | 7516.69 |
| Borrowing <br> Debentures and Bond | 6.83 | 361.50 | 350 | 550 | 800 |
| C. Long-term Debt | 1679.65 | 2656.18 | 3562.27 | 5962.97 | 8316.69 |
| $\begin{aligned} & \text { Total } \\ & (\mathrm{A}+\mathrm{B}+\mathrm{C}) \end{aligned} \quad \text { Liabilities }$ | 9014.25 | 13255.50 | 16274.06 | 21330.14 | 27590.84 |
| Assets: |  |  |  |  |  |
| Cash Balance | 200.97 | 315.38 | 374.27 | 562.56 | 763.98 |
| Bank Balance | 725.57 | 911.54 | 966.22 | 1773.96 | 1677.53 |
| Money at call \& Short Notice | 40 | 310 | 140 | 70 | 362.97 |
| Loan,advances \& Bills Purchased | 5772.14 | 7130.13 | 10126.06 | 12776.21 | 17286.43 |
| Other Assets | 379.22 | 476.18 | 412.75 | 201.09 | 233.67 |
| A.Total Current Assets: | 7117.89 | 9143.23 | 12019.28 | 15383.82 | 20324.58 |
| Fixed Assets | 191.12 | 249.79 | 320.59 | 343.45 | 759.46 |
| Investment (Long-term) | 1705.24 | 3862.48 | 3934.19 | 5602.87 | $\begin{gathered} 6505.68 \\ 1.13 \end{gathered}$ |
| Non Banking Assets <br> B. Total Fixed Assets | 1896.36 | 4112.27 | 4254.78 | 5946.32 | 1.13 7266.26 |
| Total Assets (A+B) | 9014.25 | 13255.50 | 16274.06 | 21330.14 | 27590.84 |

Source: Annual Report of the Bank

### 4.1.4 Five year comparative Profit $\&$ Loss $A / c$ of NIBL:

Table No: 4.4
Nepal Investment Bank Limited
Five-Year Comparative Profit \& Loss A/c

| Particulars |  |  |  | (NPR In Million) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { FY } \\ 2002-03 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2003-04 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2004-05 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 2005-06 \end{gathered}$ | $\begin{gathered} \hline \text { FY } \\ 2006-07 \\ \hline \end{gathered}$ |
| INCOME: |  |  |  |  |  |
| Interest Income | 459.51 | 731.4 | 886.80 | 1172.74 | 1584.99 |
| Commission \& Discount | 40.81 | 55.75 | 93.55 | 115.94 | 163.90 |
| Other operating income | 0.488 | 1.77 | 6.19 | 0.391 | 1.43 |
| Exchange Gain | 50.83 | 87.98 | 102.52 | 125.75 | 135.36 |
| Other Income | 26.29 | 36.82 | 56.57 | 46.61 | 114.10 |
| A. Total Income | 577.93 | 913.71 | 1145.63 | 1461.43 | 1999.76 |
| EXPENSES: |  |  |  |  |  |
| B. Interest Expenses | 189.21 | 326.20 | 354.55 | 490.95 | 685.53 |
| Gross Profit [A - B] | 388.72 | 587.51 | 791.08 | 970.48 | 1314.23 |
| Less: Other Operating expenses: |  |  |  |  |  |
| Staff Expenses | 61.29 | 89.75 | 97 | 111.05 | 145.37 |
| Office Expenses | 108.04 | 149.48 | 182.92 | 200.22 | 243.43 |
| Operating Profit | 219.39 | 348.28 | 511.16 | 659.21 | 925.43 |
| Less: Non-operating expenses |  |  |  |  |  |
| Loss from extra ordinary activities Exchange Loss Bad debt written off |  |  |  |  |  |
| Bad debt written off Provision for possible |  |  |  |  |  |
|  | 30.34 | 91.09 | 140.41 | 103.81 | 129.72 |
| Provision for staff bonus | 18.91 | 25.72 | 37.07 | 50.49 | 72.34 |
| Provision for income tax | 53.33 | 78.80 | 101.53 | 154.38 | 221.98 |
| Provision for nonbanking assets |  |  |  |  |  |
| Net Profit after tax | 116.82 | 152.67 | 232.15 | 350.54 | 501.40 |

Source: Annual Report of the Bank

### 4.2. Ratio Analysis:

Ratio Analysis is the expression of the relationship between the mutually independent figures. It shows the quantitative relation between two variables. Simply it is calculated as dividing one variable by another variable.
There are various types of financial ratio which are used by different field for different purpose. Such as creditors, investor, financial institutions and management of the firm.In this analysis following ratio are analyze and interpret for the past five year for the sample banks.

### 4.2.1 Liquidity Ratio:

A bank should maintain its satisfactory liquidity position to satisfy the short-term credit needs of the community, to meet demands for deposits, withdraws, pay maturity obligation in time and convert non-cash assets into cash to satisfy immediate needs without loss to bank and consequent impact in long run profit. Liquidity ratio measures the short-run solvency of the firm.

## 1. Current Ratio:

Current ratio indicates the ability of the company to meet its current obligation. This is the broad measurement of liquidity position of the Banks. In other words, it measures the availability for current assets for meeting current liabilities. This ratio is also known as working capital. Following table shows the comparative current ratio for five years.

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

Table No 4.5: Current Ratio

| Fiscal Year | (Rs. In Million) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Banks |  |  |  |  |  |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Current <br> Assets | Current <br> Liabilities | Ratio (times) | Current Assets | Current Liabilities | $\begin{gathered} \text { Ratio } \\ \text { (times) } \end{gathered}$ |
| 2002/03 | 12874.03 | 18402.71 | 0.6995 | 7117.89 | 6696.06 | 1.0629 |
| 2003/04 | 15170.28 | 18068.67 | 0.8395 | 9143.23 | 9870.27 | 0.9263 |
| 2004/05 | 15856.53 | 19689.47 | 0.8053 | 12019.28 | 11531.62 | 1.0422 |
| 2005/06 | 21109.33 | 22575.53 | 0.9350 | 15383.82 | 13951.73 | 1.1026 |
| 2006/07 | 18008.8 | 20839.39 | 0.8641 | 20324.58 | 17396.03 | 1.1683 |
| Mean |  |  | 0.8286 |  |  | 1.0605 |
| S.D. |  |  | 0.0864 |  |  | 0.0890 |
| C.V. (\%) |  |  | 10.43 |  |  | 8.39 |

[Refer Annex A-1]
Above table indicates the current ratios of the sample banks. The ratio of HBL is in fluctuating order that is from 0.6995 to 0.8641 in fiscal year 2002/03 to 2006/07 through out the study period. Similarly, current ratio of NIBL is in fluctuating order. The highest ratio is in the year 2005/06 which is 0.9350 and lowest is 0.6995 in the year 2002/03.Since the mean ratio of NIBL is above $1: 1$ which indicates the successful management of current assets over current liabilities whereas HBL has below $1: 1$ mean ratio which means it has failed to maintain the current obligation. As
concern with liquidity and consistency NIBL seems to be in better position than HBL which is by the lower CV ( $8.39 \%$ ).

## 1. Cash and Bank Balance to Total Deposit Ratio:

The main purpose of this ratio is to examine the bank's liquidity capacity on the basis of cash and bank balance. The following table shows the cash and bank balance to total deposit ratio of selected sample banks.

Cash and Bank Balance to Total Deposit Ratio = Cash and Bank Balance
Total Deposit
Table No 4.6: Cash and Bank Balance to Total Deposit Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Cash and Bank Balance | Total Deposit | Ratio (times) | Cash and Bank Balance | Total Deposit | $\begin{aligned} & \text { Ratio } \\ & \text { (times) } \end{aligned}$ |
| 2002/03 | 1979.2 | 21045.09 | 0.0940 | 926.54 | 7922.77 | 0.1169 |
| 2003/04 | 2001.18 | 22010.33 | 0.0909 | 1226.92 | 11524.68 | 0.1064 |
| 2004/05 | 2014.47 | 24814.01 | 0.0811 | 1340.49 | 14254.58 | 0.0940 |
| 2005/06 | 1757.33 | 30048.42 | 0.0584 | 2336.52 | 18927.31 | 0.1234 |
| 2006/07 | 1717.35 | 26490.85 | 0.0648 | 2441.51 | 24488.86 | 0.0996 |
| Mean |  |  | 0.0778 |  |  | 0.1080 |
| S.D. |  |  | 0.0157 |  |  | 0.0120 |
| C.V. (\%) |  |  | 20.21 |  |  | 11.19 |

In the table no. 2 shows the fluctuation on cash and bank balance to total deposit ratio of the sample banks. During the study of five years period, the ratio of HBL is ranged between 0.0940 in 2002/03 to 0.0648 in 2006/07, NIBL is ranged between 0.1169 in 2002/03 and 0.0996 in 2006/07.It shows that NIBL has maintained the highest mean ratio which is 0.1080 than HBL.This shows that NIBL has successfully maintained the higher cash and bank balance to total deposit ratio. It also means that NIBL is successful in meeting the daily cash requirement.
Even though HBL fail to maintain a higher cash balance which is shown by low mean ratio 0.0778 it has also fail to maintain a consistency level in utilizing the cash balance than NIBL.This consistency is measured by highest C.V. (20.21\%) which is higher than that of NIBL.NIBL mean is 0.1080 and CV is $11.9 \%$ which indicate the higher cash balance and lower consistency. Holding cash and bank balance can have a negative impact on the goodwill and reputation of the bank to fulfill the demand of the profit holder and lower cash balance can have a negative impact on the customer. Therefore banks should maintain the enough liquidity.

## 2. Cash and Bank Balance to Current Assets Ratio:

This ratio measures at what level of cash and bank balance they have out of total current assets. The cash and bank balance are the most liquid assets in terms of other current assets. It also shows that the bank ability to pay to the depositors.

Cash and Bank Balance to Current Assets Ratio $=\frac{\text { Cash and Bank Balance }}{\text { Current Assets }}$
Table No 4.7: Cash and Bank Balance to Current Assets Ratio
(Rs. In Million)

| Fiscal <br> Year | Himalayan Bank Ltd. |  |  |  |  |  |  | Nepal Investment Bank Ld. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash and <br> Bank <br> Balance | Current <br> Assets | Ratio <br> (times) | Cash and <br> Bank <br> Balance | Current <br> Assets | Ratio <br> (times) |  |  |  |
|  | 1979.2 | 12874.03 | 0.1537 | 926.54 | 7117.89 | 0.1301 |  |  |  |
| $2003 / 04$ | 2001.18 | 15170.28 | 0.1319 | 1226.92 | 9143.23 | 0.1341 |  |  |  |
| $2004 / 05$ | 2014.47 | 15856.53 | 0.1270 | 1340.49 | 12019.28 | 0.1115 |  |  |  |
| $2005 / 06$ | 1757.33 | 21109.33 | 0.0832 | 2336.52 | 15383.82 | 0.1518 |  |  |  |
| $2006 / 07$ | 1717.35 | 18008.8 | 0.0953 | 2441.51 | 20324.58 | 0.1201 |  |  |  |
| Mean |  |  | 0.1182 |  |  | 0.1295 |  |  |  |
| S.D. |  | 0.0286 |  |  | 0.0152 |  |  |  |  |
| C.V.(\%) |  |  | 24.21 |  | 11.78 |  |  |  |  |

The above table shows that the ratio of HBL is ranged between the 0.1537 in 2002/03 and 0.0953 in 2006/07 with mean ratio of 0.1182 ; NIBL is ranged between the 0.1301 in 2002/03 and 0.1201 in 2006/07 with mean ratio of 0.1295 .
Since, the mean ratio of NIBL is higher than that of HBL.It supports the conclusion that,NIBL has been successful in maintaining its higher cash and bank balance to current assets ratio, but it doesn't mean that it has mobilized its more fund in profitable sectors. It actually means that NIBL can meet its daily cash requirement. In contrast HBL has lower mean ratio because it may have invested their fund in more productive sectors. Moreover, HBL is also failed to maintain a stability of cash and bank balance in comparison to NIBL which is indicate by higher C.V. (24.21\%).

## 3. Loan and Advances to Current Assets Ratio:

This ratio measures the amount of investment in loan and advance out of total current assets. This ratio shows the liquidity position of the banks as loans and advance are also liquid assets. If it is invested in higher return area then it would be profitable for the banks.

Loan and Advances to Current Assets Ratio =

Table No 4.8: Loan and Advances to Current Assets Ratio
(Rs. In Million)

| Fiscal <br> Year | Banks |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. <br> Advances | Current <br> Assets | Ratio <br> (times) | Loan and <br> Advances | Current <br> Assets | Ratio <br> (times) |  |
|  | 10001.85 | 12874.03 | 0.7769 | 5772.14 | 7117.89 | 0.8109 |  |
| $2003 / 04$ | 11951.87 | 15170.28 | 0.7878 | 7130.13 | 9143.23 | 0.7798 |  |
| $2004 / 05$ | 12424.52 | 15856.53 | 0.7835 | 10126.06 | 12019.28 | 0.8424 |  |
| $2005 / 06$ | 16997.98 | 21109.33 | 0.8052 | 12776.21 | 15383.82 | 0.8304 |  |
| $2006 / 07$ | 14642.56 | 18008.8 | 0.8130 | 17286.43 | 20324.58 | 0.8505 |  |
| Mean |  |  | 0.7932 |  |  | 0.8228 |  |
| S.D. |  |  |  |  |  |  |  |
| C.V. (\%) |  | 0.0152 |  |  | 0.0282 |  |  |

The above table shows that the ratio of HBL is ranged between the 0.7769 in 2002/03 and 0.8130 in 2006/07 with mean ratio of 0.7932 ; NIBL is ranged between 0.8109 in 2002/03 and 0.8505 in 2006/07 with mean ratio 0.8228 .
As the mean ratio of NIBL is higher than that of HBL which is 0.8228 which indicates that NIBL has invested more in loan and advances than that of HBL However, as the C. V. of HBL is lower than that of NIBL which is $1.92 \%$ indicates that the bank is successful in maintaining a stability of loan and advance in comparison to the NIBL.

## 4. Fixed Deposit to Total Deposit Ratio:

This ratio measures the proportion of fixed deposit out of total deposit a bank has collected. This analysis is useful to bank for long-term investment strategy. If a bank is able to know this ratio it may invest the fixed deposit amount proportion in longterm investment sector for higher return.

Fixed Deposit to Total Deposit Ratio =


Table No 4.9: Fixed Deposit to Total Deposit Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Fixed Deposit | Total Deposit | Ratio (times) | Fixed Deposit | Total <br> Deposit | Ratio (times) |
| 2002/03 | 3205.37 | 21045.09 | 0.1523 | 1672.88 | 7922.77 | 0.2111 |
| 2003/04 | 4710.18 | 22010.33 | 0.2139 | 2294.68 | 11524.68 | 0.1991 |
| 2004/05 | 6107.43 | 24814.01 | 0.2461 | 3212.27 | 14254.58 | 0.2253 |
| 2005/06 | 8201.14 | 30048.42 | 0.2729 | 5412.97 | 18927.31 | 0.2859 |
| 2006/07 | 6350.20 | 26490.85 | 0.2937 | 7516.69 | 24488.86 | 0.3069 |
| Mean |  |  | 0.2249 |  |  | 0.2456 |
| S.D. |  |  | 0.0457 |  |  | 0.0478 |
| C.V. (\%) |  |  | 20.32 |  |  | 19.46 |

The above table shows that the ratio of HBL is ranged between the 0.1523 in 2002/03 and 0.2937 in 2006/07 with mean ratio of 0.2249 ; NIBL is ranged between the 0.2111 in 2002/03 and 0.3069 in 2006/07 with mean ratio of 0.2456 .
Since the mean ratio of NIBL is higher than that of HBL which is 0.2456 , means that the bank is successfully able to collect larger amount of fixed deposit out of total deposit than that of HBL.This could be advantage to the banks if it could utilize the fixed deposit in productive sector. This could bring an opportunity to invest in higher return sector. The NIBL bank has successfully maintained a stability of fixed deposit in comparison to the HBL which is indicated by lower C. V. (19.46\%).

### 4.2.2 Leverage Ratios or Capital Structure Ratio:

Leverage ratio is also one of the major ratios to know about the financial performance of any institution. This ratio reveals the proportion of funds used by the institution either from the creditor's side or from owner side. In order to maintain healthy financial position any institutions need to maintain proper proportion of debt and equity capital. A capital structure of an institution is very important in terms of sustainability, liquidity and profitability.

## 1. Debt-equity Ratio:

The debt equity ratio implies the debt equity proportion used by the institution. High debt equity ratio indicates more use of money from creditors' side and vice-versa. High debt equity ratio considered good if the institution is able to have higher return than the cost paid on debt.

Debt-equity Ratio $=\quad \frac{\text { Total Debt }}{\text { Total Equity }}$
Table No 4.10: Debt-equity Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Total Debt | Total Equity | Ratio (times) | Total Debt | Total Equity | Ratio (times) |
| 2002/03 | 22216.21 | 1063.13 | 20.90 | 8375.71 | 638.54 | 13.12 |
| 2003/04 | 23437.85 | 1324.17 | 17.70 | 12526.45 | 729.05 | 17.18 |
| 2004/05 | 26302.95 | 1541.75 | 17.06 | 15093.89 | 1180.17 | 12.79 |
| 2005/06 | 31372.64 | 2146.5 | 14.62 | 19914.7 | 1415.44 | 14.07 |
| 2006/07 | 27694.21 | 1766.17 | 15.68 | 25712.72 | 1878.12 | 13.69 |
| Mean |  |  | 17.19 |  |  | 14.17 |
| S.D. |  |  | 2.39 |  |  | 1.75 |
| C.V. (\%) |  |  | 13.93 |  |  | 12.38 |

The above table shows that ratio of HBL is in decreasing trend from year 2002/03.The ratio is ranged between 20.90 (2002/03) to $15.68(2006 / 07)$ with mean ratio of 17.19.In the same way the ratio of NIBL is ranged between $13.12(2002 / 03)$ to $13.69(2006 / 07)$ with mean ratio of 14.17 .The mean ratio of NIBL is lower than that of HBL.It declared that NIBL has lower debt cost and higher investment from equity fund. The ratios of both banks are in fluctuation mode. The higher debt investment brings a higher cost to the banks.
The C.V. of HBL and NIBL are 13.93 and 12.38 respectively. Therefore NIBL has lower C.V. which indicates that NIBL has consistency in debt equity ratio.

## 2. Debt-assets Ratio:

It measures proportion of the creditor's funds used by the institution to acquire the assets. The increased proportion of debt indicated the high level of risk or burden to the institution. The debt is considering more risky and cheaper source of financing. The higher level of risk, in the sense that the debt financing needs regular payment of interest in any condition of institution financial status and economic. The debt assets ratios of the sample banks are as below;

$$
\text { Debt-assets Ratio }=\frac{\text { Total Debt }}{\text { Total Assets }}
$$

Table No 4.11: Debt-assets Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Total Debt | Total Assets | Ratio (times) | Total Debt | Total Assets | Ratio (times) |
| 2002/03 | 22216.21 | 23279.34 | 0.9543 | 8375.71 | 9014.25 | 0.9291 |
| 2003/04 | 23437.85 | 24762.02 | 0.9465 | 12526.45 | 13255.50 | 0.9450 |
| 2004/05 | 26302.95 | 27844.69 | 0.9446 | 15093.89 | 16274.06 | 0.9274 |
| 2005/06 | 31372.64 | 33519.14 | 0.9359 | 19914.7 | 21330.14 | 0.9336 |
| 2006/07 | 27694.21 | 29460.38 | 0.94 | 25712.72 | 27590.84 | 0.9319 |
| Mean |  |  | 0.9443 |  |  | 0.9334 |
| S.D. |  |  | 0.0069 |  |  | 0.0069 |
| C.V. (\%) |  |  | 0.7374 |  |  | 0.7409 |

The above table shows that debts financing of both sample banks are high. The ratios are not very fluctuation. The highest ratio of HBL is 0.9543 in 2002/03 with mean ratio of 0.9443 which is highest mean ratio than NIBL.The ratio of NIBL is ranged between 0.9291 to 0.9319 in 2002/03 to 2006/07 respectively.NIBL has a lower mean ratio than that of HBL.The C.V. of HBL and NIBL are 0.7374\% and 0.7409\% respectively. Above statement conclude that the debt financing of HBL is higher than that of NIBL.Even though NIBL use low proportion of debt they are not successful in maintaining a consistency.HBL has more consistency than NIBL due to lower C.V.

## 3. Coverage Ratio:

This ratio measures the proportion of possible loan losses out of its total loans and advance invested.

Coverage Ratio $=\quad$ Provision for possible loan losses
Loans and Advances

Table No. 4.12: Coverage Ratio
(Rs. In Million)

| Fiscal <br> Year | Banks |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hrovisionalayan Bank Ltd. <br> for <br> possible <br> losses | Loans and <br> Advances | Ratio <br> (times) | Provision Investment Bank Ld. <br> for <br> fossible <br> losses | Loans and <br> Advances | Ratio <br> (times) |  |
|  | 202.87 | 10001.85 | 0.0202 | 30.34 | 5772.14 | 0.0052 |  |
| $2003 / 04$ | 186.23 | 11951.87 | 0.0155 | 91.09 | 7130.13 | 0.0127 |  |
| $2004 / 05$ | 58.89 | 12424.52 | 0.0047 | 140.41 | 10126.06 | 0.0138 |  |
| $2005 / 06$ | 145.16 | 16997.98 | 0.0085 | 103.81 | 12776.21 | 0.0081 |  |
| $2006 / 07$ | 90.69 | 14642.56 | 0.0061 | 129.72 | 17286.43 | 0.0075 |  |
| Mean |  |  | 0.011 |  |  | 0.0095 |  |
| S.D. |  |  | 0.0066 |  |  | 0.0036 |  |
| C.V.(\%) |  |  |  |  |  |  |  |

From the above comparative table the ratios of both banks are highly fluctuating. The mean ratio of HBL is higher than NIBL which is not good for the bank. The higher ratio indicates the larger amount of losses for the banks out of loans and advances invested.NIBL has more consistency due to its lower C.V. of $38.38 \%$ than HBL.

### 4.2.3 Activity Ratios or Assets and Investment Management Ratio:

Banks must be able to manage its assets very well to earn high return to satisfy its customers and for its own existence. Asset management ratio predicts how efficiently banks manage the resources at its command. The following asset management ratios are used in this study for comparison of the banks.

## 1. Loan and Advances to Total Deposit Ratio:

This ratio measures the extent to which the banks are successful to mobilize the total deposits on loans and advances for the purposes of income generation. The following table exhibits the ratio of loans and advances to total deposits of the banks throughout the study period.
Loan and Advances to Total Deposit Ratio $=$ $\qquad$
Total Deposit
Table No. 4.13: Loan and Advances to Total Deposit Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Loan and Advances | Total Deposit | Ratio (times) | Loan and Advances | Total Deposit | Ratio (times) |
| 2002/03 | 10001.85 | 21045.09 | 0.47 | 5772.14 | 7922.77 | 0.73 |
| 2003/04 | 11951.87 | 22010.33 | 0.54 | 7130.13 | 11524.68 | 0.62 |
| 2004/05 | 12424.52 | 24814.01 | 0.50 | 10126.06 | 14254.58 | 0.71 |
| 2005/06 | 16997.98 | 30048.42 | 0.56 | 12776.21 | 18927.31 | 0.67 |
| 2006/07 | 14642.56 | 26490.85 | 0.55 | 17286.43 | 24488.86 | 0.70 |
| Mean |  |  | 0.52 |  |  | 0.69 |
| S.D. |  |  | 0.0378 |  |  | 0.04 |
| C.V. (\%) |  |  | 7.27 |  |  | 6.20 |

From above comparative table, it reveals the highly fluctuation of ratio during the study period of five years of the sample banks. In fiscal year 2002/03 and 2005/06 HBL has registered the lowest ratio (0.47) and highest ratio (0.56) respectively with mean ratio of 0.52 which is the lower than that of NIBL.Similarly NIBL has registered the highest ratio (0.73) in year 2002/03 and lowest ratio (0.62) in year 2003/04 with mean ratio of 0.69 .NIBL has higher mean ratio of 0.69 which shows that they are successful in mobilizing the loan and advances to profitable sector with respect to total deposit whereas HBL is less successful in comparison to other sample banks.
As concern with the consistency, HBL is failed to maintain the consistency in comparison to NIBL because it has higher C.V. (7.27\%) whereas NIBL has ( $6.20 \%$ ).IT shows that NIBL is able to maintain the stability in investing through loan and advance that of HBL.

## 2. Loan and Advances to Fixed Deposit Ratio:

This ratio measures the effectiveness of mobilizing loan and advance in respect with fixed deposit. Fixed deposits are high interest bearing obligation whereas as loan and advance are the major sources of investment to generate income for the commercial banks. The following table displays the ratio of loan and advances to fixed deposit ratio of the sample banks.

$$
\text { Loan and Advances to Fixed Deposit Ratio }=\frac{\text { Loans and Advances }}{\text { Fixed Deposit }}
$$

Table No. 4.14: Loan and Advances to Fixed Deposit Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Loan and Advances | Fixed Deposit | Ratio (times) | Loan and Advances | Fixed Deposit | Ratio (times) |
| 2002/03 | 10001.85 | 3205.37 | 3.12 | 5772.14 | 1672.83 | 3.45 |
| 2003/04 | 11951.87 | 4710.18 | 2.54 | 7130.13 | 2294.68 | 3.11 |
| 2004/05 | 12424.52 | 6107.43 | 2.03 | 10126.06 | 3212.27 | 3.15 |
| 2005/06 | 16997.98 | 8201.14 | 2.07 | 12776.21 | 5412.97 | 2.36 |
| 2006/07 | 14642.56 | 6350.20 | 2.31 | 17286.43 | 7516.69 | 2.30 |
| Mean |  |  | 2.41 |  |  | 2.87 |
| S.D. |  |  | 0.44 |  |  | 0.51 |
| C.V. (\%) |  |  | 18.45 |  |  | 17.91 |

The above table shows that both banks has fluctuation ratio throughout the study period.HBL has decreasing order of ratio from fiscal year 2002/03 to 2004/05 and then increasing order from 2005/06.The highest recorded ratio of HBL is 3.12 in year 2002/03 and the lowest recorded ratio is 2.03 in year 2004/05 with mean ratio of (2.41).NIBL has also fluctuating ratio ranged between (3.45) and (2.30) in year 2002/03 and 2006/07 respectively with mean ratio of (2.87).
Thus above table clearly indicate that loans and advances are being effectively and properly utilized by NIBL than HBL with respect of fixed deposit which shows the higher mean ratio. In terms of consistency, NIBL is success in maintaining the stability in investing in loan and advances with respect to fixed deposit, which is indicate by lower C.V. 17.91\%.

## 3. Loan and Advances to Total Assets Ratio:

This ratio measures the proportion of investment in loan and advance out of total assets. Total assets of any organization are very important for different purposes and so far how the total assets formation is also important. Loan and advances is current assets investment of an organization which is utilized for short-term obligation.

$$
\text { Loan and Advances to Total Assets ratio }=\frac{\text { Loans and Advances }}{\text { Total Assets }}
$$

Table No. 4.15: Loan and Advances to Total Assets Ratio
(Rs. In Million)

| Fiscal <br> Year | Bimalayan Bank Ltd. |  |  |  |  |  |  | Nepal Investment Bank Ld. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loan and <br> Advances | Total <br> Assets | Ratio <br> (times) | Loan and <br> Advances | Total <br> Assets | Ratio <br> (times) |  |  |  |
|  | 10001.85 | 23279.34 | 0.4296 | 5772.14 | 9014.25 | 0.6403 |  |  |  |
| $2003 / 04$ | 11951.87 | 24762.02 | 0.4826 | 7130.13 | 13255.50 | 0.5378 |  |  |  |
| $2004 / 05$ | 12424.52 | 27844.69 | 0.4462 | 10126.06 | 16274.06 | 0.6222 |  |  |  |
| $2005 / 06$ | 16997.98 | 33519.14 | 0.5071 | 12776.21 | 21330.14 | 0.5989 |  |  |  |
| $2006 / 07$ | 14642.56 | 29460.38 | 0.4970 | 17286.43 | 27590.84 | 0.6265 |  |  |  |
| Mean |  |  | 0.4725 |  |  | 0.6051 |  |  |  |
| S.D. |  |  |  |  |  |  |  |  |  |
| C.V. (\%) |  | 0.0332 |  | 0.0404 |  |  |  |  |  |

The table presented above shows that the ratio of HBL is ranged between (0.4296) in year 2002/03 to ( 0.4970 ) in year 2006/07, NIBL ratio is ranged between ( 0.6403 ) in year 2002/03 to 0.6265 in year 2006/07. The ratios are in fluctuating trend. As the mean ratio of NIBL is higher ( 0.6051 ) which indicates that it has invested larger amount in loan and advance than that of HBL.In terms of consistency, NIBL has maintain a successful consistency level that that of HBL which indicated by lower C.V. $6.69 \%$.

## 4. Long-term Investment to Total Deposit Ratio:

The main purpose of this ratio is to measure successfulness in mobilizing the deposit in investment. The long-term investment to total deposit ratio of different banks in the study period are mentioned in the following table:

$$
\text { Long-term Investment to Total Deposit Ratio }=\frac{\text { Long-term Investment }}{\text { Total Deposit }}
$$

Table No. 4.16: Long-term Investment to Total Deposit Ratio
(Rs. In Million)

| Fiscal <br> Year | Banks |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. <br> Lnvestment | Total <br> Deposit | Ratio <br> (times) | Long-term <br> Investment | Total <br> Deposit | Ratio <br> (times) |  |
|  | 10175.44 | 21045.09 | 0.48 | 1705.24 | 7922.77 | 0.21 |  |
| $2003 / 04$ | 9292.10 | 22010.33 | 0.42 | 3862.48 | 11524.68 | 0.33 |  |
| $2004 / 05$ | 11692.34 | 24814.01 | 0.47 | 3934.19 | 14254.58 | 0.27 |  |
| $2005 / 06$ | 11822.98 | 30048.42 | 0.39 | 5602.87 | 18927.31 | 0.30 |  |
| $2006 / 07$ | 10889.03 | 26490.85 | 0.41 | 6505.68 | 24488.86 | 0.26 |  |
| Mean |  |  | 0.43 |  |  | 0.27 |  |
| S.D. |  |  | 0.0391 |  | 0.0450 |  |  |
| C.V.(\%) | 9 |  |  |  |  |  |  |

From above table reflects that the ratio of HBL is ranged between (0.48) to (0.41) in year 2002/03 to 2006/07 with mean ratio of ( 0.43 ), NIBL ratio is ranged between ( 0.21 ) to ( 0.26 ) in year $2002 / 03$ to $2006 / 07$ with mean ratio of 0.27 . The HBL has a higher mean ratio than NIBL which indicates it has successfully invested in long-term investment out of total deposit. A large proportion of investment in long-term investment may bring a higher return to the institution. Moreover, HBL has also successfully maintained to its consistency in comparison to NIBL which is lower that is $9.09 \%$.

## 5. Performing Assets to Total Assets Ratio:

This ratio measures the proportion of income generating assets. These assets are the assets which are invested for short-term purpose.

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

Table No. 4.17: Performing Assets to Total Assets Ratio
(Rs. In Million)

| Fiscal <br> Year | Banks |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. <br> Asserming |  | Total <br> Assets | Ratio <br> (times) | Performing <br> Assets | Total <br> Assets |  |
|  | 12874.03 | 23279.34 | 0.55 | Ratio <br> (times) |  |  |  |
| $2003 / 04$ | 15170.28 | 24762.02 | 0.61 | 9143.89 | 9014.25 | 0.79 |  |
| $2004 / 05$ | 15856.53 | 27844.69 | 0.57 | 12019.28 | 13255.50 | 0.69 |  |
| $2005 / 06$ | 21109.33 | 33519.14 | 0.63 | 15383.82 | 21330.06 | 0.74 |  |
| $2006 / 07$ | 18008.8 | 29460.38 | 0.61 | 20324.58 | 27590.84 | 0.72 |  |
| Mean |  |  | 0.594 |  | 0.74 |  |  |
| S.D. |  | 0.0329 |  | 0.736 |  |  |  |
| C.V. (\%) |  |  | 5.53 |  | 0.0365 |  |  |

From the above table, the ratio of HBL is ranged between 0.55 to 0.61 in year 2002/03 to 2006/07, NIBL is ranged between 0.79 to 0.74 in the year 2002 to 2006/07 with mean ratio of 0.736 . NIBL has a higher mean ratio of 0.736 which indicates higher investment in performing assets than Blather short-term investment are very important for any institution for its working capital and other short-term needs. The C.V. of NIBL is lower than that of HBL which shows the more consistency.

## 6. Performing Assets to Total Debt Ratio:

This ratio measures the extent to which the outsider's fund is invested in performing assets.

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

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Performing <br> Assets | Total Debt | Ratio (times) | Performing <br> Assets | Total Debt | Ratio (times) |
| 2002/03 | 12874.03 | 22216.21 | 0.5794 | 7117.89 | 8375.71 | 0.8498 |
| 2003/04 | 15170.28 | 23437.85 | 0.6472 | 9143.23 | 12526.45 | 0.7299 |
| 2004/05 | 15856.53 | 26302.95 | 0.6028 | 12019.28 | 15093.89 | 0.7963 |
| 2005/06 | 21109.33 | 31372.64 | 0.6728 | 15383.82 | 19914.7 | 0.7724 |
| 2006/07 | 18008.8 | 27694.21 | 0.6502 | 20324.58 | 25712.72 | 0.7904 |
| Mean |  |  | 0.6305 |  |  | 0.7878 |
| S.D. |  |  | 0.0382 |  |  | 0.0433 |
| C.V. (\%) |  |  | 6.06 |  |  | 5.50 |

In the above comparative table, reveals that the ratio of HBL is in fluctuating trend. The ratio of HBL is ranged between 0.5794 in year 2002/03 to 0.6502 in year 2006/07.Similarly the ratio of NIBL is ranged between 0.8498 in year 2002/03 to 0.7904 in year 2006/07 with higher mean ratio of 0.7878 than that of HBL.The higher mean ratio indicates that the NIBL has used higher outsider's investment than HBL.In terms of C.V. NIBL has successfully maintained its consistency due to its lower C.V. which is $5.50 \%$.

## 7. Personnel Expenses to Total Income Ratio:

This ratio is measures the percentage expenses made to personnel out of the firms total income.
Personnel Expenses to Total Income Ratio $=\frac{\text { Personnel Expenses }}{\text { Total Income }}$
Table No. 4.19: Personnel Expenses to Total Income Ratio
(Rs. In Million)

| Fiscal <br> Year | Bimalayan Bank Ltd. |  |  |  |  |  |  | Nepal Investment Bank Ld. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Personnel <br> Expenses | Total <br> Income | Ratio <br> (times) | Personnel <br> Expenses | Total <br> Income | Ratio <br> (times) |  |  |  |
|  | 120.15 | 1454.31 | 0.0826 | 61.29 | 577.93 | 0.1061 |  |  |  |
| $2003 / 04$ | 152.51 | 1519.62 | 0.1004 | 89.75 | 913.71 | 0.0982 |  |  |  |
| $2004 / 05$ | 178.59 | 1760.68 | 0.1014 | 97 | 1145.63 | 0.0847 |  |  |  |
| $2005 / 06$ | 234.59 | 2100.83 | 0.1117 | 111.05 | 1461.43 | 0.0759 |  |  |  |
| $2006 / 07$ | 272.23 | 2576.92 | 0.1056 | 145.37 | 1999.76 | 0.0726 |  |  |  |
| Mean |  |  | 0.1003 |  |  | 0.0875 |  |  |  |
| S.D. |  |  | 0.0109 |  |  | 0.0144 |  |  |  |
| C.V. (\%) |  | 10.84 |  |  | 16.41 |  |  |  |  |

In above table, the ratio of HBL is ranged between 0.0826 in year 2002/03 to 0.1056 in year 2006/07 with mean ratio of 0.1003 , NIBL ratio is range between 0.1061 in year 2002/03 to 0.0726 in year 2006/07 with mean ratio of 0.0875.The ratio of HBL are in increasing trend which shows either bank has increase employees pay scale or it has open different branches which has increased its ratio. Employee point of view
they desire high ratio, however high ratio is unfavorable to the bank though it functions as catalyst for employees working spirit. The mean ratio of HBL is higher than that of NIBL which indicates the bank has well paid to its employee. Moreover in terms of consistency also HBL has maintained its consistency level which reveals by the lower C.V. of $10.84 \%$.

## 9. Office Expenses to Operating Profit ratio:

This ratio depicts ratio of office operating expenses regarding total operating income that affects the further cost decisions of the firm.

Office Expenses
Office expenses to Operating Profit Ratio $=$

Operating Profit

Table No 4.20: Office Expenses to Operating Profit Ratio

| Fiscal Year | (Rs. In Million) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Banks |  |  |  |  |  |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Office <br> Expenses | Operating <br> Profit | $\begin{gathered} \text { Ratio } \\ \text { (times) } \\ \hline \end{gathered}$ | Office Expenses | Operating Profit | $\begin{gathered} \text { Ratio } \\ \text { (times) } \\ \hline \end{gathered}$ |
| 2002/03 | 177.13 | 602.90 | 0.2938 | 108.04 | 219.39 | 0.4924 |
| 2003/04 | 211.05 | 664.52 | 0.3176 | 149.48 | 348.28 | 0.4292 |
| 2004/05 | 277.38 | 742.75 | 0.3734 | 182.92 | 511.16 | 0.3578 |
| 2005/06 | 329.70 | 887.70 | 0.3714 | 200.22 | 659.21 | 0.3037 |
| 2006/07 | 341.56 | 1195.72 | 0.2856 | 243.43 | 925.43 | 0.2630 |
| Mean |  |  | 0.3284 |  |  | 0.3692 |
| S.D. |  |  | 0.0419 |  |  | 0.0928 |
| C.V. (\%) |  |  | 12.76 |  |  | 25.14 |

From the above comparative table, the ratio of HBL is in fluctuating trend which is 0.2938 in year 2002/03 to 0.2856 in year 2006/07 with mean ratio of 0.3284 , NIBL ratio is ranged between 0.4924 in year 2002/03 to 0.2630 in year 2006/07 with mean ratio of 0.3692 .NIBL has the higher mean ratio than that of HBL that is 0.3692 which is not favorable for the bank. As high ratio is the indicator of higher level of operating expenses.So low ratio is favorable to bank as it reflects the operational efficiency.Moreover,NIBL is also failed to maintained its consistency level due to its higher C.V. that is $25.14 \%$.

### 4.2.4 Profitability Ratio:

The main objective of a bank is to make profit providing different types of services to its customers. To meet those objectives likewise a good liquidity position, meet fixed interest obligation, overcome the future contingencies, grab the investment opportunities, business expansion etc. they must earn sufficient profit. It is an obvious that profitability ratios are the best indicators of overall efficiency. In this study, mainly those ratios are presented which are related with profit as well as fund mobilization. The following are profitability ratios those are relevant in this study.

## 1. Net Profit to Total Deposit Ratio:

The following table reveals the percentage of net profit to total deposit of the sample banks.

$$
\text { Net Profit to Total Deposit Ratio }=\frac{\text { Net Profit }}{\text { Total Deposit }}
$$

Table No 4.21: Net Profit to Total Deposit Ratio
(Rs. In Million)

| Fiscal <br> Year | Banks |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Profit | Total <br> Deposit | Ratio <br> $(\%)$ | Net Profit | Total <br> Deposit | Ratio <br> $(\%)$ |  |
|  | 212.13 | 21045.09 | 1.01 | 116.82 | 7922.77 | 1.47 |  |
| $2003 / 04$ | 263.05 | 22010.33 | 1.19 | 152.67 | 11524.68 | 1.32 |  |
| $2004 / 05$ | 308.28 | 24814.01 | 1.24 | 232.15 | 14254.58 | 1.63 |  |
| $2005 / 06$ | 457.46 | 30048.42 | 1.52 | 350.54 | 18927.31 | 1.85 |  |
| $2006 / 07$ | 491.82 | 26490.85 | 1.86 | 501.40 | 24488.86 | 2.04 |  |
| Mean |  |  |  |  |  |  |  |
| S.D. |  |  |  |  |  | 1.36 |  |
|  | 0.33 |  |  | 1.66 |  |  |  |
| C.V.(\%) |  |  |  |  |  |  |  |

The above comparative table reveals the net profit to total deposit ratio are in fluctuating situation of both banks. The ratio of HBL has ranged between 1.01 in year 2002/03 to 1.86 in year 2006/07 with mean ratio of 1.36 ,NIBL ratio has ranged between 1.47 in year 2002/03 to 2.04 in year 2006/07 with mean ratio of 1.66.NIBL has the higher mean ratio with 1.66.The above statement indicates that NIBL has better performance in utilizing deposit to earn a higher profit than HBL as it has higher mean ratio of 1.66 .As far as consistency level,NIBL has successful in maintaining consistency in mobilizing total deposit to earn the profit even though it has lower C.V. of $17.47 \%$.

## 2. Net Profit to Total Assets ratio:

This ratio is a measuring tool of profitability with respect to each financial resources investment of the assets. If bank's total assets is well managed and utilized efficiently, return on such assets will be higher and vice-versa. The following comparative table shows the return on total assets ratio of different banks recorded over the study period.

Net Profit to Total Assets Ratio $=\frac{\text { Net Profit }}{\text { Total Assets }}$
Table No. 4.22: Net Profit to Total Assets Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Net Profit | Total Assets | Ratio (\%) | Net Profit | Total Assets | Ratio (\%) |
| 2002/03 | 212.13 | 23279.34 | 0.91 | 116.82 | 9014.25 | 1.29 |
| 2003/04 | 263.05 | 24762.02 | 1.06 | 152.67 | 13255.50 | 1.15 |
| 2004/05 | 308.28 | 27844.69 | 1.11 | 232.15 | 16274.06 | 1.43 |
| 2005/06 | 457.46 | 33519.14 | 1.36 | 350.54 | 21330.14 | 1.64 |
| 2006/07 | 491.82 | 29460.38 | 1.67 | 501.40 | 27590.84 | 1.82 |
| Mean |  |  | 1.22 |  |  | 1.47 |
| S.D. |  |  | 0.30 |  |  | 0.27 |
| C.V. (\%) |  |  | 24.59 |  |  | 18.37 |

From comparative table, it can be seen that the both bank have fluctuating ratio.The ratio of HBL is ranged between 0.91 and 1.67 in year 2002/03 and 2006/07 respectively with mean ratio of 1.22 , NIBL ratio has ranged between 1.29 and 1.82 in year 2002/03 and 2006/07 respectively with mean ratio of 1.47.The highest recorded ratio of HBL is 1.67 in year 2006/07 and lowest is 0.91 in year 2002/03.Similarly, the highest recorded ratio of NIBL is 1.82 in year 2006/07 and lowest is 1.15 in year 2003/04.From the above statement it can be concluded that the both bank profit have been increasing in comparison to previous year. Moreover NIBL has a highest mean ratio with 1.47 which determined that NIBL is successful in earning the net profit with efficient utilization of total assets with comparison to HBL.In addition, NIBL is successful to maintain the consistency profit which is shown by lower C. V (18.37\%).

## 3. Return on Net Worth:

This ratio is used to measure the successfulness of earning the profit with respect to the shareholder's equity. The following table presents the net profit to net worth ratio of sample banks.

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

Table No. 4.23: Return on Net Worth

| Fiscal <br> Year | Bimalayan Bank Ltd. |  |  |  |  |  |  | Nepal Investment Bank Ld. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Profit | Net Worth | Ratio <br> $(\%)$ | Net Profit | Net Worth | Ratio <br> $(\%)$ |  |  |  |  |  |  |
|  | 212.13 | 1063.13 | 19.95 | 116.82 | 638.54 | 18.29 |  |  |  |  |  |  |
| $2003 / 04$ | 263.05 | 1324.17 | 19.86 | 152.67 | 729.05 | 20.94 |  |  |  |  |  |  |
| $2004 / 05$ | 308.28 | 1541.75 | 19.99 | 232.15 | 1180.17 | 19.67 |  |  |  |  |  |  |
| $2005 / 06$ | 457.46 | 2146.5 | 21.31 | 350.54 | 1415.44 | 24.76 |  |  |  |  |  |  |
| $2006 / 07$ | 491.82 | 1766.17 | 27.85 | 501.40 | 1878.12 | 26.70 |  |  |  |  |  |  |
| Mean |  |  |  |  |  |  |  |  | 21.79 |  |  | 22.07 |
| S.D. |  |  |  |  |  |  |  |  |  |  |  |  |
| C.V. (\%) |  |  |  |  |  |  |  |  |  |  |  |  |

From above table it reveals that both sample banks have fluctuating ratio. The highest ratio recorded in year 2006/07 with (27.85) and lowest is in year 2003/04 with (19.86), NIBL has highest recorded ratio in year 2006/07 with (26.70) and lowest in year 2002/03 with (18.29).The mean ratio of HBL is 21.79 and NIBL ratio is 22.07.The NIBL has the highest mean ratio than that of HBL which defined that they got a better achieving on increasing a net profit by mobilizing on resources of shareholder's equity. On the other side, HBL has a lower mean ratio which indicates it less successful in earning a net profit by utilizing a shareholder's equity due to its lower mean ratio.
Although HBL has lower mean ratio than NIBL but it is successful in earning a net profit with respect to net worth it has consistency or stability in earning a net profit which is shown by lower C.V. of $15.79 \%$.

## 4. Total Interest Earned to Total Assets Ratio:

The ratio shows the earning capacity of a bank on its total assets. This ratio exhibits the extent on which banks are successful in mobilizing their working funds to
generate income as much as possible. The following table shows the comparative ratios of banks for the different periods.
Total Interest Earned to Total Assets Ratio $=\underline{\text { Interest Earned }}$
Total Assets
Table No. 4.24: Total Interest Earned to Total Assets Ratio
(Rs. In Million)

| Fiscal <br> Year | Banks |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. <br> Earnest | Total <br> Assets | Ratio <br> (times) | Interest <br> Earned | Total <br> Assets | Ratio <br> (times) |  |
|  | 1201.23 | 23279.34 | 0.0516 | 459.51 | 9014.25 | 0.0509 |  |
| $2003 / 04$ | 1245.89 | 24762.02 | 0.0503 | 731.4 | 13255.50 | 0.0552 |  |
| $2004 / 05$ | 1446.47 | 27844.69 | 0.0519 | 886.80 | 16274.06 | 0.0545 |  |
| $2005 / 06$ | 1626.47 | 33519.14 | 0.0485 | 1172.74 | 21330.14 | 0.0549 |  |
| $2006 / 07$ | 1775.58 | 29460.38 | 0.0603 | 1584.99 | 27590.84 | 0.0574 |  |
| Mean |  |  |  |  |  |  |  |
| S.D. |  | 0.0525 |  |  | 0.0546 |  |  |
| C.V. (\%) |  |  |  |  |  |  |  |

From the above table reveals the total interest earned to total assets ratio. The ratio of HBL is ranged between (0.0516) in year 2002/03 to (0.0603) in year 2006/07 with mean ratio of ( 0.0525 ), NIBL ratio is ranged between ( 0.0509 ) in year 2002/03 to ( 0.0574 ) in year $2006 / 07$ with mean ratio of ( 0.0546 ).The highest recorded ratio of HBL is ( 0.0603 ) in year 2006/07 and NIBL is ( 0.0574 ) in year 2006/07.The mean ratio of NIBL is higher than that of HBL which indicates that the bank has earned more interest. Since the C.V of NIBL is significantly lower than that of HBL which shows the good consistency in earning interest by mobilizing total assets effectively.

## 5. Total Interest Paid to Total Assets Ratio:

The ratio is used to measure the percentage of total interest expenses against the total assets. The following are the comparative ratio figures of banks recorded in different periods.
Total Interest Paid to Total Assets Ratio $=\quad \begin{aligned} & \text { Interest Paid } \\ & \text { Total Assets }\end{aligned}$
Table No. 4.25: Total Interest Paid to Total Assets Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Interest Paid | Total Assets | Ratio (times) | Interest Paid | Total Assets | Ratio (times) |
| 2002/03 | 554.13 | 23279.34 | 0.0238 | 189.21 | 9014.25 | 0.0209 |
| 2003/04 | 491.54 | 24762.02 | 0.0198 | 326.20 | 13255.50 | 0.0246 |
| 2004/05 | 561.96 | 27844.69 | 0.0202 | 354.55 | 16274.06 | 0.0218 |
| 2005/06 | 648.84 | 33519.14 | 0.0194 | 490.95 | 21330.14 | 0.0230 |
| 2006/07 | 767.41 | 29460.38 | 0.0260 | 685.53 | 27590.84 | 0.0248 |
| Mean |  |  | 0.0218 |  |  | 0.0230 |
| S.D. |  |  | 0.0029 |  |  | 0.0017 |
| C.V. (\%) |  |  | 13.36 |  |  | 7.42 |

The above table shows the comparative analysis of total interest paid to total assets. The ratio of HBL is ranged between ( 0.0238 ) in year 2002/03 to ( 0.0260 ) in year 2006/07 with mean ratio of ( 0.0218 ) whereas NIBL ratio has ranged between ( 0.0209 ) in year 2002/03 to $(0.0248)$ in year 2006/07 with mean ratio of ( 0.0230 ). The highest ratio of HBL is $(0.0260)$ in year 2006/07 and NIBL has $(0.0248)$ in year 2006/07.The table reflects that NIBL has higher mean ratio which indicates that it has paid larger interest. Even though NIBL has paid higher interest but it has successfully maintained consistency level which indicates its lower C.V. of $7.42 \%$.

## 6. Return on Capital Employed Ratio:

A relation between net profit and capital employed is known as return on capital employed ratio. It shows whether the amount of capital employed has been properly used or not.

$$
\text { Return on Capital Employed Ratio }=\frac{\text { Net Profit }}{\text { Total Capital }}
$$

Table No. 4.26: Return on Capital Employed Ratio
(Rs. In Million)

| Fiscal <br> Year | Banks |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Profit | Total <br> Capital | Ratio <br> (times) | Net Profit | Total <br> Capital | Ratio <br> (times) |  |
|  | 212.13 | 4876.63 | 0.0435 | 116.82 | 2318.19 | 0.0504 |  |
| $2003 / 04$ | 263.05 | 6693.35 | 0.0393 | 152.67 | 3385.23 | 0.0451 |  |
| $2004 / 05$ | 308.28 | 8155.23 | 0.0378 | 232.15 | 4742.44 | 0.0489 |  |
| $2005 / 06$ | 457.46 | 10943.61 | 0.0418 | 350.54 | 7378.41 | 0.0475 |  |
| $2006 / 07$ | 491.82 | 8620.99 | 0.0570 | 501.40 | 10194.81 | 0.0492 |  |
| Mean |  |  |  |  |  |  |  |
| S.D. |  |  |  |  |  | 0.0439 |  |
|  | 0.0076 |  |  | 0.0482 |  |  |  |
| C.V. (\%) |  |  |  |  |  |  |  |

The above table reflects the ratio trends of both banks. The ratio of HBL is ranged between $(0.0435)$ to ( 0.0570 ) in year 2002/03 to 2006/07 respectively with mean ratio of (0.0439), NIBL ratio is ranged between (0.0504) in year 2002/03 to (0.0492) in year 2006/07 with mean ratio of (0.0482).The highest recorded ratio of HBL and NIBL are ( 0.0570 ) and ( 0.0504 ) respectively. Similarly the lowest recorded ratio of HBL and NIBL are $(0.0378)$ and $(0.0451)$ respectively. The mean ratio of NIBL is higher than that of HBL which indicates the efficiency of the firm on the utilization of total capital. A higher ratio is an indication of the better utilization of capital employed. Hence, higher ratio is preferable for the company. In terms of consistency also NIBL has successfully maintained which indicates by its significant lower C.V. of $4.20 \%$.

### 4.2.5 Capital Adequacy Ratio:

Capital adequacy ratio indicates strength of capital base of the institution. The capital adequacy ratios of the sampled banks are as follows:

1. Shareholder's Fund to Total Deposit Ratio:

Shareholder's Fund to Total Deposit Ratio $=\frac{\text { Shareholder's Fund }}{\text { Total Deposit }}$

Table No. 4.27: Shareholder's Fund to Total Deposit Ratio
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  |  | Nepal Investment Bank Ld. |  |  |
|  | Net Worth | Total Deposit | $\begin{gathered} \text { Ratio } \\ \text { (times) } \end{gathered}$ | Net Worth | Total Deposit | $\begin{gathered} \text { Ratio } \\ \text { (times) } \end{gathered}$ |
| 2002/03 | 1063.13 | 21045.09 | 0.0505 | 638.54 | 7922.77 | 0.0805 |
| 2003/04 | 1324.17 | 22010.33 | 0.0602 | 729.05 | 11524.68 | 0.0632 |
| 2004/05 | 1541.75 | 24814.01 | 0.0621 | 1180.17 | 14254.58 | 0.0827 |
| 2005/06 | 2146.5 | 30048.42 | 0.0714 | 1415.44 | 18927.31 | 0.0747 |
| 2006/07 | 1766.17 | 26490.85 | 0.0667 | 1878.12 | 24488.86 | 0.0766 |
| Mean |  |  | 0.0622 |  |  | 0.0755 |
| S.D. |  |  | 0.0078 |  |  | 0.0076 |
| C.V. (\%) |  |  | 12.60 |  |  | 10.04 |

The above comparative table shows the capital adequacy ratio of both sample banks are fluctuating. The ratio of HBL is ranged between the 0.0505 (2002/03) to $0.0667(2006 / 07)$ with mean ratio of 0.0622 , NIBL ratio is ranged between the $0.0805(2002 / 03)$ to $0.0766(2006 / 07)$ with mean ratio of 0.0755 . The highest recorded ratio of HBL and NIBL are 0.0714 and 0.0827 respectively. Similarly the lowest recorded ratio of HBL and NIBL are 0.0505 and 0.0632 respectively. The mean ratio of NIBL is higher than HBL which indicates the capital base of bank is stronger.

In the same way C.V. of HBL and NIBL are $12.60 \%$ and $10.04 \%$ respectively. Therefore the stability in capital strength of NIBL is good due to lower C.V. of $10.04 \%$.

## 2. Shareholder's F und to T otal A ssets R atio:

Shareholder's Fund to Total Assets ratio $=\frac{\text { Shareholder's Fund }}{\text { Total Assets }}$
Table No. 4.28: Shareholder's Fund to Total Assets Ratio
(Rs. In Million)

| Fiscal <br> Year | Banks |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Worth | Total <br> Assets | Ratio <br> (times) | Net Worth | Total <br> Assets | Ratio <br> (times) |  |
|  | 1063.13 | 23279.34 | 0.0456 | 638.54 | 9014.25 | 0.0708 |  |
| $2003 / 04$ | 1324.17 | 24762.02 | 0.0534 | 729.05 | 13255.50 | 0.0549 |  |
| $2004 / 05$ | 1541.75 | 27844.69 | 0.0553 | 1180.17 | 16274.06 | 0.0725 |  |
| $2005 / 06$ | 2146.5 | 33519.14 | 0.0640 | 1415.44 | 21330.14 | 0.0663 |  |
| $2006 / 07$ | 1766.17 | 29460.38 | 0.0599 | 1878.12 | 27590.84 | 0.0681 |  |
| Mean |  |  | 0.0556 |  |  | 0.0665 |  |
| S.D. |  |  |  |  |  |  |  |
| C.V. $\%$ ) |  |  |  |  |  |  |  |

The above table shows that the control over total assets by shareholder's fund is high in NIBL which is shown by higher mean ratio. The ratio of NIBL is ranged between $0.0708(2002 / 03)$ to $0.0681(2006 / 07)$ with mean ratio of $0.0665, \mathrm{HBL}$ ratio is ranged between $0.0456(2002 / 03)$ to $0.0599(2006 / 07)$ with mean ratio of 0.0556 .The highest ratio of HBL is 0.0640 recorded in year 2005/06 and 0.0725 of NIBL in year

2004/05.Similarly the lowest recorded ratio of HBL is 0.0456 in year 2002/03 and 0.0549 of NIBL in the year 2003/04.As the mean ratio of HBL is lower than that of NIBL which indicates that it has less control over assets by shareholder's fund. Since NIBL has lower C.V ( $10.41 \%$ ) which indicates it has more consistency than HBL.

### 5.3. Statistical Analysis:

### 5.3.1. Coefficient of Correlation Analysis:

This tool is used to predict the relationship between deposits and loans \& advances, net profit and outsider assets and deposits and long-term investment. Under this study, Karl's Pearson's coefficient of correlation is being used.

### 4.3.1.1 Correlation between Total Deposits and loan and Advances:

Deposit is the main tool for developing the banking performance of the banks. Likewise loans and advances are the key part to mobilize the collected deposits. The coefficient of correlation between deposits and loans and advances measures the degree of relationship between these two variables. For this study, deposit is taken as independent variable ( x ) and loans \& advances are dependent variables( y ). The purpose of computing ' $r$ ' between these two variables is to justify whether deposits are significantly used as loans and advances in proper way or not.

Table No. 4.29
Rs. In Million)

| Fiscal Year | Banks |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  | Nepal Investment Bank Ltd. |  |
|  | Total Deposit <br> (x) | Loan \& Advances (y) | Total Deposit (x) | Loan \& Advances (y) |
| 2002/03 | 21045.09 | 10001.85 | 7922.77 | 5772.14 |
| 2003/04 | 22010.33 | 11951.87 | 11524.68 | 7130.13 |
| 2004/05 | 24814.01 | 12424.52 | 14254.58 | 10126.06 |
| 2005/06 | 30048.42 | 16997.98 | 18927.31 | 12776.21 |
| 2006/07 | 26490.85 | 14642.56 | 24488.86 | 17286.43 |
| r | 0.9741 |  | 0.9940 |  |
| r2 | 0.9489 |  | 0.9880 |  |
| P.E.(r) | 0.0154 |  | 0.0036 |  |
| 6 * P.E.(r) | 0.0924 |  | 0.0217 |  |
| Level of Significant | Significant |  | Significant |  |

[Refer Annex A -2 and A -3]
The coefficient of correlation for both banks found to be almost ' 1 ' which indicates there is proportion relationship between the total deposit and loans \& advances for both banks. While testing 6P.E.r for both banks found to be significant as the value of ' $r$ ' is greater than 6P.E.r which implies that there found to be perfect correlation between the total deposits and loan and advances. It shows that the loan \& advances and the total deposit to loan and advances efficiently.

### 4.3.1.2 Correlation between Total Deposit and long-term Investment:

Investment is also a measures part of banks to mobilize the collected deposit. By investing in different profitable area like shares and debenture, government securities banks maximize the profit. Therefore it is important to study the relation between the deposit and investment. For this analysis deposit is taken as independent variable(x) and investment ( y ) is taken as dependent variable. This analysis measures the degree of relationship between these two variables. Besides this, it will justify whether the deposits are significantly used in proper way or not and whether there is any relationship in between these two components. The following table exhibits the coefficient of correlation (r) between deposits and total investment, coefficient of determination (r2), probable error (P.E. r).

Table No. 4.30
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. <br> Total Deposit <br> (x) | Long-term <br> Investment (y) | Nepal Investment Bank Ltd. <br> Total Deposit <br> (x) | Long-term <br> Investment (y) |
| $\mathbf{2 0 0 2 / 0 3}$ | 21045.09 | 10175.44 | 7922.77 | 1705.24 |
| $\mathbf{2 0 0 3 / 0 4}$ | 22010.33 | 9292.10 | 11524.68 | 3862.48 |
| $\mathbf{2 0 0 4 / 0 5}$ | 24814.01 | 11692.34 | 14254.58 | 3934.19 |
| $\mathbf{2 0 0 5 / 0 6}$ | 30048.42 | 11822.98 | 18927.31 | 5602.87 |
| $\mathbf{2 0 0 6 / 0 7}$ | 26490.85 | 10889.03 | 24488.86 | 6505.68 |
| r | 0.7877 |  | 0.9670 |  |
| r2 | 0.6205 |  | 0.9351 |  |
| P.E.(r) | 0.1145 |  | 0.0196 |  |
| $\mathbf{6 * P . E . ( r ) ~}$ | 0.6868 |  | 0.1175 |  |
| Level of <br> Significant | Significant |  | Significant |  |

[Refer Annex A- 4 and A-5]
The coefficient of correlation for the HBL found to be almost ' 1 ' which indicates there is proportion relationship between the deposits \& investment for the banks. While testing 6P.E.r for the both banks found to be significant as the $r$ value of the bank is greater than 6P.E.r which implies that there is perfect correlation between deposit and long-term investment. This shows that the both sample banks are successful in vestment with respect to deposit. Both sample bank's investment is depends upon the deposit.

### 4.3.1.3 Correlation between long-term Investment and Net Profit:

Following table shows the relation between the investment and net profit. As we say in above investment is done in different profitable area to maximize the profit.Net profit is the key to survive the banks. Without profit banks can not sustain in the market. Therefore it is necessary to measure the degree of relationship between these two variables. For this study long-term investment ( x ) is taken as independent variable and net profit(y) is taken as dependent variable. The following table shows the coefficient of correlation between (r), coefficient of determinants (r2) and probable error P.E.r between investment and net profit of the banks.

Table No. 4.31

|  | (Rs. In Million) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Banks |  |  |  |
|  | Himalayan Bank Ltd. |  | Nepal Investment Bank Ltd. |  |
|  | Long-term Investment (x) | Net Profit(y) | Long-term Investment (x) | Net Profit(y) |
| 2002/03 | 10175.44 | 212.13 | 1705.24 | 116.82 |
| 2003/04 | 9292.10 | 263.05 | 3862.48 | 152.67 |
| 2004/05 | 11692.34 | 308.28 | 3934.19 | 232.15 |
| 2005/06 | 11822.98 | 457.46 | 5602.87 | 350.54 |
| 2006/07 | 10889.03 | 491.82 | 6505.68 | 501.40 |
| r | 0.5811 |  | 0.9298 |  |
| r2 | 0.3377 |  | 0.8645 |  |
| P.E.(r) | 0.1998 |  | 0.04086 |  |
| 6 * P.E.(r) | 1.1987 |  | 0.2452 |  |
| Level of Significant | Insignificant |  | Significant |  |

[Refer Annex A -6 and A-7]
The coefficient of correlation of the HBL is found to be 0.58 which indicates that there is moderate degree of correlation between investment and net profit,NIBL coefficient of correlation is found to be almost ' 1 '" which indicates perfectly positive correlation. While testing 6P.E. $r$ of HBL found to be insignificant as the value of $r$ is lower than 6P.E.r whereas NIBL is found to be significant as the value of $r$ is greater than the value of 6P.E.r.HBL is found to be weak in earning the net profit through the investment whereas NIBL is successful to earn net profit by mobilizing the deposit to the investment.

### 4.3.1.4 Correlation between loan and Advances and Net Profit:

Loan and advances also plays a vital role in earning the profit. By mobilizing the deposit in loan \& advances banks earns the profit. So, it is necessary to study the relation between these two variable loan \& advances and net profit. Following table shows the coefficient of correlation(r), coefficient of determinants (r2) and probable error between loan \& advance and net profit of the banks. For this study loan and advances ( x ) is taken as independent variable and net profit ( y ) is taken as dependent variable.

Table No. 4.32
(Rs. In Million)

| Fiscal Year | Banks |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Himalayan Bank Ltd. |  | Nepal Investment Bank Ltd. |  |
|  | Loan and Advances (x) | Net Profit(y) | Loan and Advances (x) | Net Profit(y) |
| 2002/03 | 10001.85 | 212.13 | 5772.14 | 116.82 |
| 2003/04 | 11951.87 | 263.05 | 7130.13 | 152.67 |
| 2004/05 | 12424.52 | 308.28 | 10126.06 | 232.15 |
| 2005/06 | 16997.98 | 457.46 | 12776.21 | 350.54 |
| 2006/07 | 14642.56 | 491.82 | 17286.43 | 501.40 |
| r | 0.9080 |  | 0.9967 |  |
| r2 | 0.8245 |  | 0.9934 |  |
| P.E.(r) | 0.0529 |  | 0.00199 |  |
| 6 * P.E.(r) | 0.3177 |  | 0.0119 |  |
| Level of Significant | Significant |  | Significant |  |

[Refer Annex A-8 and A-9]
The coefficient of correlation for the sample banks found to be almost ' 1 ' which indicates there is proportion relationship between the loan \& advances and net profit for both banks. While testing 6.P.E.r for HBL and NIBL found to be significant as the $r$ value for both banks are greater than 6P.E.r which implies that there found to be perfect correlation between the loan \& advances and net profit. It shows that both banks are successful in earning the net profit by mobilizing the loan and advances.

### 5.3.2. Trend Analysis:

The main objective of this part is to analyze the trend of prospective net profit in future by analyzing the trend of past net profit of the banks. Banks utilized the deposit by releasing investment in loan and advances in different profitable area for maximizing the profit. A bank can invest in shares \& debentures, government securities and provide the loan and advances under different scheme.
This topic will be used to forecast the ratios between net profit and deposit, net profit and investment, net profit and loan \& advances of the banks for next five years on the base of past five years. The analysis is done under limited factors which are as follows:

- The economy will remain unchanged as of present the stage.
- Banks will run as of present position.
- The guidelines by NRB for Banks will remain unchanged.
- The forecast will be true only when the limitations of least square method carried out.
- The main assumption is that other factors are consistent


### 4.3.2.1 Trend Analysis of Total Deposit:

The part of this analysis will analyze net profit to total deposit of banks for five years from 2002/03 to 2006/07 and projection for next five years i.e. 2007/08 to 2011/12.The following table exhibits the trend values of net profit to total deposit of banks for ten years.

Table No. 4.33
(Rs. In Million)

| Fiscal Year | Banks |  |
| :---: | :---: | :---: |
|  | Himalayan Bank Ltd. | Nepal Investment Bank Ltd. |
|  | Total Deposit | Total Deposit |
| $\mathbf{2 0 0 2 / 0 3}$ | 21045.09 | 7922.77 |
| $\mathbf{2 0 0 3 / 0 4}$ | 22010.33 | 11524.68 |
| $\mathbf{2 0 0 4 / 0 5}$ | 24814.01 | 14254.58 |
| $\mathbf{2 0 0 5 / 0 6}$ | 30048.42 | 18927.31 |
| $\mathbf{2 0 0 6 / 0 7}$ | 26490.85 | 24488.86 |
| $\mathbf{2 0 0 7 / 0 8}$ | 30560.65 | 27584.12 |
| $\mathbf{2 0 0 8 / 0 9}$ | 32453.62 | 31637.61 |
| $\mathbf{2 0 0 9 / 1 0}$ | 34346.59 | 35691.1 |
| $\mathbf{2 0 1 0 / 1 1}$ | 36239.56 | 39744.59 |
| $\mathbf{2 0 1 1 / 1 2}$ | 38132.53 | 43798.08 |

[Refer Annex A-10 and A-11]


The above comparative table exhibits that trend values of the both of the banks are in increasing trend. Among the sample banks,NIBL has a higher increasing trend of total deposit in past. The total deposit forecasted for the next five years on the basis of past years of HBL are $30560.65,32453.62,34346.59,36239.56$ and 38132.53 for the year 2007/08 to 2011/12 respectively.Similarly,NIBL total deposit for next five years are 27584.12, 31637.61, 35691.1, 39744.59 and 43798.08 from 2007/08 to 2011/12.

### 4.3.2.2 Trend Analysis of Loan \& Advances:

This analysis will show the picture of trend values of net profit to loans \& advances of banks for the study period and then forecast for following five years. The trend values of net profit to loans \& advances of the banks are presented in the following table.

Table No. 4.34
(Rs. In Million)

| Fiscal Year | Banks |  |
| :---: | :---: | :---: |
|  | Himalayan Bank Ltd. | Nepal Investment Bank Ltd. |
|  | Loan \& Advances | Loan \& Advances |
| $\mathbf{2 0 0 2 / 0 3}$ | 10001.85 | 5772.14 |
| $\mathbf{2 0 0 3 / 0 4}$ | 11951.87 | 7130.13 |
| $\mathbf{2 0 0 4 / 0 5}$ | 12424.52 | 10126.06 |
| $\mathbf{2 0 0 5 / 0 6}$ | 16997.98 | 12776.21 |
| $\mathbf{2 0 0 6 / 0 7}$ | 14642.56 | 17286.43 |
| $\mathbf{2 0 0 7 / 0 8}$ | 17502.03 | 19220.57 |
| $\mathbf{2 0 0 8 / 0 9}$ | 18934.78 | 22088.03 |
| $\mathbf{2 0 0 9 / 1 0}$ | 20367.53 | 24955.49 |
| $\mathbf{2 0 1 0 / 1 1}$ | 21800.28 | 27822.95 |
| $\mathbf{2 0 1 1 / 1 2}$ | 23233.03 | 30690.41 |

[Refer Annex A-12 and A-13]


The comparative table shows that both banks has an increasing trend of net profit with respect to loan \& advances. Among them,NIBL has a higher trend of loan \& advances than HBL.

### 4.3.2.3 Trend Analysis of Long-term Investment:

The following table are the analysis for trend of net profit to long-term investment and prediction of long-term investment for next five year according to base of past five year analysis.

Table No. 4.35
(Rs. In Million)

| Fiscal Year | Banks |  |
| :---: | :---: | :---: |
|  | Himalayan Bank Ltd. | Nepal Investment Bank Ltd. |
|  | Long-term Investment | Long-term Investment |
| $\mathbf{2 0 0 2 / 0 3}$ | 10175.44 | 1705.24 |
| $\mathbf{2 0 0 3 / 0 4}$ | 9292.10 | 3862.48 |
| $\mathbf{2 0 0 4 / 0 5}$ | 11692.34 | 3934.19 |
| $\mathbf{2 0 0 5 / 0 6}$ | 11822.98 | 5602.87 |
| $\mathbf{2 0 0 6 / 0 7}$ | 10889.03 | 6505.68 |
| $\mathbf{2 0 0 7 / 0 8}$ | 11961.79 | 7724.48 |
| $\mathbf{2 0 0 8 / 0 9}$ | 12357.6 | 8858.61 |
| $\mathbf{2 0 0 9 / 1 0}$ | 12753.41 | 9992.74 |
| $\mathbf{2 0 1 0} / \mathbf{1 1}$ | 13149.22 | 11126.87 |
| $\mathbf{2 0 1 1 / 1 2}$ | 13545.03 | 12261 |

[Refer Annex A-14 and A-15]


The above comparative table shows the trend of long term investment from 2002/03 to 2006/07 actual data and next five year forecast. It shows the effect of investment to the net profit.

### 4.3.3 Simple Regression Analysis:

Regression Analysis is useful tool in statistical analysis which shows how the variables are related. In regression analysis one variable is considered to be unknown and other to be known variable. From the known variable we can estimate the value of unknown variable. So, regression is said to be measures of average relationship between two or more variables in terms of the original units of the data. For the study we confined to only two variables and this kind of regression is called simple regression.

### 4.3.3.1 Regression analysis between Net Profit and Total Deposit:

The focal point of this analysis is to determine the relation between net profit and total deposit.Obviously,it seems that as total deposit increases the net profit of the banks need to increase.So, in this analysis net profit is considered to be dependent variable and total deposit as independent variable. The relation between net profit and total deposit can be present mathematically as below:
N.P. $=a+b$ T.D.

Where,
N.P. = Net Profit
T.D. $=$ Total Deposit

Table No. 4.36: Regression analysis between net profit and total deposit

| S. No. | Banks | Intercept(a) | Regression <br> Coefficient(b) | $\mathbf{r}$ | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | HBL | 15.82 | 26.15 | 0.88 | $3.21^{*}$ |
| 2 | NIBL | 48.72 | -70.33 | 0.99 | $12.14^{*}$ |

[Refer Annex A-16 and A-17]
Note: i) * represents that results are significant at $5 \%$ level of significant
The above table exhibits the estimation of net profit on the basis of total deposit. The regression coefficient of net profit and total deposit of HBL is positive which determine that increase in the total deposit ultimately increases Net Profit but NIBL regression coefficient is negative which indicates the fluctuation or decrease in Net profit. The coefficient of correlation found to be highest in case of NIBL almost ' 1 ' which indicates proportionate change in net profit as increase or decrease in total deposit for the bank.HBL has lower correlation in comparison to NIBL but it is also almost ' 1 '. In case of t-test the variables the both banks got significance at $5 \%$ level of significant. This shows that there is high correlation between net profit and total deposit of HBL and NIBL.

### 4.3.3.2 Regression analysis between Net Profit and Loan and Advances:

The analysis determines the relation between net profit and loan \& advances. As loan \& Advances increases the net profit of the banks need to increase. So, in this analysis net profit is considered to be dependent variable and loan and advances as independent variable. The relation between net profit and loan and advances can presented mathematically as below:
N.P. $=\mathrm{a}+\mathrm{b}$. LA

Where,
N.P. = Net Profit

LA = Loan and advances
Table No. 4.37: Regression analysis between net profit and loan and advances.

| S. No. | Banks | Intercept(a) | Regression <br> Coefficient(b) | r | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | HBL | 6.29 | 19.94 | 0.91 | $3.79^{*}$ |
| 2 | NIBL | 2.69 | 29.26 | 0.99 | $12.14^{*}$ |

[Refer Annex A-18 and A-19]
Note: i) * represents that results are significant at $5 \%$ level of significant
The above table is a comparative result of regression analysis for both banks. The regression coefficient of net profit and loan and advances of both sampled banks are positive which determine that increase in the loan and advances ultimately increases net profit. The coefficient correlation found to be highest in case of NIBL almost ' 1 ' which indicates proportionate change in net profit as increase or decrease in loan and advances whereas HBL has lower correlation between net profit and loan and advances. While testing the hypothesis on the basis of $t$-test the variables are significant which indicates as they got at $5 \%$ significance level. This shows that there was high correlation between net profit and loan and advances.

### 4.3.3.3 Regression analysis between Net Profit and Long-term Investment:

This analysis determines the relation between net profit and long-term investment. As long-term advance increases the net profit of the banks need to increase.So, in this analysis net profit is considered to be dependent variable and long-term investment as independent variable. The relation between net profit and long-term investment can be presented below:

Table No. 4.38: Regression analysis between net profit and long-term investment.

| S. No. | Banks | Intercept(a) | Regression <br> Coefficient(b) | $\mathbf{r}$ | t-test |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | HBL | 9.02 | 5.06 | 0.58 | 1.23 |
| 2 | NIBL | 1.36 | 10.92 | 0.93 | $4.38^{*}$ |

[Refer Annex A-20 and A-21]
Note: i) * represents that results are significant at $5 \%$ level of significant

The above comparative table represents the regression analysis between the net profit and long-term investment. The regression coefficient of net profit and long-term investment for both banks are positive which indicate that increase in investment ultimately increases net profit of the banks. The coefficient of correlation of NIBL found to be highest that is almost ' 1 ' which indicates proportionate change in net profit as increase or decrease in investment of the bank.HBL has lower correlation in respect to NIBL.Since NIBL has higher value than t-test table value it has got significant at $5 \%$ level while testing the hypothesis whereas HBL didn't get the significance between net profit and long-term investment. This represents that there is a high correlation between the net profit and long-term investment for NIBL and low correlation for HBL.

### 4.4. Major Finding of the Study:

The main findings of the study are carried out on the basis of the analysis of financial data of Banks which are as follows:

## I. LIQUIDITY RATIO:

- During the five years study period of the sampled banks the current ratio found to be in fluctuate trend. It is well known that the standard current ratio is 2:1.Among sample bank the current ratio of NIBL dominates the respective current liability which indicates that NIBL is capable in paying the current obligation. Therefore NIBL has a highest liquidity ratio than HBL.HBL has low current ratio, but it does not mean that it failed to maintain the liquidity position. From point of view of working policy HBL is found to be very much aggressive. However average of both banks shows the satisfactory level of current ratio.
- NIBL found to be in better position to maintain the cash and bank balances ratio than HBL.But it doesn't mean that it has mobilized its more funds in profitable sector. It actually means that it can meet the daily cash requirement to make payments of the customer.HBL has lower mean ratio which means it may invest the more fund in the productive sector. But both banks have a highly fluctuation ratio during the study period.
- As we analyze the loan and advance to current ratio the mean ratio of NIBL is higher than that of HBL which indicates it has given more loan and advances. It indicates that the banks has successful in the utilization of its current assets by making investment in order to maximize its profit.The mean ratio of HBL is comparatively low to NIBL which indicates the lower utilization of current assets which is not worthy to the bank.
- NIBL is successful to collect larger amount of fixed deposit out of its total deposit which is indicated by its higher mean ratio than that of HBL.It actually means the bank can invest in long-term profitable sector for higher return which will ultimately maximize the profit of the banks. On the other hand, HBL has lower ratio which indicates the lower fund collection for fixed deposit and will be limited for long-term investment which will ultimately impacts on its profit.

From above results it can be said that the liquidity position of NIBL found to be comparatively better than HBL.Although HBL has a satisfactory level of liquidity position due to their aggressive working policy.

## II. LEVERAGE RATIOS OR CAPITAL STRUCTURE RATIO:

- The debt-equity ratios of the both banks are in highly fluctuation trend. The mean ratio of HBL is higher than NIBL which indicates that more of the funds invested in the business are provided by the outsider not the owners which is more risky. But comparatively NIBL has lower debt-equity ratio which shows that more funds invested in the business are provided by the owners. Moreover NIBL has lower C.V. which indicates it has successfully able to maintain consistency in comparison to HBL.
- Debt-assets ratios of both banks are very consistent. The mean ratio of HBL is negligible higher in comparison to NIBL.Although HBL has more consistency due to its lower C.V.This ratio shows the proportion of debt out of its total assets.NIBL has lower debt proportion as its mean ratio is lower than HBL.
- The mean coverage ratio of HBL is higher than NIBL which indicates larger amount of possible losses for the bank. A bank has to be careful in lending to minimize its possible losses. On the other hand, NIBL has comparatively lower coverage mean ratio which indicates the lower amount of possible losses. Moreover, NIBL is also able to maintain its consistency which indicates its lower C.V.


## III. ACTIVITY RATIOS OR ASSETS AND INVESTMENT MANAGEMENT RATIO:

- The loan and advances to total deposit ratio of both bank found to be at satisfactory level and maintain the good consistency in ratio. However NIBL has a higher mean ratio it shows that NIBL's liquidity position with respect to this ratio is more satisfactory than HBL.As the C.V of NIBL is also lower than that of HBL which indicates the more consistency.
- The mean value of NIBL of loan and advances to fixed deposit ratio is higher than that of HBL which indicates the effective mobilization of loan and advance with respect to fixed deposit. As commercial bank has to pay higher interest on fixed deposit so it has to mobilize it effectively to generate income. Moreover the consistency level of NIBL is also better than HBL which is indicated by its lower C.V.
- The both sample banks are successful to mobilize the funds as loan and advances with respect to total assets. However comparatively during the five years of study period NIBL has a higher mean ratio than HBL which indicates that they are the better investor. As concern to consistency,NIBL has maintain better level than HBL which is indicated by its lower C.V of $6.69 \%$.
- The proportion of mobilizing the deposit in investment is measured by the long-term investment to total deposit ratio. The mean value of HBL the longterm investment to total deposit ratio is higher than NIBL which indicates that it has mobilize the deposit effectively. Moreover NIBL is also failed to maintain consistency level in comparison to HBL very significantly which is 9.09\% Vs 16.69\%.
- NIBL has higher investment in performing assets which shows by its higher mean value. Performing assets are the assets which are invested for short-term investment. Short-term investment plays vital role for working capital need and short-term needs. As concern of consistency level NIBL has maintained better level than HBL.
- The performing assets to total debt ratio measures the proportion of amount invested of outsider's in performing assets.NIBL has the higher mean value which indicates that larger amount of investment in performing assets of outsider's than HBL.Moreover NIBL has effectively maintained its consistency level than HBL which is indicated by its lower C.V.
- As we compare the five years study period of both banks the mean value of HBL found to be higher than NIBL which indicates that it has spend larger amount on employees. As concern of stability HBL has effectively managed better consistency level than NIBL which indicates it lower C.V.
- The office expenses to operating profit ratio shows the proportion of office expenses out of its operating profit.The mean value of the ratio of NIBL is higher than HBL which indicates larger amount of expenses on office. As concern of consistency level NIBL has failed to maintain its consistency level than HBL due to its significantly higher percentage of C.V.

From above findings, it shows that both banks are successful in on- balance sheet utilization as well as off balance sheet operation. However NIBL found a best in mobilizing the assets to the profitable sector.

## IV. PROFITABILITY RATIO:

The following findings are derived from the profitability ratios of sample banks.

- Net profit to total deposit ratio of NIBL is higher than HBL which is indicated by higher mean value. As concern of consistency level NIBL has maintained successfully better level than HBL which is indicated by its lower C.V.
- The both sample banks are able to earn the profit on total assets. As the mean value of net profit to total assets ratio of NIBL is higher than HBL the bank is in better position. Moreover the C.V of NIBL is lower than HBL which indicates it has maintained successfully its consistency level. The consistency level of this ratio indicates consistency of earning on total assets which is very important for banks.
- The mean ratio of net profit to net worth of NIBL is higher than HBL which indicates that earning level of NIBL is higher. Although, NIBL is failed to
maintain its consistency level in comparison to HBL but there is negligible variation in percentage of C.V.
- Even though all sample banks seem to earn the interest on total assets, NIBL has successful in earning the higher interest as well as maintain consistency in earning. HBL has comparatively lower earning and lower consistency level.
- HBL seems to be successful to collect its assets from less expensive sources of fund in comparison to NIBL as the mean value is lower. In terms of consistency, HBL has maintained better consistency level than NIBL in spite of higher interest payment sources of fund.
- NIBL has higher mean value of return on capital employed ratio which indicates that the capital employed has been used properly but HBL has lower. Moreover the consistency level maintained by NIBL is also better than HBL which is indicated by its significantly lower C.V.

From above finding, we can conclude that NIBL has a consistency in earning the net profit and expenses. However HBL has also earned a competitive level of earning and maintained its consistency level but it is failed to maintain as effectively maintained by NIBL.

## V. CAPITAL ADEQUACY RATIO:

- The capital adequacy ratio of NIBL is higher than HBL which is shown by its higher mean value of shareholder's fund to total deposit ratio. Moreover it has maintained better level of consistency than HBL which is indicated by its lower C.V.
- NIBL has achieved the higher shareholder's fund to total assets ratio, which means they have more assets out of the shareholder's fund. The C.V. percentage of NIBL is lower than HBL which shows that it has maintained successfully its consistency level. Whereas HBL has also maintained competitive level of mean value and C.V.


### 4.1 COEFFICIENT OF CORRELATION:

The following statement can be concluded by correlation analysis:

- The positive correlation between deposit and loan and advances are found of both banks. The correlation between the deposit and loan and advances are perfect as there is significant between them. It means that the both banks provided the loans and advances from its deposit. Banks are successful in mobilizing the deposit as loan and advances.
- There is the perfect positive correlation between the deposit and investment of both banks. It shows that both sample banks have effectively mobilize its deposit on investment. In another word it can be said that investment is depends upon the deposit.
- NIBL is successful in earning the net profit from it's investment which means that there is a positive correlation between the investment and net profit in NIBL. HBL is failed to earn the net profit from its deposit since the correlation between the investment and net profit is not significant. It is failed in mobilizing the investment to earn the profit.
- The both sampled banks are successful in earning the net profit by mobilizing the loan and advances. The correlation between the loan and advances and net profit are found to be perfectly positive.


### 4.5 TREND ANALYSIS:

Trend Analysis is for past five years for projecting future results. The trend analysis is done on some basic assumption that will continue in the future. The trend analysis results are as follows.

- The past trend of total deposit for both banks is in increasing trend. However NIBL has registered for the higher trend value which shows that NIBL are more successful in mobilizing the deposit in comparison to HBL.
- The both banks have increasing trend of the loan \& advances. Even though HBL has low increasing trend value they are successful in mobilizing the loan and advances to different productive and profitable sector. The higher loan \& advances trend value is registered by the NIBL.On the basis of the past trend the future trend of loan \& advances will continue.
- Although the both sample banks has increasing trend of the investment HBL has recorded the higher long-term investment value which is in increasing trend. This shows that HBL is successful in mobilizing the investment than NIBL.


### 4.6. SIMPLE REGRESSION ANALYSIS:

- The both sample banks have a positive regression coefficient. There is a high correlation and significance while testing the hypothesis between the net profit and total deposit. This represents that as the total deposit changes the net profit also change in same proportion.
- The regression coefficient of net profit and loan and advances of both banks are positive. There is a high correlation and significance between the net profit and loan and advances in HBL and NIBL which indicate that if loan and advances increases net profit also increases and vice-versa.
- HBL and NIBL both banks has got the positive regression coefficient between the net profit and investment but NIBL only got the high correlation and significance which represents that if investment is change net profit also change in same ratio. But in case of HBL there is only slightly changes in net profit are found, even though investment changes. This represents by low correlation and no significance between the net profit and investment


## CHAPTER - V

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 SUMMARY:

Industrialization is an important factor for achieving the basic objective of a country's economic and social progress. Industrialization not only provides necessary products and services to the community but also create employment opportunities. Industrial development thus has a multiplier effect on the economy. Banking industries have been regarded as one of the component of economy. It transfers the scattered funds collected from saving of the public into various productive sectors. Economic activities remains halt in absence of banking industries as it plays the role of catalyst for economic development of the country in the developing country where there prevail unorganized transactions. It helps to enhance economic activities of the country by providing capital funds for the smooth operation of business activities, create employment opportunities, investing agriculture, industry. At present there are altogether twenty five commercial banks operating in the country among which HBL and NIBL has occupied wide range of the business due to access to most of the corner of the country. Slowly private banks are also initiating to move toward every corner of the country but due to prevailing political crisis they are not being able to meet their objects to reach to every corner of the country. Due to increasing competition banks are forced to innovate new products to their customer and they are also shifting from traditional service procedure to various sophisticated services like ATM card, debit card, credit card, housing loan, educational loans, vehicle financing.
Economic development of a country cannot be imagined without the development of commerce and industry. No doubt, banking promotes the development of commerce to its extreme, as banking itself is the part of commerce. Though the economic growth was as snail speed in earlier year, it had caught its full sailing with the restoration of democracy in the country. These days Nepal has been facing severe economic problem due to the unrest condition.
In this study the objective functions, policies and strategies of foreign participated private commercial banks have been emphasized and analyze of their financial performance. Here the main finding of the study is the financial performance of these two sample banks has been presented. The financial data, statement of five consecutive years i.e. 2002/03 to 2006/07 has been examined for the purpose of the study. The study is mainly based on the primary and secondary data, which have been processed first and analyzed comparatively. From this analysis of financial performance of both the banks the following findings are made.
Financial analysis is the process of determining the significant operation and financial characteristics of a firm from accounting data. It shows the relationship between the various component which can be found in balance sheet and profit and loss account. The analyzed statement contain those information which is useful for management, shareholder, creditors, investors, depositors etc.As in other industries banking industries also need financial analysis, as it is crucial for evaluating and analyzing the performance of the particular company as compare to the other and also from the previous performance of the same company.

### 5.2 CONCLUSION:

The study completely based on secondary data accumulated from websites. The study covers only two banks HBL and NIBL among various banks but the sample banks are the leading banks among commercial banks. The study is based on five fiscal year from 2002/03 to 2006/07.Research Methodology followed to achieve the objective of the study and which constitute research design, sources of data, population and sample, data collection process and method of analysis.Moreover,financial and statistical tools has been used according to the requirement to achieve the targeted result.
The uncontrollable growth in number of banks within a short span of time has raised reasonable doubts to the common people. Banks, insurance companies and other companies are directly playing parts in the country to establish their banking with fully or partly repatriation facilities. Banks help to mobilize the small saving collectively to the huge capital investment though banking is considered as the platform of money market and capital markets, commercial banks basically help to promote the money market. Because of qualitative managerial skills, at most customers satisfaction, objective to use advanced technology, private commercial banks have been able to attain their objectives within short span of time.

### 5.3 RECOMMENDATIONS:

From the above finding and analysis it is clear that both sample banks are not strong in all fields. One is stronger in profit making but another failed to maintain the consistency, weaker in mobilizing their deposits, concentrated into very limited diversified investment etc.Therefore the following recommendations should be brought into highlight to overcome inefficiency, weakness and develop present fund mobilization and investment policy of the banks:

Bank should maintain the liquidity ratio for daily cash transaction. Bank should not invest all the deposit as loan and advances. According to the policy of NRB some percentage should kept in the banks for fulfilling the demand of the customer. The standard liquidity ratio is $2: 1$. The depositor may demand the money at time so; banks should be ready at any time. In this research none of sample banks has the standard ratio due to their aggressive working capital policy. Therefore both sample banks should modify their working capital policy to maintain the standard ratio. If sample banks can not maintain the ratio they may failed to maintain the daily cash transaction.

As leverage ratios indicates both the banks are suggested to increase their debt financing so that profit will be generated through the utilization of deposits.

HBL have less mobilization of total deposit to loan and advances than NIBL.The purpose of loan and advances is to generate income for the banks. So, HBL should increase a loan and advance to different productive sectors.
Fixed deposits are deposited for long period and need to pay higher interest. Therefore fixed deposit can use for long time investment and generate income for the bank. Since mobilization of fixed deposit by HBL is lower than NIBL,they should mobilized its fixed deposit to different productive sector in for of loan and advances or investment.

NIBL is less successful in mobilizing its deposit by investing in different productive sector. Investment is the key to earn a profit.Therefore, they should invest in different productive sectors by utilizing the different types of deposit. Since there consistency level is very high they should maintain stability in total investment.

Profit is a key of success of any business. The bank also cannot survive without the profit.so,they should keep in the mind for profit maximization. But in long-term business bank also should be concern with the shareholder's wealth maximization as they are investor of the bank. Over the study period, NIBL is successful to earn more profit than HBL with consistency in profit. So it is recommended to HBL that it may cut down its operating expenses or can imply other profit maximization tools.

HBL should maintain stability in earning interest since they have greater variation in earning interest. Since NIBL have low interest earning variation they should increase an interest earning because it will directly effect to the net profit.

NIBL paid a higher interest than HBL which mean that they used more creditors' funds or paid higher interest rate in investment. So they need to use equity fund rather than debt or should pay a lower interest rate. Although the interest paid by HBL is lower but it is failed to maintain its consistency level.

The operating expenses of HBL are lower than NIBL although it couldn't make profit as made by NIBL so they should analyze other factors which maximize their profits.

Majority of private commercial banks have been found to be profit oriented, ignoring their social responsibility, which is not a proper strategy to sustain in long run. So, other the banks are suggested to render their services even in the rural areas providing special loans to the deprived and priority sectors, which might further intensify the goodwill of the banks in future.

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

The economic liberalization has made the entire bank to determine the own interest rate. But nowadays due to unhealthy competition the spread between the deposit and lending interest has being higher than NRB directives. If the depositor interest rate is very low then depositor may not interest to deposit the saving. Therefore the spread should be appropriate.

Banks should evaluate its investment portfolio every year. Investment portfolio must be balanced in each sector according to the NRB rules and company's self policy. It should be calculated co-efficient of correlation and regression among deposit, investment and return of the company.

Nepal Rastra Bank should clearly define its role and strict monitoring for the efficient operations of banks so that they can use the facilities as much as possible. Besides that, NRB should open to all, flexible and strong supervision rather than imposing rules and regulation only.

The success rate of banking mainly depends upon the banking awareness by the general public. Unless they find a convincing reason about their savings as well as new approach of investment, it is almost impossible to make live for a bank. Therefore there should be the awareness program, regularly conducted in terms of seminars or workshops from well experienced personnel such as top executives from banks and concerned regulating authorities.Ths will exchange the ideas and share the grass root problems. On the basis of this feedback information, regular changes or implementation of new rules and regulations can be easily carried out. Nepal Rastra Bank should also encourage frequent trainings to new entrants to provide orientations on the conceptual dimensions and practical aspects of operation of the banks.

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## ANNEX A-1

Calculation of Mean and Coefficient of Variation between current assets and current Liabilities

| Fiscal Year(X) | Ratio of HBL(X) | ( X - X) | ( X - X)2 | Ratio of NIBL(Y) | (Y-Y) | $(\mathrm{Y}-\mathrm{Y}) 2$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002/03 | 0.6995 | -0.1291 | 0.0166668 | 1.0629 | 0.0024 | 0.00000576 |
| 2003/04 | 0.8395 | 0.0109 | 0.0001188 | 0.9263 | -0.1342 | 0.01800964 |
| 2004/05 | 0.8053 | -0.0233 | 0.0005429 | 1.0422 | -0.0183 | 0.00033489 |
| 2005/06 | 0.935 | 0.1064 | 0.011321 | 1.1026 | 0.0421 | 0.00177241 |
| 2006/07 | 0.8641 | 0.0355 | 0.0012603 | 1.1683 | 0.1078 | 0.01162084 |
| $\mathrm{N}=5$ | 4.1434 |  | 0.0299097 |  |  | 0.03174354 |

Here,
Arithmetic Mean $\bar{X}=\frac{\sum X}{N}=\frac{4.1434}{5}=0.8286$

Arithmetic Mean $\overline{\mathrm{Y}}=\frac{\sum Y}{N}=\frac{5.3023}{5}=1.0605$

Standard Deviation (S.D) $=\sqrt{\frac{\sum(X-X) 2}{N-1}}=\sqrt{\frac{0.02990}{5-1}}=0.0864$

Standard Deviation (S.D) $=\sqrt{\frac{\sum(Y-Y) 2}{N-1}}=\sqrt{\frac{0.0317}{5-1}}=0.0890$

Coefficient of Variation C.V $=\frac{Q}{X} \times 100 \%=\frac{0.0864}{0.8286} \times 100 \%=10.43$

Coefficient of Variation C.V $=\frac{Q}{Y} \times 100 \%=\frac{0.0890}{1.0605} \times 100 \%=8.39$

## ANNEX A-2

Calculation of Correlation between Total Deposits(x) and Loan and Advance(y):

## For HBL:

| Fiscal |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | x | y | d1 $=\mathrm{x}-\mathrm{a}$ | $\mathrm{d} 2=\mathrm{y}-\mathrm{a}$ | $\mathrm{d} 1^{2}$ | d2 ${ }^{2}$ | d1d2 |
| 2002/03 | 21045.1 | 10001.9 | -3768.9 | -2422.6 | 14204607 | 5868990.76 | 9130537.1 |
| 2003/04 | 22010.3 | 11951.9 | -2803.7 | -472.6 | 7860733.7 | 223350.76 | 1325028.6 |
| 2004/05 | 24814 | 12424.5 | 0 | 0 | 0 | 0 | 0 |
| 2005/06 | 30048.4 | 16998 | 5234.4 | 4573.5 | 27398943 | 20916902.3 | 23939528 |
| 2006/07 | 26490.9 | 14642.6 | 1676.9 | 2218.1 | 2811993.6 | 4919967.61 | 3719531.9 |
|  | 124408.7 | 66018.9 | 338.7 | 3896.4 | 52276278 | 31929211.4 | 38114626 |

$r_{12}=\frac{n \sum d_{1} d_{2}-\left(\sum d_{1}\right)\left(\sum d_{2}\right.}{\sqrt{n \sum d_{1}^{2}-\left(\sum d_{1}\right)^{2}} \sqrt{n \sum d_{2^{2}}-\left(\sum d_{2}\right)^{2}}}$
Where,

$a=$ assumed mean
Karl's Pearson's Coefficient of Correlation
$r_{12}=\frac{5 \times 38114626.05-(338.7) \cdot(386.4)}{\sqrt{5 x 52276277.87-(338.7)^{2}} \sqrt{5 \times 31929211.38-(3896.4)}}{ }^{2}$
$r_{12}=\frac{189253419.6}{16163.7456 \times 12019.3229}$
$=0.9741$
$r^{2}=0.9489$
P.E. $(r)=0.6745 x \frac{1-r^{2}}{\sqrt{n}}$
$=0.6745 x \frac{1-0.9489}{\sqrt{5}}$
$=\frac{0.03447}{2.2361}$
$=0.0154$
$6 x P . E(r)=6 x 0.0154$

$$
=0.0924
$$

## ANNEX A - 3

Calculation of Correlation between Total Deposits(x) and Loan and Advance(y):

## For NIBL:

| Fiscal Year | x | y | d1 $=\mathrm{x}-\mathrm{a}$ | d2 $=\mathrm{y}$-a | d1 ${ }^{2}$ | d2 ${ }^{2}$ | d1d2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002/03 | 7922.77 | 5772.14 | -6331.83 | -4353.96 | 40092071 | 18956967.7 | 27568535 |
| 2003/04 | 11524.7 | 7130.13 | -2729.9 | -2995.97 | 7452354 | 8975836.24 | 8178698.5 |
| 2004/05 | 14254.6 | 10126.1 | 0 | 0 | 0 | 0 | 0 |
| 2005/06 | 18927.3 | 12776.2 | 4672.7 | 2650.1 | 21834125 | 7023030.01 | 12383122 |
| 2006/07 | 24488.9 | 17286.4 | 10234.3 | 7160.3 | 104740896 | 51269896.1 | 73280658 |
|  | 77118.27 | 53090.97 | 5845.27 | 2460.47 | 174119447 | 86225730 | 121411014 |

$$
\begin{aligned}
& r_{12}=\frac{5 x 121411013.6-(5845.27) \cdot(2460.47)}{\sqrt{5 \times 174119446.9-(5845.27)^{2}} \sqrt{5 \times 86225730.02-(2460.47)^{2}}} \\
& =\frac{592672956.5}{28921.1005 \times 20617.3407} \\
& =0.9940 \\
& r^{2}=0.9880
\end{aligned}
$$

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

$$
=0.6745 x \frac{1-0.9880}{\sqrt{5}}
$$

$$
=\frac{0.00809}{2.2361}
$$

$$
=0.0036
$$

$$
\begin{aligned}
6 x P \cdot E(r) & =6 x 0.0036 \\
& =0.0217
\end{aligned}
$$

## ANNEX A - 4

Calculation of Correlation between Total Deposit and long-term Investment

## For HBL:

| Fiscal Year | X | Y | d1 $=\mathrm{x}-\mathrm{a}$ | $\mathrm{d} 2=\mathrm{y}-\mathrm{a}$ |
| :---: | :---: | :---: | :---: | :---: |
| 2002/03 | 21045.1 | 10175.4 | -3768.9 | -1516.9 |
| 2003/04 | 22010.3 | 9292.1 | -2803.7 | -2400.2 |
| 2004/05 | 24814 | 11692.3 | 0 | 0 |
| 2005/06 | 30048.4 | 11823 | 5234.4 | 130.7 |
| 2006/07 | $\begin{array}{r} 26490.9 \\ 124408.7 \end{array}$ | $\begin{array}{r} 10889 \\ 53871.8 \end{array}$ | $\begin{array}{r} 1676.9 \\ 338.7 \end{array}$ | $\begin{array}{r} -803.3 \\ -4589.7 \end{array}$ |
|  |  |  |  |  |
| $r_{12}=\frac{}{\sqrt{5 x 52276277.87-(338.7)^{2}} \sqrt{5 x 8724319.03-(-4589.7)^{2}}}$ |  |  |  |  |
| $=\frac{58917837.3+1554531.39}{16163.7456 \times 474.3419}$ |  |  |  |  |
| $16163.7456 \times 4749.3419$ |  |  |  |  |
| $=0.7877$ |  |  |  |  |
| $r^{2}=0.6205$ |  |  |  |  |
| $P . E(r)=0.6745 x \frac{1-0.6205}{}$ |  |  |  |  |
|  | $\frac{0.2560}{2.2361}$ 0.1145 |  |  |  |
| $6 x P . E(r)=6 x 0.1145$ |  |  |  |  |
| $=0.6868$ |  |  |  |  |

## ANNEX A-5

Calculation of Correlation between Total Deposit and long-term Investment

## For NIBL:

| Fiscal Year | X | Y | d1 $=\mathrm{x}-\mathrm{a}$ | $\mathrm{d} 2=\mathrm{y}-\mathrm{a}$ | d1 ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2002/03 | 7922.77 | 1705.24 | -6331.83 | -2228.95 | 400920 |
| 2003/04 | 11524.7 | 3862.48 | -2729.9 | -71.71 | 74523 |
| 2004/05 | 14254.6 | 3934.19 | 0 | 0 |  |
| 2005/06 | 18927.3 | 5602.87 | 4672.7 | 1668.68 | 21834 |
| 2006/07 | 24488.9 | 6505.68 | 10234.3 | 2571.49 | 1047408 |
|  | 77118.27 | 21610.46 | 5845.27 | 1939.51 | 174119 |
| $5 \times 48423734.75-(5845.27) .(1939.51)$ |  |  |  |  |  |
| $r_{12} \sqrt{5 x 174119446.9-(5845.27)^{2} x} \sqrt{5 \times 1437414.19-(1939.51)^{2}}$ |  |  |  |  |  |
| 230781714.1 |  |  |  |  |  |
| $\begin{aligned} r_{12} & =\overline{28921.1005 \times 8251.6890} \\ & =0.9670 \end{aligned}$ |  |  |  |  |  |
| $r^{2}=0.9351$ |  |  |  |  |  |
| $P . E(r)=0.6745 x \frac{1-0.9351}{2.2361}$ |  |  |  |  |  |
| $=\frac{0.0438}{2.2361}$ |  |  |  |  |  |
|  |  |  |  |  |  |
| $=0.0196$ |  |  |  |  |  |
| $6 x P . E(r)=6 x 0.0196$ |  |  |  |  |  |
| $=0.1175$ |  |  |  |  |  |

## ANNEX A - 6

Calculation of Correlation between long-term Investment and Net Profit

## For HBL:

| Fiscal Year | X | Y | d1 $=\mathrm{x}-\mathrm{a}$ | d2=y-a | d1 ${ }^{2}$ | d2 ${ }^{2}$ | d1d2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002/03 | 10175.4 | 212.13 | -1516.9 | -96.15 | 2300985.6 | 9244.8225 | 145849.94 |
| 2003/04 | 9292.1 | 263.05 | -2400.2 | -45.23 | 5760960 | 2045.7529 | 108561.05 |
| 2004/05 | 11692.3 | 308.28 | 0 | 0 | 0 | 0 | 0 |
| 2005/06 | 11823 | 457.46 | 130.7 | 149.18 | 17082.49 | 22254.6724 | 19497.826 |
| 2006/07 | 10889 | 491.82 | -803.3 | 183.54 | 645290.89 | 33686.9316 | 147437.68 |
|  | 53871.8 | 1732.74 | -4589.7 | 191.34 | 8724319 | 67232.1794 | 126471.13 |

$$
\begin{aligned}
r_{12} & =\frac{5 \times 126471.125-(-4589.7) \cdot(191.34)}{\sqrt{5 \times 8724319.03-(-4589.7)^{2}} \sqrt{5 \times 106129.8339-(192.83)^{2}}} \\
& =\frac{1510548.823}{4749.3420 \times 547.3115} \\
& =0.5811
\end{aligned}
$$

$$
r^{2}=0.3377
$$

$$
P . E(r)=0.6745 x \frac{1-0.3377}{2.2361}
$$

$$
=\frac{0.4467}{2.2361}
$$

$$
=0.1998
$$

$6 x P . E(r)=6 * 0.1998$

$$
=1.1987
$$

## ANNEX A - 7

Calculation of Correlation between long-term Investment and Net Profit

## For NIBL:

$$
\begin{aligned}
r_{12} & =\frac{5 x 1152693.022-(1939.51) \cdot(192.83)}{\sqrt{5 \times 14370414.19-(1939.51)} \cdot \sqrt{5 \times 106129.8339-(192.83)^{2}}} \\
& =\frac{5389469.397}{8251.6890 \times 702.4711} \\
& =0.9298
\end{aligned}
$$

$$
r^{2}=0.8645
$$

$$
P . E(r)=0.6745 x \frac{1-0.8645}{2.2361}
$$

$$
=\frac{0.0914}{2.2361}
$$

$$
=0.04086
$$

$$
6 x P . E(r)=6 x 0.04086
$$

$$
=0.2452
$$

## ANNEX A-8

Calculation of Correlation between loan and Advances and Net Profit

## For HBL:



ANNEX A - 9
Calculation of Correlation between loan and Advances and Net Profit

## For NIBL:

| Fiscal Year | X | Y | d1 $=\mathrm{x}-\mathrm{a}$ | $\mathrm{d} 2=\mathrm{y}-\mathrm{a}$ | d1 ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2002/03 | 5772.14 | 116.82 | -4353.96 | -115.33 | 18956 |
| 2003/04 | 7130.13 | 152.67 | -2995.97 | -79.48 | 897583 |
| 2004/05 | 10126.1 | 232.15 | 0 | 0 |  |
| 2005/06 | 12776.2 | 350.54 | 2650.1 | 118.39 | 7023 |
| 2006/07 | 17286.4 | 501.4 | 7160.3 | 269.25 | 512698 |
|  | 53090.97 | 1353.58 | 2460.47 | 192.83 | 86225 |
| $5 \times 2981918.016-(2450.47) .(192.83)$ |  |  |  |  |  |
| $r_{12}=\frac{\sqrt{5 x 86225730.02-(2460.47)^{2}} \sqrt{5 x 106129.8339-(192.83)^{2}}}{}$ |  |  |  |  |  |
| 14435137.65 |  |  |  |  |  |
| $20617.340 \times 702.4712$ |  |  |  |  |  |
| $=0.9967$ |  |  |  |  |  |
| $r^{2}=0.9934$ |  |  |  |  |  |
| $\text { P.E. }(r)=0.6745 x \frac{1-0.9934}{2.2361}$ |  |  |  |  |  |
| $\frac{0.0044}{2.2361}$ |  |  |  |  |  |
| 2.2361 |  |  |  |  |  |
| $=0.00199$ |  |  |  |  |  |
| $6 x P . E(r)=6 x 0.00199$ |  |  |  |  |  |
| $=0.0119$ |  |  |  |  |  |

## ANNEX A - 10

## Trend Analysis of Total Deposit

## For HBL:

Where,

$$
\begin{aligned}
& \mathrm{a}=\frac{\sum y}{N}=\frac{124408.7}{5}=24881.74 \\
& \mathrm{~b}=\frac{\sum x y}{\sum x 2}=\frac{18929.7}{10}=1892.97
\end{aligned}
$$

Trend Line $(\mathrm{Yc})=\mathrm{a}+\mathrm{bx}=24881.74+1892.97 \mathrm{x}$

Total Deposit in Year 2007/08 $=\mathrm{a}+\mathrm{bx}$

$$
\begin{aligned}
& =24881.74+1892.97(2007-2004) \\
& =30560.6
\end{aligned}
$$

Total Deposit in Year 2008/09 $=24881.74+1892.97 \times 4$

$$
=32453.62
$$

Total Deposit in Year 2009/10 $=24881.74+1892.97 \times 5$

$$
=34346.59
$$

Total Deposit in Year 2010/11 $=24881.74+1892.97 \times 6$

$$
=36239.56
$$

Total Deposit in Year 2011/12 $=24881.74+1892.97 \times 7$

$$
=38132.53
$$

## ANNEX A - 11

## Trend Analysis of Total Deposit

## For NIBL:

Where,

$$
\begin{aligned}
& \mathrm{a}=\frac{\sum y}{N}=\frac{77118.27}{5}=15423.65 \\
& \mathrm{~b}=\frac{\sum x y}{\sum x 2}=\frac{40534.86}{10}=4053.49
\end{aligned}
$$

Trend Line $(\mathrm{Yc})=\mathrm{a}+\mathrm{bx}=15423.65+4053.49 \mathrm{x}$

$$
\begin{aligned}
\text { Total Deposit in Year 2007/08 } & =\mathrm{a}+\mathrm{bx} \\
& =15423.65+4053.49(2007-2004) \\
& =27584.12
\end{aligned}
$$

Total Deposit in Year 2008/09 $=15423.65+4053.49 \times 4$

$$
=31637.61
$$

Total Deposit in Year 2009/10 $=15423.65+4053.49 \times 5$

$$
=35691.1
$$

Total Deposit in Year 2010/11 $=15423.65+4053.49 \times 6$

$$
=35691.1
$$

Total Deposit in Year 2011/12 $=15423.65+4053.49 \times 7$

$$
=43798.08
$$

## ANNEX A - 12

## Trend Analysis of Loan \& Advance

## For HBL:

Where,

$$
\begin{aligned}
& \mathrm{a}=\frac{\sum y}{N}=\frac{66018.9}{5}=13203.78 \\
& \mathrm{~b}=\frac{\sum x y}{\sum x 2}=\frac{14327.5}{10}=1432.75
\end{aligned}
$$

Trend Line $(\mathrm{Yc})=\mathrm{a}+\mathrm{bx}=13203.78+1432.75 \mathrm{x}$

$$
\begin{aligned}
\text { Total Deposit in Year 2007/08 } & =\mathrm{a}+\mathrm{bx} \\
& =13203.78+1432.75(2007-2004) \\
& =17502.03
\end{aligned}
$$

Total Deposit in Year 2008/09 $=13203.78+1432.75 \times 4$ $=18934.78$

Total Deposit in Year 2009/10 $=13203.78+1432.75 \times 5$

$$
=20367.53
$$

Total Deposit in Year 2010/11 $=13203.78+1432.75 \times 6$

$$
=21800.28
$$

Total Deposit in Year 2011/12 $=13203.78+1432.75 \times 7$

$$
=23233.03
$$

## ANNEX A - 13

## Trend Analysis of Loan \& Advance

## For NIBL:

Where,

$$
\begin{aligned}
& \mathrm{a}=\frac{\sum y}{N}=\frac{53090.97}{5}=10618.19 \\
& \mathrm{~b}=\frac{\sum x y}{\sum x 2}=\frac{28674.59}{10}=2867.46
\end{aligned}
$$

Trend Line $(\mathrm{Yc})=\mathrm{a}+\mathrm{bx}=10618.19+2867.46 \mathrm{x}$

Total Deposit in Year 2007/08 $=a+b x$

$$
=10618.19+2867.46(2007-2004)
$$

$$
=19220.57
$$

Total Deposit in Year 2008/09 $=10618.19+2867.46 \times 4$

$$
=22088.03
$$

Total Deposit in Year 2009/10 $=10618.19+2867.46 \times 5$

$$
=24955.49
$$

Total Deposit in Year 2010/11 $=10618.19+2867.46 \times 6$

$$
=27822.95
$$

Total Deposit in Year 2011/12 $=10618.19+2867.46 \times 7$

$$
=30690.41
$$

## ANNEX A - 14

## Trend Analysis of Long-term Investment

## For HBL:

Where,

$$
\begin{aligned}
& \mathrm{a}=\frac{\sum y}{N}=\frac{53871.8}{5}=10774.36 \\
& \mathrm{~b}=\frac{\sum x y}{\sum x 2}=\frac{3958.1}{10}=395.81
\end{aligned}
$$

Trend Line $(\mathrm{Yc})=\mathrm{a}+\mathrm{bx}=10774.36+395.81 \mathrm{x}$

Total Deposit in Year 2007/08 $=a+b x$

$$
\begin{aligned}
& =10774.36+395.81(2007-2004) \\
& =11961.79
\end{aligned}
$$

Total Deposit in Year 2008/09 $=10774.36+395.81 \times 4$

$$
=12357.6
$$

Total Deposit in Year 2009/10 $=10774.36+395.81 \times 5$

$$
=12753.41
$$

Total Deposit in Year 2010/11 $=10774.36+395.81 \times 6$

$$
=13149.22
$$

Total Deposit in Year 2011/12 $=10774.36+395.81 \times 7$

$$
=13545.03
$$

## ANNEX A - 15

## Trend Analysis of Long-term Investment

## For NIBL:

Where,

$$
\begin{aligned}
& \mathrm{a}=\frac{\sum y}{N}=\frac{21610.46}{5}=4322.09 \\
& \mathrm{~b}=\frac{\sum x y}{\sum x 2}=\frac{11341.27}{10}=1134.13
\end{aligned}
$$

Trend Line $(\mathrm{Yc})=\mathrm{a}+\mathrm{bx}=4322.09+1134.13 \mathrm{x}$

$$
\begin{aligned}
\text { Total Deposit in Year 2007/08 } & =\mathrm{a}+\mathrm{bx} \\
& =4322.09+1134.13(2007-2004) \\
& =7724.48
\end{aligned}
$$

Total Deposit in Year 2008/09 $=4322.09+1134.13 \times 4$

$$
=8858.61
$$

Total Deposit in Year 2009/10 $=4322.09+1134.13 \times 5$ $=9992.74$

Total Deposit in Year 2010/11 $=4322.09+1134.13 \times 6$

$$
=1126.87
$$

Total Deposit in Year 2011/12 $=4322.09+1134.13 \times 7$

$$
=12261
$$

## ANNEX A - 16

Regression Analysis between Net Profit and Total Deposit

## For HBL:

| Fiscal | Total |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Year | Net Profit $(x)$ | Deposit $(y)$ | $x 2$ | $y 2$ | $x y$ |
| $2002 / 03$ | 0.2121 | 21.04 | 0.04498641 | 442.6816 | 4.462584 |
| $2003 / 04$ | 0.2631 | 22.01 | 0.06922161 | 484.4401 | 5.790831 |
| $2004 / 05$ | 0.3083 | 24.81 | 0.09504889 | 615.5361 | 7.648923 |
| $2005 / 06$ | 0.4575 | 30.05 | 0.20930625 | 903.0025 | 13.747875 |
| $2006 / 07$ | 0.4918 | 26.49 | 0.24186724 | 701.7201 | 13.027782 |
|  | $\mathbf{1 . 7 3 2 8}$ | $\mathbf{1 2 4 . 4}$ | $\mathbf{0 . 6 6 0 4 3 0 4}$ | $\mathbf{3 1 4 7 . 3 8 0 4}$ | $\mathbf{4 4 . 6 7 7 9 9 5}$ |

$5 a+1.7328 b=124.4$
$1.7328 a+0.6604 b=44.68$
\}

$$
a=15.82
$$

$$
\mathrm{r}=0.88
$$

$b=26.15$
$t=\frac{0.88}{\sqrt{1-(0.88)^{2}}} * \sqrt{5-2}$
$=\frac{0.88}{0.4749} * 1.73$
$=3.21$

## ANNEX A - 17

Regression Analysis between Net Profit and Total Deposit

## For NIBL:

| Fiscal | Total |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Year | Net Profit(x) | Deposit(y) | $x 2$ | $y 2$ | $x$ |
| $2002 / 03$ | 0.1168 | 79.23 | 0.01364224 | 6277.3929 | 9.254064 |
| $2003 / 04$ | 0.1527 | 11.52 | 0.02331729 | 132.7104 | 1.759104 |
| $2004 / 05$ | 0.2321 | 14.25 | 0.05387041 | 203.0625 | 3.307425 |
| $2005 / 06$ | 0.3505 | 18.93 | 0.12285025 | 358.3449 | 6.634965 |
| $2006 / 07$ | 0.5014 | 24.49 | 0.25140196 | 599.7601 | 12.279286 |
|  | $\mathbf{1 . 3 5 3 5}$ | $\mathbf{1 4 8 . 4 2}$ | $\mathbf{0 . 4 6 5 0 8 2 1 5}$ | $\mathbf{7 5 7 1 . 2 7 0 8}$ | $\mathbf{3 3 . 2 3 4 8 4 4}$ |


| $5 \mathrm{a}+1.3535 \mathrm{~b}=148.42$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\}$ | $\mathrm{a}=$ | 48.72 |  |
| $1.3535 \mathrm{a}+0.4651 \mathrm{~b}=33.2348$ |  |  |  |  |$\quad \mathrm{~b}=\quad-70.33 \mathrm{r}=0.99$

$t=\frac{0.99}{\sqrt{1-(0.99) 2}} * \sqrt{5-2}$
$=\frac{0.99}{0.1411} *(1.73)$
$=12.14$

## ANNEX A - 18

Regression analysis between Net Profit and Loan and Advances

## For HBL:

| Fiscal |  | Loan \& |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Net Profit(x) | Adv.(y) | x2 | y2 | xy |
| 2002/03 | 0.2121 | 10 | 0.04498641 | 100 | 2.121 |
| 2003/04 | 0.2631 | 11.95 | 0.06922161 | 142.8025 | 3.144045 |
| 2004/05 | 0.3083 | 12.42 | 0.09504889 | 154.2564 | 3.829086 |
| 2005/06 | 0.4575 | 16.99 | 0.20930625 | 288.6601 | 7.772925 |
| 2006/07 | 0.4918 | 14.64 | 0.24186724 | 214.3296 | 7.199952 |
|  | 1.7328 | 66 | 0.6604304 | 900.0486 | 24.067008 |

$5 a+1.7328 b=66$
\}

$$
a=6.29
$$

$$
\mathrm{r}=0.91
$$

$1.7328 a+0.6604 b=24.07$
$b=19.94$
$t=\frac{0.91}{\sqrt{1-(0.91)^{2}}} * \sqrt{5-2}$
$=\frac{0.91}{0.4146} * 1.73$
$=3.79$

## ANNEX A - 19

Regression analysis between Net Profit and Loan and Advances

## For NIBL:

| Fiscal | Loan \& |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Year |  |  |  |  |  |$\quad$ Net Profit(x) | Advv.(y) | x2 |
| :--- | :--- |

$5 a+1.3535 b=53.1$
$\mathrm{a}=2.69$
\}
$1.3535 a+0.4651 b=17.2625$

$$
\mathrm{r}=0.99
$$

$\mathrm{b}=29.26$
$t=\frac{0.99}{\sqrt{1-(0.99)^{2}}} * \sqrt{5-2}$
$=\frac{0.99}{0.4146} * 1.73$
$=12.14$

## ANNEX A - 20

Regression analysis between Net Profit and Long-term Investment

## For HBL:

| Fiscal | Net Profit $(x)$ | Long-term <br> $\operatorname{inv}(y)$ |  |  |  |  |  | $x 2$ | y2 | $x y$ |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Year | 0.2121 | 10.17 | 0.04498641 | 103.4289 | 2.157057 |  |  |  |  |  |
| $2002 / 03$ | 0.2631 | 9.29 | 0.06922161 | 86.3041 | 2.444199 |  |  |  |  |  |
| $2003 / 04$ | 0.3083 | 11.69 | 0.09504889 | 136.6561 | 3.604027 |  |  |  |  |  |
| $2004 / 05$ | 0.4575 | 11.82 | 0.20930625 | 139.7124 | 5.40765 |  |  |  |  |  |
| $2005 / 06$ | 0.4918 | 10.89 | 0.24186724 | 118.5921 | 5.355702 |  |  |  |  |  |
| $2006 / 07$ | $\mathbf{1 . 7 3 2 8}$ | $\mathbf{5 3 . 8 6}$ | $\mathbf{0 . 6 6 0 4 3 0 4}$ | $\mathbf{5 8 4 . 6 9 3 6}$ | $\mathbf{1 8 . 9 6 8 6 3 5}$ |  |  |  |  |  |

```
\(5 a+1.7328 b=53.86\)
        \(\mathrm{a}=9.02\)
        \} \(\quad r=0.58\)
\(1.7328 a+0.6604 b=18.9686\)
    \(\mathrm{b}=5.06\)
\(t=\frac{0.58}{\sqrt{1-(0.58)^{2}}}\)
    \(=\frac{0.58}{0.8146} * 1.73\)
    \(=1.23\)
```


## ANNEX A - 21

Regression analysis between Net Profit and Long-term Investment

## For NIBL:

| Fiscal | Long-term <br> inv(y) |  |  | $x 2$ | y2 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Year | Net Profit(x) | 1.71 | 0.01364224 | 2.9241 | 0.199728 |
| $2002 / 03$ | 0.1168 | 3.86 | 0.02331729 | 14.8996 | 0.589422 |
| $2003 / 04$ | 0.1527 | 3.93 | 0.05387041 | 15.4449 | 0.912153 |
| $2004 / 05$ | 0.2321 | 5.6 | 0.12285025 | 31.36 | 1.9628 |
| $2005 / 06$ | 0.3505 | 6.51 | 0.25140196 | 42.3801 | 3.264114 |
| $2006 / 07$ | 0.5014 | $\mathbf{2 1 . 6 1}$ | $\mathbf{0 . 4 6 5 0 8 2 1 5}$ | $\mathbf{1 0 7 . 0 0 8 7}$ | $\mathbf{6 . 9 2 8 2 1 7}$ |

$5 a+1.3535 b=21.61$
$\mathrm{a}=1.36$
\}
$1.3535 a+0.4651 b=6.9282$
$\mathrm{b}=10.92$

$$
t=\frac{0.93}{\sqrt{1-(0.93)^{2}}} * \sqrt{5-2}
$$

$$
=\frac{0.93}{0.3675} * 1.73
$$

$$
=4.38
$$


[^0]:    Source: Annual Report of the Bank

