## CHAPTER-I

## INTRODUCTION

### 1.1 General Background of the Study

Financial performance analysis can be considered as a heart of the financial decisions. The growth and development of any enterprise is directly influenced by the financial policy. Rational evaluation of the financial performance of the financial management in public enterprises is too much involved in record keeping, raising necessary funds and maintaining relationship with the bank or other financial institutions. But financial aspect is one of the most neglected aspects of public enterprises in Nepal. However joint venture banks have analyzed financial performance for their corrective actions. But their analysis is limited within the banks themselves.

Financial performance as a part of the financial management is the main indicator of the success or failure of the firm. There are different institutions that affect or are affected by the decision of the firm. Financial condition of business firm should be sound from the point of view of shareholders, debenture holders, financial institution and nation as whole.

Though the type of analysis varies according to the specific interest of the part involved, shareholders of the firm are concerned principally with the present and expected future earnings of other enterprise. This indicates that they concentrate their analysis on the profitability of the firm.

Management of the firm is interested in all aspects of financial analysis to adopt a good financial management system for the internal control of the enterprise. Similarly, trade creditors are primarily interested in the liquidity position of the firm. Long-term creditors are more interested in the cash flow ability of the enterprise to service debt over a long run. Similarly, all the concerned groups are directly or indirectly interested about the financial performance of the firm.

The absolute accounting figures are reported in the financial statement: the balance sheet, the profit and loss account and the other statements do not provide a meaningful understating of the performance and financial position of the firm. An accounting figure conveys meaning, when it is related to some other relevant information. A quantitative judgment about the firm's financial position and performance should be made from the point view of a firm's investment. Thus financial analysis is the main qualitative judgment process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of the balance sheet and profit and loss account.

Ratio analysis is a powerful tool of financial analysis. A ration is designed as "the indicated quotient of two mathematical expressions" and as "the relationship between two or more things". In financial analysis, ratio is used as a benchmark for evaluating the financial position and performance of a firm (Pandey, 1996:104).

In the financial world, a bank's performance has mainly focused on financial performance decision. A commercial bank's performance is to be examined for various reasons. Bank regulators identify banks that are experiencing severe problems so that they can give remedy to them.

Joint venture banks in Nepal are profit making business institutions. So, the profit earned by a joint venture commercial bank in Nepal is the main financial performance indicator of the bank. However, it cannot solely predict the performance of the bank by analyzing the profitability status only. Every aspect of the financial analysis is to be considered for financial performance of the bank. An analysis of income and expenditure and bankruptcy score of the bank is also the important indicators of the bank's performance.

### 1.1.1 Meaning of Bank

Bank is an Italian word "Banco" which means a bench where a moneylender sits and keeps account of his business. Today there is no exception that bank covers the almost entire sector in business performance of the country. Banking sector
definitely plays vital role in overall economic development of the country. It covers the larger sector for the development of the country. It collects the money from scattered spread from the market and promissory to repay principle money in any given time with interest on it. It mobilizes them to the productive sector. In this case Bank is secure place to deposit money rather than some other place and the depositor is benefited by the latest and most advanced blend of technologies and services. Thus Depositor could deposit money and withdraw money whenever needed. Bank plays an intermediary role in accepting deposit and granting loan. Many economists has defined bank more precisely.

Banks are among the most important financial institutions in the economy and essential business in thousands of local towns and cities. Certainly, banks must be identified by their functions, services, and roles they perform in the economy. Nowadays, the functions of bank are not only changing, but the functions of their principal competitors are also changing. The competitors like financial institution including security dealers, brokerage firms, and insurance companies are trying to be similar as possible to bank in the services they offer.

A commercial bank is a bank which deals in exchanging currency, accepting deposits giving loans and doing commercial transactions (Commercial Bank Act 1974).

Banks are like reservoirs. Banks collect savings of millions of people and institutions and invest or lend for the expansion of business and balanced development of the country. Banks undertake to underwrite for raising capital and loans for companies, corporation and government. Banks are the suitable institutions for the settlement of payment of different credit instruments. Banks also act as the guarantor and agent. Banks are essentials for remittance services, issuance, circulation and utilization of money. Banks also help to maintain price stability. Banks help the government to formulate policy by providing various information and data. Banks also provide necessary information and data to the customers. In a word, banks are indispensable not only to maintain economic
activity, i.e., consumption, production, exchange, and distribution, but also for promoting economic development.

Therefore, a bank is an institution, which accepts deposits from the public and in turn advances loans by creating credit. Therefore, it should be differentiated from other financial institutions, as they cannot create though they accept deposits. That is why we call bank "a factory of credit" because it manufactures credit and sells it. Hence, a bank may be called the financial supermarket providing all kinds of monitory service, which is necessary for the industrialization and economic development of a country.

### 1.1.2 Evolution of the Bank

The evolution of bank is not a non-phenomenon. There was crude firm of banking evening an ancient Vedic ere. The terms banking such as deposits, pledge, policy of loan, interest rates etc can be found in the "Mansuriti". The Roman Empire collapse in the last of $15^{\text {th }}$ century and beginning of $16^{\text {th }}$ century. Consequently, commercial banking transaction was received because of revival of commercial and other trading activities in European countries. According to the opinion of great economist Geoffrey Crowther, the Merchant trader, the goldsmith and the money Lenders are the ancestors of modern banking.

History tells us it was the merchant banker who first evolved the system of banking by trading in commodities than money. Their trading activities required the remittance of money from one place to another for they issued different documents as the near substitutes of money, called draft of hundies in modern days.

The next stage in the growth of banking was the goldsmith; the business of goldsmith was such that he had to take deposits such as bullion, money and amendments for the security from theft. This makes possible to the goldsmith to charge something for taking care of the money and bullion. On the other hand, as the evidence of receiving valuables, he used to issue a receipt to the depositors. As
such receipts are good for payment equipment to the amount mentioned, it become like the modern cheque, as a medium of exchange and means ofpayments.

Finally, moneylenders in the early ago contributed in the growth of banking to a lager extent. He advances the coins on load by charging interest. As a safe guard he use to keep some money in the reserve. Therefore goldsmith, moneylender became a banker who started performing the two function of and advancing loans. "The bank of Venice" of Italy was established in 1157 AD as first banking institution in the world. The second banking institution namely, "The bank of Barcelona" of Spain was established in 1401 AD . Its function is to exchange money, receive deposits and discount bill of exchange, both for the citizens and for the foreigner. During 1407 AD. The Bank of Genon was established in 1609 AD. 'The Bank of England' was incorporated in 1694 AD as a joint stock bank and later on the 1844 AD . It becomes a first central bank in the world (World Encyclopedia 1996).

### 1.1.3 Origin of Bank in Nepal

Like other countries, landlords, moneylenders, merchant, goldsmith etc are the ancient bankers of Nepal. Through establishment of banking industry was very recent; some crude banking operations were in practice even in the ancient time. In the Nepalese chronicle, it was recorded that the new era known as Nepal Sambat was introduced by Shankhadhar, a Sudra merchant of Kantipur in 880 A.D. after having paid all the outstanding debts in the country. This shows the basic of money lending practice in ancient Nepal. The establishment of "Tejarath Adda" during the year 1877 A.D. was the first step in institutional development of banking sector in Nepal. Tejarath Adda did not collect deposit from public but grated loans to public against the collateral of bullions. Consequently the major parts of the country remain untouched from these limited banking activities. The development of trade with India and other countries increase the necessity of the institutional banker, which can act more widely to enhance the trade and commerce and touch the remote non-banking sector in the economy. Reviewing this situation, the 'Udyog Parishad' was constituted in 1936 A.D. One year after its formulation, it
formulated the 'Company Act' and 'Nepal Bank Act' in 1937 A.D. Nepal Bank limited was established under Nepal Bank Act in 1937 A.D. as a first commercial bank of Nepal with 10 million authorized capital. Being a commercial bank, it was natural that Nepal Bank limited paid more attention to profit generating business. But, it is the onus of government to look into neglected sectors too.

Having felt need of development of banking sector and to help the government formulate monetary policies, Nepal Rastra Bank was set up in 1956 A.D. as a central under Nepal Rastra Bank Act 1956 A.D. Since then, it has been functioning as the government's Bank and has contributed to the growth of financial sector.

Being the central bank, NRB had its own limitation and reluctance of NBL to go to the un-profitable sectors was not illogical. To cope with these difficulties, government set up Rastriya Banijya Bank in 1966 A.D. as a fully government owned commercial bank. With the emergence of RBB, banking service spread to both urban and rural areas but customers failed to have taste of quality competitive service because of excessive political and bureaucratic interference. For industrial development, Industrial Development Center was set up in 1956A.D. which was converted to Nepal Industrial Development Corporation (NIDC) in 1959 A.D. Similarly, Agricultural development Bank (ADB) was established in 1976 A.D. with an objective to provide agricultural products so that agricultural productivity could be enhanced through introduction of modern agricultural techniques.

After the restoration of democracy in Nepal, the government took the liberal policy in banking sector. As an open policy of the Nepal Government to get permission to invest in banking sector from private and foreign investor under commercial bank act 1974A.D. different private banks are getting permission to establish with the joint venture of other countries. Now a day, there are 31 commercial banks operating in Nepalese financial market.

A commercial bank is one which exchange money, deposits money, accepts deposits, grants loans and performs. A commercial banking function which is not a
bank meant for co-operatives, agriculture, industries or for such specific purpose." (Commercial Bank Act 1974)

### 1.1.4 Profile of the Sample Bank

Presently, there are altogether 32 commercial banks operating in the country. The large numbers of commercial bank is leading them to huge competition. There are various factors that can make a commercial bank leader in the market, but the commercial bank having financial performance can lead the market. This study focuses on the financial performance of the commercial banks. The limited resources and time has lead to make this study, a comparative study of financial performance between two leading commercial banks of Nepal. This study focuses on the financial performance of Everest Bank limited and Nepal Investment Bank Limited.

## Everest Bank limited

Everest Bank Ltd was established in 1994 as a joint venture with Punjab National Bank of India. The bank operates with the objective of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer friendly services through a network of 47 branches across the nation. The bank has been conferred with "Bank of the year 2006" by the banker a publication of financial times, London. The bank provides various services and facilities such as Loans and Advance, Credit finance, Bank guarantees, Hire purchase loan, Education / Housing loan, Foreign exchange facility, Automated Teller Machine (ATM) facility (www.everestbank.com)

## Nepal Investment Bank Limited

Nepal Investment Bank Ltd. (Nepal Indosuez Bank Ltd) was established on $21^{\text {st }}$ january 1986 as a third joint venture bank under the company Act 1964. Initially, the Bank is manages by Banque Indosuez, paris in accordance with joint venture and technical services. $50 \%$ of the shares of Nepal Indosuez bank ltd held by credit Agricole Indosuez was sold to the Nepalese promoters on April 25, 2002 as per the
transaction record of NEPSE. After this divestment of shares by Nepalese Owners, the name of th the company was changed to Nepal Investment Bank Ltd by its 15 AGM held on May 31, 2002. The ownership structure of the shares of NIBL is, A group of companies holding $50 \%$ of the capital, Rashtriya Banijya Bank holding $15 \%$ of the Capital, Rashtriya Beema Sansthan holding the same percentage and the remaining $20 \%$ being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange).

Activities and services are provided by NIBL including normal functions such as Tele Banking, Retail Banking, Corporate Banking, Trade Finance, Treasury, Credit card facilities, SWIFT, Deposit Locker, NTC's Mobile bill payment, ATM, International Trade and Bank Guarantee, E-Banking etc (www.nibl.com)

### 1.2 Focus of the Study

The establishment of the Joint Venture (Commercial) banks has given a new horizon to the financial sector of Nepal. The study is mainly focused on the financial performance of a commercial bank namely Everest Bank and Investment Bank in the Five year period form 2007/08 to 2011/12. Investment analysis involves determining the investor's objectives and the amount of his or her investable wealth. Investor's objectives should be stated in terms of both risk and return. We must know how to quantify risk merely saying "risky" or "no risky" does not give any concrete idea to compare various financial assets and to reach to ideal decision.

### 1.3 Statement of the Problem

A commercial bank is essentially a dealer in money. It is a financial institution, which receives deposits from public and invests it to business and enterprises against approved securities at certain rates of interest. Higher the investment on loans and advances higher will be the profit. Since investment is the major source of earning, the bank should invest as much as possible on loans and advances. But there are two major problems in front of economy, first to mobilize the greatest amount of saving for the development of the country and second, the collected
saving have to be channelized in the productive sector in a planned way. The objective of domestic resource mobilization is essentially to finance development expenditure. Therefore, it is a great concern to our community to accumulate idle resource of the country and utilize them into productive uses and involve in development activities. On the one hand there is capital shortage in the country. It means, the financial resources required for various development opportunities, are not sufficient. As a result commercial banks are not making effort to attract the saving. But on the other hand the real problem is concerned with the utilization of collected resources. Such resources are sometimes looked up and not forwarded to desired sector of the country. Thus a gap is existing between the deposits collected and amounts spent on loan and advancement. There are various issues of commercial banks in the financial sector but out of them here researcher tries to find out these problems which are as follows;

- How can commercial banks examine their financial performance?
- How far the commercial banks has been able to convert the mobilized resources into investment, collected from public?
- What extent of commercial banks has been able to raise their profitability?
- How efficiency commercial banks are managing their liquidity, activity, profitability, and capital adequacy?


### 1.4 Objectives of the Study

The primary objective of this study is to analyze the financial performance of Everest Bank Ltd. and Nepal Investment Bank Ltd. However following are the specific objectives of the study:-

- To examine the financial performance of Everest Bank Ltd. and Nepal Investment Bank Ltd.
- To examine the causes of gap existing between deposits and loan, investment etc.
- To evaluate the effectiveness of collection of deposits and their utilization.
- To provide suggestion and recommendation for the improvement of the future performance and maximum utilization of deposits.


### 1.5 Significance of the Study

Commercial banks in developing countries like Nepal have the greatest responsibility towards the economic development of the country. "In the presentday world in the developed and developing money economies, the vital process of production and consumption are significantly affected by the aggregate money supply consisting of the currency, demand and time deposit with banks" In modern times, Since credit or bank money or credit rather than changes in the total supply of the high powered money issued by the reserve held by the bank against their deposit liabilities that account for changes in the aggregate money supply. Gone are the old days when commercial banks were regarded as merely purveyors of money. They are today not merely purveyors of money but are also the creators or manufacturers of money in the system. It is the banks that set the tempo of the aggregate economic activity in the system. The main goal of the banks as a commercial organization is to maximize the surplus by the efficient use of its funds and resources. In spite of being a commercial institution, it too has a responsibility (obligation) to provide social service oriented contribution for the socio-economic enlistment to the country by providing specially considered loans and advancement towards less privileged sectors.

Hence, the study is needed to examine the financial performance of the bank especially in collection of deposits and utilization. This study will help to know the financial performance of Everest Bank Ltd. and Nepal Investment Bank Ltd. So it will be useful for managers, shareholders, customers, public and student who would conduct further study on performance analysis of Everest Bank Ltd. and Nepal Investment Bank Ltd.

### 1.6 Limitations of the Study

As every study has been conducted within certain limitations, thus the present study has the following limitations:

- This study is based only on the financial report i.e. Secondary data.
- This study has covered five-year period i.e. from 2007/08 to 2011/12.
- The study has not paid attention towards the funds flow, cash flow pattern etc.
- The data available in published annual reports have been assumed to be correct and true.
- Only limited financial tools and technique are used for analysis, so this study may not be sufficient for depth analysis.


### 1.7 Organization of the Study

The whole study is divided into five main chapters. The first chapter presents of introduction, statement of the problems, objective of the study, Significant of the study and limitation of the study.

The second chapter presents of review of literature. Review of related material like previous thesis, browser booklets, journals, articles and report, magazines etc will be done.

The third chapter presents of research design, nature and source of data, method of data collection and method of analysis under research methodology.

The fourth chapter presents the collected data will be tabulated and analyzed by using various financial tools, mathematical and statistical tools under data presentation and analysis.

The fifth chapter presents of the brief summary of whole research report and conclusions. Its also provides some useful suggestion and recommendations to concerned parties.

At the beginning of the thesis viva voce sheet, recommendation, declaration, acknowledgement, table of content and abbreviation are also submitted. And finally, bibliography and appendix are presented at the end of the study.

## CHAPTER-II

## REVIEW OF LITERATURE

When researcher started to do research work, he/she should study different books, newspaper, magazine, journals, previous research work related to his/her topic, etc. to collect the necessary information. This process of studying different educational materials is known as review of literature. This chapter highlights the literature that is available in concerned subject as to my knowledge, research work, and relevant study on this topic, review of journals and articles and review of thesis work performed previously.

### 2.1 Conceptual Framework

This sub-chapter presents the theoretical aspect of the study. It covers the historical development of financial system and evaluation of commercial banks in Nepal, Role of Commercial Banks in the Development of the Economy, finance products and services and finance performance approaches.

### 2.1.1 Financial Statement

Financial statements are the end product or output of an accounting system designed and used in an organization. The inputs to this system are the business transactions or financial events taken place in the organization. These transactions or events are processed with generally accepted accounting principles and procedures in the course of their transformation into financial statements.

Financial statements include two basic statements: The income statement or profit and loss account and the position statement or balance sheet. The income statement reveals the performance of the organization during a particular period of time with the ascertainment of net profit or loss after matching the costs with the revenues of the period. The balance sheet states the assets, liabilities and owner's equity at the date of its preparation. There are two other financial reports which are frequently used along with the basic financial statements: the statement of retained earnings and cash flow statement. The statement of retained earnings indicates the
magnitude and causes of changes in the firm's retained earnings due to the years activities.

Financial statement and reports provide information regarding the operating performance, financial health and the direction chosen by the firm to the different users of information both external and internal. Users of accounting information generally are; owners, management, creditors, investors, researcher, government, customers, employees, trade union etc.

## The limitations of financial statements

- Financial statements are based on historical cost of transactions involved. Unless and adjustment is made on them for general price level change over the period, they do not portray the current state of being.
- Financial statement are prepared based the monetary involvement of the events or transaction. Events with no monetary involvement but having long-term implication on the performance and financial position of an organization like entry and exit of competitors; quality of the management team; cordiality, competency and commitment of employees etc. have no say in financial statements.
- Financial statements incorporate several estimates made by different personnel's involved in the process selection of a particular method of charging depreciation, valuing closing stock, treating research and development expenditure etc. over the other method can influence the financial statements with a wider margin.
- "Window-dressed" financial statements are of little use whatever the purpose behind such preparation might have been.
- Financial statements are merely the interim reports, the actual and overall results being known only after the termination or closure of an organization.


### 2.1.2 Concept of Financial Performance

Financial performance analysis can be considered as a heart of the financial decisions. The growth and development of any enterprise is directly influenced by the financial policy. Rational evaluation of the financial performance of the financial management in public enterprises is too much involved in record keeping, raising necessary funds and maintaining relationship with the bank or other financial institutions. But financial aspect is one of the most neglected aspects of public enterprises in Nepal. However joint venture banks have analyzed financial performance for their corrective actions. But their analysis is limited within the banks themselves.

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information. A quantitative judgment about the firm's financial position and performance should be made from the point view of a firm's investment. Thus financial analysis is the main qualitative judgment process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of the balance sheet and profit and loss account.

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### 2.2 Scenario of Commercial Bank

There are 32 commercial banks in Nepal which presents the main role of economy in Nepal. The main sub-topic under this topics are as follows;

### 2.2.1 Concept of Commercial Bank

A bank is an institution, which deals in money, receiving it on deposit from customers, honoring customer's drawing against such deposit on demand,
collecting cheque for customers and lending or investing surplus deposit until they are required for repayment.

Simply, commercial bank means the bank, which deals in exchanging currency, accepting deposit, giving loans and doing commercial transactions. According to black's Law Dictionary "Commercial bank means a bank authorized to receive both demand and time deposits, to engage in trust services, to issue letter of credit, to rent time deposit boxes, and to provide similar services."

According to commercial bank Act 1974, Commercial bank means a bank which operates currency exchange transactions, accepts deposits, provides loan: performs, dealing, relating to commerce except are banks which have been specified for the co-operative, agricultural, industry of similar other specific objectives.

Commercial banks are the major component in the financial system. They work as the intermediary between depositors and lenders and facilitate in overall development of the economy with major thrust in industrial development.

Commercial bank came into existence mainly with the objectives of collecting the idle funds, mobilizing them into productive sector and causing and overall economic development. The bankers have the responsibility of safeguarding the interest of the depositors, the shareholders and the society they are serving. A sound banking system is important because of the key roles it plays in the economy, intermediation maturity transformation, facilitating payments, flows, credit allocation and maintaining financial discipline among borrowers.

The main activities of commercial bank are as follows:

- Accepting various types of deposits from people, institution or company.
- Providing loan to various productive sectors to earn a lot of profit from it.
- Acting as agency functions.
- Providing general utility functions.
- Providing overseas trending services.
- Providing information and other services.


### 2.2.2 Role of Commercial Banks in the Development of the Economy

In fact, the development of a country is linked with the economic development of that country. Economic development is connected with banking system. Without economic development, there is no possibility of raising the living standard of the people of that place. A great amount of capital needs to be utilized for the economic development. It is possible to utilize a great amount of capital only with the medium of commercial banks. Thus, we can say that development of the commercial banking system is the backbone of the economic development.

Commercial banks play and important role in directing the affairs of the economy is various ways. The operation of commercial banks records the economic pulse of the country. The size and composition of their transaction reflect the economic happening in the country. Commercial banks have played a vital role in giving the direction of economic growth over the time by financing the requirement of industries and trade in that country. By encouraging the thrift among the people, banks have fostered the process of capital formation in the country. In the context of deposit mobilization, commercial banks include the savers to hold their savings in the form of bank deposits thus help brining the scattered resources into the organized banking sector which and be allocated to the different economic activities. In this way, they help in country's capital assets formation. Through, their advances banks also help the creation of income out of which further saving by the community and further growth potentials emerge for the good of the economy. In a planned economy, banks make the entire planned productive process possible by providing funds to the public sector, joint sector or private sector of any type of organization. All employment income distribution and other objectives of the plan as far as possible subsumed into the production plan which banks finance.

The importance of commercial banks in directing the economic activities in the system is immense. Not only in the highly developed economics where the commercial and industrial activities are paralyzed in the absence of banks, even in the developing countries, most of the economic activities particularly or organized sectors are bank based. Therefore, in a nutshell, it can be said that the growth of the economy is tied up with the growth of the commercial banks in the economy.

### 2.3 Review of Related Studies

Here, in this part, the reviews of related studies conducted for the preparation of the study are presented. Various review of books, review of journals/articles and review of unpublished dissertation, theses have been presented below:-

The financial statement provides a summarized view of the financial operation of the firm. Therefore, much can be learnt about a firm and careful examination of its financial statement as invaluable documents. The analysis of financial statement is thus important aid to financial analysis. To measure the bank's performance in many aspects, we should analyze its financial indicator with the help of financial statement (Pandey, 1996:13).

Financial performance analysis is a process of evaluating the relationship between components parts of financial statement to be obtained a better understanding of a firm's position and performance (Metcalf \& Titard, 1987:32).

Financial ratio can be derived from the balance sheet and the income statement. They must be analyzed on a comparative basis. A comparison of ratio of the same firm over time uncovers leading clues in evaluating changes and trend in the firm's financial condition and profitability. Ratio may also be judged in comparison with those of similar firms in the same line of business and when appropriate, with an industry average and we can look to further progress in regard (Van Horne, 1988:125).

Financial performance analysis is the study of relationship among the various financial factors in a business as disclosed by a single set of statement and a study
of the trend of these facts as shown in a series of statement. By establishing a strategic relationship between the item of a balance sheet and income statement and others operative data, the financial analysis unveil the meaning and significance of such items (Ahuja, 2002:42).

### 2.3.1 Review of Journals/Articles

In this section, effort has been made to examine and review of some related journals/articles in different way, which are as follows;

Khadka, (2005) in the article of "Comparative Performance Evaluation of Commercial Banks" the author has concluded about JVB as joint venture banks (JVB) are new operationally more efficient and having superior performance while comparing with local bank better performance of JVB is due to their sophisticated technology, modern banking method and skill. Their better performance is also due to burden the local banks are facing due to government banking policy in rural areas and financing public enterprises. Local banks are efficient and have expertise in rural sector. But having a number of deficiencies local banks have to face growing constraints of socio economic and political system on one spectrum and that of issues and challenges of JVB commanding significant banking business on the other spectrum. He has further said that the government's liberalization policy also encourages the traditionally run domestic banks to enhance their efficiency and competitiveness through modernization mechanization via computerization and prompt customer service by setting them to the exposure of JVB.

Rai, (2006)in the article "Financial System of Nepal" he expressed his view that the commercial banks including foreign joint venture banks seen to be doing pretty well in mobilizing deposits. Like wise loans and advances of these banks are also increasing. But compared to the high credit needs particularly by the newly emerging industries the bank still seem to lack adequate funds. The banks are increasing their lending to non-traditional along with traditional sectors. He has also state that out of the commercial banks operating, NBL and RBB are operating
with nominal profit, the later turning towards, negative from time to time, because of non recovery of accrued interest, the margin between interest income and interest expenses is declining. They have heavy burden of personal and administrative overhead. On the other hand, foreign joint venture banks are functioning in an extremely efficient way. They are making huge profit year after year. Because of their effective persuasion of loans recovery, overdue and defaulting loans have been limited resulting in high margins between interest income and interest expenses. At the end of this article, he concludes that by its very nature of public enterprise, domestic banks could not compete with the private banks, so only remedy to the problem is to handover the ownership as well as the management of these banks to the private hands.

Nepal, (2010) in the article "Nepal ma Banijya Bank Upalabdhi tatha Chunanti" He concluded some major issue in local banks in comparison to recently established joint ventures banks. The study deals with whole banking system of Nepal in respect to their performance and profitability. Some of his findings relevant to this study are given as:

The deposit collection rate of local banks is very poor in comparison JVBs. The patterns of deposit are also different between these banks. The ratio of current deposits in local banks is $9.34 \%$ only, where the same as the joint venture banks is $52.5 \%$. But the fixed deposit ratio is very high in local banks.

Chaudhary, (2011) in the article, "Banking the Future on Competition" has found the same results that the all commercial banks are establishing and operating in urban areas which achievements are as follows:-

- Commercial banks are establishing and providing their services in urban areas only.
- They do not have interest to establish in rural areas. Only the branch of Nepal Bank Ltd and Rastriya Banijya Bank Ltd are running in those areas.
- Commercial banks are charging higher interest rate on lending.
- They have maximum tax concession.
- They do not properly analyze the credit system.

According to him, "Due to the lack of investment avenues, banks are tempted to invest without proper credit appraisal and on personal guarantee, whose negative side effect would show colors only after four or five years." He has further included that private commercial banks have mushroomed only in urban areas where large volume of banking transaction and banking activities are possible.

### 2.3.2 Review of Unpublished Dissertation

Dhakal, (2008), in his thesis entitled "Financial Performance of Commercial Banks and Returns to Investors: With special reference to BOK, EBL, SCBNL, NIBL, NABIL" has pointed out following objectives:

- To evaluate Liquidity position of these Banks.
- To analyze comparative financial performance of these banks.
- To study comparative position of selected banks.
- To offer a package of suggestion to improve the financial performance.

Research Methodology, In this study she used the secondary data such as annual report of sample banks, various articles, journals, newspapers etc. The researcher used the different tools like financial tools \& statistical tools.

## Major Findings of this study are as follows:

- Commercial Bank except SCBNL and NABIL are not maintaining constant DP Ratio, It is recommended to maintain a constant DP Ratio so as to have the confidence of general shareholders.
- Net income of SCBNL is the highest and that of BOK is lowest during the study period. SCBNL has highest EPS and that of BOK is the lowest. SCBNL and NABIL are continuously paying the dividend maintaining higher DP Ratio. SCBNL provides the highest return on equity as compared to other commercial banks under study.

Bohara, (2009), in his thesis entitled "A comparative study of financial performance of NIBL, HBL, SCBNL and $E B L^{\prime \prime}$, has pointed out following objectives.

- To study the present of the four joint venture banks
- To do the comparative study about the financial performance of these banks with regard to-their profitable liquidity, efficiency and capital structure.
- To provide recommendation and suggestion on the findings to improve financial performance of these banks.

Research Methodology, As per the requirement of this study he used the secondary data, such as different articles bulletins, news, and financial report etc. He also used different financial as well as statistical tools.

## Major Findings of the study are as follows:

- Among all the sample banks, HBL has the lowest ratio and EBL has not mobilized its assets into profit generating projects.
- SCBNL has been successful in earning more net profit by the proper use of its available assets.
- EBL with the highest ratio has been successful in generating more interest by the proper use of its available assets.
- EBL and HBL seem to have held more cash and bank balance rather than other commercial banks.

Rana, (2010) in his thesis entitled "A comparative analysis of financial performance of NABIL and SCBNL", has pointed out following objectives.

- To evaluate liquidity position of both banks.
- To analyze comparative financial performance of both banks.
- To study the comparative position of both banks.
- To offer a package of suggestion to improve the financial performance
- To identity the relationship between interests earned and operating profit.

Research Methodology, According to the nature of the study requires primary as well as secondary data are collected through questionnaire statistical tools as well as financial questions propositions models are used according to necessity.

## Major Finding of this study are as follows:

- SCBNL has efficiently operated its long-term fund, deposit and assets to generate more profits.
- Liquidity position of NABIL bank is favorable in many cases it seems excessive. The proposed recommendation for these banks are to reduce its excessive non-performing assets (Cash and bank balance) and invest on the income generating current assets (Treasury bills), while SCBNL must strength the liquidity position.
- Comparatively SCBNL's profit ability position is better than that of NABIL.

Singh, (2011) in his thesis entitled "A comparative study on financial performance of HBL and SCBNL" has pointed out following objectives.

- To analyze comparative financial performance of both banks.
- To evaluate liquidity position of both banks.
- To identity the relationship between interests earned and operating profit.
- To offer a package of suggestion to improve the financial performance.

Research Methodology, The study of the thesis has been taken from secondary data, he used financial tools to examine the financial performance of sample banks.

## Major findings of this study are as follows:

- Current ratio of both the banks are below the standard, this might effect the liquidity position of these banks.
- SCBNL's loan and advances to total deposits ratio are significantly lower than that of HBL.
- SCBNL is strongly recommended to follow liberal lending policy and invest more and more percentage amount of total deposits in loan and advances.
- HBL is strongly recommended to increases it's earning per share and dividend per share to keep investors within the bank.

Yadav, (2012) in her thesis entitled "Financial performance of Nepal Investment Bank Limited", has tried to summarize the financial performance of NIBL. And she has pointed out the following objectives:

- To evaluate liquidity position of NIBL.
- To analyze the financial performance of this bank.
- To offer a package of suggestion to improve the financial performance
- To identity the relationship between interests earned and operating profit.

Research Methodology, As we know for the study of the thesis we need different data, news, bulletins, report etc, as per the requirement he utilized the secondary data from different sources like financial report from sample banks, taken the review from different journals, old thesis etc. He also used statistical as well as financial tools to compare financial performance of sample banks.

## Major Findings of the study are as follows:

- The result of the analysis indicates that the bank had the high debt equity ratio which again exhibits that the creditors have invested more in the bank than the owners.
- The result of the analysis indicates that the bank has better mobilization of saving deposits in loans and advances for income generating purpose.

Rai, (2013) in his thesis entitled "A comparative study on Financial Performance of Nepal Bangladesh Bank Limited and other Joint Venture Banks" has pointed out following objectives.

- To analyze the relationship between loan and advance and total investment with other financial variable of NB bank and compare them with NABIL and NBL.
- To evaluate the liquidity, asset management efficiency, profitability and risk position of NB bank in comparison to NABIL and NBL.

Research Methodology, In this study the researcher used the secondary data such as annual report of sample banks, various articles, journals, newspapers etc, and used the different tools like financial tools such as ratios analysis \& statistical tools such as mean, median, S.D, C.V and hypothesis test.

## Major Findings of the study are as follows:

- NB bank has good deposit collections, it has better liquidity position.
- It has made enough loan and advances but it has the negligible amount of investment in government securities.
- Credit risk ratio, interest risk ratio, capital risk ratio and profitability position of NB bank is comparatively worse than NABIL and NBL.
- There is significant relationship between deposit and loan and advance, outside assets and net profit of NB bank.


### 2.4 Research Gap

Large numbers of research are available bearing the same topic, "A comparative analysis of financial performance of commercial Banks". I will draw insights from them. However, the researcher will sustain gap by covering the relevant data and information from the year 2007/08 to 2011/12. Moreover, the researcher has selected two commercial banks of Nepal as sample banks i.e. Everest Bank Ltd. and Nepal Investment Bank Ltd. That itself demonstrates the gap of this research from the previous one because the researcher has not found any research done in these banks in collective form. Under this topics many researcher have been done but none of the researcher undertaken regarding the case study of financial performance between the Everest Bank Ltd and Nepal Investment Bank Ltd. These banks are leading commercial banks as compared to other commercial banks by which we can find for the perfect comparison between highly growing commercial
bank rather than rapidly growing new commercial banks. 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.

EBL and NIBL are the leading 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 performances are 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. This research work will help to acquire knowledge regarding tools and technique used and extra knowledge for the further researchers who are going to study in the topics related to the financial performance of commercial bank.

## CHAPTER-III

## RESEARCH METHODOLOGY

Research in common parlance refers to a search for knowledge is composed by 're' and 'search' where 're' means repeatedly or again and again and 'search' means to investigate or find. Research methodology is a way to systematically solve the research problem.

Research methodology may be defined as "a systematic process that is adopted by the researcher in studying problem with certain objective and view". In other word, research methodology describes the methods and process applied in the entire aspect of the study focus of data, data gathering instrument and procedure, data tabulating and processing and methods of analysis. It is really a method of critical thinking by defined and redefining the problems, formulating hypothesis or suggested solution and collecting and organizing and evaluating data, making deduction and making conclusions.

In addition, "Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In this study, the various steps are generally adopted by a researcher in studying his/her research problem along with the logic behind them" (Kothari, 1990:10).

Research methodology is a path from which we can solve research dilemma systematically to accomplish the basic objective of the study. It consists of a brief explanation of research design, nature and sources of data, method of data collection and methods of tools used for analyzing data.

### 3.1 Research Design

A research design is the arrangement of conditions for collection and analysis of data that aim to combine relevance to the research purpose with economy in procedure. Research design in the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to objective of this
study. To achieve the objective of this study, descriptive and analytical research design has been used.

It is the process which gives us an appropriate way to reach research goal. It includes definite procedures and techniques which guide in sufficient way for analyzing and evaluating the study. This study is carried out by using both quantitative and qualitative analysis methods. Mostly, secondary data has been used for analysis, but the discussion and personal interview with the concerned employees of the selected banks are also used for qualitative analysis. Hence, research design of this study is based on descriptive and analytical method.

### 3.2 Population and Sample

The population refers to the industries of the same nature and its services and product in general. Thus, total of 32 commercial banks operating in Nepal constitute the population of the data and the two banks under study constitutes the sample for the study. The sample size represents almost 6.50 of the total population. The sample bank name are as follows;

- Everest Bank Ltd.
- Investment Bank Ltd.


### 3.3 Nature and Source of Data

For the purpose of this study, data are collected mainly from the secondary as well as primary sources. In the study two types of data are collected which are:

## Primary Data

This is the first hand information bearing on any research which has been collected by the researcher or his agents or assistant. These are original observation collected for the first time. Such data facilitate original investigation and observation leading to useful and valuable result.

## Secondary Data

The next method of collecting the data is secondary source. The secondary data are based on the second hand information. Secondary data were gathered much more quickly than primary. Secondary source were bulletins and newspapers of selected banks, annual reports, official document, reference material collected from library.

### 3.4 Method of Data collection

It indicates the sources of data and how they collected. In this study data are collected through published sources. They were collected from the correspondent offices and their respective websites.

The annual reports of EBL for the period of five years were obtained from the field visit of its Human Resources Department at its head office located at Lazimpat, and the annual reports of Investment Bank for the period of five years were obtained from the bank website. The data regarding the profile of EBL and NIBL and other related documents were collected from internet websites. Unpublished master's thesis, books, research papers, articles, journals have been collected mainly form Centre Library of Tribhuvan University, library of Shanker Dev Campus and NRB magazines and newspapers were from concerned authorities.

After collecting data, as necessarily required, they were separated and analyzed presentation and analysis of the collected data is the main theme of the research work. Collected raw data were first presented in systematic manner in tabular forms and then analyzed by applying different financial and statistical tools to achieve the research objectives. Besides these, some graph, charts and tables have been presented to analyze and interpret the finding of the study.

### 3.5 Method of Data Analysis

Various financial and statistical tools will be used to complete the research study such as ratio analysis, mean, standard deviation, coefficient of variance etc. For presentation purpose, different types of tables, charts, figures and graphs are used as per necessary.

### 3.5.1 Financial Tools

Financial analysis is the process of identifying the financial strengths and weaknesses of the organization by properly establishing relationships between the items of the balance sheet and the profit and loss account.

Ratio analysis is a powerful tool of financial analysis. A ration is designed as "the indicated quotient of two mathematical expressions" and as "the relationship between two or more things". In financial analysis, ratio is used as a benchmark for evaluating the financial position and performance of a firm.

Several ratios, calculated from the accounting data, can be grouped into various classes according to the financial activity and function to be evaluated.

## 1. Liquidity Ratios

Liquidity ratios are used to judge the ability of banks to meet its short term liabilities those are likely to mature in the short period. With the help of liquidity ratios much insight can be obtained into present cash solvency of the banks and its ability to remain solvent in the event of adversities, it is the measurement of speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations.

The firm must maintain its satisfactory liquidity position to satisfy the credit needs of the community, to meet demand for deposit, withdraws, pay maturity obligation in time and convert non cash to satisfy immediate needs with out loan to Bank \& consequent impact in long run profit. These ratios reveal the short-term liquidity position of bank.

The following ratios are evaluated under liquidity ratios:

## a) Current Ratio:

This ratio indicates the ability of the bank to meet its current obligation. This is the main important tool to measures the liquidity position of the financial institution.

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

## b) Cash and Bank Balance to Total Deposit Ratio (Cash Reserve Ratio):

Cash and bank balance are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to take immediate payment to the depositor. It is computed as follows:

Cash Reserve Ratio $=\frac{\text { Cash and Bank Balance }}{\text { Total deposit }}$
c) Cash and Bank Balance to Total Assets Ratio:

Cash and bank balances are the most liquid assets held by a bank. This ratio reflects the proportion of cash and bank balance out of total assets. It is calculated by dividing cash and bank balance by total assets.

Cash and Bank Balance to Total Assets Ratio $=\frac{\text { Cash and Bank Balance }}{\text { Total Assets }}$

## d) Investment on Govt. Securities to Current Assets Ratio:

This ratio shows that how much amount has been the part of the total current assets on investment on government securities which is risk free assets. This ratio is calculated by dividing the investment on government securities by current assets which is shown as follows:

Investment on Govt. securities to current assets ratio $=$

## Investment on Govt. Securities

Current Assets

## e) Loan and Advances to Current Asset Ratio:

Loans and advances to current assets ratio measure the extent to which the banks are successful in utilizing the outsiders' funds for the profit generating purpose. The following formula is used to determine the loans and advances to current asset ratio.

Loan and advances to Current asset ratio $=\frac{\text { Loan and advances }}{\text { Current Asset }}$

## 2) Assets Management Ratios:

Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted turnover into sales. Asset management ratio measures how efficiently the bank manages the resources at its command. The following ratios are used under this asset management ratio.

## a) Loan and Advances to Total Deposit Ratio:

This ratio is calculated to find out that which banks are able to utilizing their total deposits on loan and advances for profit generating purpose. This ratio can be obtained by dividing loan and advances by total deposits, which can be states as,

Loan and Advances to Total Deposit Ratio $=\frac{\text { Loan \& Advance }}{\text { Total Deposits }}$

## b) Total Investment to Total Deposit Ratio:

This ratio implies the utilization of firm's deposit on investment in government securities and share debentures of other companies and bank.

This ratio can be calculated by dividing total investment by total deposit. Which can be states as? Total Investment

Total Investment to Total Deposit Ratio $=\frac{\text { Total Investment }}{\text { Total Deposits }}$
Hence, total investment consist investment on government securities, investment on debenture and bonds, share in subsidiary companies, share in other companies and other investment.

## c) Loan and Advances to Total Assets Ratio:

Loan and advances indicates the ability of any bank to canalize its deposits in the form of loan and advances to earn high return. This ratio is computed by dividing loan and advances by total Assets, which can be states as,

Loan and Advances to Total Assets Ratio $=\frac{\text { Loan \& Advance }}{\text { Total Assets }}$
d) Investment on Government Securities to Total Asset Ratio:

This ratio shows that bank's investment on government securities in comparison to the total working fund. This ratio can be computed by dividing investment on government securities by total working fund, which can be presented as, Investment on Government Securities to Total Working Fund = Investment on Government Securities

Total Working Fund

## 3) Profitability Ratios:

Profitability ratios are used to indicate and measure the overall efficiency of a firm in terms of profit and financial performance. For better performance, profitability ratios of firm should be higher. Under this, the following profitability ratio has been computed.
a) Return on Loan and Advances Ratio:

This ratio indicates how efficiently the bank utilizes its resources in the form loans and advances. This also measures the earning capacity of its loans and advances. This ratio is computed by dividing Net Profit (Loss ) by Loans and Advances which can be expressed as:

Return on Loan and Advances Ratio $=\frac{\text { Net Profit (Loss) }}{\text { Loan \& Advance }}$

## b) Return on Total Asset Ratio (ROA):

This ratio measures the overall profitability of all working fund i.e. Total assets. It is also known as Return on Assets (ROA). This ratio is calculated by dividing net profit (loss) by total working funds. This can be presented as,

Return on Total Working Fund Ratio $($ ROA $)=\frac{\text { Net Profit (Loss) }}{\text { Total Working Fund }}$

## c) Total Interest Earned to Total Operating Income Ratio:

This ratio measures the volume of Interest Income in Total operating Income of the bank. The high ratio indicates the high contribution made by the Lending and Investing and Vice Vera. This ratio can be computed by dividing Total Interest Income by Total operating Income presented as under, Total Interest income to Total Operating Income Ratio $=\frac{\text { Total Interest Income }}{\text { Total Operating Income }}$

## d) Total Interest Paid to Total Asset Ratio:

This ratio is computed to find out percentage of interest paid to Total Assets (Working Fund). Higher ratio implies better performance of the bank in terms of interest paid on its total working funds. This fund is computed by dividing Total Interest paid by Total Working Fund can be presented as

Total Interest Paid to Total Working Fund Ratio $=\frac{\text { Total Interest Paid }}{\text { Total Working Fund }}$

## 4) Activity Risk Ratios:

Risk and uncertainty is a part of business loss. All the business activities are influenced by risk, so business organization cannot achieve a good return as per their desires. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So the banks options for high profit have to accept the risk and manage it efficiently. A bank has to have ides of the level of risk of risk that one has to bear while investing its funds.

## a) Credit Risk Ratio:

Credit Risk Ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition, Credit Risk ratio is expressed as the percentage of Non- Performing Loan to Total Loan and Advances.

Bank utilizes its collected fund by providing credit to different sections. There is risk of default or non- repayment of loan. While making investment, bank examines the credit risk involved in the project. The Credit Risk Ratio shows the proportion of non-performing assets in total Loan and Advances of the bank and vice- versa.

Credit Risk Ratio $=\frac{\text { Loan \& Advance }}{\text { Total Assets }}$

## b) Liquidity Risk Ratio:

The Liquidity Risk of the bank defines its Liquidity needs for deposit. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposit as the liquidity needs. The ratio of Cash and Bank Balance to Total Deposit is an indicator of bank's liquidity of need. This ratio is low if funds are kept idle as sash balance but this reduces profitability increase and also the risk. Thus, higher liquidity ratio indicates less profitable return and viceversa. This ratio is calculated as below:

Liquidity Risk Ratio $=\frac{\text { Cash and Bank Balance }}{\text { Total Deposit }}$

### 3.5.2 Statistical Tools

Some important statistical tools are used to achieve the objective of the study. In this study, statistical tools such as mean, standard deviation, and co-efficient of variance has been used.

## 1. Arithmetic Mean:

Arithmetic mean is an average of a given set of data this is divided by the number of Observation/years. The arithmetic mean (AM) is denoted by $\overline{\mathrm{X}}$.
$\operatorname{Mean}(\bar{X})=\frac{\sum X}{n}$
n = Number of Year
$\sum \mathrm{X}=$ Sum of X series

## 2. Standard Deviation:

The coefficient of variation is the most commonly used measure of relative variation. It is used in such problems where the researcher wants to compare the variability of more than two years. Greater the C.V, the variable or conversely less consistent, less uniform, more consistent, more uniform, more stable and homogeneous.

Standard Deviation $(\sigma)=\sqrt{\frac{\Sigma \mathrm{d}^{2}}{\mathrm{n}}}$
Where, $d=X-\bar{X}$

## 3. Coefficient of Variance:

The coefficient of variation is the most commonly used measure of relative variation. It is used in such problems where the researcher wants to compare the variability of more than two years. Greater the C.V, the variable or conversely less consistent, less uniform, more consistent, more uniform, more stable and homogeneous.

Coefficient of Variance $(\mathrm{CV})=\frac{\sigma}{\overline{\mathrm{X}}} \times 100$

## 4. Coefficient of Correlation:

This statistical tool has been used to analyze, identify and interpret the relationship between two or more variables. It interprets whether two or more variables are correlated positively or negatively. Statistical tool analyses the relationship between those variables and helps the selected banks to make appropriate financial performance regarding to profit maximization and deposit collection; fund mobilization through providing loan and advances.

For the purpose of decision-making, interpretation is based on following term:

- When $\mathrm{r}=1$, there is perfect positive correlation.
- When $\mathrm{r}=-1$, there is perfect negative correlation.
- When $\mathrm{r}=0$, there is no correlation.
- Nearer the value of r to +1 , closer will be the relationship between two variables and nearer the value of r to 0 , lesser will be the relationship.

Coefficient of Correlation $(r)=\frac{\mathrm{d}_{1 .} \mathrm{d}_{2}}{\sqrt{\sum \mathrm{~d}_{1}{ }^{2} \cdot \sum \mathrm{~d}_{2}{ }^{2}}}$

Where,
$\mathrm{d}_{1}=\mathrm{X}_{1}-\overline{\mathrm{X}}_{1}$
$\mathrm{d}_{2}=\mathrm{X}_{2}-\overline{\mathrm{X}}_{3}$

Under this topic, Karl Pearson's correlation coefficient is used to measure the degree of relationship between the following variables:

## 5. Trend Analysis:

Among the various methods of determining trend of time series, The most popular and mathematical method is the least square method. Using this least square method, it has been estimated the future trend values of
different variables. For the estimation of linear trends line following formula can be used:
$Y=a+b x$

Where, $\quad Y=$ Dependent Variable
$\mathrm{X}=$ Independent Variable
$\mathrm{a}=\mathrm{Y}$ - Intercept
$b=$ Slope of the trend line

## CHAPTER-IV

## DATA PRESENTATION AND ANALYSIS

### 4.1 Financial Analysis

Introduction, review of literature and research methodology are presented in the previous chapters that provide the basic inputs to analyze and interpret the data. Presentation and analysis of data is the main body of the study. In this chapter collected data are analyzed and interpreted as per the stated methodology in the previous chapter. The main sources of data are secondary data, which are mainly related to the financial performance of EBL and NIBL.

### 4.1.1 Liquidity Ratio

Commercial bank must maintain its satisfactory liquidity posting to satisfy the credit needs of community, to meet demands for deposit-withdrawals, pay maturity obligation in time and convert non-cash assets into cash to satisfy immediate needs without loss to bank and consequent impact on long-run profit. Liquidity ratio is mainly used to analyze the short-term strength of commercial banks.

### 4.1.1.1 Analysis of Current Ratio

This ratio measures the liquidity position of the commercial banks. It indicates the ability of Banks to meet the current liquidity.

Under Table 4.1 shows the current ratio of selected commercial banks during the study period. In the case of EBL the C.R. is high in 2010/11 i.e 1.41 , NIBL has high in 2010/11 i.e. 8.22. In an average, liquidity position of NIBL is greater than EBL others sample banks i.e. 7.96. Due to high mean ratio NIBL is better than others banks.

Table: 4.1

## Current Assets to Current Liability (in times)

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 1.39 | 7.82 |
| $2008 / 09$ | 1.35 | 7.86 |
| $2009 / 10$ | 1.25 | 7.88 |
| $2010 / 11$ | 1.41 | 8.22 |
| $2011 / 12$ | 1.01 | 8.05 |
| Total | 6.41 | 39.83 |
| Mean | 1.28 | 7.96 |
| S.D | 0.16 | 0.17 |
| C.V | 0.13 | 0.02 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 1
Table no. 4.1 shows NIBL have better liquidation position that then EBL. EBL have not good liquidation position because the standard ratio is $1: 1$ where only NIBL meet that. Generally, banks require more liquid assets with compare to current liabilities in order to provide better bank service but only NIBL is in better liquidity position than liquidity position of other sample banks.

### 4.1.1.2 Cash and Bank Balance to Total Deposit Ratio

Cash and Bank Balance to Total Deposit Ratio indicates the bank ability to meet their daily requirement of depositors. Higher ratio shows the greater ability of the firms to meet customer demands on their deposits. Following table shows cash and bank balance to total deposit of sample banks during the study period.

Table: 4.2
Cash and Bank Balance to Total Deposit Ratio

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 0.13 | 0.12 |
| $2008 / 09$ | 0.11 | 0.16 |
| $2009 / 10$ | 0.18 | 0.18 |
| $2010 / 11$ | 0.21 | 0.14 |
| $2011 / 12$ | 0.15 | 0.15 |
| Total | 0.78 | 0.75 |
| Mean | 0.16 | 0.15 |
| S.D | 0.04 | 0.02 |
| C.V | 0.25 | 0.14 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 2

Table no 4.2 revels that the Cash and Bank Balance to Total Deposit Ratio of sample banks where all sample banks are in fluctuating trend. The highest ratio of EBL and NIBL are 0.21 time in FY 2010/11 and 0.18 in FY 2009/10 respectively. Similarly, the lowest ratio of EBL and NIBL respectively in different year.

The mean ratio of EBL and NIBL are 0.16 times and 0.15 times respectively. EBL has higher ratio than the other sample banks, which shows its greater ability to pay depositors money as they want. Similarly, EBL have highest sd 0.04 times and NIBL have 0.02 times.

Table no 4.2 have been concluded that the cash and bank balance position of EBL with respect to NIBL is better in order to serve its customer's deposits. It implies the better liquidity position of EBL from the viewpoint of depositor demand but NIBL is also near about EBL. In contrast a high ratio of cash and bank balance may be undesirable which indicates the bank's iNIBLity to invest its funds
income generating areas. Thus EBL should invest in more productive sectors like short-term marketable securities insuring enough liquidity which will help the bank to improve its profitability.

### 4.1.1.3 Cash and Bank Balance to Current Assets Ratio

Cash and Bank Balance are the most liquid or quick assets. Cash and bank balance to current assets ratio represents the liquidity capacity of the firms as per cash and bank balance. Higher the ratios, better the ability of the firms to meet the daily cash requirement of their customers. But high ratio is not so preferred to the firms because firms have to manage the cash and bank balance to current asset ratio in such manner that firm may not be paid interest on deposits and may not have liquidity crisis.

Following the states the cash and bank balance to current assets of sample banks during the study period.

Table: 4.3
Cash and Bank Balance to Current Assets

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
|  |  | 0.11 |
| $2007 / 08$ | 0.12 | 0.16 |
| $2008 / 09$ | 0.18 | 0.14 |
| $2009 / 10$ | 0.20 | 0.12 |
| $2010 / 11$ | 0.14 | 0.13 |
| $2011 / 12$ | 0.76 | 0.66 |
| Total | 0.15 | 0.13 |
| Mean | 0.04 | 0.02 |
| S.D | 0.27 | 0.14 |
| C.V |  |  |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 3

Table no 4.3 reveals that cash and bank balance to current assets ratio of EBL and NIBL is in fluctuating trend. The mean ratio and sd of EBL is higher than NIBL. The higher mean ratio shows EBL's liquidity position is better than that of others
banks. That indicates that it has more inconsistency in the ratios in comparison to others.

Regarding the above analysis, it can be concluded that EBL has a little bit better ability to meet daily cash requirements of their customers but there is not any fix policy to maintain the standard ratio of cash balance over the period of both sample banks.

### 4.1.1.4 Investment on Government Securities to Current Assets Ratio

This ratio examines that portion of a commercial bank's current assets, which is invested on different government securities. More or less, each commercial bank is interested to invest their collected funds on different securities issued by government in different times to utilize their excess funds and for other purpose. Although those securities can be sold easily in the financial market or they can be converted into cash, they are liquid assets like cash and bank balance. It shows the portion of current assets to banks that are invested on various securities. Government securities are the more secured investment alternatives. These securities are also called risk less investment but less return is generated than others risky assets.

Table: 4.4
Investment on Government Securities to Current Assets

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 0.18 | 0.35 |
| $2008 / 09$ | 0.13 | 0.29 |
| $2009 / 10$ | 0.10 | 0.27 |
| $2010 / 11$ | 0.07 | 0.27 |
| $2011 / 12$ | 0.11 | 0.24 |
| Total | 0.48 | 1.41 |
| Mean | 0.12 | 0.28 |
| S.D | 0.04 | 0.04 |


| C.V | 0.35 | 0.35 |
| :---: | :---: | :---: |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 4
Table no 4.4 shows investment on government securities to current assets ratio of sample banks. EBL have fluctuating type ratios and NIBL is in decreasing trend. The table shows the highest ratio of EBL is 0.18 times in FY 2007/08 and lowest is 0.07 times in FY 2010/11. In the same way, the ratio of NIBL is 0.35 times in FY 2007/08 and lowest is 0.24 times in FY 2011/12.

The mean ratio of EBL is 0.12 i.e. 12 percent which is lower than the mean ratio of NIBL 0.28 i.e. 28 percent. It means NIBL has invested more money in risk free assets than that of other sample banks. In another words in other word less mean ratio means it has emphases on more loan and advances and other short term investment than investment in govt. securities. For minimization of investment risk, other banks should divert its investment in govt. securities. Similarly, S.D. and C.V is similar of EBL and NIBL i.e 0.04 and 0.35 respectively.

### 4.1.1.5 Loan and Advances to Current Assets Ratio

To make a high profit mobilizing its fund in the best way, a commercial bank should not keep its all collected funds as cash and bank balance but they should be invested as loan and advances to the customers. In the present study loan \& advances represent to local and foreign bills discounted and purchased and loans, cash credit and overdraft in local currency as well as inconvertible foreign currency.

Table: 4.5
Loan and Advances to Current Assets

| F/Y | EBL | NIBL |
| :---: | :---: | :---: |
|  |  |  |
| $2007 / 08$ | 0.69 | 0.32 |
| $2008 / 09$ | 0.73 | 0.33 |
| $2009 / 10$ | 0.70 | 0.32 |
| $2010 / 11$ | 0.71 | 0.33 |
| $2011 / 12$ | 0.37 | 0.25 |
| Total | 3.21 | 1.55 |


| Mean | 0.64 | 0.31 |
| :---: | :---: | :---: |
| S.D | 0.15 | 0.03 |
| C.V | 0.24 | 0.11 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 5

Table no. 4.5 shows the total mean, standard deviation and coefficient of variation of loan \& advances to current assets ratio of commercial banks. Through this table loan \& advances to current assets ratios of the sample CBS are analyzed. In case of NIBL loans and advances to current asset ratios are in decreasing trend and after FY 2009/10 it started to increase in decreasing trend. Similarly EBL ratio has fluctuating trend.

### 4.1.2 Assets Management Ratio

A commercial bank must be able to manage it's assets very well to earn high profit, so to satisfy it's customers and for own existence. Assets management ratio measures how efficiently the bank manages the resources at its commands. Through following ratios, assets management ability of banks has been measured.

### 4.1.2.1 Loan and Advance to Total Deposit Ratio

This ratio actually measures the extent to which the banks are successful to mobilize the total deposit on loan and advances for the purpose of profit generation. A higher ratio of loan and advances indicates better mobilization of collection deposit and vice-versa. But it should be noted that too high ratio might not be better from its liquidity point of view. Following Table shows the loan and advances to total deposit ratio of related banks.

Table: 4.6
Loan and Advance to Total Deposit

| F/Y | Banks | EBL |
| :---: | :---: | :---: |
|  |  | NIBL |
| $2007 / 08$ | 0.75 | 0.67 |
| $2008 / 09$ | 0.76 | 0.67 |
| $2009 / 10$ | 0.72 | 0.74 |
| $2010 / 11$ | 0.75 | 0.70 |
| $2011 / 12$ | 0.76 | 0.77 |


| Total | 3.73 | 3.53 |
| :---: | :---: | :---: |
| Mean | 0.75 | 0.71 |
| S.D | 0.02 | 0.04 |
| C.V | 0.02 | 0.06 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 6
Table no 4.6 shows that the loan and advances to total deposit ratio of EBL is in fluctuating trends and NIBL is increaseing trends except 2010/11. EBL has higher ratio than other banks in study period ie 0.75 . It indicates the better mobilization of deposit by EBL. It reveals that the deposit of EBL is quickly converted in to loan and advances to earn income. According to NRB directives above $70 \%$ to $90 \%$ of loan and advances to total deposit ratio is able to better mobilization of collected deposit. So all of the year the EBL and NIBL has met the NRB requirement or it has utilized its deposit to provide loan.

The mean, S.D. and C.V of NIBL is $71 \%, 0.04$ and 0.062 and similarly, EBL has $0.75,0.02$ and 0.027 .

### 4.1.2.2 Total Investment to Total Deposit Ratio

Commercial banks and financial companies invest their collected funds in various government securities and other financial or non-financial companies. This ratio measures how successfully and efficiently the banks are mobilizing their funds on investment in various securities. This ratio of sample banks are calculated and presentation below.

Table: 4.7
Total Investment to Total Deposit

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 0.20 | 3.83 |
| $2008 / 09$ | 0.14 | 3.11 |
| $2009 / 10$ | 0.10 | 0.29 |
| $2010 / 11$ | 0.07 | 0.30 |
| $2011 / 12$ | 0.12 | 0.26 |


| Total | 0.62 | 7.80 |
| :---: | :---: | :---: |
| Mean | 0.12 | 1.56 |
| S.D | 0.047 | 1.77 |
| C.V | 0.37 | 1.13 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 7
Table no 4.7 shows that total investment to total deposit ratio of EBL and NIBL. Both banks have fluctuating trend of total investment to total deposit ratio. Higher ratio of EBL is 0.20 percent in FY 2007/08 and lowest ratio is 0.07 percent in FY 2010/11 and in the same way the highest ratio of NIBL $3.83 \%$ percent in FY 2007/08 and lowest ratio is $0.26 \%$ percent in FY 2011/12.

The mean ratio of EBL and NIBL is 0.12 and 1.56 respectively so NIBL has higher ratio. It signifies NIBL has successfully allocated its deposit in investment portfolio. The C.V. also higher than others.

### 4.1.2.3 Loan and Advances to Total Assets Ratio

A commercial bank's working fund plays very active role in profit generation through fund mobilization. This ratio reflects the extent to which the banks are successful in mobilizing their total assets on loan and advances for the purpose of income generation. A high ratio indicates better mobilization of funds as loan and advance and vice-versa. The following table shows loan and advances to total assets of sample banks as follows.

Table: 4.8
Loan and Advances to Total Assets

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 0.64 | 0.57 |
| $2008 / 09$ | 0.68 | 0.58 |
| $2009 / 10$ | 0.65 | 0.63 |
| $2010 / 11$ | 0.67 | 0.62 |


| $2011 / 12$ | 0.67 | 0.65 |
| :---: | :---: | :---: |
| Total | 3.30 | 3.05 |
| Mean | 0.66 | 0.61 |
| S.D | 0.02 | 0.04 |
| C.V | 0.0250 | 0.0589 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 8
Table no 4.8 shows the loan and advances to total assets ratio of sample banks during the study period. Loan and advances to total assets of EBL and NIBL are in fluctuating trend. While observing their ratios; EBL is better mobilizing of fund as loan and advances and it seems quite successful in generating higher ratio in each year. The mean S.D and C.V of EBL and NIBL are $0.66 \%, 0.02 \%, 0.025 \%$ and $0.61,0.04$ and 0.0589 respectively.

### 4.1.2.4 Investment on Government Securities to Total Assets ratio

It is not possible to apply all collection, deposit and other resources in to loan and advances for the banks. Therefore, they arrange their total assets in various sectors. Among all possible sectors, investment on government securities is one, which is very less risky. Invest on government securities to total assets ratio measures how successfully selected banks have applied their total assets on various forms of government securities in profit maximization and risk minimization point of view. The higher ratio represents the better position of fund mobilization into investment on government securities and vice-versa.

Table: 4.9
Investment on Government Securities to Total Assets

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 0.17 | 0.15 |
| $2008 / 09$ | 0.12 | 0.10 |
| $2009 / 10$ | 0.09 | 0.04 |
| $2010 / 11$ | 0.07 | 0.11 |


| $2011 / 12$ | 0.10 | 0.11 |
| :---: | :---: | :---: |
| Total | 0.55 | 0.52 |
| Mean | 0.11 | 0.10 |
| S.D | 0.04 | 0.04 |
| C.V | 0.3483 | 0.3768 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 9
Table no 4.9 shows that the investment on government treasury bills to Total assets of EBL and NIBL are in fluctuating trend. The highest ratio of EBL and NIBL are $0.17 \%$ and $0.15 \%$, respectively. The lowest ratio EBL and NIBL are $0.07 \%$ and $0.04 \%$ respectively.

From the table we notice that mean ratio of EBL and NIBL are $0.11 \%$ and $0.10 \%$ respectively. The mean of EBL is has higher than NIBL. It means EBL has invested more money in risk free assets than that of others NIBL. In another words EBL has emphases on more loan and advances and other short-term investment than investment in govt. securities. For minimization of investment risk, EBL should divert its investment in govt. securities.

### 4.1.3 Profitability Ratio

The major performance indicator of any firm is profit. The objective of investment policy is to make good return. Any organization has to desire of earning high profited which helps to survive the firm and indicates the efficient operation of the firm. Profit is the essential part of business activities to meet internal obligation, overcome the future contingencies, make a good investment policy, expand the banking transaction etc. Profitability ratios are the best indicators of overall efficiently. Here, those ratios are presented and analyzed which are related with profit as well as fund mobilization. Through the following ratios, effort has been made to measure the profit earning capacity of EBL and NIBL.

### 4.1.3.1 Return on Loan and advances

Every financial institution tries to mobilize their deposits on loan and advances properly. So this ratio helps to measure the earning capacity selected banks. Returns on loan and advances ratio of selected banks are presented as follows.

Table: 4.10
Return on Loan and advances

| F/Y | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 0.022 | 0.043 |
| $2008 / 09$ | 0.025 | 0.035 |
| $2009 / 10$ | 0.027 | 0.037 |
| $2010 / 11$ | 0.030 | 0.035 |
| $2011 / 12$ | 0.030 | 0.035 |
| Total | 0.133 | 0.186 |
| Mean | 0.027 | 0.037 |
| S.D | 0.004 | 0.004 |
| C.V | 0.1359 | 0.0954 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 10

Table no 4.10 shows that return on loan and advances ratio of EBL is in increasing trend and NIBL is in fluctuating trend. The highest ratio of EBL is $0.03 \%$ in the year 2010/11 and 2011/12 and lowest ratio is $0.02 \%$ in year 2007/08. The mean ratio is $0.027 \%$. Whereas highest ratio of NIBL is $4.3 \%$ in year 2007/08 and lowest ratio is $3.5 \%$ in above three years. These both sample banks show the normal
earning capacity in loan and advances and same earning capacity in form of loan and advances.

From the Table 4.10 researcher notice that NIBL has higher ratio of average in the study period. It can be concluded that NIBL have utilized the loan and advance for the profit generation in same earning capacity. However EBL seem to have poor performance in order to have returns from loan and advances because of heavy less than five percents of return on loan and advances as five percent is benchmarking ratio in this case.

### 4.1.3.2 Return on Total Assets

This ratio measures the overall profitability of all working fund i.e. Total assets. A firm has to earn satisfactory return on working funds for its survival. The following table shows return on total assets ratio of selected banks.

Table: 4.11
Return on Total Assets Ratio

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 0.014 | 0.025 |
| $2008 / 09$ | 0.017 | 0.020 |
| $2009 / 10$ | 0.017 | 0.024 |
| $2010 / 11$ | 0.020 | 0.022 |
| $2011 / 12$ | 0.020 | 0.023 |
| Total | 0.088 | 0.113 |
| Mean | 0.018 | 0.023 |
| S.D | 0.003 | 0.002 |
| C.V | 0.1503 | 0.0773 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 11

Table 4.11 shows the Return on Total Assets of EBL an NIBL. This table states the net profit to total assets of selected banks during the study period. EBL has almost same value of return on asset beside 2008/09 and 2009/10 is $1.7 \%$, 2010/11 and 2011/12 is $2 \%$. But EBL has constantly increasing trend of return on its total assets however, NIBL seems successful in managing and utilizing the available assets in order to generate revenue since its ROA ratio is $0.023 \%$ of total assets in an average which is higher than that of others. Where as S.D. and C.V .of EBL is 0.003 and 0.15 respectively, NIBL is 0.002 .

### 4.1.3.3 Total interest Earned to Total Operating Income Ratio

Total interest earned to total operating income ratio reveals that portion of interest income on total operating income of the firms. The major sources of income for the bank are interest income so the banks should mobilize their funds in more interest generating sectors considering the risk and return. This ratio measures how successfully the selected banks have been mobilizing their fund uninterested generating assets during last from FY 2007/08 to 2011/12 are presented to analyze in the following table. The major sources of income for the bank are interest income. So the banks should mobilize their funds in more interest generating sectors considering the risk and return.

Table: 4.12
Total interest Earned to Total Operating Income Ratio

| Banks | EBL | NIBL |
| :---: | :---: | :---: |
| F/Y | 1.36 | 1.07 |
| $2007 / 08$ | 1.28 | 1.18 |
| $2008 / 09$ | 1.42 | 1.26 |
| $2009 / 10$ | 1.61 | 1.46 |
| $2010 / 11$ | 1.97 | 1.72 |
| $2011 / 12$ |  |  |


| Total | 7.64 | 6.71 |
| :---: | :---: | :---: |
| Mean | 1.53 | 1.34 |
| S.D | 0.28 | 0.26 |
| C.V | 0.1818 | 1.07 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 12
Table 4.12 shows Interest Earned to Operating Income Ratio of EBL and NIBL has increasing ratio of study period except 2008/09 of EBL. EBL has greater share of total interest earn in its total operating income in each year and mean too by NIBL. The mean ratio of EBL and NIBL respectively. EBL has higher ratio, it indicates the high contribution in operating income made by lending and investing activities (core banking activity). NIBL has lower average ratio, it indicates that high contribution in operating income do not made by lending and investing activities (core banking activity). High contribution in operating income made by lending and investing activities (core banking activity) is not good for long run but in short run it is not so bad. Thus, from short term view, EBL is in good condition but from long term view, NIBL is in good condition. In overall and has managed sound interest earned to operating income ratio.

The S.D. and C.V of EBL is 28 and 18.18, similarly NIBL have 26 and 1.7 times, respectively.

### 4.1.3.4 Total Interest Paid to Total Assets Ratio

Total interest paid to total assets ratio help to show and measure the percentage of interest paid by the firm in comparison with total assets. If interest paid to total assets ratio is higher, there will be higher interest expenditure on total assets. The following table shows that total interest paid to total assets of selected banks.

Table: 4.13
Total Interest Paid to Total Assets Ratio

| Banks | EBL | NIBL |
| :---: | :---: | :---: |


| $2007 / 08$ | 0.024 | 0.020 |
| :---: | :---: | :---: |
| $2008 / 09$ | 0.023 | 0.020 |
| $2009 / 10$ | 0.027 | 0.026 |
| $2010 / 11$ | 0.038 | 0.038 |
| $2011 / 12$ | 0.055 | 0.051 |
| Total | 0.168 | 0.156 |
| Mean | 0.034 | 0.031 |
| S.D | 0.013 | 0.013 |
| C.V | 0.3956 | 0.4202 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 13

Due to the little bit higher ratio in each year of EBL, it seems less conscious about borrowing cheaper fund. Both shows the increasing trend of the interest paid to total asset ratio, whereas the average ratio of EBL is $3.4 \%$. The mean ratio of NIBL is $3.1 \%$. In comparison, EBL seems ineffective in getting cheaper fund from the mean point of view. However, EBL has been conscious in each year for getting cheaper fund.

The S.D. and C.V of EBL is $1.3 \%$ and $39.56 \%$ and NIBL is $1.3 \%$ and 42.02 respectively.

### 4.1.4 Activity Risk Ratio

Risk and uncertainty is a part of business loss. All the business activities are influenced by risk, so business organization cannot achieve a good return as per their desires. The profitability of risk makes banks investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So the banks options for high profit have to accept the risk and manage it efficiently. A bank has to have idea of the level of risk of risk that one has to bear while investing its funds. Through following ratios, effort has been made to measure the level of risk inherent in the EBL and NIBL.

### 4.1.4.1 Liquidity Risk Ratio

The liquidity risk of the bank defines its liquidity need for deposit. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposit as the liquidity needs. The ratio of cash and bank balance to total deposit is an indicator of bank's liquidity of need. This ratio is low if funds are kept idle as cash balance but this reduces profitability, when the banks makes loan, its profitability increase and also the risk. Thus, higher liquidity ratio indicates less profitable return and vice-versa. This ratio is calculated as below:

Table: 4.14
Liquidity Risk Ratio

| F/Y Banks | EBL | NIBL |
| :---: | :---: | :---: |
| $2007 / 08$ | 0.13 | 0.12 |
| $2008 / 09$ | 0.11 | 0.16 |
| $2009 / 10$ | 0.18 | 0.18 |
| $2010 / 11$ | 0.21 | 0.14 |
| $2011 / 12$ | 0.15 | 0.15 |
| Total | 0.78 | 0.75 |
| Mean | 0.16 | 0.15 |
| S.D | 0.04 | 0.02 |
| C.V | 0.25 | 0.14 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 14

Table 4.14 shows liquidity risk ratio of the selected banks. Ratio of EBL and is in increasing trend except 2011/12, whereas ratio of NIBL is in fluctuating trend. The higher average ratio of them is 0.16 of EBL and 0.15 of NIBL..

The average mean ratio of EBL is greater than that of NIBL bank. It signifies that EBL has sound liquid fund to make immediate payment to the depositors.

### 4.1.4.2 Credit Risk Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. Actually credit risk ratio shows the proportion of non-performing assets in total loan and advances of a bank.

Table: 4.15
Credit Risk Ratio (\%)

| Banks | EBL | NIBL |
| :---: | :---: | :---: |
| F/Y | 0.64 | 0.57 |
| $2007 / 08$ | 0.68 | 0.58 |
| $2008 / 09$ | 0.65 | 0.63 |
| $2009 / 10$ | 0.67 | 0.62 |
| $2010 / 11$ | 0.67 | 0.65 |
| $2011 / 12$ | 3.30 | 3.05 |
| Total | 0.66 | 0.61 |
| Mean | 0.02 | 0.04 |
| S.D | 0.0250 | 0.0589 |
| C.V |  |  |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 8
The table no. 4.15 shows that the total mean, standard deviation \& coefficient of variation of credit risk ratio of commercial banks. The table shows that the credit
risk ratios of EBL is in fluctuating trend. NIBL is in increasing trend. The higher ratio of EBL is 68 and lower is 64 whereas, the higher ratio of NIBL is 65 and lower is $57 \%$.

Mean ratio of EBL is higher than NIBL i.e. $66 \%>61 \%$. S.D and C.V is $2 \%$ and $2.3 \%$ of EBL and $4 \%$ and $5.89 \%$ of NIBL.

### 4.2 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study, statistical tools such as, trend analysis, co-efficient of correlation analysis between different variables, test of hypothesis are used.

### 4.2.1 Coefficient of Correlation Analysis \& Test of Hypothesis

Under this topic, Karl person's coefficient of correlation \& test of hypothesis are used to find out the relationship between deposit and loan \& advances, deposit and total investment, total asset and net profit.

### 4.2.1.1 Co-efficient of correlation between deposits and loan \& advances

Coefficient of correlation (r) between deposits and loans and advances measures the degree of relationship between these two variables. The purpose of correlation analysis between deposit and loan and advances is to find out whether deposit is significantly used as loan and advances. In this analysis deposit is independent variables (x) and loan \& advances are dependent variables (y).

Table: 4.16
Coefficient of correlation between deposit and loan \& advances

| Evaluation criteria | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |


| EBL | 0.997 | 0.9940 |
| :---: | :---: | :---: |
| NIBL | 0.989 | 0.9781 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 15 \& 16

From the table no. 4.16 shows that coefficient of correlation between deposit and loan and advances of EBL and NIBL for the period of 2007/08 to 2011/12.

It is found that the co-efficient of correlation (r) between deposit and loan and advances of EBL and NIBL is 0.997 and 0.989 respectively. It shows the highly positive relationship between these two variables. However co- efficient of determination i.e. $r^{2}$ it indicates that in the case of NIBL 0.9781 of the variation in the dependent variable i.e. loan \& advances has been explained by the independent variables i.e. deposit. In the case of EBL is 0.9940 . More over considering the hypothesis in case of EBL and NIBL is no significant relationship between deposit and loan \& advance. The value of $r^{2}$ is no significant that means there is no significant relationship between deposit and loan \& advances of all sample banks.

### 4.2.1.2 Coefficient of correlation between deposit and total investment

Coefficient of correlation between deposit and total investment measures the degree of relationship between these two variables. The purpose of calculating this analysis is to find out whether deposit is significantly used as investment or not. In this analysis deposit is independent variable (x) and total investment is independent variable (y).

Table: 4.17

## Coefficient of correlation between deposit and total investment

| Evaluation criteria | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| EBL | 0.295 | 0.0870 |
| NIBL | 0.964 | 0.93 |

Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 17 \& 18

The table no.4.17 shows that, the value of coefficient of correlation between total deposit and total investment of EBL and NIBL for the study period 2007/08 to 2011/12.

In case of EBL it is found that coefficient of correlation between deposit and total investment is 0.295 , NIBL has also highly Positive correlation i,e 0.964 respectively. It shows that positive relationship between deposit \& total investment of EBL and NIBL. Moreover, when we consider the value of EBL and NIBL coefficient of determination ( $\mathrm{r}^{2}$ ) are 0.0870 and 0.93 respectively. When analyze the value of $r$ and comparing with test of hypothesis we can find that there is insignificant relationship between deposit and investment of both sample banks.

The relationship is insignificant and the value of $r$ shows high percent in the dependent variables, which has been explained by the independent variable. Above analysis indicated that NIBL has successful in maximizing the investment of their deposits in comparison to other banks because we have the highest value of $r$ of NIBL than EBL. Due to small sample size it becomes no significant.

### 4.2.1.3 Coefficient of correlation between total assets and net profit

Coefficient of correlation between total assets and net profit measures the degree of relationship between these two variables. The purpose of computing these analysis is to find out whether net profit is significantly correlated with respect to total assets or not. In this analysis outside asset is independent variable (x) and net profit is independent variable (y).

Table: 4.18
Coefficient of correlation between outside assets and net profit

| Evaluation criteria | r | $\mathrm{r}^{2}$ |
| :---: | :---: | :---: |
| EBL | 0.9756 | 0.9517 |
| NIBL | 0.9553 | 0.9125 |

[^0]The table no. 4.18 shows the value of coefficient of correlation between total assets and net profit of EBL and NIBL for the study period 2007/08 to 2011/12.

From the table in case of EBL it is found that coefficient of correlation between total assets and net profit is 0.9756 . It shows the positive relationship between these two variables. Moreover, when we consider the value of coefficient of determination ( $\mathrm{r}^{2}$ ) it 0.9517 and it means $95.17 \%$ of the variation in the dependent variable is explained by the independent variable. Where analyze the value of $r$ and comparing with hypothesis we can find that there is insignificant relationship between total assets and net profit which reveals that due to small sample size.

In case of NIBL there is positive correlation between total asset and net profit. There is no significant relationship between mobilization of funds and returns of both selected banks.

### 4.2.2 Trend Analysis

Under this topic, analysis trend of loan \& advances to total deposit ratio as well as trend of total investment to total deposit ratios of EBL and NIBL bank are calculated and forecasted for next five years. The forecast is based on the following assumptions.

- The first assumption is that other things will remain unchanged.
- The bank will run in present potion.
- The economy will remain in the present stage.
- The forecast will be true only when the limitation of least square method is carried out.
- Nepal Rastra Bank will not change its guidelines to commercial banks.


### 4.2.2.1 Trend analysis of loan and advances to total deposits ratio of EBL \& NIBL.

Calculate the trend values of loan and advances to total deposits ratio of EBL and NIBL for five years from 2007/08 to 2011/12 and forecast for next five years from

2012/13 to 2016/17. The following table no 4.19 shows the trend value of deposit for ten years for the sample banks.

Table: 4.19
Trend analysis of loan and advances to total deposits ratio of EBL \& NIBL (\%)

| Banks | EBL | NIBL |
| :---: | :---: | :---: |
| F/Y | 0.75 | 0.67 |
| $2007 / 08$ | 0.76 | 0.67 |
| $2008 / 09$ | 0.72 | 0.74 |
| $2009 / 10$ | 0.75 | 0.70 |
| $2010 / 11$ | 0.76 | 0.77 |
| $2011 / 12$ | 0.76 | 0.78 |
| $2012 / 13$ | 0.76 | 0.80 |
| $2013 / 14$ | 0.75 | 0.82 |
| $2014 / 15$ | 0.75 | 0.85 |
| $2015 / 16$ | 0.76 | 0.87 |
| $2016 / 17$ |  |  |

Source: Annual Report of Sample Banks (2007/08-2011/12)
From the table no. 4.19 it has been shows that the ratio of loan $\&$ advances to total deposits of EBL and NIBL is in increasing trend. The ratio of EBL and NIBL is in 2016/17 will be $76 \%$ and $87 \%$ respectively.

The calculated and projected trend values of loan and advances of EBL and NIBL are fitted in the following trend line.

Figure 4.1
Trend analysis of loan and advances to total deposits ratio of Sample Banks


Source: Table 4.19

From figure no. 4.1 trend analysis it is quite obvious that deposit utilization position in relation to loan \& advances to total deposit ratio is lower than other bank but it has fluctuating trend. These increasing trend means NIBL may use relatively large portion of their deposit by providing loan. It is also found that the loan and advances position of NIBL is increasing trend that means it will be better position in future.

### 4.2.2.2 Trend analysis of total investment to total deposit ratio of EBL \& NIBL.

Calculate the trend values of total investment to total deposits ratio of EBL and NIBL for five years from 2007/08 to 2011/12 and forecast for next five years from $2012 / 13$ to $2016 / 2017$. The following table shows the trend value of total investments to total deposits ratio of EBL and NIBL bank.

Table: $\mathbf{4 . 2 0}$
Trend analysis of total investment to total deposit ratio of Sample Bank (\%)

| Banks | EBL | NIBL |
| :---: | :---: | :---: |
| F/Y | 0.20 | 3.83 |
| $2007 / 08$ | 0.14 | 3.11 |
| $2008 / 09$ | 0.10 | 0.29 |
| $2009 / 10$ | 0.07 | 0.30 |
| $2010 / 11$ | 0.12 | 0.26 |
| $2011 / 12$ | 0.17 | 3.55 |
| $2012 / 13$ | 0.15 | 2.55 |
| $2013 / 14$ | 0.12 | 1.56 |
| $2014 / 15$ | 0.10 | 0.57 |
| $2015 / 16$ | 0.08 | -0.43 |
| $2016 / 17$ |  |  |

Source: Annual Report of Sample Banks (2007/08-2011/12)

From the table no. 4.20 it has been shows that the ratio of total investment to total deposit ratio of EBL and NIBL. The ratio of EBL and NIBL is in 2016/17 will be $8 \%$ and $-43 \%$ respectively.

The calculated and projected trend values of total investment to total deposits of EBL and NIBL are fitted in the following trend line.

Figure 4.2
Trend analysis of total investment to total deposit ratio of sample banks


Source: Table 4.20

From the figure 4.2 shows that the ratio of total investment to total deposit ratio of EBL and NIBL. EBL is in decreasing trend and NIBL is in Fluctuating trend and it will be negative value at end of the study period i,e 2016/17. If other things remaining the same it shows that the value of ratio decreasing by negatively. The negative trend value means the banks ratio is less than par value. If our assumption is applied the ratio of total investment to total deposit of NIBL in 2015/16 will be $-43 \%$, which is lower than EBL.

Above analysis only mention when it meet the above assumption and if other things remaining same but in real life it is different.

### 4.3 Major Findings of the Study

- It is found from the study that the amount of total deposit collected by NIBL Bank in each year during 5 years of the study period is higher than that of EBL. Total deposit collected and total investment made, total loan and advances of NIBL Bank is also Higher during the study period. It is clear that Investment policy adopted by NIBL Bank is sound from profit point of view.
- NIBL Bank has given more priority on investment. NIBL Bank has accepted higher level of interest rate risk rather than credit risk because if
bank take more risk in cash there will be more written. Overall profitability ratio of NIBL Bank shows that it has earned Higher profit than EBL. It is clear that NIBL Bank has given more emphasis on profit.
- The study has found that total deposit and loan and advances and investment of the selected bank will be in increasing trend if other things remain constant.
- There is positive relationship between deposit and loan \& advances and deposit and investment of the selected bank.
- NRB has directed all the commercial banks to keep minimum $5.5 \%$ of total deposit in the NRB balance so as to maintain the liquidity position. EBL has an average mean ratio of $1.28 \%$, NIBL Bank has an average mean ratio of 7.96\%.
- Loan \& advances to total deposit average mean ratio of EBL is $0.75 \%$ and NIBL Bank is $071 \%$.
- Investment to total deposit ratio of sample banks is in fluctuating and decreasing trend. An average mean of EBL is $66 \%$ which is near by NIBL bank, NIBL is 61.
- Investment on financial institution to total deposit ratio of the selected bank is fluctuating drastically.
- The loan loss ratio shows that the overall study of this ratio reveals that EBL and NIBL both is in better position to grant loan and advances but in terms of investment purposed NIBL Bank is more capable to make investment out of total deposit.
- NIBL Bank has higher interest rate risk than that of EBL and also has higher variability ratio.
- Credit risk ratio measures the risk behind making investment or granting loan.
- Return on total assets of NIBL Bank has accepted higher level of risk. It is clear that NIBL Bank is in better position to earn higher profit out of its working fund.
- Return on Loan \& advance of NIBL Bank is higher than that of EBL i,e $0.037 \%$ That means NIBL Bank has achieved the net profit from loan \& advances four times more than that of EBL.
- Correlation of coefficient between deposit and loan \& advances found that there is positive relationship between deposit and the loan \& advances of the all sample bank. It indicates that the increase in deposit tends to increase in loan and advances. The study also suggests that the dependent variable i.e. loan \& advances of sample bank is highly dependent upon the total deposit.
- Correlation coefficient between deposit and investment of NIBL bank are negative whereas that of EBL is positive. It is found from the study that the dependent variable i.e. investment and independent variable i.e. deposit.
- It indicates that increase in net profit of NIBL Bank is not caused by the increase in total assets of the bank.
- The trend analysis of loan and advance to total deposit ratio of sample bank show that in increasing trend.
- It is forecasted that all sample banks will have decreasing trend of investment to total deposit ratio. The total investment to total deposit ratio of all sample banks are forecasted negatively it means that the banks ratio is less than par value or it doesn't maintain the standard of ratio.


## CHAPTER-V

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

In the last chapter of this study is summary, conclusion and recommendation have discussed and explored the facts and matters required for various parts of the study. Through the analytical chapter by using some important financial as well as statistical tools, makes a comparative analysis of various aspects of the investment of concern commercial banks.

### 5.1 Summary

The economic development of a country depends upon the development of commerce and industry. And, there is no any doubt; banking promotes the development of commerce because banking itself is the part of commerce. The process of economic development depends upon various factors, however economists are now convinced that capital formation and its proper utilization plays a paramount role for rapid economic development.

The economic growth was very slow in earlier year; it has caught its full selling with the restoration democracy in the country. At present, overall economic growth rate still decline year by year. Reasons behind this decline are insecure situation faced by industry, decrease in the tourist arrival, drop in the production and export of carpet, garment and pashmina industry and political situation. The evolution of the organized financial system in Nepal has more recent history than in other countries of the world. In Nepalese context, the history of banking is not more than six decade. After the announcement of liberal and free market economic based policy Nepalese banks and financial sectors having greater network and access to national and international markets. Commercial banks plays a vital role which deals with other people's money and stimulate saving by mobilized idle resources to those sectors where have investment opportunities. Modern bank provides various services to their customer in view of facilitating their economic and social life.

The objective of the commercial banks is always to earn more profit by investing or granting loan and advances into profitable, secured and marketable sector. But commercial bank should be careful while performing the credit creation function; the banks should never invest its funds in those securities, which are too many fluctuations. And commercial banks must follow the rules and regulations as well as different directions issued by central banks and ministry of finance while mobilization the funds or the commercial banks should invest its funds only those securities, which are legal.

In the study, the word financial covers a wide range of activities i.e. the investment of income, savings or other collected fund. If there is no savings, there is no existence of investment therefore, savings and investment are interrelated. Financial Performance is a one facet of the overall spectrum of policies that guide banks financial operations and it ensures efficient allocation of funds to achieve the well being economic development of the nation. A sound and viable financial policy attracts both borrowers and lenders, which help to increase the volumes and quality of deposits, loan and investment. Some sources of funds for the investment of the bank are capital, general reserves, accumulated profit, deposits and external \& internal borrowings. Similarly, some important banking terms, which are frequently used in this study, are loan and advances, investment on government securities, shares and debentures, deposits and other use of funds.

In this study, for the analysis and interpretation of the data different financial \& statistical tools are used. In the financial tools liquidity ratios, assets management ratios, profitability ratios, risk ratios and growth ratio have been used. Where, as in statistical tools mean, standard deviation, coefficient of variation, trend analysis, coefficient of correlation and test of hypothesis have been used. Only the secondary data have been used for the analysis in this research. The data are obtained from annual reports of concerned banks, likewise, the financial statement of five years i.e. 2007/08 to 2011/12 was selected for the purpose evaluation.

### 5.2 Conclusions

Under This research study, different financial and statistical tools are used to measure the Investment policy of the selected banks. It is found that all sample banks have strong financial performance but comparatively NIBL Bank are better position. Despite of social contribution NIBL Bank has higher profit earnings. It is concluded that NIBL Bank has adopted better financial policy than that of EBL.

In conclusion, it can be said that central banks are required to direct the commercial banks. Commercial bank should move as per the direction given by the central bank. Banks should have optimum policy to collect the deposit in various accounts. Deposit is the major organ of commercial bank to live in the industry. Higher the deposit Higher will be the chance of mobilization of working fund and profit thereto. Banks should not invest their' fund haphazardly. It should be careful while advancing loan because loan is the blood of the commercial bank for survival. If commercial bank does not apply sound investment policy it will be in great trouble in future to collect it in time, hence the possibility of bankruptcy there too. Banks should invest their fund in various portfolios after the deep study of the project to be safe from being bankruptcy. If banks concentrate the investment in few organizations there is a high chance of default risk. Diversification is needed to all the business houses but it has seen immense importance to commercial bank (C.B). Hence, the C.B. should implement the investment policy considering the directives issued by NRB. CBs should not cross the boundary level set by central bank to make investment policy. In overall, it can be concluded that the role of NRB in investment policy of commercial bank has both positive and negative impacts.

### 5.3 Recommendations

On the basis of analysis and findings of the two banks in previous section, EBL and NIBL are recommended to go through following suggestion, which may
overcome the weakness and less effectiveness of the existing fund mobilization and financial policy.

- A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community; however, external as well as internal factors affect the liquidity position of banks.
- To get success in competitive banking environment, depositor's money must be utilized as loan and advances. The largest item of the bank in the asset side is loan and advances. If it is neglected, then it could be the main cause of liquidity crisis in the bank.
- Besides giving priority of investing on government securities, NIBL is recommended to invest its fund in purchase of shares and debentures of other financial and non-financial companies. Government securities such as treasury bills are gives very lowest interest rate rather than other's company's securities. This also helps to maintain the sound portfolio of the banks.
- Profitability is the main indicator of the financial performance of cash and every business organization. In this study, profitability ratio is good from of all sample banks.
- Diversification of investment is highly suggested to the selected bank as they have given priority to invest in government securities only. Both sample banks seem risk avoider as they have invested highest amount in risk free securities. Higher the risk higher will be the profit. Hence, EBL and NIBL Bank are recommended to diversify their investment in NRB bond, govt. non financial institution, other non-financial institution etc.
- Liquidity and profitability are like two wheels of the same cart and both are very inter-related and have converse relation; one can be achieved only at the cost of the others. Highly liquid bank may have less profitability as it has to hold more assets in the form of cash. However, the bank has to maintain sufficient fund in the form of cash and liquid assets to meet various commitments like depositors claim, personnel expenses, interest
payments, to exploit unforeseen opportunities etc. Since, EBL and NIBL has held more liquidity its profitability ratios.
- To get success in this competitive banking environment, deposit money must be utilized as loan and advances. Loan and advances is the largest item of the bank in assets side. While granting the loan it should be borne in mind that large number of borrowing customers may benefit from the banker's fund. Negligence in administering these assets could be the main cause of liquidity crisis in the bank and one of the main reasons of the bank's failure. Project oriented approach has to be encouraged in lending business of bank. Although there is high risk in such project, the important things regarding project is that project itself should be capable of generating their own funds and to repay the loan on a timely basis.
- Similarly, recovery of loan is another important factor of financial policy. Although effort has been made for collection of repayment, but still there is some increment in sub-standard and doubtful loan. It should be controlled timely, if not sub-standard loan might be converted to doubtful loan and doubtful to bad loan. Both the sample banks are suggested to implement a sound collection policy, which should ensure rapid identification of fake loans, immediate contact with borrower and continual follow up until a loan is recovered in full. The recovery of loan loss is the must be very careful in formulating credit collection policy, which should be associated with some legal procedure.
- The commercial banks have been established gradually after the commercial banks act 1974 A.D. With the passage of time so many commercial banks, as a joint venture, have been established gradually because of the liberal and market friendly economic policy of government of Nepal. But banks should provide some social response by expanding their operation in rural areas rather than urban areas. And banks can give response to poor and disadvantage groups. By establishing the branches in rural areas, minimum amount for opening accounts and interest rate should be reduced for creditors.
- In the light of growth competition in the banking sectors, the business of the banks should be customer oriented. It should focus not only towards big clients but also towards small clients. They should treat every client equally. They should bring different schemes to focus the customers like, increase interest rate, bank credit policies, bank loan insurance policies, evening counters, social responsibilities etc.
- Majority of 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 all the banks are suggested to render their serves 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 Economic Liberalization policy adopted by Nepal government has created and environment of strict competition even in the banking sectors. In the context, all the banks are suggested to formulate and implement some sound and attractive financial; and non- financial strategies to meet required level of profitability such as risk analysis diversification, social responsibility, bank credit policy, compensation policy etc.


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## APPENDICES

## Appendix: 1

Computation of Current Ratio of EBL \& NIBL
(in Millions)

| Year | EBL |  | NIBL |  | Current <br> Ratio of <br> EBL (CR = <br> CA/CL) | Current <br> Ratio of <br> NIBL(CR <br> CA/CL) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current <br> Assets (CA) | Current <br> Liabilities (CL) | Current <br> Assets (CA) | Current <br> Liabilities (CL) |  <br> $2007 / 08$ <br> 19892.71 | 14304.41 |
| 258370.9 | 33057.13 | 1.39 | 7.82 |  |  |  |
| $2008 / 09$ | 24967.25 | 18481.92 | 343750 | 43720.1 | 1.35 | 7.86 |
| $2009 / 10$ | 33912.63 | 27051.25 | 405082.7 | 51423.94 | 1.25 | 7.88 |
| $2010 / 11$ | 38656.64 | 27478.74 | 507180 | 61709.8 | 1.41 | 8.22 |
| $2011 / 12$ | 42777.47 | 42340.67 | 555143.9 | 68978.06 | 1.01 | 8.05 |

## Appendix: 2

Computation of Cash $\mathcal{\&}$ bank balance to Total deposit Ratio of EBL $\&$ NIBL (in Millions)

| Year | EBL |  | NIBL |  | Cash \& bank <br> balance to Total <br> deposit Ratio of <br> EBL = CBL/TD | Cash \& bank <br> balance to Total <br> deposit Ratio of <br> NIBL= CBL/TD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total <br> deposit | Cash and <br> bank balance | Total <br> deposit | Cash and <br> bank balance | 0.13 | 0.12 |
| $2007 / 08$ | 18186.25 | 2391.42 | 23342.3 | 2704.06 | 0.11 | 0.16 |
| $2008 / 09$ | 23976.3 | 2667.97 | 31915 | 5114.26 | 0.18 | 0.18 |
| $2009 / 10$ | 33322.95 | 6164.38 | 37348 | 6743.95 | 0.21 | 0.14 |
| $2010 / 11$ | 36932.31 | 7818.82 | 46411 | 6359.86 | 0.15 | 0.15 |
| $2011 / 12$ | 41127.9 | 6122.8 | 49696 | 7445.92 |  |  |

## Appendix: 3

Computation of Cash \& bank balance to Current Assets Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Cash \& bank balance to Current Assets Ratio of EBL = CBL/CA | Cash \& bank balance to Current Assets Ratio of NIBL = CBL/CA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Current } \\ \text { Assets(CA) } \end{gathered}$ | Cash and bank balance | $\begin{gathered} \text { Current } \\ \text { Assets(CA) } \end{gathered}$ | Cash and bank balance |  |  |
| 2007/08 | 19892.71 | 2391.42 | 24988.39 | 2704.06 | 0.12 | 0.11 |
| 2008/09 | 24967.25 | 2667.97 | 32749.67 | 5114.26 | 0.11 | 0.16 |
| 2009/10 | 33912.63 | 6164.38 | 46821.24 | 6743.95 | 0.18 | 0.14 |
| 2010/11 | 38656.64 | 7818.82 | 52835.66 | 6359.86 | 0.20 | 0.12 |
| 2011/12 | 42777.47 | 6122.8 | 56012.26 | 7445.92 | 0.14 | 0.13 |

## Appendix: 4

Computation of Investment on Govement Securites to Current Assets Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Investment <br> on Govement | Investment <br> on Govement <br> Securites to <br> Securites to |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| current <br> Assets(CA) | Investment on <br> Govement <br> Securites | Current <br> Assets(CA) | Investment on <br> Govement <br> Securites | Assers Ratio <br> of EBL $=$ <br> IGS/CA | Assets Ratio <br> of NIBL $=$ <br> IGS/CA |  |
| $2007 / 08$ | 19892.71 | 3614.54 | 258370.9 | 89453.2 | 0.18 | 0.35 |
| $2008 / 09$ | 24967.25 | 3237.98 | 343750 | 99397.71 | 0.13 | 0.29 |
| $2009 / 10$ | 33912.63 | 3371.42 | 405082.7 | 108263.7 | 0.10 | 0.27 |
| $2010 / 11$ | 38656.64 | 2745.28 | 507180 | 137030 | 0.07 | 0.27 |
| $2011 / 12$ | 42777.47 | 4745.5 | 555143.9 | 130812 | 0.11 | 0.24 |

## Appendix: 5

## Computation of Loan \& Advance to Current Assets Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | $\begin{array}{c}\text { Loan \& Advance } \\ \text { to Current Assets } \\ \text { Ratio of EBL }= \\ \text { L\&A/TD }\end{array}$ | $\begin{array}{c}\text { Loan \& Advance } \\ \text { to Current Assets } \\ \text { Ratio of NIBL }\end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L\&A/TD |  |  |  |  |  |  |$\}$

Appendix: 6
Computation of Loan \& Advance to Total deposit Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  |  <br> Advance to <br> Total deposit <br> Ratio of EBL <br> L\&A/TD |  <br> Advance to <br> Total deposit <br> Ratio of <br> NIBL <br> L\&A/TD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  <br> Advance | Total deposit |  <br> Advance | Total deposit |  | 0.67 |
| $2007 / 08$ | 13664.08 | 18186.25 | 15545.77 | 23342.3 | 0.75 | 0.3 |
| $2008 / 09$ | 18339.08 | 23976.3 | 21365.05 | 31915 | 0.76 | 0.67 |
| $2009 / 10$ | 23884.67 | 33322.95 | 27589.93 | 37348 | 0.72 | 0.74 |
| $2010 / 11$ | 27556.36 | 36932.31 | 32268.87 | 46411 | 0.75 | 0.70 |
| $2011 / 12$ | 31057.69 | 41127.9 | 38034.09 | 49696 | 0.76 | 0.77 |

## Appendix: 7

## Computation of Total Investment to Total deposit Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Total Investment to Total deposit Ratio of EBL = TI/TD | Total Investment to Total deposit Ratio of NIBL = TI/TD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Investment | Total deposit | Total Investment | Total deposit |  |  |
| 2007/08 | 3614.54 | 18186.25 | 89453.2 | 89453.2 | 0.20 | 3.83 |
| 2008/09 | 3237.98 | 23976.3 | 99397.71 | 99397.71 | 0.14 | 3.11 |
| 2009/10 | 3371.42 | 33322.95 | 108263.7 | 10826.37 | 0.10 | 0.29 |
| 2010/11 | 2745.28 | 36932.31 | 137030 | 13703 | 0.07 | 0.30 |
| 2011/12 | 4745.5 | 41127.9 | 130812 | 13081.2 | 0.12 | 0.26 |

## Appendix: 8

Computation of Loan \& Advance to Total Assets Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  |  <br> Advance to <br> Total Assets <br> Ratio of EBL <br> = \& \&/TA | Total <br> Investment to <br> Total deposit <br> Ratio of <br> NIBL <br> L\&A/TA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  <br> Advance | Total Assets |  <br> Advance | Total Assets |  | 0.64 |
| $2007 / 08$ | 13664.08 | 21432.57 | 15545.77 | 27253.39 | 0.57 |  |
| $2008 / 09$ | 18339.08 | 27149.34 | 21365.05 | 37132.75 | 0.68 | 0.58 |
| $2009 / 10$ | 23884.67 | 36916.84 | 27589.93 | 43867.39 | 0.65 | 0.63 |
| $2010 / 11$ | 27556.36 | 41382.76 | 32268.87 | 52150.23 | 0.67 | 0.62 |
| $2011 / 12$ | 31057.69 | 46236.21 | 38034.09 | 58141.43 | 0.67 | 0.65 |

## Appendix: 9

Computation of Investment on Govement Securites to Total Assets Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Investment <br> on Govement <br> Securites to <br> Total Assets <br> Ratio of EBL <br> Investment to <br> IGS/TA | Total deposit <br> Ratio of <br> NIBL <br> IGS/TA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Investment on <br> Govement <br> Securites | Total Assets | Investment on <br> Govement <br> Securites | Total Assets |  | 0.17 |
| $2007 / 08$ | 3614.54 | 21432.57 | 4085.83 | 27253.39 | 0.15 |  |
| $2008 / 09$ | 3237.98 | 27149.34 | 3788.38 | 37132.75 | 0.12 | 0.10 |
| $2009 / 10$ | 3371.42 | 36916.84 | 1838.81 | 43867.39 | 0.09 | 0.04 |
| $2010 / 11$ | 2745.28 | 41382.76 | 5865.88 | 52150.23 | 0.07 | 0.11 |
| $2011 / 12$ | 4745.5 | 46236.21 | 6489.95 | 58141.43 | 0.10 | 0.11 |

## Appendix: 10

Computation of Return on Loan \& Advance Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Return on <br>  | Return on <br>  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Advance |  |  |  |  |  |  |
| Net profit |  <br> Advance <br> Advance <br> Raf EBL <br> Ratio of <br> NIBL $=$ <br> NP/L\&D |  |  |  |  |  |
| $2007 / 08$ | 296.4 | 13664.08 | 673.95 | 15545.77 | 0.022 | 0.043 |
| $2008 / 09$ | 451.21 | 18339.08 | 746.46 | 21365.05 | 0.025 | 0.035 |
| $2009 / 10$ | 638.73 | 23884.67 | 1031.05 | 27589.93 | 0.027 | 0.037 |
| $2010 / 11$ | 831.76 | 27556.36 | 1141.05 | 32268.87 | 0.030 | 0.035 |
| $2011 / 12$ | 931.3 | 31057.69 | 1337.74 | 38034.09 | 0.030 | 0.035 |

## Appendix: 11

## Computation of Return on Total Assets Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Return on <br> Total Assets <br> Ratio of EBL <br> = NP/TA | Return on <br> Total Assets <br> Ratio of <br> NIBL = <br> NP/TA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net profit | Total Assets | Net profit | Total Assets |  <br> $2007 / 08$ <br> 296.4 <br> $2008 / 09$ | 451.21 |
| 2732.57 | 673.95 | 27253.39 | 0.014 | 0.025 |  |  |
| $2009 / 10$ | 638.73 | 36916.84 | 1031.05 | 43867.39 | 0.017 | 0.024 |
| $2010 / 11$ | 831.76 | 41382.76 | 1141.05 | 52150.23 | 0.020 | 0.022 |
| $2011 / 12$ | 931.3 | 46236.21 | 1337.74 | 58141.43 | 0.020 | 0.023 |

## Appendix: 12

Computation of Total Interest Earned to Total Operating Income Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Total <br> Interest <br> Earned to Total Operating Income Ratio of $\mathrm{EBL}=$ TII/TOI | Total Interest Earned to Total Operating Income Ratio of NIBL = TII/TOI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Interest Income | Total Operating Income | Total Interest Income | Total Operating Income |  |  |
| 2007/08 | 11444.08 | 8413.32 | 15877.58 | 14801.57 | 1.36 | 1.07 |
| 2008/09 | 15486.57 | 12098.98 | 19786.96 | 16704.27 | 1.28 | 1.18 |
| 2009/10 | 21868.14 | 15449.65 | 27984.86 | 22209.83 | 1.42 | 1.26 |
| 2010/11 | 31024.51 | 19279.76 | 40477.25 | 27984.86 | 1.61 | 1.45 |


| $2011 / 12$ | 43310.26 | 21929.4 | 52582.69 | 30619.8 | 1.97 | 1.72 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Appendix: 13

## Computation of Total Interest Paid to Total Assets Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Total <br> Interest Paid <br> to Total | Total Interest <br> Paid to Total <br> Assets Ratio <br> of NIBL $=$ <br> TIP/TA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Interest <br> paid | Total Assets | Total Interest <br> Paid | Total Assets | Assets Ratio <br> of EBL $=$ <br> TIP/TA |  <br> $2007 / 08$ <br> 5171.66 <br> $2008 / 09$ |
| 6326.09 | 2714325.7 | 5557.1 | 272533.9 | 0.024 | 0.020 |  |
| $2009 / 10$ | 10128.74 | 369168.5 | 11532.8 | 438673.9 | 0.027 | 0.026 |
| $2010 / 11$ | 15727.9 | 413827.6 | 19601.07 | 520797.2 | 0.038 | 0.038 |
| $2011 / 12$ | 25358.75 | 462362.1 | 29554.03 | 580996.1 | 0.055 | 0.051 |

Appendix: 14
Computation of Liquidity Risk Ratio of EBL \& NIBL (in Millions)

| Year | EBL |  | NIBL |  | Liquidity <br> Risk Ratio <br> of EBL = <br> CBB/TD | Liquidity <br> Risk Ratio <br> of NIBL = <br> CBB/TD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash and <br> bank balance | Total deposit | Cash and <br> bank balance | Total deposit | 0.13 | 0.12 |
| $2007 / 08$ | 2391.42 | 18186.25 | 2704.06 | 23342.3 | 0.11 | 0.16 |
| $2008 / 09$ | 2667.97 | 23976.3 | 5114.26 | 31915 | 0.18 | 0.18 |
| $2009 / 10$ | 6164.38 | 33322.95 | 6743.95 | 37348 | 0.21 | 0.14 |
| $2010 / 11$ | 7818.82 | 36932.31 | 6359.86 | 46411 | 0.15 | 0.15 |
| $2011 / 12$ | 6122.8 | 41127.9 | 7445.92 | 49696 | 0.15 |  |

## Appendix - 15

Calculation for Mean value, Standard Deviation, CV \& Correlation between Total deposit and Loan \& Advance of EBL (in Millions)

| Year | Total deposit ( $\mathbf{X}_{1}$ ) | Loan \& Advance ( $\mathbf{X}_{2}$ ) | $\mathrm{x}_{1}=\mathbf{X}_{1}-\overline{\mathbf{x}}_{1}$ | $\mathbf{x}_{2}=\mathbf{X}_{2}-\overline{\mathbf{x}}_{2}$ | $\mathbf{x}_{1} \cdot \mathbf{x}_{2}$ | $\mathbf{x}_{1}{ }^{2}$ | $\mathbf{x}_{2}{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007/08 | 18186.25 | 13664.08 | -12522.9 | -9236.3 | 115665137 | 156822824 | 85309164 |
| 2008/09 | 23976.3 | 18339.08 | -6732.84 | -4561.3 | 30710485 | 45331161 | 20805421 |
| 2009/10 | 33322.95 | 23884.67 | 2613.808 | 984.294 | 2572755.5 | 6831992.3 | 968834.68 |
| 2010/11 | 36932.31 | 27556.36 | 6223.168 | 4655.984 | 28974971 | 38727820 | 21678187 |
| 2011/12 | 41127.9 | 31057.69 | 10418.76 | 8157.314 | 84989080 | 108550518 | 66541772 |
| $\begin{aligned} & \mathrm{N}_{1}=5 \\ & \mathrm{~N}_{2}=5 \end{aligned}$ | $\sum_{=153545.7} \mathrm{X}_{1}$ | $\sum_{=114501.9} \mathrm{X}_{2}$ |  |  | $\begin{aligned} & \sum \mathrm{x}_{1} \cdot \mathrm{x}_{2}= \\ & 262912429 \end{aligned}$ | $\begin{gathered} \sum \mathrm{x}_{1}{ }^{2}= \\ 356264316 \end{gathered}$ | $\begin{gathered} \sum \mathrm{x}_{2}{ }^{2}= \\ 195303378 \end{gathered}$ |

For Total Deposit,

$$
\begin{aligned}
& \text { Mean }(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{1}}{\mathrm{~N}_{1}} \quad=\frac{153545.7}{5}=30709.14 \\
& \text { S.D }(\boldsymbol{\sigma})=\sqrt{\frac{\sum\left(\mathrm{X}_{1}-\overline{\mathrm{x}}_{1}\right)^{2}}{\mathrm{~N}_{1}}}=\sqrt{\frac{356264316}{5}}=9437.48
\end{aligned}
$$

For Loan \& Advance,

$$
\begin{aligned}
& \text { Mean }(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}} \quad=\frac{114501.9}{5}=22900.38 \\
& \text { S.D }(\boldsymbol{\sigma})=\sqrt{\frac{\sum\left(\mathrm{X}_{2}-\overline{\mathrm{x}}_{2}\right)^{2}}{\mathrm{~N}_{2}}}=\sqrt{\frac{195303378}{5}}=6987.54
\end{aligned}
$$

Correlation between Total deposit and Loan \& Advance of EBL,

$$
\begin{aligned}
\left(\mathrm{r}_{12}\right)= & \frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}{ }^{2} \sum \mathrm{x}_{2}{ }^{2}}} \\
& =\frac{262912429}{\sqrt{356264316 \times 114501.9}}=0.997
\end{aligned}
$$

## Appendix - 16

## Calculation for Mean value, Standard Deviation \& Correlation between Total deposit and Loan \& Advance of NIBL (in Millions)

| Year | $\begin{gathered} \text { Total } \\ \text { deposit }\left(\mathrm{X}_{1}\right) \end{gathered}$ | Loan \& Advance $\left(\mathbf{X}_{2}\right)$ | $\mathrm{x}_{1}=\mathrm{X}_{1}-\overline{\mathrm{x}}_{1}$ | $\mathrm{x}_{2}=\mathrm{X}_{2}-\overline{\mathrm{x}}_{2}$ | $\mathrm{x}_{1} \cdot \mathrm{x}_{2}$ | $\mathbf{x}_{1}{ }^{2}$ | $\mathbf{x}_{2}{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007/08 | 23342.3 | 155457.8 | -14400.2 | -114150 | 1643773598 | 207364608 | 13030148531 |
| 2008/09 | 31915 | 213650.5 | -5827.46 | -55956.9 | 326086748 | 33959290.05 | 3131177567 |
| 2009/10 | 37348 | 275899.3 | -394.46 | 6291.864 | -2481888.67 | 155598.6916 | 39587552.59 |
| 2010/11 | 46411 | 322688.7 | 8668.54 | 53081.23 | 460136800.2 | 75143585.73 | 2817617403 |
| 2011/12 | 49696 | 380341 | 11953.54 | 110733.5 | 1323657369 | 142887118.5 | 12261908908 |
| $\begin{aligned} & \mathrm{N}_{1}=5 \\ & \mathrm{~N}_{2}=5 \end{aligned}$ | $\sum_{=188712.3} \mathrm{X}_{1}$ | $\sum_{=1348037.33}$ |  |  | $\begin{aligned} & \sum_{3751172627} \mathrm{x}_{1} \cdot \mathrm{x}_{2}= \\ & \end{aligned}$ | $\begin{gathered} \sum \mathrm{x}_{1}{ }^{2}= \\ 459510201 \end{gathered}$ | $\begin{gathered} \sum \mathrm{x}_{2}{ }^{2}= \\ 31280439962 \end{gathered}$ |

For Total Deposit,

$$
\begin{aligned}
& \text { Mean }(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{1}}{\mathrm{~N}_{1}} \quad=\frac{188712.3}{5}=37742.46 \\
& \text { S.D }(\boldsymbol{\sigma})=\sqrt{\frac{\sum\left(\mathbf{X}_{1}-\overline{\mathrm{x}}_{1}\right)^{2}}{\mathrm{~N}_{1}}}=\sqrt{\frac{459510201}{5}}=10718.095
\end{aligned}
$$

For Loan \& Advance,

$$
\begin{aligned}
& \text { Mean }(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}} \quad=\frac{1348037.33}{5}=269607.5 \\
& \text { S.D }(\boldsymbol{\sigma})=\sqrt{\frac{\sum\left(\mathrm{X}_{2}-\overline{\mathrm{x}}_{2}\right)^{2}}{\mathrm{~N}_{2}}}=\sqrt{\frac{31280439962}{5}}=88431.39
\end{aligned}
$$

Correlation between Total deposit and Loan \& Advance of NIBL

$$
\begin{aligned}
\left(\mathrm{r}_{12}\right)= & \frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}{ }^{2} \sum \mathrm{x}_{2}{ }^{2}}} \\
& =\frac{3751172627}{\sqrt{459510201 * 31280439962}}=0.9894
\end{aligned}
$$

## Appendix - 17

## Calculation for Mean value, Standard Deviation \& Correlation between Total deposit and Total Investment of EBL (in Millions)

| Year | Total <br> deposit <br> $\left(\mathbf{X}_{\mathbf{1}}\right)$ | Total <br> Investment <br> $\left(\mathbf{X}_{\mathbf{2}}\right)$ | $\mathbf{x}_{\mathbf{1}}=\mathbf{X}_{\mathbf{1}}-\overline{\mathbf{x}}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{2}}=\mathbf{X}_{\mathbf{2}}-\overline{\mathbf{x}}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}} \cdot \mathbf{x}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 18186.25 | 3614.54 | -12522.9 | 71.596 | -896589 | 156822824 | 5125.987 |
| $2008 / 09$ | 23976.3 | 3237.98 | -6732.84 | -304.964 | 2053274 | 45331161 | 93003.04 |
| $2009 / 10$ | 33322.95 | 3371.42 | 2613.808 | -171.524 | -448331 | 6831992.3 | 29420.48 |
| $2010 / 11$ | 36932.31 | 2745.28 | 6223.168 | -797.664 | -4963997 | 38727820 | 636267.9 |
| $2011 / 12$ | 41127.9 | 4745.5 | 10418.76 | 1202.556 | 12529140 | 108550518 | 1446141 |

For Total Deposit,

$$
\begin{aligned}
& \text { Mean }(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{1}}{\mathrm{~N}_{1}} \quad=\frac{153545.7}{5}=30709.14 \\
& \text { S.D }(\boldsymbol{\sigma})=\sqrt{\frac{\sum\left(\mathrm{X}_{1}-\overline{\mathrm{x}}_{1}\right)^{2}}{\mathrm{~N}_{1}}}=\sqrt{\frac{356264316}{5}}=8441.14
\end{aligned}
$$

For Total Investment,

$$
\begin{aligned}
& \text { Mean }(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}}=\frac{17714.72}{5}=3542.944 \\
& \text { S.D }(\boldsymbol{\sigma})=\sqrt{\frac{\sum\left(\mathrm{X}_{2}-\overline{\mathrm{x}}_{2}\right)^{2}}{\mathrm{~N}_{2}}}=\sqrt{\frac{2209958}{5}}=664.82
\end{aligned}
$$

Correlation between Total deposit and Total Investment of EBL,

$$
\begin{aligned}
\left(\mathrm{r}_{12}\right)= & \frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}{ }^{2} \sum \mathrm{x}_{2}{ }^{2}}} \\
& =\frac{8273498}{\sqrt{356264316 * 2209958}}=0.295
\end{aligned}
$$

## Appendix - 18

## Calculation of Correlation between Total deposit and Total Investment of NIBL (in Millions)

| Year | Total <br> deposit <br> $\left(\mathbf{X}_{\mathbf{1}}\right)$ | Total <br> Investment <br> $\left(\mathbf{X}_{\mathbf{2}}\right)$ | $\mathbf{x}_{\mathbf{1}}=\mathbf{X}_{\mathbf{1}^{-}}$ <br> $\overline{\mathbf{x}}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{2}}=\mathbf{X}_{\mathbf{2}} \mathbf{- X}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}} \cdot \mathbf{x}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2007 / 08$ | 23342.3 | 89453.2 | -14400.16 | -23538.1 | 338952722.9 | 207364608 | 554043187 |
| $2008 / 09$ | 31915 | 99397.71 | -5827.46 | -13593.6 | 79216230.19 | 33959290 | 184786287 |
| $2009 / 10$ | 37348 | 108263.7 | -394.46 | -4727.62 | 1864857.774 | 155598.69 | 22350409.8 |
| $2010 / 11$ | 46411 | 137030 | 8668.54 | 24038.68 | 208380241.8 | 75143586 | 577858040 |
| $2011 / 12$ | 41127.9 | 130812 | 11953.54 | 17820.68 | 213020187.3 | 142887119 | 317576564 |

For Total Deposit,
$\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{1}}{\mathrm{~N}_{1}} \quad=\frac{188712.3}{5}=37742.46$
S.D $(\boldsymbol{\sigma})=\sqrt{\frac{\sum\left(\mathbf{X}_{1}-\overline{\mathbf{x}}_{1}\right)^{2}}{\mathrm{~N}_{1}}}=\sqrt{\frac{459510201}{5}}=9586.55$

For Total Investment,

$$
\begin{aligned}
& \text { Mean }(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}} \quad=\frac{564956.61}{5}=112991.32 \\
& \text { S.D }(\boldsymbol{\sigma})=\sqrt{\frac{\sum\left(\mathrm{X}_{2}-\overline{\mathrm{X}}_{2}\right)^{2}}{\mathrm{~N}_{2}}}=\sqrt{\frac{1656614489}{5}}=18202.28
\end{aligned}
$$

Correlation between Total deposit and Total Investment of NIBL,

$$
\begin{aligned}
\left(\mathrm{r}_{12}\right)= & \frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}{ }^{2} \sum \mathrm{x}_{2}{ }^{2}}} \\
& =\frac{841434239.9}{\sqrt{459510201 * 1656614489}}=0.9644
\end{aligned}
$$


[^0]:    Source: Annual Report of Sample Banks (2007/08-2011/12) \& Appendix: 17 \& 18

