CHAPTER-1
INTRODUCTION

1.1 Background of the Study

Nepal is considered as one of the least developed countries by the international economics standards. It is landlocked country with agro-based economy and it is sandwiched between two most powerful economic growth countries China in North and India in East, West and South. Its total area is about 1,47,181 sq. km. It is divided into mountain, hills and tarai region with its geographical nature. The population of Nepal according to the 2011 census is about 26500000. Nepal is categorized as the least development country having per capital income of about us $ 269. About 49% of the total population lives under poverty and 80% of the population depends upon agriculture for the living. Nepal is poorly developed in entire sector due to unstable political environment and rapidly growing terrorism. Without developing of agriculture sector development of our economic situation is impossible. In other words agriculture is the backbone of Nepalese economy. Banking industry plays an important role to maskers our backbone strong.

Nepal has a lot of constraints and opportunities. Unemployment is said to be the biggest problem of the country. Most of the people of the nation are engaged in traditional type of agriculture. The productive activity is the result of the investment venture in productive active enterprises. The process of the economic development depends upon various factors. However economists are now convinced that capital formation and its proper utilization plays a paramount role in rapid economic development. Hence, investment portfolio is one such tool to help proper utilization of resources.

Bank is that organization where people play the game of depositing cash and taking needed loans. Bank can be defined as a place where the transactions of money take place. In other words, banks are such an institution that collects scattered deposits and advance loans. A bank collects deposits from different individuals and institutions. These collected deposits are mobilizes by giving loans to different industries, commercials enterprises, individuals and households etc. A bank doesn't only perform the activities of receiving deposits and advancing loans but at the same time it performs payment or remittance and other credit

activities as well. In fact bank is that organization which provides many resources for established new investment opportunities.

The growth of banking sector in Nepal is not so long ago as compared with other banks of the world. In comparison with other developing country the institutional development in banking system is far behind. Nepal had to wait for the period to enter the present banking position. The origin and growth of bank in Nepal is controversial. At present there are altogether 31 commercial banks operating in the country. Among these commercials banks Nepal Bank Limited (NBL) and Rastriya Banjiya Bank (RBB) has occupied wide range of the business due to access to most of the corner of the country.

1.2 Profile of Sample Banks

1.2.1 Bank of Katmandu Limited (BOK)

Bank of Katmandu limited is a culmination of a comprehensive vision of the promoters to take the Nepalese economy to a newer realm in the globe market. Each promoter of bank of Katmandu has successfully demonstrated leadership stills business acumen and entrepreneurial talents in his or her respective field. Incorporated in 1993, bank of Katmandu came into operation in March 1995 with the following predominant objectives.

Bank of Katmandu's activities globe around deposit mobilization, advancement of various credits, international banking including trade financing, inward and outward remittances and funds and portfolio management. Bank of Katmandu is committed to providing products and services of the highest standards to its customers by understanding their requirements best suiting the market needs. In Bank of Kathmandu Limited has state of art technologies for appropriate and efficient management information system and rendering quality services and radio modern for networking, international trade and transfer of funds around the world, correspondent banking relationships with over 200 banks worldwide for effective and proficient execution of international trade and services and centralized banking operations for better risk management, consistent service deliveries and lowering operation costs.

1.2.2 Nepal Investment Bank Limited (NIBL)

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital) was Credit Agricore Indosuez, a subsidiary of one the largest banking groups in the world. With the decision of Credit Auricle Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, in April 2002, acquired 50% of the holdings of Credit Agricola Indosuez in Nepal Indosuez Bank. The name of the bank was changed to Nepal Investment Bank ltd. upon approval of the Bank's Annual General Meeting.

1.2.3 Himalayan Bank Limited (HBL)

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits. It is the first commercial bank of Nepal with maximum share holding by the Nepalese private sector. Besides commercial activities, the Bank also offers industrial and merchant banking.

1.2.4 Nabil Bank Limited (Nabil)

Nabil Bank Limited (Nepal Arab Bank Limited) was established on July 12th 1984 under a technical service agreement with Dubai Bank Limited, Dubai, which was later merged with Emirates Bank Ltd., Dubai. Nabil Bank is the first and major joint venture bank in the country with key points of representation all over the Nepal. The Bank is managed by a team of qualified and highly experienced professionals.

1.2.5 Everest Bank Limited (EBL)

Everest Bank Limited (EBL) started its operations in 1994 with a view and objective of extending professionalized and efficient banking services to various segments of the society. EBL joined hands with Punjab National Bank (PNB), India as its joint venture partners in 1997. Drawing its strength from its joint venture partner, EBL has been steadily growing in its size and operations. and established itself as a leading Private Sector Bank. EBL is ranked as No. 2 bank by NRB. The bank is providing its services through a wide network of 18 branches across the nation and over 250 correspondents across the globe. All the major branches of the bank are connected through anywhere Branch Banking

System (ABBS); a facility that eNABILes a customer to do banking transactions from any of the branches irrespective of their having accounts in other branch. The Bank in association with Smart Choice Technology (SCT) is providing ATM services for its customers.EBL is playing a pivotal role in facilitating remittance to and from across globe The Bank recognizes the value of offering a complete range of services. EBL have pioneered in extending various customer friendly products such as Home Loan, Education Loan, EBL Flexi Loan, EBL Property Plus (Future Lease Rentals), Home Equity Loan, Car Loan, Loan Against Shares, Loan Against Life Insurance Policies.

1.3   Focus of the study

This study confines comparative analysis of financial performance among NBL, NIBL and HBL. Financial analysis covers analysis and other portfolios of JVBs. Financial analysis is the process of determining the significant operating and financial characteristic of a firm from accounting data and financial statements. Financial ratio analysis is a widely used tool of financial analysis and its performance. The goal of such analysis is to determine the efficiency and the performance of the firm's management as reflected in the financial records and reports. Besides financial analysis emphasizing profitability the study is focus on financial position analysis, income and expenditure analysis, correlation analysis and trend analysis of NBL, NIBL and HBL. Financial ratio identifies the financial strength and weaknesses of sample banks with the help of basis financial statement namely balance sheet and P/L accounts. It measures the Bank's liquidity, leverage, activity and profitability in rational way.

1.4   Statement of the Problem

This research will highlight the problems relating with banking sector with respect to three sample commercial banks they are Himalayan Bank Limited, Nepal Investment Bank Limited and Nabil bank limited. The sample banks which are choosing for the studies have achieved success in terms of market share and profitability. However it cannot always predict that these banks will continue to maintain profitability and stability of earning. Thus the management of bank should evaluate financial performance of the banks to prepare the sound financial policies.

Ratio analysis is powerful tools for evaluating the financial analysis. It is also a process of determining and interpreting numerical relationship with the help of financial statement. Management use effective strategies through financial tools and analysis for achieving optimal goal. Financial analysis satisfies the interest of common stock holders, equity investors, creditor and management of the banks.

Although all sample banks are able to earn profit and dividend to shareholders, they are facing throat cut competition between them or with other commercial banks. Therefore some question of problem arises in these sample banks, which are as follows:

    a. To what extents these banks are able to raised and maintain their profitability?

    b. Whether sample banks are more effective and efficient mobilization of fund for better financial performance?

    c. Is there any stability in various ratio policies of the sample banks?

    d. Do financial ratios indicate any strength and weakness of the banks?

1.5 Objectives of the Study

The main objective of this study is to analysis, examine and interpret the financial position of NBL, NIBL and HBL with the help of ratio analysis and other portfolio. In addition the study tries to evaluate the efficiency and progress of the sample banks comparatively.

The specific objective of the study will be pointed out as follows:

a) To analyze the financial performance of sample banks in terms of liquidity, profitability, growth, leverage and capital adequacy.

b) To identify relationship between net profit with respect to deposit, loan and advances and investment.

c) To analyze the trend of total deposit, loans and advances, total investment, net profit of the selected banks.

1.6 Significance of the Study

Economic development and financial development go side by side and the need of financial institutions availing varieties of banking services to fulfill commerce, trade, industry and agriculture needs of their country is of crucial important in Nepal. Research based on secondary data is not far from limitations due to inherent character Financial analysis play vital role in the management decision. Every organization has to analyze its

financial performance. In this way this study is very useable and valuable to major parties interested in the reference to the policy making bodies. This study is important for the following groups and individuals.

- ☞ Further researcher
- ☞ University students who are new generation
- ☞ Financial managers
- ☞ Government
- ☞ NGO's and INGO's
- ☞ Shareholders and creditors
- ☞ Stockbroker

1.7   Limitations of the Study

This study is simply for partial fulfillment of the requirement of Master in Business Studies (MBS). However there are some limitations, which narrowed the generalization. This study will be limited by following factors:

a) The study deals with only five banks but it may not applicable to other banks.

b) The whole study is based on secondary data collected from the respective companies and web sites on internet. As far as the output concerned, any.

c) The study concerns only a periods of five years i.e. from 2007/08 to 2011/12 therefore the conclusion is concern with only above period.

d) Time and budget limitation.

1.8   Organization of the Study

The Study has been divided into 5 chapters. These are as follows:

Chapter 1: Introduction

It includes background, focus of the study, introduction, and significance of   the study, statement of the problem, objectives of the study, limitation of study and organization of the study.

Chapter 2: Review of Literature

It deals with the review of available literature. It includes conceptual/theoretical review, review of books, articles & previous thesis etc.

Chapter 3: Research Methodology

It covers on research design, sample, and sources of data and methods of analysis.

Chapter 4: Data Presentation & Analysis

This chapter mainly concerns to analyze and evaluate data with the help of analytical tools procedure & interprets the result obtained.

Chapter 5: Summary, Conclusion & Recommendations

It sums up the results obtained through analysis and recommends some suggestions. This chapter will highlight the major findings of the study.

CHAPTER-2
REVIEW OF LITERATURE

This part of the study tries to describe the conceptual framework concept of commercial bank. Apart from these, this chapter highlights the literature that a available in the concerned subject to my knowledge, review of reports related to commercial banks, review of research works, review of books, review of articles and relevant study on this topic and review of previous thesis work.

2.1   Conceptual Framework

Bank is that organization where people play the game of money, depositing cash as well as taking needed loan. The bank collects scattered money of various parts of country and change into capital. This capital is invested in different productive sectors like: Agriculture, Industry, Service, and Business and through it generates profit. Thus we can say that main function of bank is mobilizing deposit into the productive sectors. The bank gives certain interest in deposit and takes high rate of interest in their loans, which are main income sources of bank. The bank also provides different services for the attraction of the customers and makes big capital. In this way, we can say that the banks actually acts as an agent between the investor and money depositor and it helps to develop our economic condition. In other words "A bank is one who in the ordinary course of this business receives money which he repays by honoring cheques of persons from which of one whose account it receives it."

Commercial bank is one of which exchange money, deposits money, accepts deposits, grant loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture and industries or such specific purpose. Commercial Bank Act 2031. But recently, The Banking and Financial Institutions Act 2063 have accumulated the act including commercial bank act 2031, which defines the bank with respect to their transaction. This act is trying to categories the banking institutions in two ways that is based on their transaction under the provisions mentioned on section 47 of this act.[*Banking &Financial Institution Act 2063]*

2.1.1   Origin of Bank

The Bank was origin from middle Europe. Before origin of bank, people used to save their valuable ornaments and money under the ground. That is not safety way for preserve assets, 50 they gave to gold smiths their money for save.

The First bank of the world called. The Bank of Venice was established in Venice, Italy in year 1157. In England, the banking begins with English goldsmiths only after 1640 A.D. so, we can say that. The goldsmiths of mid Europe are the ancestor of modern commercial Bank. The Bank of Amsterdam was the great bank in seventeenth century.

2.1.2   History of Bank in Nepal

The concept of banking was started from commercial banking in Nepal. Before the establishment of modern bank, there is too much united organization which collected deposits and invested some portion of that deposit as well as earned some interest as remuneration. Some persons who done these works are Goldsmiths, money tenders and merchants etc. They are ancestors of modern bank.

In a case of Nepal there was no any united bank of before 1994 B.S. Prime Minister Ranadeep established "Tejarath Adda" which worked as a Govt. Financial institution. Main function of that "Adda" was to provide credit security of gold, silver and other valuable ornaments. In the period of Prime minister Juddha Shamsher "Tejaratth Adda" was replaced by a commercial bank known as the Nepal Bank Ltd. After the established of NBL, banking environment started developing day by day. In 2014 B.S. NRB was established as a central bank. Rastriya Banijya Bank was set up in 2022 B.S. for to fulfill the growing credit requirements of country. Now many commercial banks have been established in our country. They are following:

Table: 2.1

List of Licensed Commercial Banks

June 2013

S No	Commercial Bank	Opp. Date	Head office
1	Nepal Bank Ltd.	1937/11/15	Kathmandu
2	Rastriya Banijya Bank Ltd.	1966/01/23	Kathmandu
3	Agriculture Development Bank Ltd.	1968/01/02	Kathmandu
4	Nabil Bank Ltd.	1984/07/16	Kathmandu
5	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu
6	Standard Chartered Bank Nepal Ltd..	1987/01/30	Kathmandu
7	Himalayan Bank Ltd.	1993/01/18	Kathmandu
8	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu
9	Nepal Bangladesh Bank Ltd.	1994/06/05	Kathmandu
10	Everest Bank Ltd.	1994/10/18	Kathmandu
11	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu
12	Nepal Credit and Commerce Bank Ltd.	1996/10/14	Rupandehi
13	Lumbini Bank Ltd.	1998/07/17	Chitawan
14	Machhapuchhre Bank Ltd.	2000/10/03	Kaski
15	Kumari Bank Ltd.	2001/04/03	Kathmandu
16	Laxmi Bank Ltd.	2002/04/03	Parsa
17	Siddhartha Bank Ltd.	2002/12/24	Kathmandu
18	Global Bank Ltd.	2008/01/02	Parsa
19	Citizens Bank International Ltd.	2008/06/21	Kathmandu
20	Prime Commercial Bank Ltd	2008/09/24	Kathmandu
21	Sunrise Bank Ltd.	2008/10/12	Kathmandu
22	Grand Bank Ltd.	2008/05/25	Kathmandu
23	NMB Bank Ltd.	2008/06/05	Kathmandu
24	Kist Bank Ltd.	2009/05/07	Kathmandu
25	Janata Bank Nepal Ltd.	2010/04/05	Kathmandu
26	Mega Bank Nepal Ltd.	2010/07/23	Kathmandu

27	Commerz & Trust Bank Nepal Ltd.	2010/09/20	Kathmandu
28	Civil Bank Ltd.	2011/12/26	Kathmandu
39	Century Commercial Bank Ltd.	2011/03/10	Kathmandu
30	Sanima Bikash Bank	2011/10/23	Kathmandu
31	NIC Asia Bank Ltd.	2012/07/02	Kathmandu

(**Source**: *http://bfr.nrb.org.np*, **2013**)

2.2   Concept of Financial Analysis

Every business firm is established with view of earning more profit. Pirated bank is also that type of organization which major objectives are earning maximum profit is necessary of long term existing of business. An investor of always invests in that area where profit is maximum financial statement is the indicator of business performance that whether business is profitable or not. Profit shows condition business. Financial statement analysis is help to the decision maker for finding out favorable or unfavorable situation of a business concern. Financial analysis reflects the financial position of a firm, which is the process of determining the operational and financial characteristics of a firm. Financial analysis also includes consideration of the strategies and economic development. Financial analysis is the main indicator of success or failure of the company. The major function of financial analysis is the pinpointing of the strengths and weakness of a business undertaking by regrouping and analysis of figures. This can be used by financial managers as the basis to plan future financial requirement by means of forecasting and budgeting procedures.

Pandey I M ''Financial analysis is the process of determine financial strengths and weakness of .Analysis company by establishing strategic relationship between the components of analysis balance sheet and analysis balance sheet and other operative data.''

Myer J.N. 1961, "Financial statement analysis is largely analysis study of relationship among the various financial factors in analysis business as disclosed by the single set of statement and analysis study of the trend of these factors as shown in analysis serous of statement."

Hampton J.J. 1998 "It is the process of determining the significant operation and financial statements. The goal of such analysis is to determining the efficiency and performance of the firm's management, as reflected in the financial records and reports."

Vanhorn J.C., Watchowlcz J.M. "Financial analysis is process of identifying the financial strength and weakness of the firm by properly establishing relationship between the itams of the balance sheet, which represents analysis snapshot of the firm's financial position analysis at moment in time and next, income statement, that depots analysis summary of the firm;s profitability overtime."

2.3   Technique of Financial Analysis

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

- ❖ Income Statement
- ❖ Balance Sheet
- ❖ Ratio Analysis
- ❖ Trend Analysis

Among above tools Ratio analysis is used by most companies. Therefore in this study we will discuss only about Ratio Analysis.

2.3.1   Income Statement

An Income statement that measures; A company's financial performance over a specific accounting period. Financial performance is assessed by giving a summary of how the business incurs its revenues and expenses through both operating and non-operating activities. It also shows the net profit or loss incurred over a specific accounting period, typically over a fiscal quarter or year. Income Statement helps to know financial condition of business firm."The income statement profit and loss account of a firm reports the result of operation in terms of income / net profit of a year." Thus income statement basically provides information on the various revenue and expense items during a certain period. This statement shows the total income generated in a period and the express made by the firm of that date. "The earning capacity and potential of the firm are reflected by income statement and it is the 'score board' of the firm's performance during a particular period of time."

2.3.2 Balance Sheet

A financial statement that summarizes a company's assets, liabilities and shares hold equity at a specific point in time. These three balance sheet segments give investors a idea so to what the companies. Owns and owes, as well as the amount invested by shares holders. Balance sheet may be defined as accounting statement of financial position of a business presented at specific point of time usually at the end of accounting period. Balance sheet shows assets on the other, the balancing of the statement being immediately apparent. Thus, balance sheet discloses the information regarding assets, liabilities and capital. From study of Balance sheet we can know the financial position of the bank at a fiscal year. It provides the information about capital and owner's equity.

2.3.3 Ratio Analysis

A tool used by individuals to conduct a quantitative analysis of information in a company's financial statements. Ratios are calculated from current year numbers and are then compared to previous years, other companies, the industry, or even the economy to judge the performance of the company. Ratio analysis is predominately used by proponents of fundamental analysis. In financial analysis a ratio is used an index or yardstick for evaluating the financial position and performance of firm. Analysis and interpretation of various ratios should give an experienced and skilled analyst a better understanding of the financial condition and performance of a firm than any provides a measure of the relationship between variables or figures. Ratio analyses is the process of determining and interpreting numerical relationship based on financial statements. It is one of the key financial ratios where the financial ratios are used for accessing the financial performance and financial position of the company by means of various ratios that relate to the liquidity, turnover, profit etc. of a company. The major ratios under this analysis are current ratios, profitability ratios, turnover ratios, and debt management ratios.

2.3.4 Trend analysis

In financial analysis the direction of charges over a period of years is of crucial importance. It indicates the direction of change. This kind of analysis is particularly applicable to the items of profit and loss account. Trend analysis is a significant and widely used statistical technique for the analysis of time series data like investment, bank deposit, net profit etc, which spread over a long period of time. It helps in forecasting and planning the future courses of action. It indicates the direction of changes or movement i.e. whether

the movement is favorable or not. It's NABIL a firm to take the time dimension into account. It helps to identify the controllable items of the given period and make forecast for future to an ongoing concern.

2.4   Review of Related Studies

2.4.1   Review of Related books

Hanks and Stucki (1956), Says that, Sound; vibrant and competitive financial sector is a key to the economic development. As the countries are, becoming more and interdependent through globalization and liberalization, most of the poor and developing nations are finding themselves way behind the developed countries in terms of trade and development. To become a successful trade partner and to achieve economic development, development of a financial sector is necessary.

Myer, (1998), "Financial analysis is used primarily to gain insight into operating and financial problems concerning the firma with respect to these problems concerning the firms with respect to here problems. We must be careful to distinguish between the cause of problem and symptom of it. It so thus an attempt to direct the financial statement in to their components on the basis of purpose in the hand and establish relationship between these items on the one hand as between individual components and totals of these items on the other. Along with this ,a study of various important factors over the past several years is also undertaken to have clear understanding of changing profitability and financial condition of the business organization."

Joshi and Shrestha (2001), They mention the principle of sound investment policy of commercial bank. In this topic, the authors identify the investment policy as profitability, liquidity, shift ability, safety, diversification of risks, capital adequacy, solvency, social welfare etc.

Dongol and Prajapati (2055), Mentions the use of Ratio Analysis as follows;

 ➢ For expressing trend
 ➢ For showing changes in financial statement
 ➢   For explaining plan for future
 ➢ For setting standard
 ➢ For comparing efficiency
 ➢ For maintain uniformity

Thapa and Rawal (2012), Says as the name itself signifies are designed to accept deposit and advance credit to commercial sector. Their operations are mainly commercial in nature and they handle short term finance. But new developments have come up as they are also handling medium term and long term financing. Commercial banks, these days, undertake numerous kinds of financing activities and provide numerous kinds of financial services.

Researcher can't find any study in the field of financial performance of   Pashchimanchal Finance Company Limited. Though various studies have been conducted on different aspect of CBs including JVBs but only one study has been undertaken about Finance Companies. The conclusions drawn on different studies will also be relevant to justify this study. Thus, the gifts of the relevant previous thesis work are captured in this section.

2.4.2   Review of Article

Thakur (2057), Raises the issue of risk management in the banking sector. According to him, "Risk should be taken as one of the challenges of the banking industry but it is not sufficient to minimize the potential disasters. Banking risk should be managed as a eparate part of the management."

Bhattarari (2059), Trying to indicate the problem of bank's bad debt and nonperforming asset. According to him "If a bank cannot recover its loan lending, bank's cash flow will be badly affected. Similar it can affect the close relationship between depositors."

Karki (2059), "Challenges of non-performing loan management in Nepal," has mentioned the causes of increasing trend of non-performing loan. She identifies the major causes such as poor loan analysis, guarantee oriented loan system, depreciation on valued assets, misuse of loan, lack of regular supervision of loan.

2.4.3 Review of journals

Khan and Jain (1988), Claim that "While it is true that general economic conditions and industry practices have a strong impact on the level of receivables, a firm's investment in these types of current assets is also greatly affected by its internal policy."

Squar (1999), Says that "Ordinary banking business consist of changing cash for bank deposit from one person to corporation (one depositor to another) giving bank deposit in exchange for bill or exchange; government bond, secured and unsecured promises businessmen to repay."

Shrestha R.L. (2009) In his "Capital Adequacy of Bank in the Nepalese Context" has suggested that the banks deal in highly risky transactions to maintain strong capital base. He concluded that the capital base should neither be too much leading to inefficient allocation of scarce resources nor so weak degree of risk associated with them are subject are subject to changes country wish, bank wish and time period wide.

Pradhan K. (2010), Concluded that the finance companies are centered in the city as like commercial banks. If this trends remains, the central bank is to consider novel strategy. However, financial and banking transaction don't take place in zero, it favors of financial intermediaries. The emergence of closure of financial companies in market economy in common sense. But keeping in mind, the social and economic structure of our country, we should not turn a deaf ear to regional balance.

2.4.4 Review of Thesis

Bikram Chandra Gurung (2003), In the study entitled with "A financial study of joint venture bank: A comparative study of Nepal Grindlays Bank Limited and Nepal Indosuez Bank Limited. " has found that profitability records of both the banks have registered an increasing trend during the first half of the study period and have decreased thereafter. He found that the liquidity, profitability and dividend payout ratio of both the banks seem to be favorable and both the banks have been able to manage satisfactory level of capital adequacy ratio in the subsequent years, which is well above the required adequacy norm. He also recommended that both the banks are required to maintain improved capital structure by increasing equity base i.e. issuing more capital, expanding general reserve and

retaining more earnings and wide range of fluctuation in the cash/bank to deposit ratio of both the bank should be stabilized after proper diagnosis of the root cause. He had suggested further that both banks should try hard to earn operational profit by increasing their operational efficiencies, mobilizing resource more efficiently or by minimizing operating expenses as far as possible or the both. He has focused mainly on return on deposit of NIBL and NABIL in his study.

Deepak Joshi (2007) In the thesis "A study on Commercial Banks of Nepal with Special Reference to Financial Analysis of Rastriya Banijya Bank" has concluded that liquidity position of the bank has maintained low- liquidity than required. Gradual increase in the amount of funded debt and highly geared capital structure seem to be negative performance for the bank moreover, return on assets is not satisfactory. The research suggests that the bank should invest its resources in more productive sectors and equity financing should be emphasized.

Bishnu Dev Pandey (2008), Has conducted another study to analyze and evaluate the financial position of HBL with title of "A Study of Financial Analysis on HBL". In his research, he has concluded that overall liquidity and capital structure position of the bank is not satisfactory. Overall profitability condition was highly appreciable profit generating capability through loans and advances appeared satisfactory. Trend of deposit collection showed that the bank was in a higher risk with respect to saving deposit as against the fixed deposit.

Sangita Shakya (2009), In the thesis "Comparative analysis of Financial Performance of selected JVBs, A case study of EBL and HBL" has familiar with comparative strength and weakness and their ability through the analysis of liquidity ratios. The major findings drawn from the study are HBL is more efficient in case of liquidity as well as it is more levered than EBL where as HBL is in better condition from the aspect of capital adequacy, activity and profitability ratios. Study showed positive correlation between loans and advances to total debts of both banks. According to the trend analysis, Profit before tax of EBL has been increasing at the higher rate than that of HBL.

Sarita. Shakya (2009), performs a study on financial analysis of joint venture banks in Nepal. The objective of this study was to carry out the comparative financial performance evaluation of Nabil Bank and EBL.

In this study, his financial ratio viz. Liquidity, leverage, activity, profitability, growth and valuation, and statistical tools viz. Karl Pearson's correlation coefficient, t-test simple average, and index. The researcher has found that in spite of the increase in loans and deposits of both banks, their performance measured in terms of deposit utilization rate is not satisfactory. Further, the study showed that financial performance of Nabil is better than that of EBL.

Nabin Gurung (2011), NABIL and Nepal Investment Bank Ltd. The study has covered the period of seven fiscal years i.e. 2009/10 through 2010/11. In this study, he has used financial ratios viz. current activity, profitability, capital structure and statistical tools viz. Karl Pearson's Coefficient of correlation. The researcher has, on the basis of different financial indicators; found that performance of NABIL is better than that of NIBL

Bijaya Lal Shrestha (2012) conducted his MBS Thesis on "Comparative Analysis of Finance Companies in Nepal". His study primarily based on number of emerging and developing finance companies. His primary objective has been to :
To evaluate investment financial performance of

Finance Companies of Nepal. To examine investment of finance companies of Nepal with reference to securities loans and advances. To find the comparative financial strength and weakness of various finance companies To find growth and downfall of various finance companies. To find return rate to the shareholders as they are creditors of the companies.

In this regard he tried to focus on the major problems of finance companies at growth level. Furthermore he accepts that for achievement of targeted step of goals and objectives of finance companies, is required to make better investment and better profit. For that good financial performance is required. In conclusion analysis and observation with facts, it must be concluded with a reason NABIL realistic solution.

2.5 Research Gap

There is gap between the present research and the previous researches. Previous researches conducted on the topics concerning on the financial aspects not for the trend of profit in the bank. Most to the study were based on general financial activities of the bank. The findings of the previous researches were mostly based on old data. Most of the previous researches didn't disclose what kinds of performances should be implemented in bank. Thus to fill up those gap the current research is conducted.

CHAPTER-3
RESEARCH METHODOLOGY

This chapter includes research design, justification for the selection of study unit, nature and sources of data, method of data collection, data analysis tools and limitations of methodology. The prime objectives of this chapter are to evaluate and assess the financial performance of selected Commercial Bank in different timelines. The above research procedures are adopted comprehensively to accomplish the objectives set in Chapter 1.

3.1   Research Design

"A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure." Research design is a plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances. To achieve the objective of the study, descriptive and analytical research designs will be used. Some statistical and accounting tools will be applied to evaluate financial performance of the banks.

This research has basically followed the descriptive methodology to analyze the collected data. The data are collected from website of NRB and Sample Company's annual report. The collected data are shown in Table and Bar Graph. Some financial tools like: Ratio Analysis , Activity Ratios, Profitability Ratio, Capital Adequacy Ratios, Leverage Ratio are used to analyses the collected data. Some Statistical tools like: Arithmetic Mean, Standard Deviation, Co-efficient of Variation, Co-efficient of Correlation ,Probable Error of the Co-efficient of Correlation, Co-efficient of Determination ,Simple Regression Analysis, Test of Hypothesis, Trend Analysis are used to analyses the collected data.

3.2   Nature and Sources of Data

There are two sources of data collection. The research is based on secondary source of data. All the adequate data are collected from secondary sources. This refers from to data that are already used and gathered by others. Secondary data are mostly used for this research purpose. So that major sources of secondary data are as follows.

- ➢ Annual report of concern bank
- ➢ Web site of selected bank
- ➢ NRB directives
- ➢ Economy survey of Government of Nepal ; Finance Ministry
- ➢ Newspaper, journals, articles and various economic magazines.
- ➢ Dissertation of Center Library of T.U. and Library of Nepal Commerce Campus.

3.3   Population and Sampling Design

There are 31 Listed Commercial Banks in Nepal and their stocks are traded actively in stock exchange market. It is not possible to study all bank; so the financial analysis of listed five banks is being compared with that average of the same which are selected from population. They are one is Government bank rest of four are joint venture bank.

1) Bank Of Kathmandu Limited **(BOK)**
2) Nepal Investment Bank Limited **(NIBL)**
3) Nabil Bank Limited **(NABIL)**
4) Himalayan Bank Limited **(HBL)**
5) Everest Bank Limited **(EBL)**

The samples are selected because of following features:-

3.4   Data Collection Procedure

As explain before, the main sources of secondary data are the annual reports of the banks published in their respective annual general meetings and website www.nepalstockexchange.com and relevant bank's website. In addition to that some of the relevant data will also collect from the non bank financial statistics published by the non bank regulation department if Nepal Rastra Bank.

3.5   Data Analysis Procedure

To achieve the objectives of the study, various accounting, statistical and financial tools have been used in this study. The analysis of data is done according to pattern of data available. With the available tools and resources statistical tools such as Karl Pearson's coefficient of correlation, simple and multiple regressions analysis as well as corresponding hypothesis etc is use in the study. Similarly some strong accounting and financial tools such as ratio analysis and trend line analysis are also apply in this study.

The various calculated results obtained through financial and statistic tools are tabulated under different headings. Then they are compared with each other to interpret the results.

3.5.1 Financial Tools

To evaluate the financial position and performance of any firm ratio is used as a key tool of financial analysis. "Financial Analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account". Financial Analysis is the use of financial statements to analyze a company's financial position and performance and to assess future financial performance.

3.5.1.1 Ratio Analysis

Ratio Analysis is a tool of scanning the financial statement of the firm. It is simply one number expressed in terms of another and as such it expresses the numerical and qualitative relationship between two variables. Through this, one comes to know that in which areas operation the organization is strong and in which areas it is weak. Ratio Analysis is the widely used tool of financial analysis in financial analysis; a ratio is used as a benchmark for evaluating the financial position of the firm. Ratio Analysis reflects the relative strengths and weakness of any organization and also indicates the operation and financial growth of the organization. "Ratio helps to summarize large quantities of financial data and to make quantitative judgment about the firm's financial performance. The relationship between two accounting figures expressed mathematically is known as financial ratio." Even though there are many ratios, only those have been calculated which are related to the subject matter. Following ratios have been computed and analyzed in this study.

3.5.1.2 Liquidity Ratios

As name denotes the liquidity refers to the ratio between liquid assets and liability. Liquidity ratio measures the ability of firm to meet its current obligations. In fact, analysis of liquidity needs the preparation of cash budgets and cash funds, but liquidity ratio, by establishing a relationship between cash and other current assets to current obligation, provide a guide measure of liquidity. Liquidity ratios give insight into the present cash solvency of the firm and its ability to remain solvent of adversities. It is the comparison

between the short term obligation and the short firm resources. In case bank, liquidity management is widely used to analyze liquidity position of banks. If a company does not maintain sufficient liquidity then it will result in baa credit ratings, less creditors, confidence, eventually may less to bankruptcy. Thus the company should endeavor to maintain proper balance between sufficient liquidity and unnecessary liquidity for the survival and for avoiding risk.

A bank should ensure that it does not suffer from lack of liquidity and it does not have excess liquidity. Both conditions of liquidity are unfavorable for a bank.

Banks can experience lack of liquidity when cash outflows (due to deposit, withdraws, loans, etc) exceed cash inflows (new deposits loan repayments etc). They can resolve any cash deficiency either by creating additional liabilities or by selling assets. To analyze the ability of banks, the following ratios are calculated.

3.5.1.3 Current Ratio

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

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

Current assets those assets which can be converted into cash bank balance within analysis accounting period such as cash bank balance, investment in treasury bill, money at call or placement, loans, receivable and prepaid expenses .etc.

Current Liabilities refers to the short- term maturing obligations. This includes all deposit liabilities, intra bank reconciliations account, bills payable, tax provision, staff bonus, dividend payable overdrafts, provisions and accrued expenses.

3.5.1.4 Cash and Bank Balance to Total Deposit Ratio

Cash and bank balance are the most liquid current assets. This ratio measures the percentage of liquid fund with the bank to make immediate payment to the depositors. This

ratio is computed by dividing cash and bank balances by total deposit. This can be presented as follows:

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

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

3.5.1.5 Cash and Bank Balance to Current Assets Ratio

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

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

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

3.5.1.6 Assets Management Ratios (Activity Ratios)

Traditionally, asset and investment management ratios have been called activity ratios or turnover ratios. What ever designation, the idea is to measure how effectively the firm utilized the investments and the economic resources at its command. Investments are made in order to produce profitable sales. Achieving profitable sales, therefore involves making sound investments. At the practical level, this involves comparisons between the sales and

the investment in various assets accounts. The methodology postulates an optimal relationship between sales and the various types of asset investment.

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

3.5.1.7 Loan and Advances to Total Deposit Ratio

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

$$\text{Total Deposit Ratio} = \frac{\textit{Loan and Advances}}{\textit{Total Deposit}}$$

Here loan and advances refers to total of loan, advances and overdraft and total deposits refer to total of all kinds of deposits.

3.5.1.8 Loan and Advances to Fixed Deposit Ratio

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

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

3.5.1.9 Loan and Advances to Total Working Fund Ratio

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

$$\text{Total Working Fund Ratio} = \frac{\textit{Loan and Advances}}{\textit{Total Working Fund}}$$

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

3.5.1.10 Investment on Government Securities to Total Deposit Ratio

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

$$\text{Securities to Total Deposit Ratio} = \frac{\textit{Investment on Government Securities}}{\textit{Total Deposit}}$$

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

3.5.1.11 Investment on Government Securities to Total Working Fund Ratio

The ratio measure to what extent, Banks are successful in mobilizing their total working fund on different types of government securities to grow income. All the deposits of banks should not be utilized as loans and advances and other from liquidity as well as company's security point of view. That's why some of the investments should be diversified into such kind of investments that has lower risk in companies to loans. Higher the ratio result, better the mobilization of fund as investment on government securities and vice versa. This ratio is calculated by dividing investment on government securities by working fund. This can be stated as:

$$\text{Total Working Fund Ratio} = \frac{\textit{Investment on Government Securities}}{\textit{Total Working Fund}}$$

3.5.1.12 Profitability Ratios

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

3.5.1.13 Net Profit to Total Assets

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

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

3.5.1.14 Net Profit to Total Deposit Ratio

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

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

3.5.1.15 Net Profit to Net Worth Ratio

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

$$\text{Net Profit to Net Worth Ratio} = \frac{Net\ Profit}{Net\ Worth}$$

3.5.1.16 Total Interest Earned to Total Working Fund Ratio

The ratio shows the earning capacity of a bank on its total assets (working fund). This ratio exhibits the extent on which banks are successful in mobilizing their working funds to generate income as much as possible. The higher ratio will indicate the high earning power of the banks on its total assets. Total interest earned is calculated by adding the total

income from loans, advances, cash, credit, overdrafts and government securities etc. This ratio is calculated by dividing net profit by total working fund.

$$\text{Total Working Fund Ratio} = \frac{\textit{Total Interest Earned}}{\textit{Total Working Fund}}$$

3.5.1.17 Total Interest Paid to Total Working Fund Ratio

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

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

3.5.1.18 Leverage Ratios

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

In practice, leverage is approached in two ways. One approach examines balance sheet ratios and determines the extent to which borrowed funds have been used to finance the firm. The other approach measures the risks of debt by income statement ratios designed to determine the number of times fixed charges are covered by operating profits. These sets of ratios are complementary, and most analysts examine both.

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

3.5.1.19 Debt Assets Ratio

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

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

3.5.1.20 Debt Equity Ratio

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

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

3.5.1.21 Capital Adequacy Ratios

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

3.5.1.22 Shareholder's Fund to Total Deposit Ratio

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

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

3.5.1.23 Shareholder's Fund to Total Assets Ratio

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

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

3.5.1.24 Market Value Ratio / Growth Ratio

Market value ratio represents how well the banks are maintaining their economic and financial position. The ratios can be calculated by dividing the last period divided by the first period divided, then by referring to the computed interest tables. Alternatively, it is calculated by using the following formula,

$$FV = PV(1+r)^n$$

Where,

FV = Future Value   r = rate interest

PV= Present Value   n= no. of year

A high ratio generally indicates better performance and vice-versa. To examine and analyzed the expansion analysis growth of company. Following growth ratio are calculated in this study.

3.5.1.25 Net Profit

Net Profit is the main indicator of financial position of any business organization. Net profit is essential for its survival and growth and to maintain capital adequacy through profit retention. This indicator is computed by subtracting total expenditure including tax from operating income and interest. It is also called net profit after tax and interest.

$$NP = OI - (TE + IP + T)$$

Where,

NP =   Net Profit after Tax and Interest.

OI =   Operating Income

TE =   Total Expenditure

IP =   Interest Paid

T =   Taxes

3.5.1.26 Earning Per Share (EPS)

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

$$EPS = \frac{NPAIT - PD}{n}$$

Where,

EPS = Earning Per Share

NPAIT= Net Profit after Interest and Taxes

PD =   Preference Dividend

n   =   Number of Equity Shares

3.5.1.27 Dividend Per Share (DPS)

Bank pay certain amount of net profit as dividend to its shareholders under its' policy. The term dividend refers to distributed earning to the shareholders of the bank in return to their investment. Generally, dividend implies that portion of net profit, which is allocated to shareholders as their return in term of cash or share. The difference fund between EPS and DPS is retaining in the company as retain earning. It is calculated total dividend by number of share.

$$DPS = \frac{TDD}{n}$$

Where,

DPS   =   Dividend Per Share

TDD   =   Total Distributed Dividend

n   =   Number of Common Share Outstanding

3.5.2 Statistical Tools

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

3.5.2.1 Arithmetic Mean or Average

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

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

Where,

$\overline{X}$ = Arithmetic Mean

$\sum x$ = Summation for Total Values of the Variable / Observation

N = Number of Items

3.5.2.2 Standard Deviation

The standard deviation is the most important and widely used measure of studying dispersion. It is also known as root mean square deviation for the reason that the square root of the mean of the standard deviation from the arithmetic mean. It is also denoted by the small Greek letter σ (Sigma). The standard deviation measures the absolute dispersion or variability of a distribution. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a serious, a large standard deviation means just the opposite. Hence, standard deviation is extremely useful in judging the representative of the mean.

Symbolically,

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

Where,

σ = Standard Deviation

$\sum d^2$ = Sum of Squares of the Deviation Measured from the Arithmetic Average

n = Numbers of Item

3.5.2.3 Co-efficient of Variation (C.V)

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

We can denotes this by following formula,

$$CV = \frac{\sigma}{x} \times 100$$

Where,

CV =   Co-efficient of Variation

σ =   Standard Deviation

$\overline{X}$ =   Mean / Average

3.5.2.4 Co-efficient of Correlation (r)

Correlation is the statistical tool that we can use to describe the degree to which one variable is linearly related to another. The coefficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the study. The result of coefficient of correlation is always between +1 and −1. When r =+1, it means there is perfect relationship between two variables and vice-versa. When r=0, it means there is no relationship between two variables. The Pearson's1 formula is:

$$r = \frac{N\sum xy - \sum x \times \sum y}{\sqrt{N\sum x^2 - (\sum x)^2}\sqrt{N\sum y^2 - (\sum y)^2}} -$$

Where,

r   =   Co-efficient of Correlation

x   =   Independent Variable

y   =   Dependent Variable

N =   Number of Periods

3.5.2.5 Probable Error of the Co-efficient of Correlation

After the calculation of co-efficient of correlation the next thing is to find out extent to which it is dependable. For this purpose the probable error of the coefficient of correlation is calculated. If the probable error is added to and subtracted from the co-efficient of correlation it would give two such limits with in which we can reasoNABILy accept the value of co- efficient of correlation to vary. The formula for finding out the probable of error of the Karl Pearson's co-efficient of correlation is:

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

Where,

P.E.r = Probable Error of Co-efficient of Correlation

r = Co-efficient of Correlation

n = Number of Pairs of Observations

In other to conclude whether co-efficient of correlation is significant or not. The following points should be kept in mind.

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

3.5.2.6 Co-efficient of Determination (R^2)

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

Symbolically, $R^2 = (r)^2$

Where,

R^2 = Co-efficient of Determination

r = Co-efficient of Correlation

3.5.2.7 Simple Regression Analysis

Regression is one of statistical tool, which is used to determine the statistical relationship between two or more variables and to make estimation (or prediction) of one variable on the basis of the other variable. In other word, it is that tools with the helps of which unknown value of one variable can be estimated on the basis of known

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

3.5.2.8   Test of Hypothesis

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

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

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

The t – statistic is calculated by following formula under Ho:

$$T = \frac{r}{\sqrt{1-r2}}\sqrt{n-2}$$

3.5.2.9 Trend Analysis

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

$Yc = a + bx$

Where,

Yc = the estimated value of Y for given value of x obtained from the line of regression

Of **Y** on **X**

a = "Y- intercept "/ mean of Y value

b = "slope of line "/ rate of change

x = the variable in time series analysis represent time

In order to determine the value of the constants a and b the following two normal equations are to be solved.

$\sum Y = Na + b\sum X$ and $\sum XY = a\sum X + b\sum X^2$

Where;   N= Number of Years for with the date are given

Here, X stands for the time variations and Y for the variables related to time. Naturally, if we take the middle year or the mid – point of the two years as the starting point, X will be equal to 0 and the two equations will then be

$\sum Y = N a$ and $\sum XY = b\sum x^2$

By transformation, we; can write

$$a = \frac{\sum Y}{N} \qquad \text{and} \qquad b = \frac{\sum XY}{\sum X^2}$$

The term best fit is interpreted in accordance with the principle of least squares which consists in minimizing the sum of squares of the residual of the errors of estimates i.e. the deviation between the given observed value of the variable and their corresponding estimated values as given by the line of best fit.

This topic will be used to forecast the ratios of Total deposit, Total Loan and Advances, Total Investment and Net Profit of the banks for next five years on the base of past five years. The analysis is done under limited factors which are as follows:

- The economy will remain unchanged as of present the stage.

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

CHAPTER-4
DATA PRESENTATION AND ANALYSIS

This chapter is devoted to the presentation, analysis, interpretation and scoring the empirical finding out of the study through definite course of research methodology. To achieve the stated of the study and also to make the reader easier to understand the findings qualitative data and information has been analyze. Different types of ratios have been calculated to reach in the conclusion of this study.

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

4.1   Presentation and Analysis of Data

4.1.1   Ratios Analysis

Ration analysis is a powerful tool of financial analysis, which helps in identifying strength and weakness of business concerns. Ratios analysis is the expression of the relationship between the mutually independent figures. It is an important way to state meaningful relationships between components of financial statements. It shows the quantitative relation between two variables. Simple it is calculated as dividing on variable by another variable. The primary purpose of ratio is to point out area for further investigation. Ratio analysis has been a major tools used in the interpretation and evaluation of financial statements.

4.1.1.1 Liquidity Ratios

As name denotes the liquidity refers to the ratio between liquid assets and liability. Liquidity ratio measures the ability of firm to meet its current obligations Banks should maintain it's satisfactory liquidity position to satisfy the short-term credit needs of the community, to meet demands for deposits, withdraws, pay maturity obligation in time an convert non cash assets into cash to satisfy immediate needs without loss to bank consequent impact in log run profit. Liquidity ratio measures the short- run solvency of the firm.

4.1.1.1.1 Current Ratio

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

<div align="center">

Table No.4.1 Current Ratio   Rs. in million

</div>

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	**Current Assets**	3740.1	4136.9	5738.7	5113.7	4940.7
	Current Liabilities	12414.3	15910.4	18182.4	20399	23123.2
	Ratio	**0.3012**	**0.2600**	**0.3156**	**0.2507**	**0.2137**
NABIL	**Current Assets**	9778.6	14860.5	17035.7	13958.5	14508.2
	Current Liabilities	23915.6	32353.6	38247	47040.1	50712.9
	Ratio	**0.4088**	**0.4593**	**0.4454**	**0.2967**	**0.2861**
NIBL	**Current Assets**	9054.7	11921.1	21654.6	18732	22221.3
	Current Liabilities	26751.7	36829.3	49223.7	52621.8	52886.6
	Ratio	**0.3385**	**0.3237**	**0.4399**	**0.3560**	**0.4200**
HBL	**Current Assets**	10794	9860.6	12487.9	12801.8	11187.1
	Current Liabilities	30024.7	31932.2	34821.1	37931.4	41085.5
	Ratio	**0.3595**	**0.3088**	**0.3586**	**0.3375**	**0.2723**
EBL	**Current Assets**	7099.8	6523.7	13452	16445.4	13039.9
	Current Liabilities	19425.1	24748.5	34095.7	37909.6	42108.9
	Ratio	**0.3655**	**0.2636**	**0.3945**	**0.4338**	**0.3097**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.2683**	**0.3793**	**0.3756**	**0.3273**	**0.3534**
	S.D.	**0.1207**	**0.0825**	**0.0515**	**0.0367**	**0.1865**
	C.V. in %	**44.98%**	**21.75%**	***13.70%***	**11.21%**	**52.77%**

(**Sources:** *Sources& Uses of fund of concerned Bank. Refer Appendix -1*

Given Table no. 4.1 shows the current ratios of the sampled banks. According to this table the ratios of BOK is very - 41 -luctuating order. From fiscal year 2007/08 to 2008/09 it is decreasing order. It means current liabilities is increase than current assets. In fiscal year

2008/09 to 2009/10 this ratio is increasing. From fiscal year 2009/10 to 2011/12 this ratio is decreasing order.

Likewise current ratio of NABIL is increasing order from fiscal year 2007/08 to 2008/09. Then after it is decrease respectively. Current ratio of NIBL is also fluctuating order. One year it is increasing and next year this ratio is decrease respectively. The Current ratio of HBL and EBL also same as jicjac order .It means these bank have no fixed liquidity.

As concern with liquidity and consistency HBL seems to be in better position than other four sample banks which shows by lowest C.V. (i.e. 11.21%) among the sample banks. Respectively NIBL, NABIL,BOK and EBL is unsuccess to maintain the consistency in the liquidity.

These banks have following C.V. 13.70%,21.75%,44.98%,52.77% respectively.

Figure No.4.1
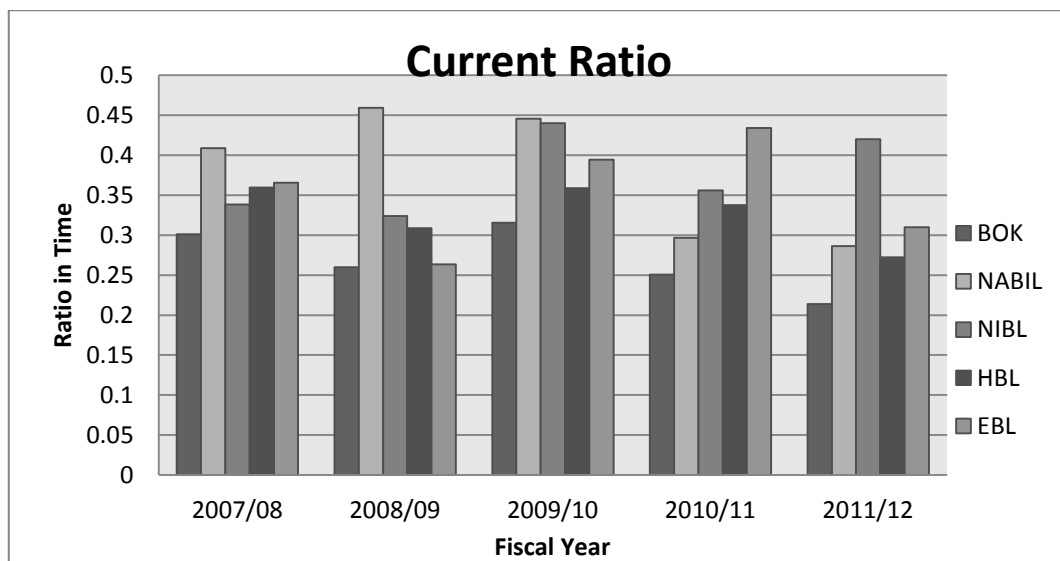
Above figure no.4.1 also shows that the Current Ratio of the five sample banks in various five fiscal year. In 2008/09 NABIL has greater current ratio then other sample banks. It is 0.4593 Same as in fiscal year 2011/12 BOK has lowest current ratio than other sample banks. That is 0.2137

4.1.1.1.2 Cash and Bank Balance to Total Deposit Ratio.

   This ratio measure the percentage of liquid find with the bank to make immediate payment to the deposits. The main purpose of this ratio is to examine the bank's liquidity capacity on the basis of cash and bank balance. The following table shows the cash and bank balance to total deposit ratio of selected sample banks.

Table No. 4.2

Cash & Bank Balance with Total Deposit   Rs. In million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Cash & Bank Balance	1301.6	1440.4	2169.0	1792.4	1679
	Total Deposit	12358.6	15832.7	18083.9	20315.8	21018.4
	Ratio	**0.1053**	**0.0910**	**0.1199**	**0.8820**	**0.0799**
NABIL	Cash & Bank Balance	1399.6	2671.1	3372.5	1395.6	2432
	Total Deposit	23342.4	31915	37348.3	46334.8	49691.4
	Ratio	**0.0600**	**0.0837**	**0.0903**	**0.0301**	**0.0489**
NIBL	Cash & Bank Balance	2441.5	3755	7918	6815.8	8140.4
	Total Deposit	24488.9	34451.8	46697.9	50094.7	50138.1
	Ratio	**0.0997**	**0.1090**	**0.1696**	**0.1361**	**0.1624**
HBL	Cash & Bank Balance	1549.6	1396.7	3048.6	3866.1	2964.3
	Total Deposit	29905.8	31805.3	34681	37609.4	40920.6
	Ratio	**0.0518**	**0.0439**	**0.0879**	**0.1028**	**0.0724**
EBL	Cash & Bank Balance	3329.7	2852.4	6164.4	7818.8	6122.9
	Total Deposit	19097.7	23976.3	33322.9	36932.3	41127.9
	Ratio	**0.1744**	**0.1190**	**0.1850**	**0.2117**	**0.1489**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	0.0969	0.0626	0.1354	0.0718	0.1678
	S.D.	0.0158	0.0250	0.0312	0.0250	0.0354
	C.V. in %	16.30	39.94	23.04	34.82	21.09

(**Sources:** *Sources& Uses of fund of concerned Bank. Refer Appendix -2)*

Above Table No. 4.2 The cash and bank balance to total deposit ratio of FIVE sample banks of 5 years from fiscal year 2007/08 to 2011/12. It is very fluctuation order. During study of 5 years period, in 2010/11 the EBL has highest ratio that is 0.2117 and same year NABIL has lowest ratio which is 0.0301 Similarly BOK has highest ratio of 0.1199 in fiscal year 2009/10 and lowest ratio of 0.0799 in fiscal year 2011/12. Same as NABIL has highest ratio in fiscal year 2009/10 that is 0.0903 lowest in fiscal year 2010/11 that is 0.0301 For NIBL has also highest ratio 0.1696 in fiscal year 2009/10 lowest 0.0997 in 2007/08 Similarly HBL has highest ratio is 0.1028 in 2010/11 and lowest ratio 0.0439 in

fiscal year 2008/09 same as EBL has highest ratio 0.2117 and lowest ratio 0.1190 respectively in fiscal year 2010/11 and 2008/09

EBL has maintains the higher cash and bank balance to total deposit ratio but BOK has better position in consistency which is shown by lowest C.V. (16.30%) they have a consistency in utilizing the cash balance among the other sample banks. NABIL has highest CV and lowest mean that is 0.0626 that indicate NABIL has highest liquidity then other sample Bank. Holding cash and bank balance can have a negative impact on the goodwill or reputation of the bank to fulfill the demand of the profit holder and lower cash balance can have a negative impact on the customer. Therefore banks should maintain the enough liquidity.

Figure No. 4.2
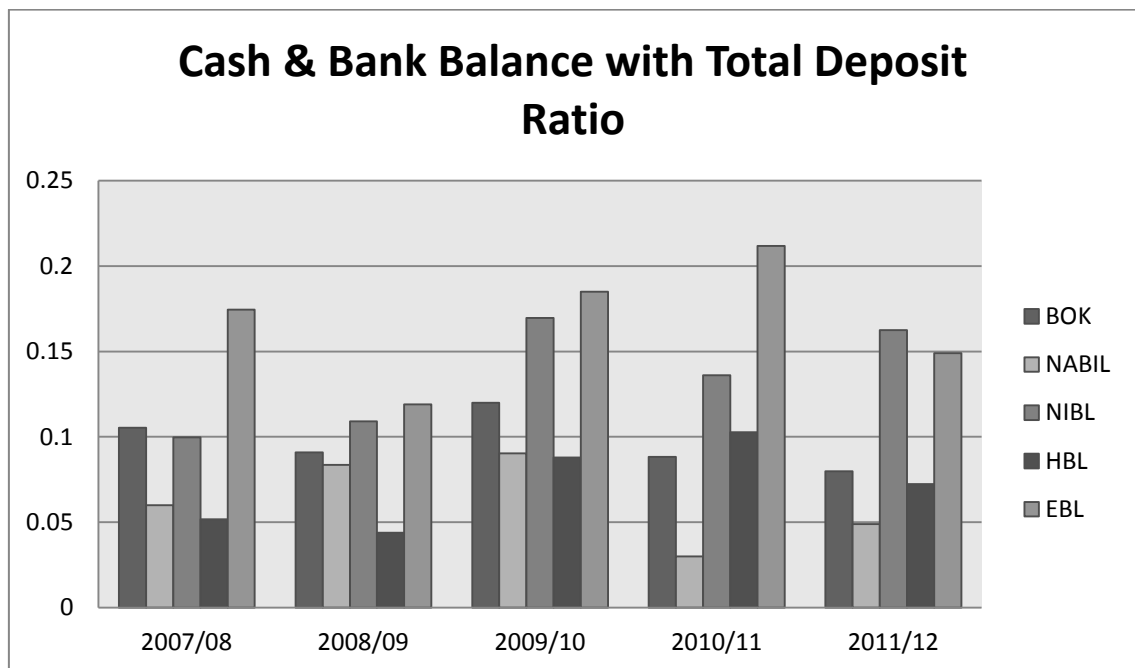
Above figure no. 2 we saw that in fiscal year 2010/11 NABIL has lowest ratio and same year EBL has highest cash and bank balance to total deposit ratio.

4.1.1.1.3 Cash and Bank Balance to Current Assets Ratio:

Cash and Bank balance to current assets ratio shows the percents of readily available fund with in the banks. A high ratio indicates the sound ability to meet their daily cash requirements of this customer deposits and vice versa.

Cash &Bank Balance With Current Assets Rs. in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Cash & Bank Balance	1301.6	1440.4	2169.0	1792.4	1679
	Current Assets	3740.1	4136.9	5738.7	5113.7	4940.7
	Ratio	**0.3480**	**0.3482**	**0.3789**	**0.3505**	**0.3398**
NABIL	Cash & Bank Balance	1399.6	2671.1	3372.5	1395.6	2432
	Current Assets	9778.6	14860.5	17035.7	13958.5	14508.2
	Ratio	**0.1431**	**0.1797**	**0.1980**	**0.0999**	**0.1676**
NIBL	Cash & Bank Balance	2441.5	3755	7918	6815.8	8140.4
	Current Assets	9054.7	11921.1	21654.6	18732	22221.3
	Ratio	**0.2696**	**0.3150**	**0.3657**	**0.3639**	**0.3665**
HBL	Cash & Bank Balance	1549.6	1396.7	3048.6	3866.	2964.3
	Current Assets	10794	9860.6	12487.9	12801.8	11187.1
	Ratio	**0.1436**	**0.1416**	**0.2441**	**0.3020**	**0.2650**
EBL	Cash & Bank Balance	3329.7	2852.4	6164.4	7818.8	6122.9
	Current Assets	7099.8	6523.7	13452	16445.4	13039.9
	Ratio	**0.4690**	**0.4372**	**0.4583**	**0.4754**	**0.4696**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	0.3529	0.1577	0.3361	0.2193	0.4619
	S.D.	0.0141	0.0433	0.0430	0.0728	0.0158
	C.V. in %	3.9955	27.46	12.79	33.20	3.42

(**Sources:** *Sources& Uses of fund of concerned Bank. Refer Appendix -3)*

Above Table no. 4.3 Cash and Bank balance to Current Assets Ratio is given of five sample banks of fiscal year 2007/08 to 2011/12 According to this table we know that the highest ratio 0.4696 in fiscal year 2011/12 of EBL and lowest of all is 0.0999 in fiscal year 2010/11 of NABIL. The ratio is very fluctuating order. Ratio of EBL is greater than other sample bank. The mean of EBL is 0.4619 and C.V is 3.42% which is lowest C.V. of other sample banks .That indicates EBL successful in maintaining a stability of cash and bank

balance in comparison to other sample banks. But HBL has highest C.V. that is 33.20 % and mean ratio is 0.2193 which means HBL mobilized its cash in more profitable sector. NABIL has 27.46% of CV and its mean ratio is 0.1577 which is lowest mean than rest of sample banks which means NABIL has very limit liquidity. BOK has 0.3529 mean ratio and C.V. is 3.9955% that means BOK also good management of maintain a stability of cash and bank balance with current assets . NIBL has 0.3361 of mean ratio and 12.79% C.V. that indicates a NIBL can meet its daily cash requirement. It really means that NIBL has a third highest mean ratio among five sample banks NIBL may have invested their fund in more productive sectors.

Figure No.4.3
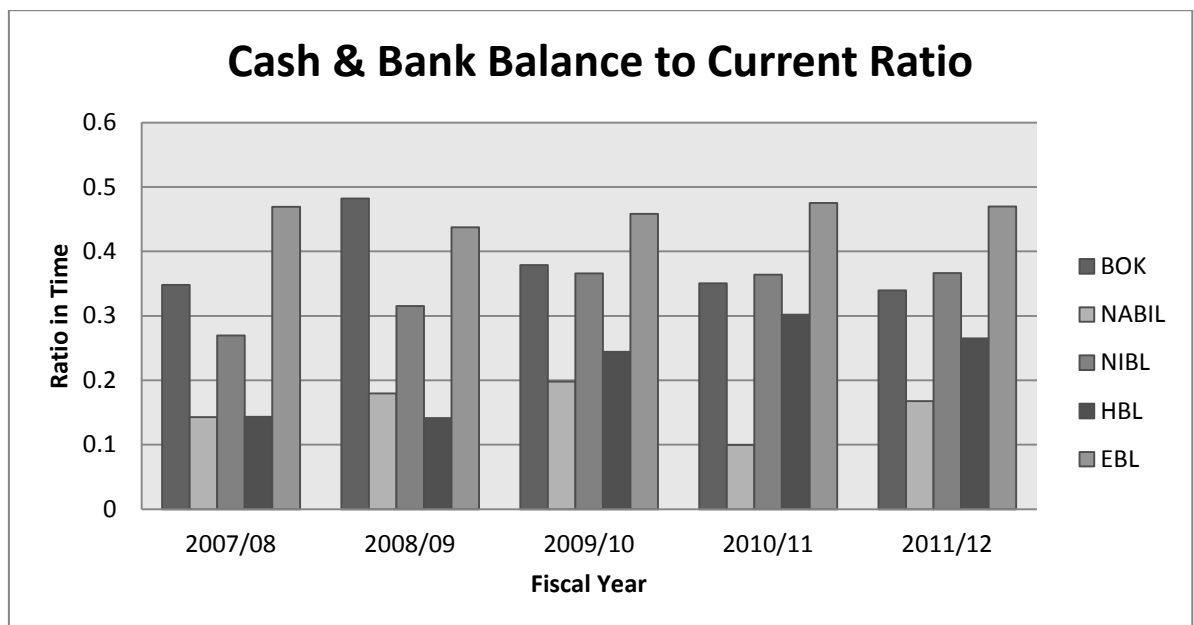
Above figure no.4.3 we can also know EBL bar is highest than other sample banks rest of bank's bar is very fluctuating order.

4.1.1.2 Activity Ratio / Assets Management Ratio:

Activity Ratio / Assets Management Ratios indicate the speed with which assets are being converted or turned over. Thus these ratios are used to measure the banks ability to utilize their available resources. Asset management ratio predicts how efficiently banks manage the resources at its command. The following asset management ratios are used in this study for comparison of the ban

4.1.1.2.1 Loan and Advance to Total Deposit Ratio

This ratio measures the extent to which the Banks are successful to mobilize the total deposits on loans and advances for the purpose of income generation. The following table exhibits the ratio of loans and advances to total deposits of the Banks throughout the study period.

Table No.4.4
Loan & Adv. To Total Deposit Ratio

Rs. In million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Loan &Advance	9663.6	12692.9	14894.7	16847.1	17247.8
	Total Deposit	12358.6	15832.7	18083.9	20315.8	21018.4
	Ratio	0.7819	0.8017	0.8236	0.8293	0.8206
NABIL	Loan &Advance	15657.1	21514.6	27816.6	32902.8	38765.6
	Total Deposit	23342.4	31915	37348.3	46334.8	49691.4
	Ratio	0.6708	0.6741	0.7448	0.7101	0.7801
NIBL	Loan &Advance	17482	27145.5	36250.4	40689.6	41665.2
	Total Deposit	24488.9	34451.8	48897.9	50094.7	50138.1
	Ratio	0.7139	0.7879	0.7763	0.8123	0.8310
HBL	Loan &Advance	17672	19985.2	25292.1	28976.1	31656.6
	Total Deposit	29905.8	31805.3	34681	37609.4	40920.6
	Ratio	0.5909	0.6284	0.7293	0.7705	0.7736
EBL	Loan &Advance	14059.2	18814.3	24366.2	28129.7	31534.7
	Total Deposit	19097.7	23976.3	33322.9	36932.3	41127.9
	Ratio	0.7362	0.7847	0.7312	0.7617	0.7667
		BOK	NABIL	NIBL	HBL	EBL
	Mean	0.8114	0.7160	0.7843	0.6985	0.7561
	S.D.	0.0192	0.0466	0.0450	0.0840	0.0218
	C.V. in %	2.3663	6.5084	5.7376	12.0258	2.8832

(Sources: *Sources& Uses of fund of concerned Bank. Refer Appendix -4)*

Above table no. 4.4 indicate the ratio of Loan & Adv. to Total Deposit of five fisical year of five sample banks.BOK has registered the lowest ratio 0.7819 in fiscal year 2007/08 and highest ratio 0.8293 in fiscal year 2011/12 with mean ratio 0.8114 Ratio of BOK is increasing order till 2009/10 then for three year nearly constant it means BOK successful in mobilizing the loan and advances to profitable sector with respect to total deposit. NIBL registered the lowest ratio in 0.7139 in fiscal year 2007/08 and highest

ratio 0.8310 in 2011/12 with mean ratio 0.7843 It is totally increasing order which indicate NIBL progress its mobilizing its loan and advance capacity year by year. Same as EBL registered highest ratio0.7847 in fiscal year 2008/09 and lowest ratio in 0.7312 but it is not very lowest almost EBL ratios are nearly constable . It's mean ratio is 0.7561which is third rank of successful on loan and advance mobilization of all sample bank . Like wish NABIL registered lowest ratio 0.6708 in fiscal year 2007/08 and highest ratio 0.7801 in 2011/12 with mean ratio 0.7160 Same as HBL has registered highest ratio is 0.7736 and lowest ratio is 0.5909 with mean ratio is 0.6985 which is lower ratio then rest of sample banks.

As concerned with the consistency of HBL is failed to maintain the consistency in comparison to BOK,NIBL,EBL and NABIL because it has a higher C.V. 12.0258% then rest of banks. BOK has lowest CV. 2.3663% so, they are able to maintain the consistency. Rest of other sample banks like wise EBL,NIBL, NABIL they are also able to maintain the stability in investing loan and advance to some extent. There C.V. is respectively 2.88%,5.7376% and 6.50%

Figure No. 4.4
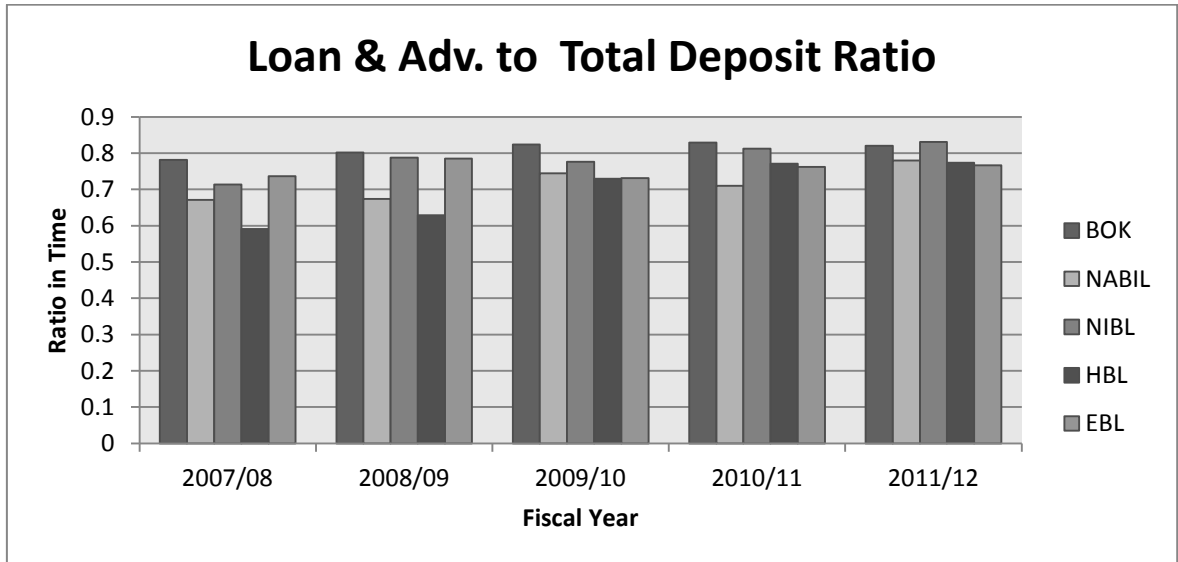
Above figure no. 4.4 we can see that Loan and Advances to Total Deposit Ratio of sample bank of five different fiscal year.

4.1.1.2.2 Loan and Advance to Fixed Deposit Ratio:

This ratio measures the effectiveness of mobilizing loan and advance in respect with fixed deposit. Fixed deposits are high interest bearing obligation where as loan and advances are

the major sources of investment to generate income for the commercial banks. The following table displays the ratio of loan and advances to fixed deposit ratios of sample banks

Table No.4.5
Loan & Adv. to Fixed Deposit Ratio   Rs. in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Loan &Advance	9663.6	12692.9	14894.7	16847.1	17247.8
	Fixed Deposit	3037.2	3703.1	4474.6	6383.6	7850.3
	Ratio	**3.182**	**3.428**	**3.329**	**2.639**	**2.197**
NABIL	Loan &Advance	15657.1	21514.6	27816.6	32902.8	38765.6
	Fixed Deposit	5435.2	8464.1	8310.7	14711.1	16840.8
	Ratio	**2.881**	**2.542**	**3.347**	**2.237**	**2.302**
NIBL	Loan &Advance	17482	27145.5	36250.4	40689.6	41665.2
	Fixed Deposit	7516.8	7944.2	11633.4	16825.1	18378.3
	Ratio	**2.326**	**3.417**	**3.116**	**2.418**	**2.267**
HBL	Loan &Advance	17672	19985.2	25292.1	28976.1	31656.6
	Fixed Deposit	8201.1	6423.9	6377.1	11328.6	13507.4
	Ratio	**2.155**	**3.111**	**3.966**	**2.558**	**2.344**
EBL	Loan &Advance	14059.2	18814.3	24366.2	28129.7	31534.7
	Fixed Deposit	5658.7	6598	7094.7	10440.3	15061.9
	Ratio	**2.485**	**2.852**	**3.434**	**2.694**	**2.094**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**2.955**	**2.662**	**2.709**	**2.827**	**2.712**
	S.D.	**0.522**	**0.565**	**0.274**	**0.731**	**0.494**
	C.V. in %	**17.665%**	**21.225%**	**10.114%**	**25.858%**	**50.667%**

(Sources: *Sources& Uses of fund of concerned Bank. Refer Appendix -5)*

Table No. 6 indicate that all five sample banks has fluctuation order ratio throughout the study period. According to table BOK registered highest ratio 3.428 in fiscal year 2008/09 and lowest ratio 2.197 in fiscal year 2011/12. NABIL registered highest ratio in 3.347 in fiscal year 2009/10. Likewise NIBL registered its highest ratio 3.417 and lowest ratio 2.267 .Same as HBL has highest ratio 3.966 and lowest ratio is 2.155 and EBL has registered highest ratio 3.434 and lowest ratio 2.094 in fiscal year 2011/12, Similary HBL has registered highest ratio 3.966 in fiscal year 2009/10 and lowest ratio 2.155 registered in

fiscal year 2007/08. Same as EBL registered highest ratio 3.434 and lowest ratio 2.094 in 2011/12.

Above table clearly indicate that loans and advances are being effectively and properly utilized by NIBL because its CV is lowest it is 10.114% then other sample banks. Whereas EBL can not effectively and properly utilized there loans and advances cause its CV is higher then other sample banks.

Figure No. 4.5
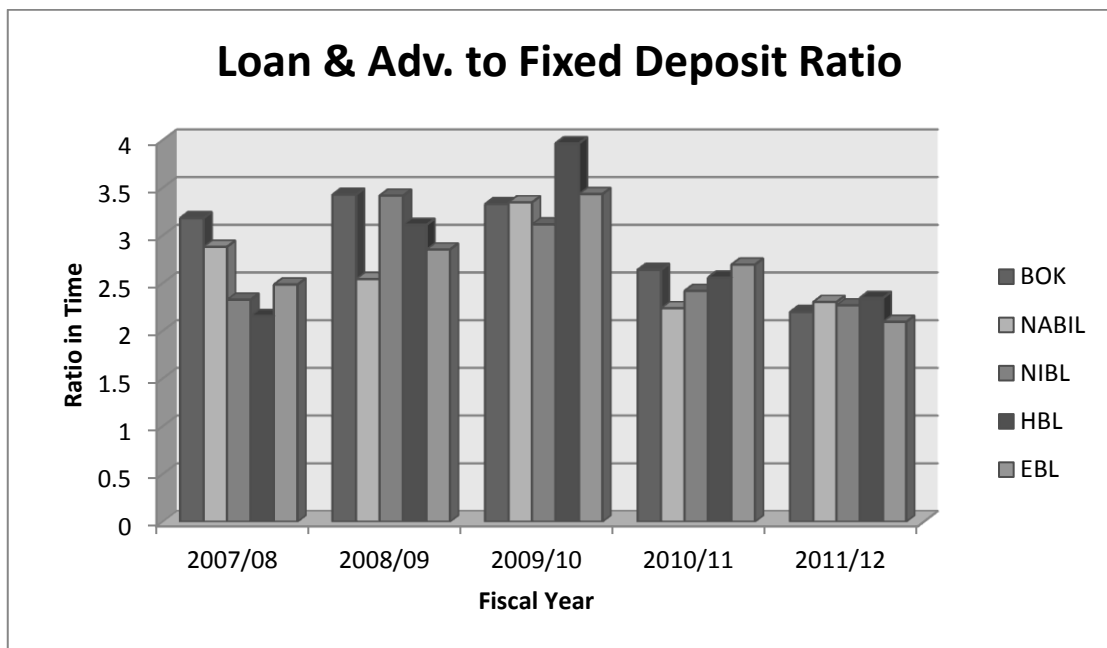
From above figure is also shows that HBL has highest ratio in fiscal year 2009/10 then other sample banks during the study time. IN fiscal year 2011/12 has lowest ratio then previous fiscal year.

4.1.1.2.3 Loan and Advance to Total Working Fund Ratio :

This ratio exhibits the extent to which the banks are successful in mobilizing their total assets(working fund) on loans and advances for the purpose of income generation. The following are the ratios different sample banks that have been calculated in the study period.

Table No. 4.6
Loan &Advances to Working Fund Ratio

Rs. In million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Loan &Advance	9663.6	12692.9	14894.7	16847.1	17247.8
	Working Fund	14997.5	18159.1	21009.3	24058.8	25582.1
	Ratio	**0.6443**	**0.6990**	**0.7090**	**0.7002**	**0.6742**
NABIL	Loan &Advance	15657.1	21514.6	27816.6	32902.8	38765.6
	Working Fund	29660.4	38478.6	45941.6	54609.8	61292.6
	Ratio	**0.5279**	**0.5591**	**0.6055**	**0.6026**	**0.6325**
NIBL	Loan &Advance	17482	27145.5	36250.4	40689.6	41665.2
	Working Fund	28572.8	40205.5	54634.5	59554.7	61357
	Ratio	**0.6118**	**0.6752**	**0.6635**	**0.6832**	**0.6791**
HBL	Loan &Advance	17672	19985.2	25292.1	28976.1	31656.6
	Working Fund	34645.5	37526.8	40790.7	44768.8	49298.5
	Ratio	**0.5101**	**0.5326**	**0.6200**	**0.6472**	**0.6421**
EBL	Loan &Advance	14059.2	18814.3	24366.2	28129.7	31534.7
	Working Fund	23335.3	28565.9	38000.3	42053	46895.6
	Ratio	**0.6025**	**0.6586**	**0.6412**	**0.6689**	**0.6724**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.6853**	**0.58555**	**0.66266**	**0.5904**	**0.6487**
	S.D.	**0.0273**	**0.0387**	**0.0273**	**0.0632**	**0.0273**
	C.V. in %	**39.85%**	**6.62%**	**4.12%**	**10.71%**	**4.21%**

(Sources: *Sources& Uses of fund of concerned Bank. Refer Appendix -6)*

Above Table No.6 reveals that fluctuations in ratio are found during the study period. According to table we can find that the highest ratio registered by BOK is 0.7090 in fiscal year 2009/10 and lowest ratio 0.6443 registered in 2007/05. Similary NABIL registered highest ratio 0.6325 and lowest ratio 0.5279 in fiscal year 2007/08 It is increasing order per year it is increasing order. Same as NIBL registered higher ratio 0.6832 and lowest ratio 0.6118 in fiscal year 2007/08 it is fluctuation order. HBL has its highest ratio 0.6472 in fiscal year 2010/11 where lowest ratio 0.5101 in fiscal year 2007/08. Same as EBL has highest ratio 0.6724 and lowest ratio 0.6025 in 2007/08

Above table shows that The BOK is successful to maintain the higher mean ratio 0.6853 whereas NABIL has lowest mean ratio 0.5855 other than five sample banks. It means the BOK is successful in mobilizing the loan and advance with respect to the working fund then other sample banks. Since, BOK has also highest CV percentage that is 39.85%. The lowest CV percentage is in 4.12% of NIBL so, they are able to maintain the consistency in investing in loan and advances from its working fund. Except NIBL, EBL NABIL and HBL is also maintain their loan and advances from its working fund.
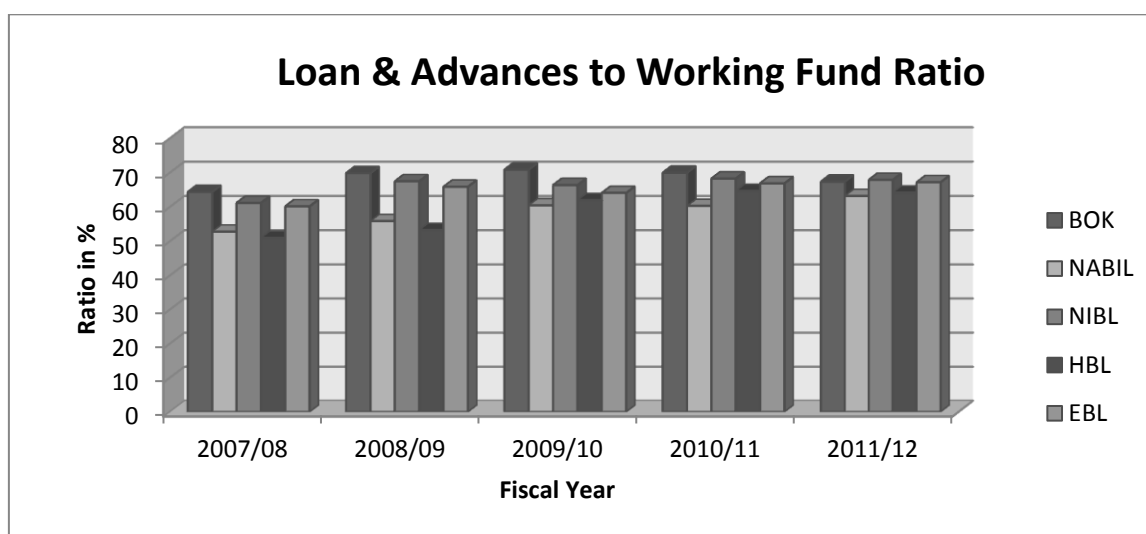
Above figure no. 4.6 also shown that the ratio of all the sample bank is nearly same . The highest ratio is BOK in year 2009 and lowest in year 2008 of HBL.

4.1.1.2.4 Investment on Government Securities to Total Deposit Ratio:

The main purpose of this ratio is to measure successfulness in mobilizing the deposit in investment on government securities. The investment on government securities to total deposit ratio of different banks in the study period are mentioned in the following table.

Table no.4.7
Government Security to Total Deposit Ratio

Rs. In million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Govt. Security	2332	2113.2	1745	2954.9	4002.1
	Total Deposit	12358.6	15832.7	18083.9	20315.8	21018.4
	Ratio	**0.1887**	**0.1335**	**0.0965**	**0.1454**	**0.1904**
NABIL	Govt. Security	4805.7	4646.9	3706.2	7641.3	8742.3
	Total Deposit	23342.4	31915	37348	46334.8	49691.4
	Ratio	**0.2059**	**0.1456**	**0.0992**	**0.1714**	**0.1759**
NIBL	Govt. Security	3256.4	3155	2531.3	4201.9	4294.6
	Total Deposit	24488.9	34451.8	**46697.9**	50094.7	50138.1
	Ratio	**0.1330**	**0.0945**	**0.0542**	**0.0839**	**0.0857**
HBL	Govt. Security	6454.8	7471.7	4212.3	4465.4	4725.6
	Total Deposit	29905.8	31805.3	34681	37609.4	40920.6
	Ratio	**0.2158**	**0.2349**	**0.1215**	**0.1187**	**0.1155**
EBL	Govt. Security	4704.6	4906.5	5146	4354.4	7145
	Total Deposit	19097.3	23976.3	33322.9	36932.3	41127.9
	Ratio	**0.2463**	**0.2046**	**0.1544**	**0.1179**	**0.1737**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.1509**	**0.1596**	**0.0897**	**0.1613**	**0.1794**
	S.D.	**0.0397**	**0.0397**	**0.0283**	**0.0589**	**0.0487**
	C.V. in %	**26.31**	**24.87**	**31.55**	**36.52**	**27.15**

(***Sources***: *Sources & Uses of fund and Annual Report of Concerned Bank, Refer Appendix-7*)

Table No. 4.7 reflects that all the ratios are fluctuation order which ranged from 0.0965 to 0.1904 of BOK with mean ratio is 0.1509. The highest mean ratio is 0.1794 of EBL its highest ratio is 0.2463 and lowest ratio register 0.1179 in fiscal year 2010/11. Same as NABIL registered highest ratio is 0.2059 and lowest ratio is 0.0992 whereas NIBL has highest ratio is 0.1330 and lowest ratio is 0.0542 which has mean ratio is 0.0897 and HBL has highest ratio is 0.2349 and 0.1155 is lowest ratio with mean ratio is 0.1613That means NIBL is less successful in mobilizing the deposit in investment on government securities then rest of sample bank.

As concern with consistency HBL is failed to maintain the consistency since it has higher C.V. then rest of sample bank. Among five sample bank NABIL has lowest C.V. that shows NABIL able to maintain the consistency in mobilization of investment on government securities, which is shown by the lowest C.V. that is 24.87%RespectivlyBOK, EBL, NIBL, HBL is successful in mobilizing the deposit in investment on government securities. There C.V. is 26.31% ,27.15%, 31.55% and 36.52% respectively. Let study at figure no.7 .

Figure No. 4.7
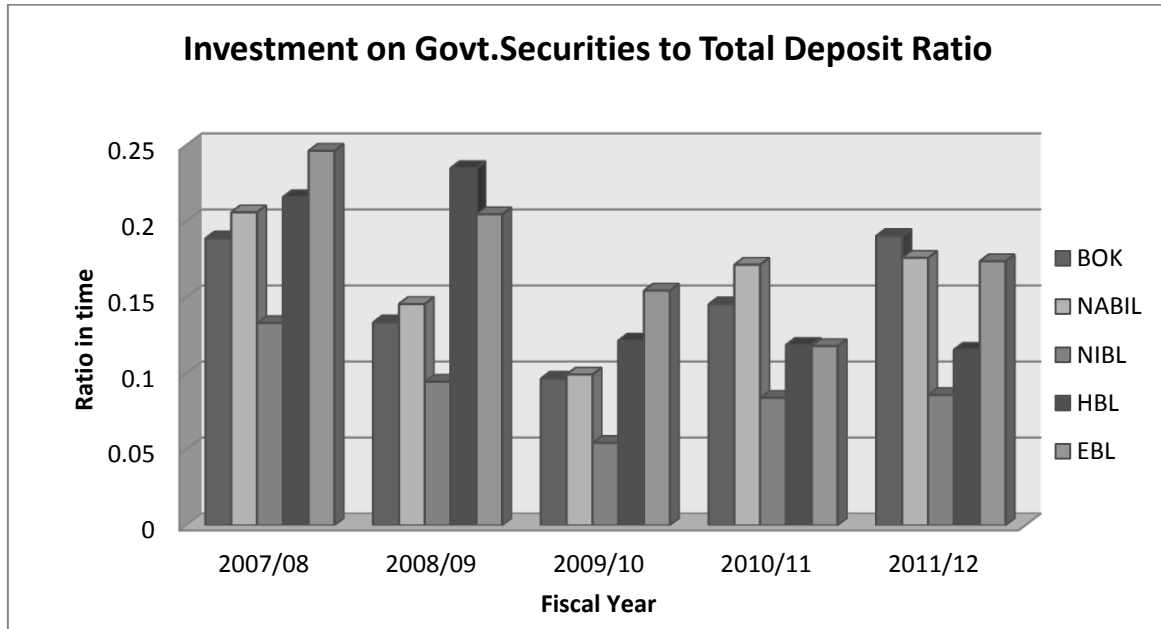
According to Figure No. 4.7 also indicate that ratios of sample banks are very fluctuating order among them in fiscal year 2009/10 the ratio of all bank is lower then other fiscal year.

4.1.1.2.5 Investment on Government Securities to Total Working Fund Ratio:

The investment on govt. securities to total assets ratios of different companies over the study period is presented in the following table below.

Table no.4.8

Government Security to Working Fund Ratio   **Rs in million**

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Govt. Security	2332	2113.2	1745	2954.9	4002.1
	Working Fund	14997.5	18159.1	21009.3	24058.8	25582.1
	Ratio	**0.1555**	**0.1164**	**0.0831**	**0.1228**	**0.1564**
NABIL	Govt. Security	4805.7	4646.9	3706.2	7641.3	8742.3
	Working Fund	29660.4	38478.6	45941.6	54609.8	61292.6
	Ratio	**0.1620**	**0.1208**	**0.0807**	**0.1454**	**0.1426**
NIBL	Govt. Security	3256.4	3155	2531.3	4201.9	4294.6
	Working Fund	28572.8	40205.5	54634.5	59554.7	61357
	Ratio	**0.1140**	**0.0785**	**0.0463**	**0.0706**	**0.0700**
HBL	Govt. Security	6454.8	7471.7	4212.3	4465.4	4725.6
	Working Fund	34645.5	37526.8	40790.7	44768.8	49298.5
	Ratio	**0.1863**	**0.1991**	**0.1033**	**0.0997**	**0.0959**
EBL	Govt. Security	4704.6	4906.5	5146	4354.4	7145
	Working Fund	23335.3	28565.9	38000.3	42053	46895.6
	Ratio	**0.2016**	**0.1718**	**0.1354**	**0.1035**	**0.1524**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.1268**	**0.1303**	**0.0759**	**0.1369**	**0.1529**
	S.D.	**0.0304**	**0.0312**	**0.0245**	**0.0512**	**0.0371**
	C.V. in %	**23.97**	**23.94**	**32.28**	**37.40**	**24.26**

(***Sources***: *Sources & Uses of fund and Annual Report of Concerned Bank, Refer Appendix-8*)

Above table no. 4.8 indicate that the ratio of government security to total assets of five sample bank. Among them BOK registered its highest ratio is 0.1564 and lowest ratio is 0.0831 with mean ratio is 0.1268 similarly NABIL has highest ratio is 0.1620 and lowest ratio is 0.0807 with mean ratio is 0.1303 Same as NIBL has its ratio between 0.0463 to 0.1140 and its mean ratio is 0.0759 where HBL has highest ratio is 0.1991 and lowest ratio is 0.0959 which mean ratio is 0.1369 and EBL has its ratio between 0.1035 to 0.2016 and its mean ratio is 0.1529

The CV of BOK, NABIL, NIBL, HBL, EBL is respectively 23.97%, 23.94%, 32.28%, 37.40% and 24.26% . HBL has highest CV then other sample bank that shows that HBL is fail to maintain a consistency in investing in government securities then other bank . BOK and NABIL has nearly same CV that is 23.97% and 23.94% this is lowest CV among five sample bank it reflects that two bank have more efficient in using government securities

Figure No. 4.8
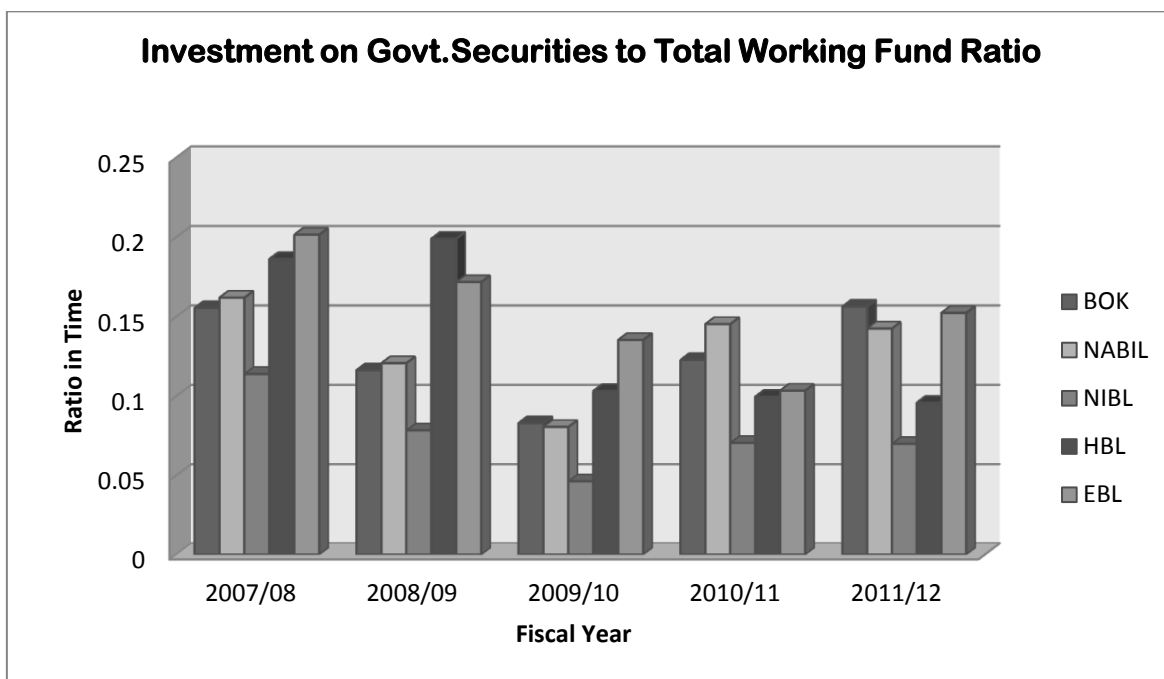
Above figure no. 4.8 also show that the ratio of all sample bank are fluctuating order . In fiscal year 2007/08 EBL has highest ratio of all and in fiscal year 2009/10 NIBL has lowest ratio among all sample banks.

4.1.1.3 Profitability Ratios

The mail objective of a bank is to make profit providing different types of services to its customers. Profit is the different between total revenue and total expenses over a period if time. Profit is necessary to survive in any business field for its successful operation and further expansion. Profit is the ultimate out put of a commercial bank and it will have no future if it fails to make sufficient profits. Therefore, the financial manager continuously evaluates the efficiency of the bank sinters of profits. Profitability shows the overall efficiency of the business concerns. To meet those objectives likewise a good liquidity position, meet fixed interest obligation, overcome the future contingencies, grab the investment opportunities, business expansions etc; they must earn sufficient profit, It is an obvious that profitability ratios are the best indicators of overall efficiency. In this study,

mainly those ratios are presented which are related with profit as well as well as fund mobilization.

Profit measures management's overall effectiveness as shown by the return generated on sales and investment. The relation of the return of the firm to either its sales or equity of its assets is known as profitability ratio. Higher the profitability ratio betters the financial performance of the banks and vice-versa. The following are profitability ratios those are relevant in this study.

4.1.1.3.1 Net Profit to Total Assets Ratio:

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

Table no.4.9

Net Profit to Total Assets Ratio   Rs in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Net Profit	262.38	361.49	461.73	509.26	605.15
	Total Assets	14997.5	18159.1	21009.3	24058.8	25582.1
	Ratio	**0.0175**	**0.0199**	**0.0220**	**0.0212**	**0.0237**
NABIL	Net Profit	673.96	746.47	1031.05	1138.57	1344.18
	Total Assets	29660.4	38478.6	45941.6	54609.8	61292.6
	Ratio	**0.0227**	**0.0194**	**0.0224**	**0.0208**	**0.0219**
NIBL	Net Profit	501.40	696.73	900.62	1265.95	1176.64
	Total Assets	28572.8	40205.5	54634.5	59554.7	61357
	Ratio	**0.0175**	**0.0173**	**0.0165**	**0.0213**	**0.0192**
HBL	Net Profit	491.82	635.87	752.83	508.80	893.12
	Total Assets	34645.5	37526.8	40790.7	44768.8	49298.5
	Ratio	**0.0142**	**0.0169**	**0.0185**	**0.0114**	**0.0181**
EBL	Net Profit	296.14	451.21	638.73	831.76	931.30
	Total Assets	23335.3	28565.9	38000.3	42053	46895.6
	Ratio	**0.0127**	**0.0158**	**0.0168**	**0.0198**	**0.0199**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	0.0209	0.0214	0.01836	0.01582	0.0170
	S.D.	0.0906	0.0014	0.0088	0.0027	0.0032
	C.V. in %	4.33	6.54	47.93	17.07	18.82

(*Sources: Sources & Uses of fund and Annual Report of Concerned Bank, Refer Appendix-9*)

Table No. 4.9 shows that each bank have fluctuating ratio. According to above table we know that the ratio of Net profit to Total assets (ROA) lies between 0.0114 to 0.0237 and the mean ratio of sample banks are 0.0209, 0.0214, 0.01836 ,0.01582 and 0.0170 respectively BOK, NABIL , NIBL ,HBL and EBL. HBL has lowest mean ratio then other sample bank .Whereas NABIL has highest ratio which indicate that NABIL is successful in utilizing the total assets for earning the net profit with compare to other sample banks.

The C.V. of NIBL is 47.93% which is highest CV among sample bank that means NIBL has a greater variation in earning the profit on total working fund . BOK is able to maintain the consistency in profit which is shown by lowest CV(i.e. 4.33%) among the sample banks.

Figure No. 4.9
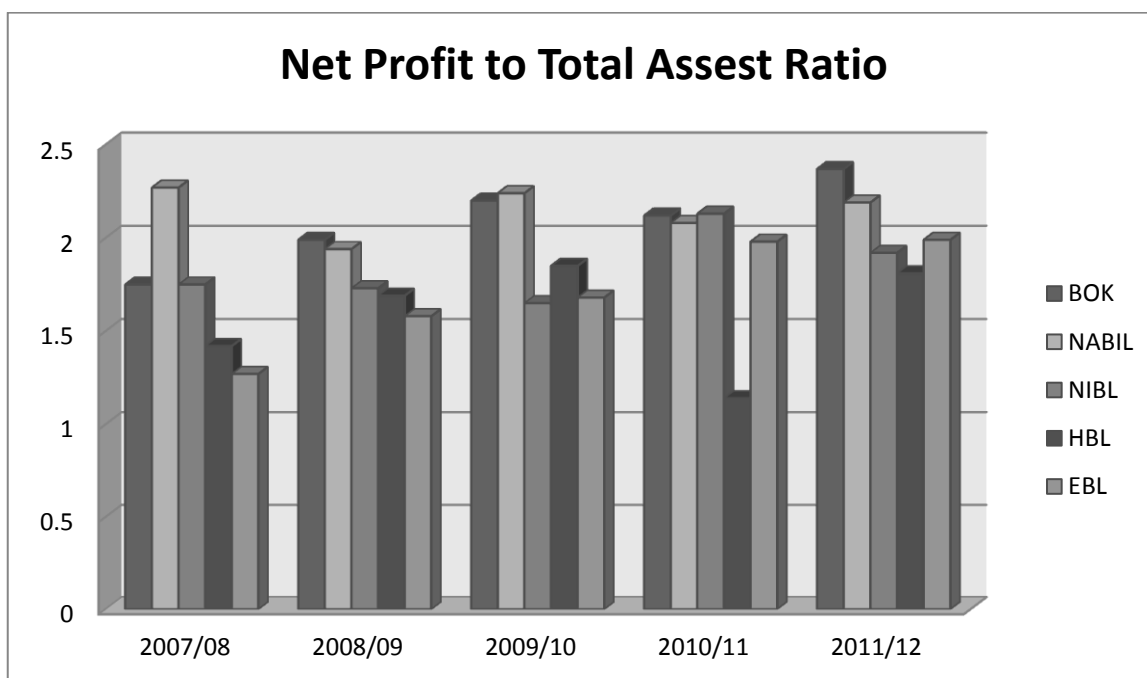
Above figure no. 9 also shows that fluctuating ratio of Net Profit to Total assets.

4.1.1.3.2 Net Profit to Total Deposit Ratio:

This ratio is the mirror for banks overall financial performance as well as its success in profit generating, the reason being that the deposits made by its customer's is the major sources of earning of the joint venture banks as the earning is made by the efficiency and effective utilization of these deposits. The following table reveals the percentage of net profit to total deposit of sample banks.

Net Profit to Total Deposit Ratio   **Rs. In million**

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Net Profit	262.38	361.49	461.73	509.26	605.15
	Total Deposit	12358.6	15832.7	18083.9	20315.8	21018.4
	Ratio	**0.0212**	**0.0228**	**0.0255**	**0.0251**	**0.0288**
NABIL	Net Profit	673.96	746.47	1031.05	1138.57	1344.18
	Total Deposit	23342.4	31915	37348	46334.8	49691.4
	Ratio	**0.0289**	**0.0234**	**0.0276**	**0.0246**	**0.0271**
NIBL	Net Profit	501.40	696.73	900.62	1265.95	1176.64
	Total Deposit	24488.9	34451.8	48897.9	50094.7	50138.1
	Ratio	**0.0205**	**0.0202**	**0.0193**	**0.0253**	**0.0235**
HBL	Net Profit	491.82	635.87	752.83	508.80	893.12
	Total Deposit	29905.8	31805.3	34681	37609.4	40920.6
	Ratio	**0.0164**	**0.0200**	**0.0217**	**0.0135**	**0.0218**
EBL	Net Profit	296.14	451.21	638.73	831.76	931.30
	Total Deposit	19097.7	23976.3	33322.9	36932.3	41127.9
	Ratio	**0.0155**	**0.0188**	**0.0192**	**0.0225**	**0.0226**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.0247**	**0.0263**	**0.0218**	**0.0187**	**0.01972**
	S.D.	**0.00286**	**0.012479**	**2.5314**	**3.535**	**2.7386**
	C.V. in %	**11.60**	**47.45**	**11.61**	**18.96**	**13.89**

*(**Sources:** Sources & Uses of fund and Annual Report of Concerned Bank, Refer Appendix -10)*

Table No.4.10 reveals the net profit to total deposit ratio is in fluctuating situation of all sample banks. The ratio of BOK has ranged between 0.0212 to 0.0288 with mean ratio 0.0247 same as NABIL has registered its highest ratio is 0.0289 and lowest ratio is 0.0234 and its mean ratio is 0.0263 which is highest mean ratio all five sample banks. This indicate that NABIL has better performance in utilizing of total deposit to earn a higher profit than other sample banks. Similary, HBL has not better performance in comparison to other bank since they has low mean ratio i.e. 0.0187.

As far as consistency level of BOK is successful in maintaining consistency in mobilizing total deposit to earn the profit . The lowest C.V. of BOK is 11.60%
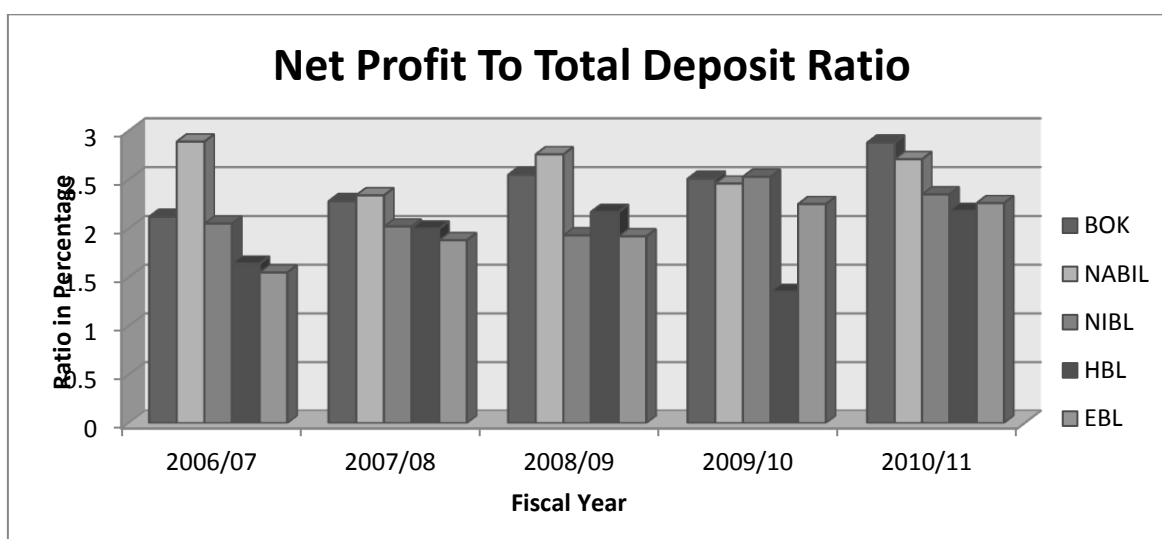
4.1.1.3.3 Net Profit to Net Worth Ratio:

Net Worth or shareholders equity refers to the owners claim on the assets of the banks. It can be found by deducting total liabilities from total assets. This ratio is used to measure the successfulness of earning the profit with respect to the shareholder's equity. The following table presents the net profit to net worth ratio of sample banks.

Table no 4.11

Net Profit to Net Worth Ratio   Rs.in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Net Profit	262.38	361.49	461.73	509.26	605.15
	Net Worth	840.2	982.0	1342.1	1741.6	2071.4
	Ratio	**0.3123**	**0.3681**	**0.3440**	**0.2924**	**0.2921**
NABIL	Net Profit	673.96	746.47	1031.05	1138.57	1344.18
	Net Worth	1874.8	2057.0	2436.7	3129.4	3835.7
	Ratio	**0.3595**	**0.3629**	**0.4332**	**0.3638**	**0.3504**
NIBL	Net Profit	501.40	696.73	900.62	1265.95	1176.64
	Net Worth	1370.8	1959.0	3421.1	3765.2	4685.4
	Ratio	**0.3658**	**0.3557**	**0.2633**	**0.3362**	**0.2566**
HBL	Net Profit	491.82	635.87	752.83	508.80	893.12
	Net Worth	1766.1	2146.5	2513.0	3119.9	3439.2
	Ratio	**0.2785**	**0.2962**	**0.2996**	**0.1631**	**0.2597**
EBL	Net Profit	296.14	451.21	638.73	831.76	931.30
	Net Worth	963.6	1601.5	2066.5	2203.6	2759.1
	Ratio	**0.3073**	**0.2817**	**0.3091**	**0.3775**	**0.3375**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.32178**	**0.3740**	**0.3156**	**0.25942**	**0.32262**
	S.D.	**0.0316**	**0.0335**	**0.0519**	**0.0570**	**0.0353**
	C.V. in %	**9.82**	**8.95**	**16.44**	**21.972**	**10.942**

(Sources& Uses of fund and Annual Report of Concerned Bank, Refer Appendix-11)

Table 4.11 reveals the net profit to net worth ratios are in fluctuating situation for all sample banks. The ratio of BOK has ranged between 0.2921 to 0.3681 with mean ratio 0.32178 NIBL has highest ratio is 0.3658and lowest ratio is 0.2566 where as HBL has registered its highest ratio is 0.2996 and lowest ratio is 0.1631, same as EBL has its highest ratio is 0.3775 and lowest ratio is 0.2817 and NABIL has highest mean ratio 0.3740 which is symbol of success to better performance in utilizing of total deposit to earn a higher profit than other sample banks. Similarly, HBL has not better performance in comparison to rest of sample banks. Since it has low mean ratio i.e. 0.25942

As far as consistency level of NABIL is also successful in maintaining consistency in mobilizing total deposit to earn the profit. This is shown by lowest CV i.e. 8.95%. In contrast HBL is less effective to maintain the consistency which is shown by highest CV among sample bank that is 21.972% Respectively other bank BOK, EBL and NIBL are more effective to maintain the consistency which is shown by lowest CV. That is 9.82%, 10.942% and 16.44%

Figure No.4.11
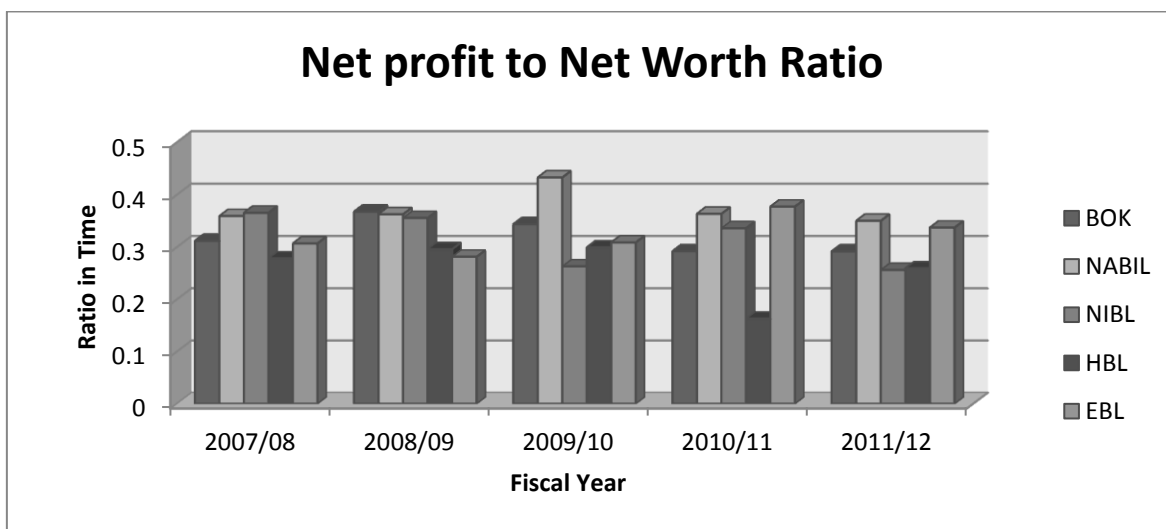
According to above figure also show that the ratio of Net profit to Net worth for various sample banks. The ratio of NABIL is better position among other sample banks.

4.1.1.3.4. Total Interest Earned to Total Working Fund Ratio :

The ratio shows the earning capacity of a Bank on its total assets (working fund). This ratio exhibits the extent on which banks are successful in mobilizing their working funds to generate income as much as possible. The higher ratio will indicate the high earning power of the banks on its total assets. The following table shows the comparative ratios of Banks for the different periods.

Total Interest Earned to Working Fund Ratio   Rs. in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Interest Earned	819.0	1034.16	1347.76	1870.85	2386.78
	Working Fund	14997.5	18159.1	21009.3	24058.8	25582.1
	Ratio	**0.0546**	**0.0569**	**0.0642**	**0.0778**	**0.0933**
NABIL	Interest Earned	1587.76	1978.70	2798.48	4047.72	5258.27
	Working Fund	29660.4	38478.6	45941.6	54609.8	61292.6
	Ratio	**0.0535**	**0.0514**	**0.0609**	**0.0741**	**0.0858**
NIBL	Interest Earned	1584.99	2194.28	3267.94	4653.52	5803.44
	Working Fund	28572.8	40205.5	54634.5	59554.7	61357
	Ratio	**0.0555**	**0.0546**	**0.0598**	**0.0781**	**0.0946**
HBL	Interest Earned	1775.58	1963.65	2342.20	3148.61	4326.14
	Working Fund	34645.5	37526.8	40790.7	44768.8	49298.5
	Ratio	**0.0512**	**0.0523**	**0.0574**	**0.0703**	**0.0878**
EBL	Interest Earned	1144.41	1548.66	2186.81	3102.45	4331.03
	Working Fund	23335.3	28565.9	38000.3	42053	46895.6
	Ratio	**0.04900**	**0.0542**	**0.0575**	**0.0738**	**0.0924**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.0694**	**0.0652**	**0.06852**	**0.0638**	**0.06538**
	S.D.	**0.0161**	**0.01457**	**0.01740**	**0.01541**	**0.01581**
	C.V. in %	**23.20**	**22.35**	**25.39**	**24.15**	**24.18**

*(**Sources:** Sources & Uses of fund and Annual Report of Concerned Bank, Refer Appendix -12)*

Above Table no.4.12 reveals the total interest earned to total working fund ratio. The entire ratios are in the fluctuating trend throughout the study period. It determined that all sample banks have fluctuating trend of earning the interest every year. The highest ratio of BOK is 0.0933 in fiscal year 2011/12 and lowest ratio in 0.0569 in year 2008/09 with highest mean ratio 0.0694. The ratio of NABIL has ranged between 0.0514 to 0.0858 with its mean ratio of 0.0652 same as NIBL has highest ratio is 0.0946 and lowest ratio is 0.0546 with mean ratio 0.0685 where as HBL has its highest ratio is 0.0878 as well as its lowest ratio is 0.0512 and same as EBL has its highest ratio is 0.0924 and lowest ratio is 0.04000 with mean ratio 0.06538

The mean ratio is almost same of all sample bank . It shows that all sample banks are successful in earning the interest on total working fund. Among them BOK found to be a leader in earning a interest with compare to other sample banks. Since NABIL has lowest C.V. 22.35% it has a consistency in earning a interest by mobilizing a total working fund effectively . The highest CV is found in NIBL with 25.39% which shows a greater variability in earning an interest.

Figure No.4.12

Interest Earned to Working Fund Ratio
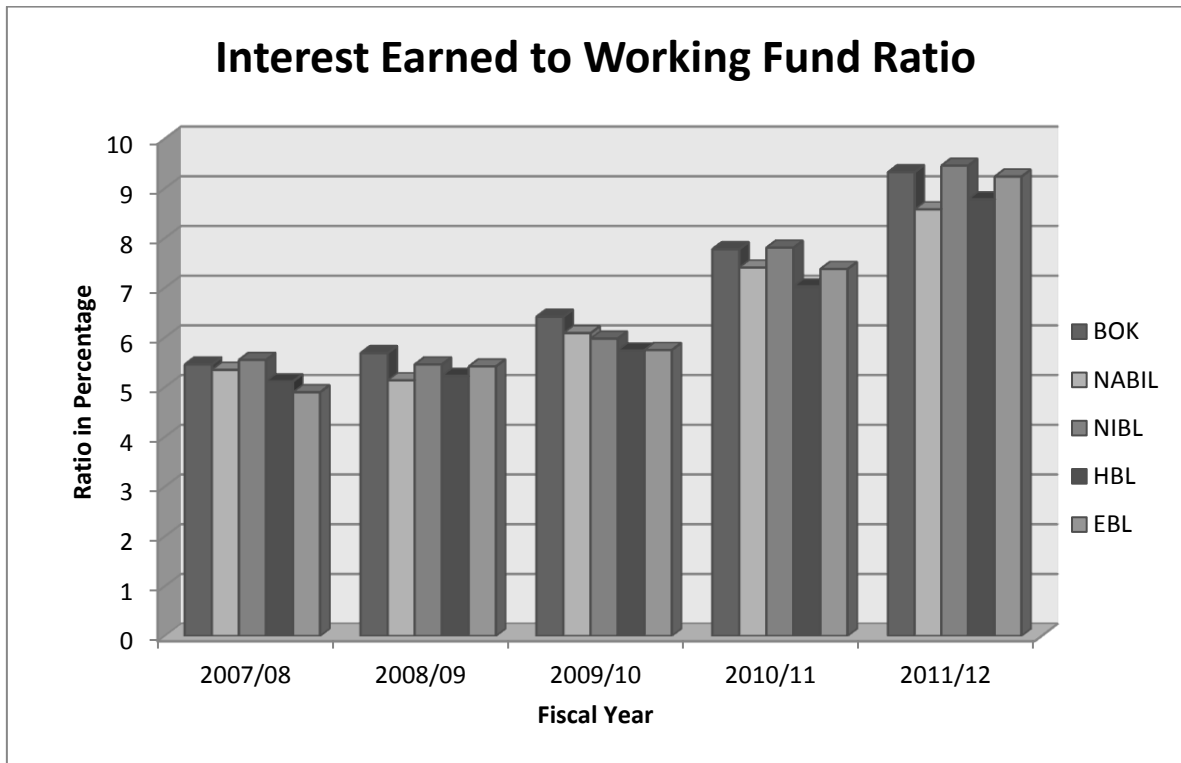
According to above figure No. 4.12 there is highest ratio in fiscal year 2011/12 then previous fiscal year. In Fiscal year 2007/08, 2008/09, 2009/10 the ratio are almost same .

4.1.1.3.5 Total Interest Paid to Total Working Fund Ratio:

Interest earning is the major source of a commercial bank. The ratio is used to measure the percentage of total interest expenses against the total assets. The following are the comparative ratio figures of Banks recorded in different periods.

Total Interest Paid to Working Fund Ratio   Rs. in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Interest Paid	339.18	417.54	563.11	902.93	1218.79
	Working Fund	14997.5	18159.1	21009.3	24058.8	25582.1
	Ratio	**0.0226**	**0.0230**	**0.0268**	**0.0375**	**0.0476**
NABIL	Interest Paid	555.71	758.43	1153.28	1960.11	2946.69
	Working Fund	29660.4	38478.6	45941.6	54609.8	61292.6
	Ratio	**0.0187**	**0.0197**	**0.0251**	**0.0359**	**0.0481**
NIBL	Interest Paid	685.53	992.16	1686.97	2553.85	3620.34
	Working Fund	28572.8	40205.5	54634.5	59554.7	61357
	Ratio	**0.0240**	**0.0247**	**0.0309**	**0.0429**	**0.0590**
HBL	Interest Paid	767.41	823.74	934.78	1553.53	2414.81
	Working Fund	34645.5	37526.8	40790.7	44768.8	49298.5
	Ratio	**0.0222**	**0.0220**	**0.0229**	**0.0347**	**0.0490**
EBL	Interest Paid	517.17	632.61	1012.87	1572.79	2535.88
	Working Fund	23335.3	28565.9	38000.3	42053	46895.6
	Ratio	**0.0222**	**0.0221**	**0.0267**	**0.0374**	**0.0541**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.0315**	**0.0295**	**0.0363**	**0.0302**	**0.0325**
	S.D.	**0.0108**	**0.0124**	**0.0148**	**0.0118**	**0.0132**
	C.V. in %	**34.29**	**42.03**	**40.77**	**39.07**	**40.62**

*(**Sources:** Sources & Uses of fund and Annual Report of Concerned Bank, Refer Appendix -13)*

Table NO.4.13 shows the comparative analysis of total interest paid to total working fund. The highest and lowest ratio of BOK are 0.0226 and 0.0476 respectively with mean ratio 0.0315 same as NABIL has its highest ratio is 0.0481 and smallest ratio is 0.0187 where NIBL has registered its highest ratio is 0.0590 and lowest ratio is 0.0240 with mean ratio is 0.0363 which is highest mean ratio then other sample bank . Likewise HBL has highest ratio is 0.0490 and lowest ratio is 0.0220 same as EBL has its highest ratio is 0.0541 and lowest ratio is 0.0221 .The above definition determined that NABIL has paid a higher interest on working fund in compare to other sample bank.

The CV of BOK is lowest then other sample banks (i.e. 34.29%) so, BOK has consistency in interest paid among sample banks

Figure No. 4.13

Interest Paid to Working Fund Ratio
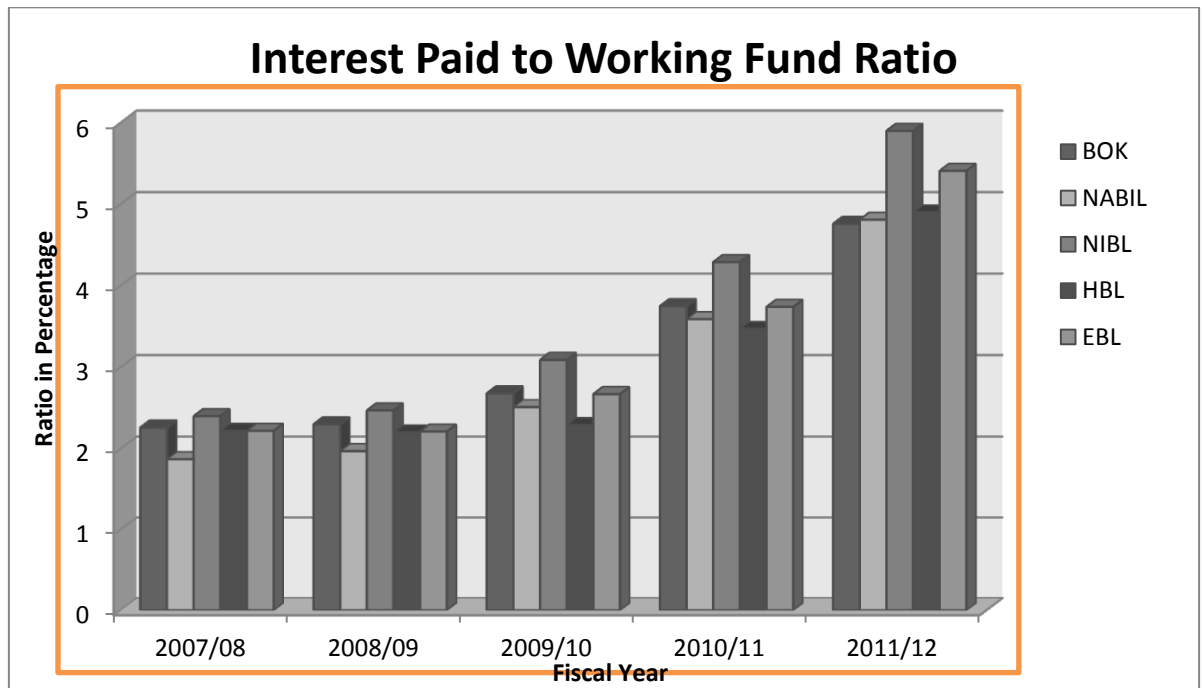
Above figure no.4.13 shows the ratio of interest paid to working fund in fiscal year 2011/12 is greater then other sample year

4.1.1.4 Leverage Ratios :

A firm should have strong short- term as well as long – term financial poaition. Like other ratios, leverage ratio is also very necessarily important tool in measuring financial performance of any institution. This ratio reveals the proportion of funds used by the institution either from the creditor's side or form owner side. In order to maintain healthy financial position any institutions need to maintain proper proportion of debt & equity. These ratios indicate the situation of the capital structure, which is calculated to measure the company's ability of using debt for benefit of shareholders. Long- term creditors like debenture holders, financial institutions etc. are more interested to the firm's long term financial health, debt serving capacity and strength and weakness of the concerns. This ratio may be calculated from the balance sheet items to determine the proportion of debt in total financing. In summary debt ratio tell us the relative proportions of capital of contribution by creditors and by owners.

Leverage ratio is also called solvency ratio or capital structure ratio. There are various tools in order to measure leverage of the institution among them. Debt Asset ratio & Debt Equity ratio has been used.

4.1.1.4.1 Debt- Asset Ratio:

It measures proportion of the creditor's funds used by the institution to acquire the assets. The increased proportion of debt indicated the risky- ness or burden to the institution. The debt is considering more risky and cheap source of financing. Risky in the sende that debt financing need regular payment of interest in any conditions of economic. The debt asset ratios of sample banks are as below.

<div align="center">

Table No. 4.14

Total Debt. To Assets Ratio   Rs. in million

</div>

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Total Debt.	11377.8	16809.5	18942.4	21807.6	22899.3
	Total Assets	14997.5	18159.1	21009.3	24058.8	25582.1
	Ratio	**0.9187**	**0.9257**	**0.9016**	**0.9064**	**0.8951**
NABIL	Total Debt.	27100	35671.3	41880.6	49681.7	56187.2
	Total Assets	29660.4	38478.6	45941.6	54609.8	61292.6
	Ratio	**0.9137**	**0.9270**	**0.9116**	**0.9028**	**0.9167**
NIBL	Total Debt.	26629.5	37415.8	50231.4	51699.1	55497.7
	Total Assets	28572.8	40205.5	54634.5	59554.7	61357
	Ratio	**0.9320**	**0.9306**	**0.9194**	**0.8681**	**0.9045**
HBL	Total Debt.	31918.1	34293.3	37027.1	40588.4	44504.6
	Total Assets	34645.5	37526.8	40790.7	44768.8	49298.5
	Ratio	**0.9213**	**0.9138**	**0.9077**	**0.9066**	**0.9028**
EBL	Total Debt.	20823.3	25817.2	35297.2	39004.5	43194.7
	Total Assets	23335.3	28565.9	38000.3	42053	46895.6
	Ratio	**0.8924**	**0.9038**	**0.9289**	**0.9275**	**0.9211**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.9095**	**0.9144**	**0.9109**	**0.9104**	**0.9147**
	S.D.	**0.0125**	**0.0088**	**0.0264**	**0.0072**	**0.0158**
	C.V. in %	**1.37**	**0.9624**	**2.89**	**0.790**	**1.73**

(***Sources:*** *Sources & Uses of fund and Annual Report of Concerned Bank, Refer Appendix -14*)

Above Table No. 4.14 exhibits that debt financing ratio of all sample banks are high. The ratio of BOK and HBL are decreasing order .Whereas ratio of other bank NABIL, NIBL, and EBL are fluctuating trend. The highest ratio of BOK is 0.9257 and 0.8951 with mean ratio 0.9095 NABIL ratio is ranged between 0.9270 to 0.9028 with mean ratio 0.9144

Similarly, NIBL has its highest ratio is 0.9320 and lowest ratio is 0.8681 with mean ratio is 0.9190 Same as HBL has register its highest ratio is 0.9213 and lowest ratio is 0.9028 and EBL has highest ratio is 0.9289 and lowest ratio is 0.8924 with mean ratio 0.9147NIBL has highest C.V. among sample banks i.e. 2.89 and lowest C.V. is 0.790 of HBL .Above statement conclude that the debt financing of NIBL in assets is lowest and highest in HBL . Therefore HBL is utilizing a highest debt among the sample banks. Even though HBL use less proportion of debt financing with compare to other sample bank successful in maintaining a consistency which is shown by lowest C.V. among sample banks. The CV of sample banks are nearly same among NIBL .It is highest then other sample banks.

Figure No. 4.14
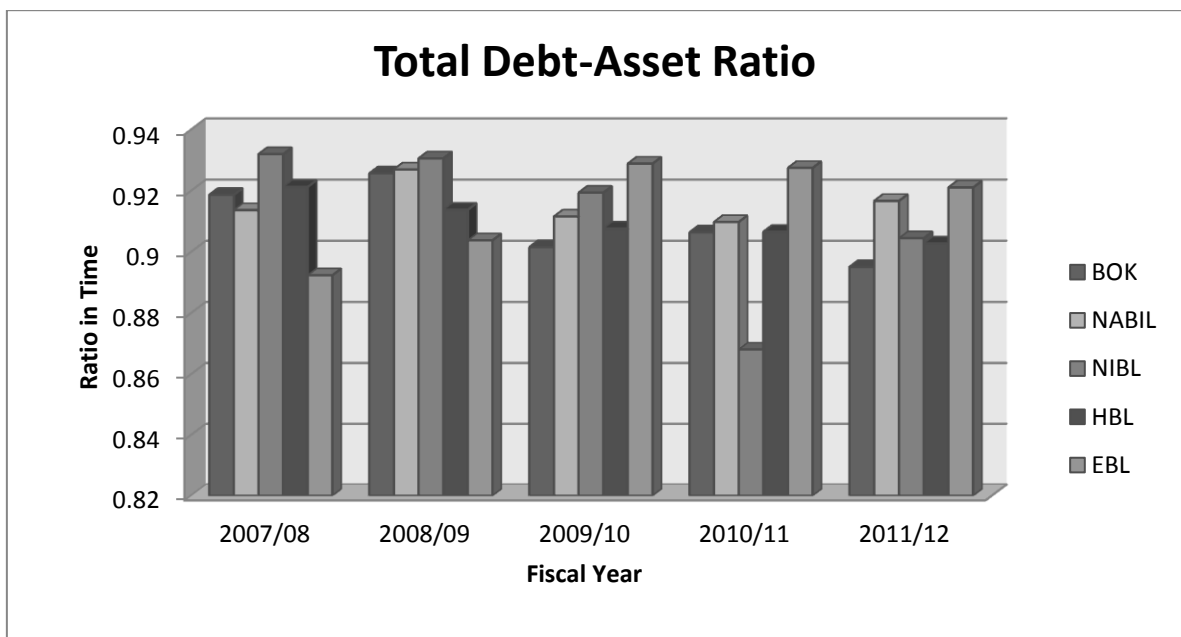
4.1.1.4.2 Debt- Equity Ratio:

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

Total Debt to Equity Ratio   Rs. in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Total Debt.	13778.8	16809.5	18942.4	21807.6	22899.3
	Total Equity	840.7	982.0	1342.1	1741.6	2071.4
	Ratio	**16.399**	**17.118**	**14.114**	**12.522**	**11.055**
NABIL	Total Debt.	27100	35671.3	41880.6	49681.7	56187.2
	Total Equity	1874.8	2057.0	2436.2	3129.4	3835.7
	Ratio	**14.455**	**17.341**	**17.191**	**15.876**	**14.648**
NIBL	Total Debt.	26629.5	37415.8	50231.4	51699.1	55497.7
	Total Equity	1370.8	1959.0	3421.1	3765.2	4585.4
	Ratio	**19.426**	**19.099**	**14.683**	**13.731**	**12.103**
HBL	Total Debt.	31918.1	34293.3	37027.1	40588.4	44504.6
	Total Equity	1766.1	2146.5	2513.0	3119.9	3139.2
	Ratio	**18.073**	**15.976**	**14.734**	**13.010**	**12.940**
EBL	Total Debt.	20823.3	25817.2	35297.2	39004.5	43194.7
	Total Equity	963.6	1601.5	2066.5	2203.6	2759.1
	Ratio	**21.610**	**16.121**	**17.081**	**17.700**	**15.655**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**14.242**	**15.902**	**15.808**	**14.947**	**17.633**
	S.D.	**2.5522**	**1.3602**	**3.2874**	**2.1596**	**2.3576**
	C.V. in %	**17.92**	**8.55**	**20.79**	**14.45**	**13.37**

*(**Sources:** Sources & Uses of fund and Annual Report of Concerned Bank, Refer Appendix -15)*

On the above table no. 4.15 represent that the ratio of sample banks is in fluctuating mode. The highest ratio of BOK is 17.118 and lowest ratio is 11.055 with mean ratio is 14.242 which is lowest mean ratio among sample banks same as NABIL has registered its highest ratio is 17.341 and lowest ratio is 14.455 where mean ratio is 15.902 NIBL ranged between its ratio is 19.426 to 12.103 with mean ratio is 15.808 where as HBL has highest ratio is 18.073 and lowest ratio is 12.94 and next bank EBL has highest ratio is 21.610 and 15.655 is lowest ratio and mean ratio is 17.633 which is highest mean ratio among sample banks which indicated more investment from debt than equity fund which cost a higher than equity . Higher debt investment brings a higher cost to the banks.

Among the sample bank NABIL has lowest CV than other sample bank which is 8.55% .So, NABIL has consistency in debt-equity ratio .But NIBL has highest CV i.e. 20.79% Therefore NIBL is not successful to maintain a consistency debt to equity as other sample bank.

Figure No. 4.15

Total Debt-Equity Ratio
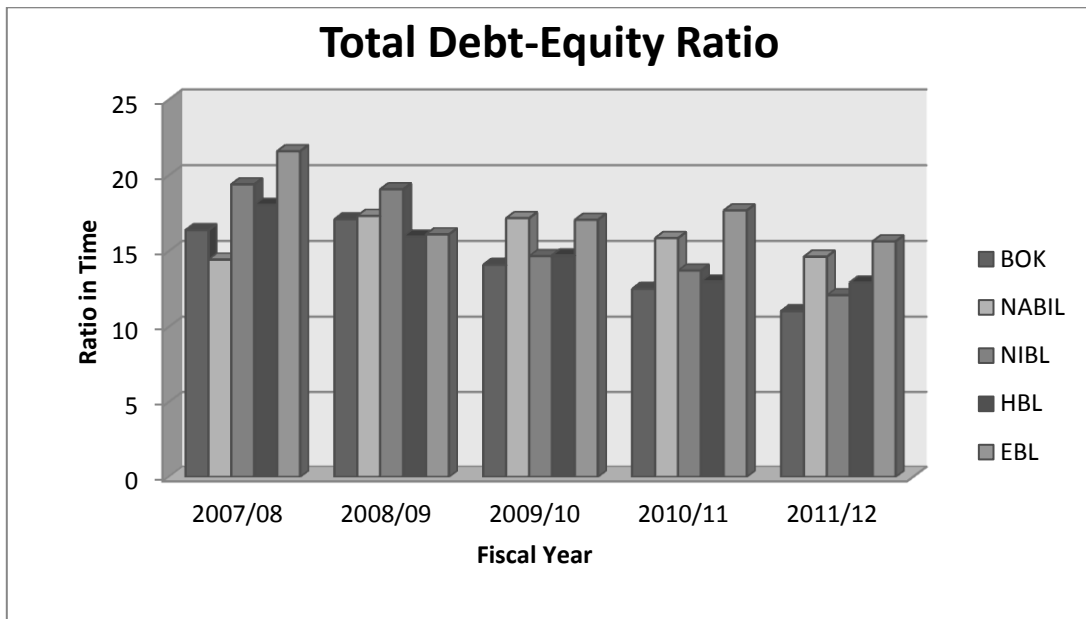
Above figure No. 4.15 the Debt-Equity Ratio is decreasing order during the study period. The highest ratio among sample period is EBL on fiscal year 2007/08

4.1.1.5 Capital Adequacy Ratios:

Capital Adequacy ratio indicates strength of capital base of the institution. Capital refers to paid up capital, general reserve and unpaid profit. A high or low capital adequacy ratio is undesirable items of lower return or lowered solvency respectively. Therefore appropriate capital adequacy is needed but it is a controversial matter. The capital adequacy ratios of the sampled banks are as follows.

4.1.1.5.1 Shareholder's Fund to Total Deposit Ratio :

Shareholder's fund to total deposit ratio shows how well bank are maintain sufficient amount as shareholder's fund is comparison to the amount of the total deposit.

Share's holder Fund to Total Deposit Ratio   Rs. in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Net Worth	840.7	982.0	1342.1	1741.6	2071.4
	Total Deposit	12358.6	15832.7	18083.9	20315.8	21018.4
	Ratio	**0.0679**	**0.06202**	**0.0742**	**0.0857**	**0.0985**
NABIL	Net Worth	1874.8	2057.0	2436.2	3129.4	3835.7
	Total Deposit	23342.4	31915	37348	46334.8	49691.4
	Ratio	**0.0803**	**0.0645**	**0.0652**	**0.0675**	**0.0772**
NIBL	Net Worth	1370.8	1959.0	3421.1	3765.2	4585.4
	Total Deposit	24488.9	34451.8	48897.9	50094.7	50138.1
	Ratio	**0.0560**	**0.0569**	**0.0733**	**0.0752**	**0.0915**
HBL	Net Worth	1766.1	2146.5	2513.0	3119.9	3139.2
	Total Deposit	29905.8	31805.3	34681	37609.4	40920.6
	Ratio	**0.0591**	**0.0675**	**0.0725**	**0.0830**	**0.0840**
EBL	Net Worth	963.6	1601.5	2066.5	2203.6	2759.1
	Total Deposit	19097.7	23976.3	33322.9	36932.3	41127.9
	Ratio	**0.0505**	**0.0668**	**0.0620**	**0.0577**	**0.0671**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.0777**	**0.0709**	**0.0705**	**0.0732**	**0.0612**
	S.D.	**0.0145**	**0.0073**	**0.0147**	**0.0105**	**0.0071**
	C.V. in %	**18.77**	**10.30**	**20.83**	**14.34**	**11.60**

(Sources: Sources & Uses of fund of Concerned Bank, Refer Appendix-16)

Given table shows the capital adequacy ratio of all sample banks are fluctuating. The highest ratio of BOK is registered in year 2011/12 is 0.0985 and lowest ratio is registered in year 2008/09 is 0.06202 with 0.0777 mean ratio which is highest mean ratio of all sample bank. Similarly, the highest and lowest ratio of NABIL is 0.0803 and 0.0645 respectively with mean ratio 0.0709 .Same as NIBL has ratio between 0.0560 to 0.0915 where as HBL has its highest Net worth to Assets ratio is 0.0840 and lowest ratio is 0.0591 in year 2007/08 with mean ratio 0.0732 Same as EBL has its highest ratio is 0.0671 and lowest ratio is 0.0505 in year 2007/08 where mean ratio is 0.06122 which is smallest mean ratio among sample banks . The highest mean ratio indicates that capital base of bank is strongest among sample banks.

In the same way CV. Among all sample banks NABIL has smallest it is 10.30 means stability in capital strength is found in NABIL next sample has less consistency in maintaining a capital strength which is indicated by highest C.V. among sample banks

Figure No.4.16

Share Holder's Fund to Total Deposit Ratio
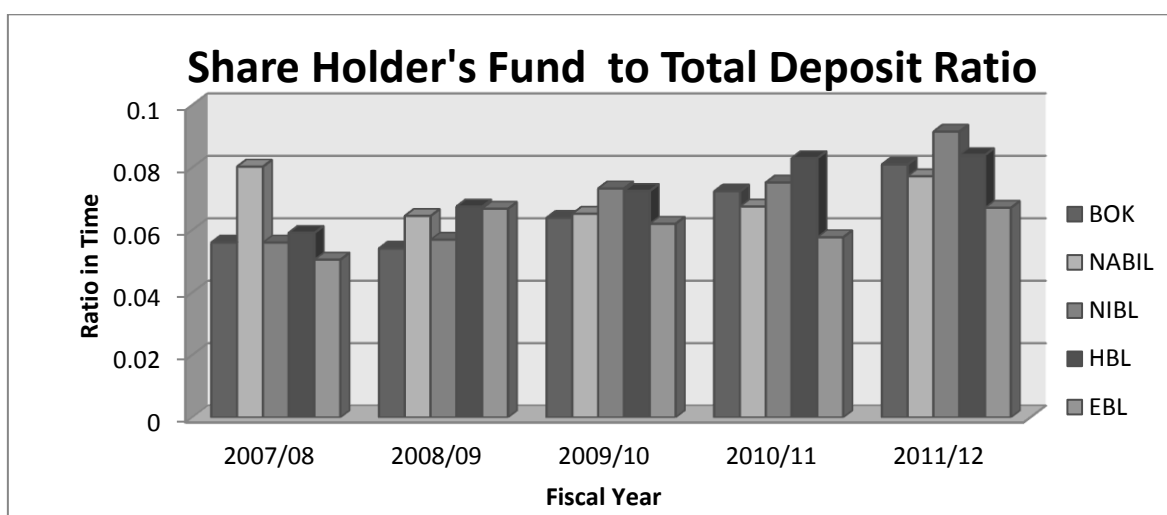
4.1.1.5.2 Shareholder's Fund to Total Assets Ratio:

This ratio is concerned with the sufficiency of shareholders fund against the total assets. Generally this ratio measures the relative claims of owners of the banks over its assets. A high ratio indicates that out of total assets shareholders have more controlled, owner command and vice-versa.

Table No. 4.17

Share's holder Fund to Total Assets Ratio

Rs. in million

	F/Y	2007/08	2008/09	2009/10	2010/11	2011/12
BOK	Net Worth	840.7	982.0	1342.1	1741.6	2071.4
	Total Assets	14997.5	18159.1	21009.3	24058.8	25582.1
	Ratio	**0.0560**	**0.0541**	**0.0639**	**0.0724**	**0.0810**
NABIL	Net Worth	1874.8	2057.0	2436.2	3129.4	3835.7
	Total Assets	29660.4	38478.6	45941.6	54609.8	61292.6
	Ratio	**0.0632**	**0.0535**	**0.0530**	**0.0573**	**0.0626**
NIBL	Net Worth	1370.8	1959.0	3421.1	3765.2	4585.4
	Total Assets	28572.8	40205.5	54634.5	59554.7	61357
	Ratio	**0.0480**	**0.0487**	**0.0626**	**0.0632**	**0.0747**
HBL	Net Worth	1766.1	2146.5	2513.0	3119.9	3139.2
	Total Assets	34645.5	37526.8	40790.7	44768.8	49298.5
	Ratio	**0.0510**	**0.0572**	**0.0616**	**0.0697**	**0.0698**
EBL	Net Worth	963.6	1601.5	2066.5	2203.6	2759.1
	Total Assets	23335.3	28565.9	38000.3	42053	46895.6
	Ratio	**0.0413**	**0.0561**	**0.0544**	**0.0524**	**0.0588**
		BOK	**NABIL**	**NIBL**	**HBL**	**EBL**
	Mean	**0.0655**	**0.0579**	**0.0594**	**0.0619**	**0.0526**
	S.D.	**0.0113**	**0.0048**	**0.0112**	**0.0081**	**0.0071**
	C.V. in %	**17.25**	**8.29**	**18.86**	**13.09**	**13.50**

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Cocerned Bank & Refer Appendix-17)

Above table no. 4.17 shows that the ratio of **BOK** is ranged between 0.0541 to 0.0810 with mean ratio of 0.0655. Similarly, the highest ratio of **NABIL** is 0.0632 and lowest ratio is 0.0530 with mean ratio 0.0579 and **NIBL** has registered its highest ratio is 0.0747 and lowest ratio is registered 0.0480 with mean ratio is 0.0579Same as **HBL** has highest ratio is 0.0698 and lowest ratio is 0.0510 in fiscal year 2007/08 and finally the ratio of **EBL** ranged between 0.0413 to 0.0588 with mean ratio 0.0526. BOK has highest mean ratio among sample banks so BOK has high control over assets by shareholder's fund in compare to other sample banks. Since NABIL has lowest C.V. then all sample banks (i.e. 8.29%) it has more consistency than other bank.

Figure No. 4.17
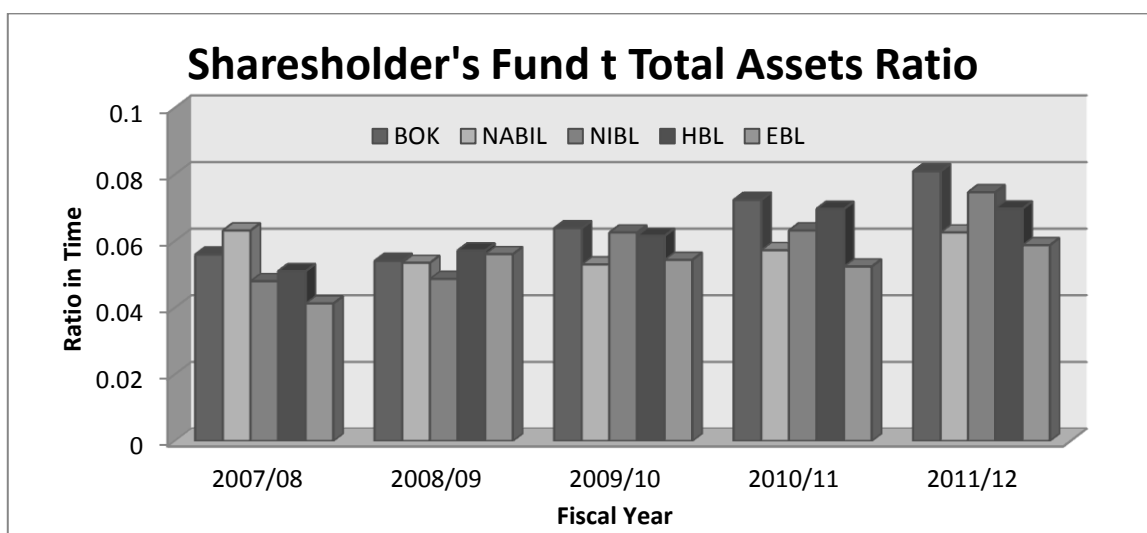
According the to above figure no.4.17 we can found that BOK has highly control over assets by shareholder's fund in compare to other four sample Banks.

4.1.1.5.3 Growth Ratio:

Growth ratios are directly related to the find mobilization and investment management of a commercial bank . It represents how well the commercial bank maintaining the economic and financial position. Under this topic, four types of growth ratios are studied which are as follows.

- i) Growth Ratio of Total Deposit
- ii) Growth Ratio of Total Loan & Advances
- iii) Growth Ratio of Total Investment
- iv) Growth Ratio of Total Net profit

The ratio can be calculated by dividing the last period figure by the first period figure then by referring to the compound interest tables.

Table No.4.18

Growth Ratio of Total Deposit, Total Loan & Advances, Total Investment & Total Net Profit.

Rs. in million

	Total Deposit		**Loan & Adv.**		**Investment**		**Net Profit**	
BOK	**2007/08**	12358.6	**2007/08**	9663.6	**2007/08**	4002.1	**2007/08**	262.38
	2011/12	21018.4	**2011/12**	17247.8	**2011/12**	2332	**2011/12**	605.15
	Growth Rate	**14.20%**	**Growth Rate**	**15.58%**	**Growth Rate**	**14.46**	**Growth Rate**	**23.23**
NABIL	**2007/08**	23342.4	**2007/08**	15657.1	**2007/08**	5359.2	**2007/08**	673.96
	2011/12	49691.4	**2011/12**	38765.6	**2011/12**	8920.3	**2011/12**	1344.18
	Growth Rate	**20.79**	**Growth Rate**	**25.44**	**Growth Rate**	**13.58**	**Growth Rate**	**18.84**
NIBL	**2007/08**	50138.10	**2007/08**	41665.2	**2007/08**	3256.4	**2007/08**	501.40
	2011/12	24488.90	**2011/12**	17482.0	**2011/12**	4294.6	**2011/12**	1176.64
	Growth Rate	**19.62**	**Growth Rate**	**24.25**	**Growth Rate**	**7.16**	**Growth Rate**	**23.77**
HBL	**2007/08**	40920.6	**2007/08**	17672	**2007/08**	6454.8	**2007/08**	7145
	2011/12	29905.8	**2011/12**	31656.6	**2011/12**	4725.6	**2011/12**	4704.6
	Growth Rate	**8.15%**	**Growth Rate**	**15.69**	**Growth Rate**	**8.11**	**Growth Rate**	**11.01%**
EBL	**2007/08**	41127.9	**2007/08**	14059.2	**2007/08**	893.12	**2007/08**	296.14
	2011/12	19097.7	**2011/12**	31534.7	**2011/12**	491.82	**2011/12**	931.30
	Growth Rate	**21.14%**	**Growth Rate**	**22.38**	**Growth Rate**	**16.08**	**Growth Rate**	**33.17**

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Cocerned Bank & Refer Appendix-18)

Given table no. 4.18 shows that growth ratio for the study period in BOK remained 14.20% growth rate on Total deposit,15.58% for Loan & Adv. 14.46% for Investment and 23.23% for Net Profit where as NABIL has it's growth rate are 20.79% ,25.44%,13.58% and 18.84% respectively for Total Deposits, Loan & Advances, Investment and Net Profit. Similarly, NIBL growth rate of Total Deposits ,Loan & Advances ,Investment and Net Profit are 19.62% 24.25%

7.16% , 23.77% respectively. HBL has it's growth ratio of Total Deposit, Loan & Adv., Investment, Net Profit are 8.15%,15.69%,8.11% and 16.08% respectively. EBL has its growth ratio of Total deposit is 21.14% Loan & Adv. is 22.38% Investment is 16.08% and Net profit is 33.17% .

According to above result shows that EBL is found to be best from point of view of net profit, because of highest growth rate of net profit i.e. 33.17% According to above data NIBL and BOK has also satisfied growth rate of Net profit . HBL has lowest growth rate of Net profit among five sample banks. In the same way EBL has highest growth rate of Investment i.e.16.08% among five sample banks. Similarly, The highest growth rate of Loan and Advances is 25.44% of NABIL among sample banks. On the case of Total Deposit the highest growth rate is 21.14% of EBL . According to above data EBL is best bank among taking sample bank because EBL has highest growth rate of Total Deposit, Investment and Net Profit.

4.1.2 Statistical Analysis

This chapter includes some statistical analysis such as Karl Pearson's coefficient of correlation, simple regression analysis and trend line analysis, which are used to analyze the data to achieve the objective of the study .

4.1.2.1 Coefficient of Correlation Analysis (r)

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

4.1.2.1.1 Coefficient of Correlation between deposits and loans & advances

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

Coefficient of Correlation between Total Deposit and Loan & Advance

Rs.in million

Fiscal Year	BOK		NABIL		NIBL		HBL		EBL	
	Total Deposit	Loan & Adv.	Total Deposit	Loan & Adv.	Total Deposit	Loan & Adv.	Total Deposit	Loan & Adv.	Total Deposit	Loan & Adv.
2007/08	12358.6	9663.6	23342.4	15657.1	24488.9	17482	29905.8	17672	19097.7	14059.2
2008/09	15832.7	12692.9	31915	21514.6	34451.8	27145.5	31805.3	19985.2	23976.3	18814.3
2009/10	18083.9	14894.7	37348.3	27816.6	46697.9	36250.4	34681	25292.1	33322.9	24366.2
2010/11	20315.8	16894.1	46334.8	32902.8	50094.7	40689.6	37609.4	28976.6	36932.3	28129.7
2011/12	21018.4	17247.6	49691.4	38765.6	50138.1	41665.2	40920.6	31656.6	41127.9	31534.7
r	0.1735		0.2407		0.1312		0.620		0.4931	
r^2	0.0301		0.07236		0.01119		0.033518		0.099768	
PE.r	0.2926		0.2799		0.2983		0.2915		0.2716	
6PE.r	1.7556		1.6794		1.7898		1.7490		1.6296	
Level of Significant	Insignificant		Insignificant		Insignificant		Insignificant		Insignificant	

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Concerned Bank & Refer Appendix-19)

According to above table no.4.19 shows that the correlation coefficient between total deposit and Loan & Advances .All the sample banks has positive correlation except HBL while testing 6PE.r for all sample banks found to be insignificant as the 'r' value for these banks are less than 6PE.r which indicates the banks are NABIL to their deposits in proper way.

4.1.2.1.2 Coefficient of Correlation between deposits and investment

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

Coefficient of Correlation between Total Deposit and Investment

Rs. in million

Fiscal Year	BOK		NABIL		NIBL		HBL		EBL	
	Total Deposit	Investment	Total Deposit	Investment	Total Deposit	Investment	Total Deposit	Investment	Total Deposit	Investment
2007/08	12358.6	2332	23342.4	4805.7	24488.9	3256.4	29905.8	6454.8	19097.7	4704.6
2008/09	15832.7	2113.2	31915	4646.9	34451.8	3155	31805.3	7471.7	23976.3	4906.5
2009/10	18083.9	1745	37348.3	3706.2	46697.9	2531.3	34681	4212.3	33322.9	5146
2010/11	20315.8	2954.9	46334.8	7941.3	50094.7	4201.9	37609.4	4465.4	36932.3	4354.4
2011/12	21018.4	4002.1	49691.4	8742.3	50138.1	4294.6	40920.6	6407.4	41127.9	7145
r	-0.0525		0.2407		0.1312		0.0620		0.4931	
r^2	0.00276		0.05794		0.01721		0.003844		0.243148	
PE.r	0.1345		0.1271		0.1326		0.1344		0.1021	
6PE.r	0.8070		0.7626		0.7956		0.8064		0.6126	
Level of Significant	Insignificant		Insignificant		Insignificant		Insignificant		Insignificant	

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Concerned Bank & Refer Appendix-20)

Table no. 4.20 indicates that the coefficient of correlation for all the sampled banks found to be positive except BOK which means there is positive while testing 6PE.r for all sample banks found to be in significant as the r value for these banks are less than 6PE.rwhich indicates the banks are NABIL to their deposits in proper way. There is highest r is 0.4931 of EBL .

4.1.2.1.3 Coefficient of Correlation between Investment & Net profit

Following table shows the relation between the investment and net profit. As we say in above investment is done in different profitable area to maximize the profit. Net profit is the key to survive the banks. Without profit banks cannot sustain in the market. Therefore it is necessary to measures the degree of relationship between these two variable. For this study, Investment (x) is taken as independent variable and net profit (y) is taken as dependent variable. The following table shows the coefficient of correlation between(r), coefficient of determinants (r^2) and probable error P.E.r on investment and net profit of banks.

Coefficient of Correlation between Investment and Net Profit

Fiscal Year	BOK		NABIL		NIBL		HBL		EBL	
	Investment	Net Profit	Investment	Net Profit	Investment	Net Profit	Investment	Net Profit	Investment	Net Profit
2007/08	2332	262.38	4805.7	673.96	3256.4	501.4	6454.8	491.82	4704.6	296.14
2008/09	2213.2	361.49	4646.9	746.47	3155	696.73	7471.7	635.87	4906.5	451.21
2009/10	1745	461.73	3706.2	1031.05	2531.3	900.62	4212.3	752.83	5146	638.73
2010/11	2954.9	509.26	7941.3	1138.57	4201.9	1265.95	4465.4	508.80	4354.4	831.76
2011/12	4002.1	605.15	8742.3	1344.18	4294.6	1176.64	6407.4	893.12	7145	931.30
R	0.1526		0.2893		0.2944		0.2705		0.2950	
r^2	0.02329		0.08369		0.08667		0.07317		0.087025	
PE.r	0.1317		0.1236		0.1232		0.1251		0.1232	
6PE.r	0.7902		0.7416		0.7392		0.7506		0.7392	
Level of Significant	Insignificant		Insignificant		Insignificant		Insignificant		Insignificant	

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Concerned Bank & Refer Appendix-21)

Table No.4.21 indicates that coefficient of correlation between Investment and Net Profit for all five sample banks. All correlation are positive so we can say that all the sample bank invest on write way. while testing 6PE.r for all sample banks found to be insignificant as the r value for these banks are less than 6PE.r ,which indicates the banks are NABIL to their invest in proper way.

4.1.2.1.4 Coefficient of Correlation between Loan and advances & Net profit

Loan and advances also plays a vital role in earning the profit. By mobilizing the deposit in loan & advances banks earns the profit. So, it is necessary to study the relation between these two variable loan & advances and net profit. Following table shows the coefficient of correlation(r), coefficient of determinants (r^2) and probable error PE.rof loan& advances and net profit of sample banks. For this study loan and advances (x) is taken as independent variable and net profit (y) is taken as dependent variable.

Coefficient of Correlation between Loan and Advance & Net Profit

Fiscal Year	BOK		NABIL		NIBL		HBL		EBL	
	Loan & Adv.	Net Profit	Loan & Adv.	Net Profit	Loan & Adv.	Net Profit	Loan & Adv.	Net Profit	Loan & Adv.	Net Profit
2007/08	9663.6	262.38	15657.1	673.96	17482	501.4	17672	491.82	14059.2	296.14
2008/09	12692.9	361.49	21514.6	746.47	27145.5	696.73	19985.2	635.87	18814.3	451.21
2009/10	14894.7	461.73	27816.6	1031.05	36250.4	900.62	25292.1	752.83	24366.2	638.73
2010/11	16894.1	509.26	32902.8	1138.57	40689.6	1265.95	28976.6	508.80	28129.7	831.76
2011/12	17247.6	605.15	38765.6	1344.18	41665.2	1176.64	31656.6	893.12	31534.7	931.30
r	0.1611		0.4374		-0.0472		-0.0555		0.0485	
r^2	0.02595		0.19132		0.00223		0.00308		0.002352	
PE.r	0.1314		0.1091		0.1346		0.1345		0.1346	
6PE.r	0.7884		0.6546		0.8076		0.8070		0.8075	
Level of Significant	Insignificant		Insignificant		Insignificant		Insignificant		Insignificant	

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Concerned Bank & Refer Appendix-22)

Above table no. 4.22 shows The coefficient of correlation for all the sampled banks found to be almost "1" which indicates there is proportion relationship between the Loan & Advance and Net profit for all the banks. While testing 6 PE.r for all sample banks found to be positive correlation except NIBL as per as HBL .It shows that NABIL is successful in earning the net profit by mobilizing the loan& advances then other sample banks .

4.1.2.2 Simple Regression Analysis

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

4.1.2.2.1 Regression Analysis between Net Profit and Total Deposit

The main point of this analysis is to determine the relation between net profit and total deposit. Obviously, it seems that as total deposit increases the net profit of the banks need to increase. So, in this *analysis* net profit is considered to be dependent variable and total deposit as independent variable. The relation between net profit and total deposit can be present mathematically as below:

N.P.=a+b(T.D)

Where,

N.P.= Net Profit   T.D.= Total Deposit

Table No. 4.23:Regression Analysis between Net Profit and Total Deposit

S.no	Banks	Intercept(A)	Regression Coefficient(B)	r	T-test
1.	Bank of Kathmandu	0.0008	0.0015	0.1122	1.4744
2.	NABIL	-0.0032	0.0017	0.7094	3.1746
3.	Nepal Investment Bank	0.0016	0.0305	0.2174	3.4648
4.	Himalayan Bank Ltd.	0.0012	0.0011	0.2932	2.9439
5.	Everest Bank Ltd.	0.0016	0.0016	0.1194	2.5995

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Concerned Bank & Refer Appendix-23)

Table No. 24 exhibits the estimation of net profit on the basis of the total deposit. The regression coefficient of net profit and total deposit for all the sampled banks are positive which determine that increase in the total deposit ultimately increases Net Profit for each sampled banks. The coefficient correlation found to be almost near by "1". The coefficient correlation found to be highest in case of NIBL the coefficient correlation which indicates proportionate change in net profit as increase or decrease in Total Deposit for the bank. In case of t-test variables of all five sample bank was significance at 5% level of significant. This shows that there was high correlation between net profit and total deposit in case of all sample banks.

4.1.2.2.2 Regression Analysis between Net Profit and Loan& Advance

This analysis determines the relation between net profit and loan & advance. As loan & advances increases the net profit of the banks need to increase. So, in this analysis net profit is considered to be dependent variable and loan& Advances as independent variable. The relation between net profit and loan & deposit can be present mathematically as below:

N.P. =a+bLA

Where,

N.P.=Net Profit

L.A.= Loan & Advances

Table No.4.24 Regression Analysis between Net Profit and Loan &Advances

S.no	Banks	Intercept (A)	Regression Coefficient(B)	r	T-test
1.	Bank of Kathmandu	0	0.00256	0.1526	2.7891
2.	NABIL	789.47	0.0650	0.2893	2.5698
3.	Nepal Investment Bank	0	0.0050	0.2944	2.4027
4.	Himalayan Bank Ltd.	0	0.0035	0.2705	1.1707
5.	Everest Bank Ltd.	0	0.00598	0.2950	2.0623

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Concerned Bank & Refer Appendix-24)

Table No.25 gives a competitive result of regression analysis for all sample banks. Regression coefficient of net profit and loan and advances for all the five sampled banks are positive which determine that increase in the loan and advances ultimately increases net profit for each sampled banks. The coefficient correlation found to be highest in case of EBL the highest correlation (r) , which indicates proportionate change in net profit as increase or decrease in loan and advances for the bank. BOK has registered the lowest correlation (r) between loan and advances and net profit in respect to other sampled banks.

While testing the hypothesis on the basis of t-test the variables of all sample banks are got significance at 5% level. This shows that there was high correlation between net profit and loan and advances of all sample banks.

4.1.2.2.3 Regression Analysis between Net profit and Investment

This analysis determines the relation between net profit and Investment. As Investment increases the met profit of the banks need to increase. So, in this analysis net profit is considered to be dependent variable and Investment as independent variable. The relation between net profit and Investment can be present mathematically as below:

N.P.=a+bl

Where,

N.P.= Net Profit

I.= Investment

Regression Analysis between Net Profit and Investment

S.no	Banks	Intercept(A)	Regression Coefficient(B)	*r*	T-test
1.	Bank of Kathmandu	0.0028	0.01389	0.1611	2.9419
2.	NABIL	789.48	0.1268	0.4374	1.6551
3.	Nepal Investment Bank	0	-0.0078	-0.0472	6.4204
4.	Himalayan Bank Ltd.	0.0592	-0.0012	-0.0555	1.9321
5.	Everest Bank Ltd.	60.2940	0.0005	0.0485	0.6367

(Sources: Sources & Uses of fund of concerned Bank & Annual Report of Concerned Bank & Refer Appendix-25)

Table No.26 represents the regression analysis between the net profit and investment. The regression coefficient of net profit and investment for all the sampled banks are positive except NIBL and HBL which indicate that increase in the investment ultimately increases net profit for each sampled banks. The coefficient correlation found to be highest in case of NIBL almost highest which indicates proportionate change in net profit as increase or decrease in investment for the bank. EBL has registered lowest correlation (r) in respect to other sampled banks.

Since NIBL has higher calculated value than t-test table value it has got significant at 5 % level while testing the Hypothesis. The other four sample banks didn't get the significance between net profit and investment. This represents that there is a highest correlation between the net profit and Investment for NIBL and low correlation for rest of sample Banks.

4.1.2.3. Trend Line Analysis

Among the various methods of determining trend of time series, the most popular and mathematical method is the least square method. Using this method of least square in the study, it has been tried to analyze the trend of prospective net profit in future by analyzing the trend of past net profit of the banks. Banks utilized the deposit by releasing investment in loan and advances in different profitable area for maximizing the profit. A bank can invest in shares & debenture, government securities and provide the loan and advances under different scheme.

This topic will be used to forecast the ratios of Total deposit, Total Loan and Advances, Total Investment and Net Profit of the banks for next five years on the base of past nine years. The analysis is done under limited factors which are as follows:

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

4.1.2.3.1. Trend Line Analysis of Total Deposit

The part of this analysis will analyze Total deposit of banks for Five years from 2007 to 2011 and projection for next five years i.e.2010 to 2015. The following table exhibits the trend values of Total deposit of sample banks for 5 years.

Table No.4.26

Trend Line Analysis of Total Deposit

Year	BOK	NABIL	NIBL	HBL	EBL
2008	13161.34	24302.82	27786.02	29417.68	19488.14
2009	15341.61	31014.6	34480.15	32201.05	25189.78
2010	17521.88	37726.38	41174.28	34984.42	30891.42
2011	19702.15	44438.16	47868.41	37767.79	36593.06
2012	21882.42	51149.94	54562.54	40551.16	42294.7
2013	24062.69	57861.72	61256.67	43334.53	47996.34
2014	26242.96	64573.5	67950.8	46117.9	53697.98
2015	28423.23	71285.28	74644.93	48901.27	59399.62
2016	30603.5	77997.06	81339.06	51684.64	65101.26
2017	32783.77	84708.84	88033.19	54468.01	70802.9

(Sources: Annual Report of Concerned Bank & Refer Appendix-26)

Figure No.4.18
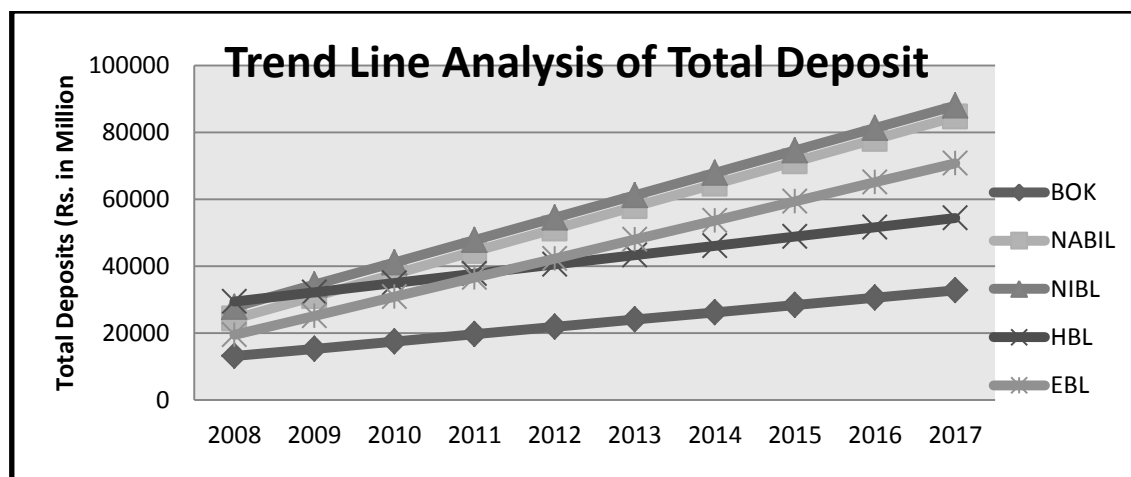
Table No. 4.18 and Figure no. shows that the trend values of all the sample banks are in increasing trend, which means futures of total deposit of all the sample banks are good position. Among the sample banks the NIBL has a highest trend of total deposit. It means NIBL is successful in mobilizing the deposit. BOK has lowest Trend value of total deposit than other sample banks.

4.1.2.3.2 Trend Line Analysis of Loan and Advances

The analysis will analyze Loan and Advances of banks for Five years from 2007 to 2011 and forecast for following five years i.e. 2010 to 2015. The following table exhibits the trend values of Total deposit of sample banks for 5 years

<div align="center">

Table No.4.27
Trend Line Analysis of Loan& Advances

</div>

Year	BOK	NABIL	NIBL	HBL	EBL
2008	10404.74	15810.3	20264.44	17324.38	14527.54
2009	12341.66	21570.82	26455.49	21020.44	18954.18
2010	14278.58	27331.34	32646.54	24716.5	23380.82
2011	16215.5	33091.86	38837.59	28412.56	27807.46
2012	18152.42	38852.38	45028.64	32108.62	32234.1
2013	20089.34	44612.9	51219.69	35804.68	36660.74
2014	22026.26	50373.42	57410.74	39500.74	41087.38
2015	23963.18	56133.94	63601.79	43196.8	45514.02
2016	25900.1	61894.46	69792.84	46892.86	49940.66
2017	27837.02	67654.98	75983.89	50588.92	54367.3

(Sources: Annual Report of Concerned Bank & Refer Appendix-27)

<div align="center">

Figure No. 4.19

</div>
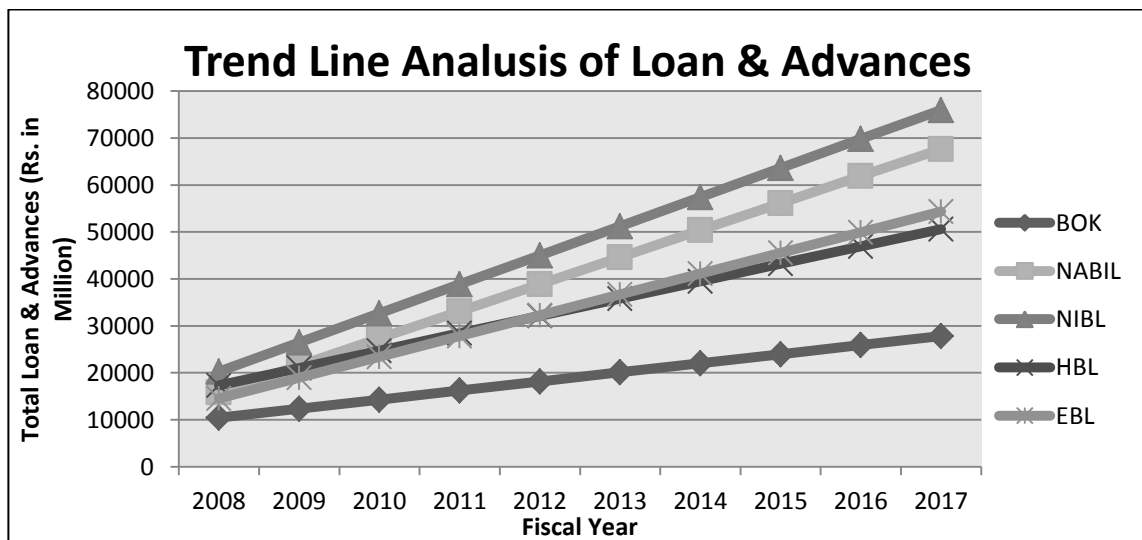
Above table no. 4.19 exhibits that the trend values of all the sample banks are in increasing trend, which means Total Loan & Advances of all the sample banks are better position. All the sample banks are successful in mobilizing the Loan and Advances to different productive and profitable sector . In fiscal year 2008   the trend values are 10404.74,15810.3, 20264.44, 17324.38 and 14527.54 of BOK, NABIL, NIBL, HBL and EBL respectively.

4.1.2.3.3 Trend Line Analysis of Investment

The following table analyzes the trend values of Investment of   sample banks for Five years and predication for next five years.

Table No.28

Trend Line Analysis of Investment

Year	BOK	NABIL	NIBL	HBL	EBL
2008	1793.06	3734.96	2863.18	5182.1	4385.56
2009	2211.25	4851.72	3175.51	5492.21	4818.43
2010	2629.44	5968.48	3487.84	5802.32	5251.3
2011	3047.63	7085.24	3800.17	6112.43	5684.17
2012	3465.82	8202	4112.5	6422.54	6117.04
2013	3884.01	9318.76	4424.83	6732.65	6549.91
2014	4302.2	10435.52	4737.16	7042.76	6982.78
2015	4720.39	11552.28	5049.49	7352.87	7415.65
2016	5138.58	12669.04	5361.82	7662.98	7848.52
2017	5556.77	13785.8	5674.15	7973.09	8281.39

(Sources: Annual Report of Concerned Bank & Refer Appendix-28)

Figure No. 4.20

Trend Line Analysis of Investment

- 83 -
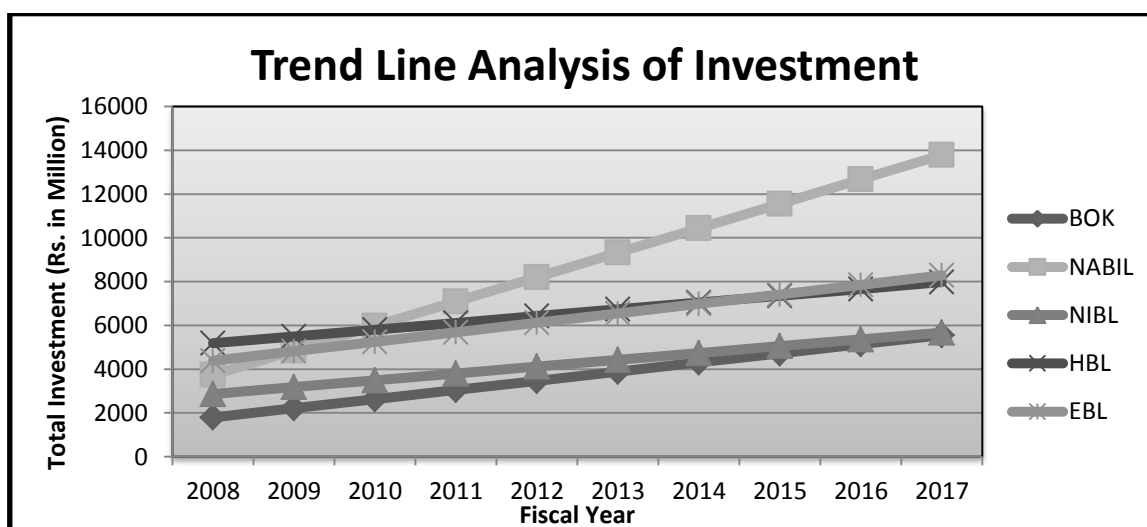
Above figure no.4.20 shows the Trend Value of Investment of five sample banks. According to above table and figure indicates that all the sample banks are in increasing trend, which means futures of Investment fund of all sample banks are increasing each year Among the sample banks NABIL has a highest trend of Investment. It means NABIL is successful in mobilizing the Investment.

4.1.2.3.4. Trend Line Analysis of Net Profit

The following table analyzes the trend values of Net Profit of sample banks for Five years and prediction for next five years.

Table No.29

Trend Line Analysis of Net Profit

Year	BOK	NABIL	NIBL	HBL	EBL
2008	273.342	640.34	524.39	521.38	299.66
2009	356.672	813.59	716.36	588.93	464.74
2010	440.002	986.84	908.33	656.48	629.82
2011	523.332	1160.09	1100.3	724.03	794.9
2012	606.662	1333.34	1292.27	791.58	959.98
2013	689.992	1506.59	1484.24	859.13	1125.06
2014	773.322	1679.84	1676.21	926.68	1290.14
2015	856.652	1853.09	1868.18	994.23	1455.22
2016	939.982	2026.34	2060.15	1061.78	1620.3
2017	1023.312	2199.59	2252.12	1129.33	1785.38

(Sources: Annual Report of Concerned Bank & Refer Appendix-29)

Figure No.4.21

- 84 -
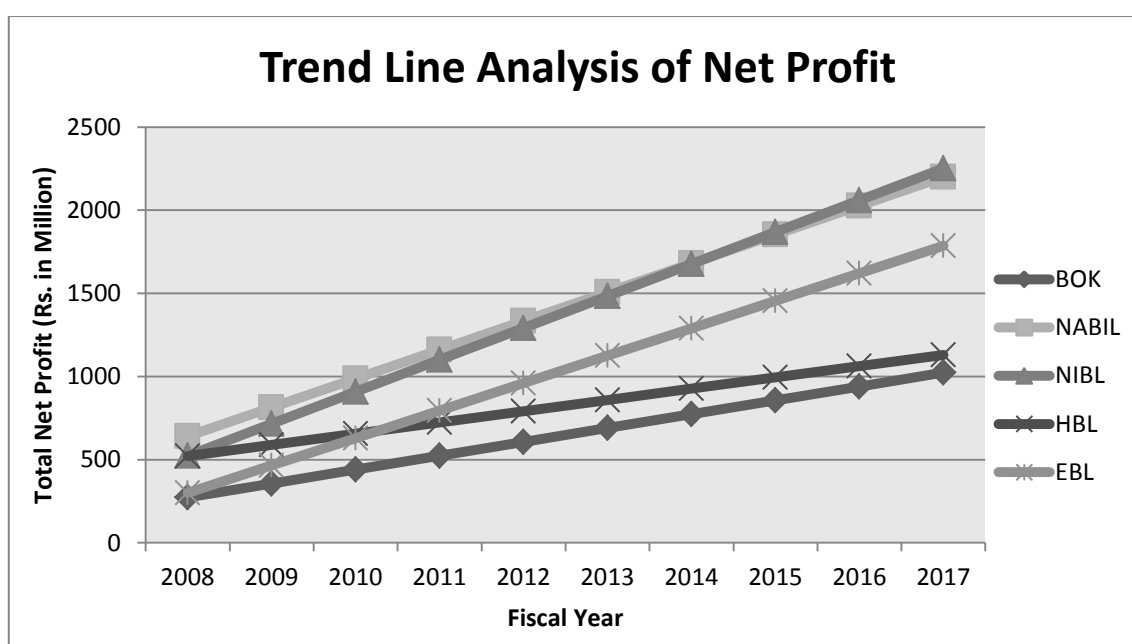
Above figure no. 4.21 exhibits that the trend values of all sample banks are in increasing trend, which means futures of Net Profit of all sample banks are good position. Among the sample banks NABIL and NIBL have almost same trend value both are highest then other sample banks. 273.342 640.34 , 524.39, 521.38 and 299.66 are respectively trend value of BOK, NABIL, NIBL, HBL and EBL in fiscal year 2007/08 and it will be increasing in fiscal year 2015/16 to respectively 1023.312, 2199.59, 2252.12, 1129.33 and 1785.38

4.2 Major Finding of the Study

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

4.2.1 Liquidity Ratio

❖ During the five years study period of five sample banks, the current ratio found to be highly fluctuate. It is well known that the standard current ratio is 2:1. Among sample bank the current ratios of NABIL dominate the current liabilities which indicate that NABIL is capable in paying the current obligation. Therefore NABIL has a highest liquidity ratio among other sample banks. However BOK has the lowest current ratio, it does not mean that it is failed to maintain the liquidity position. From point of view of working risk, EBL has highest CV (Coefficient of Variance) i.e. 52.77% but it has average of all banks shows the satisfactory level of current ratio.

❖ EBL found to be in better position to maintain the cash and bank balance ratio among the sample banks. But it does not mean that it has mobilized its more funds in profitable sector. It actually means that it can meet the daily cash requirement to make payments of the customer. NABIL has lowest mean ratio which mean it may invest the more fund in the productive sector. BOK has an average mean ratio. All the five banks have a fluctuation ratio during study period.

From above results it can said that the liquidity position of EBL found to be comparatively better than other sample banks. But other sample banks also have satisfactory level of liquidity position due to their aggressive working policy.

4.2.2 Assets Management Ratio

❖ The loan and advances to total deposit ratio of all banks found to be at satisfactory level and maintain the good consistency in ratio. However NIBL has a highest mean ratio it shows that NIBL's liquidity position with respect to this ratio is more satisfactory than other sample banks. Apart from that it has a more consistency in ratio than other.

❖ The mean ratio of loan and advances to total fixed ratio all the banks are found to be at satisfactory level. Since BOK has a higher mean ratio, BOK is able to proper utilization of loan and advance with respects to fixed deposit. NABIL and NIBL have seemed to less effective in utilizing the loan and advances in compare to BOK.

❖ All the sample banks are successful to mobilize their funds as loan and advances with respect to total assets. But in comparative study for five years for five sample banks, BOK has a higher mean ratio, so they are found to be best investor among sample banks. As concern to consistency, almost all banks are failed to maintain the consistent. Among them BOK has maintain the consistency in loan and advances up to some extent.

❖ Among sample banks EBL is successful in mobilizing the deposit in invest on government securities, since it has a higher mean ratio. But NIBL has a lower mean ratio; they are less successful to utilize the deposit in investment on government securities in compare with sample banks. Similarly, EBL is also successful in mobilizing the deposit in investment on Government securities. Among sample banks EBL are able to maintain the consistency in mobilization of investment on government securities.

❖ All sample banks have satisfactory investment on government securities to total working fund ratio. Since EBL has a higher mean ratio they are successful in mobilizing the funds in govt. securities. Where as NIBL has a lowest mean ratio which shows that they are failed to invest in government securities in past five years. EBL are found to be best as concern with consistency. It has maintained the consistency level up to some extent.

From above finding, it shows that all the sample banks are successful in on-balance sheet utilization as well as off balance sheet operation. Among them NIBL and BOK found the best in mobilizing the assets to the profitable sector.

4.2.3 Profitability Ratio

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

- ❖ All the sample banks are able to earn the profit on total assets. Among them, NABIL found to be best, since it has a higher mean ratio than average mean ratio. But as concern to consistency NABIL also shows the consistency on earning the profit. In case of other banks they have lowest earning on total assets and also have lowest consistency in earning the profit.

- ❖ Net profit to total deposit ratio of NABIL is highest among the sample banks whereas HBL has the lowest mean ratios. Similarly NABIL has more consistencies in ratio.

- ❖ The mean ratio of net profit to net worth of NABIL is highest among the sample banks. Also NABIL is found to be the best as concern with consistency. It has maintained the best consistency level among the sample banks. Except NABIL, other sample banks have lower mean ratio and been NABIL to maintain the consistency.

- ❖ Even though all sample banks seem to earn the interest on total working fund, NIBL has successful in earning the higher interest as well as maintain the consistency in earning. Remaining other sample banks are NABIL to maintain the consistency in earning the interest than NIBL.

- ❖ NABIL seems to be successful to collect its working fund from less expensive sources in comparison to among the sample banks. Even though NIBL has a higher interest expense they are successful in maintain the stability on expenses of interest.

From above finding, we can conclude that NABIL has a consistency in earning the profit and expenses on interest and NABIL are successful in earning the higher profit with lower interest expenses, where as NIBL are average of other comparative banks.

4.2.4 Leverage Ratio

- ❖ Debt-assets ratio of the EBL is the highest among the sample banks. Whereas BOK have more consistence in maintaining the ratio. Similarly, NABIL and NIBL has maintained the debt-assets ratio to some extent.

- ❖ Even though EBL is able to maintain the debt-equity ratio than other sample banks but failed to maintain the variability. In part of NABIL they are able to maintain the

consistency but they also failed to use the equity fund to creditors. In case of BOK is NABIL to maintain the debt equity ratio but successes in maintain the variability.

4.2.5 Capital Adequacy Ratio

❖ The capital adequacy ratio of the BOK is the highest among the sample banks. Similarly, EBL has achieved the lowest ratio. Other sample banks are NABIL to maintain the variability in comparison to the BOK.

❖ BOK has achieved the highest shareholders fund to total assets ratio, which means that they have more assets out of the shareholder's fund. And also BOK is able to maintain the variability. EBL have lowest ratio among the sample banks. NIBL is in average position.

4.2.6 Growth Ratio

❖ The growth rate of net profit of all sample banks is positive. Among sample banks EBL have highest growth rate and HBL has lowest growth rate.

❖ EBL found to be the strongest in comparison to other sample banks in case to growth of Investment. Whereas NIBL found to be the lowest growth in Investment.

❖ NABIL is found to be the strongest in comparison to other sample banks in case to growth of Loan and Advance. Whereas HBL found to be the lowest growth in Loan and Advance.

❖ The growth rate of deposit of all sample banks is positive. HBL has the lowest growth rate and EBL has the highest growth rate. NABIL has an average position.

4.2.7 Coefficient of Correlation

The correlation analysis has pull out the following results.

❖ The Positive correlation between the deposit and loan and advances are found in all sample banks except HBL. The correlation between the deposit and loan and advances are perfect as there is insignificant between them. It means that the all banks uNABILe to provided the loans and advances from its deposit. Banks are not successful in mobilizing the deposit as loans and advances.

❖ There is the perfect positive correlation between the deposit and investment in all sample banks except BOK, because BOK has negative result. It means BOK is unsuccessful to use the deposit in proper way. In case of another four sample

banks they have effectively mobilize its deposit on investment. In another word it can be said that Investment is depends upon the deposit.

❖ EBL and NABIL are successful in earn the net profit from it's investment which means that there is a positive correlation between the Investment and net profit. BOK tried unsuccessfully to earn the profit from its deposit since the correlation between the investment and net profit is not significant. It is failed in mobilizing the investment to earn the profit.

❖ All the sample banks are successful in earning the net profit by mobilizing the loan and advances. The correlation between the loan and advances and net profit are found to be positive.

4.2.8 Simple Regression Analysis

❖ Even though all sample banks has a positive regression coefficient. All the sample banks have a high correlation and significance between the net profit and total deposit, while testing the hypothesis. That indicates proportionate change in net profit as increase or decrease in Total Deposits of the bank.

❖ The regression coefficient of net profit and loan and advances for all sample banks are positive. There is a high correlation and significance between the net profit and loan and advances all sample banks, which indicate that if loan and advances increases net profit also increases and vice-versa.

❖ All sample banks has got the positive regression coefficient between the net profit and investment but only NABIL has got the high correlation and significance which represents that if investment is change net profit also change in same ratio. But in case of other sample banks there is only slightly changes in net profit is found, even though investment change. This is represents by low correlation and no significance between the net profit and investment.

4.2.9 Trend Line Analysis

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

❖ The trend line of total deposit for all sample banks is in increasing trend. In fiscal year 2008 the trend values of BOK, NABIL, NIBL, HBL and EBL are 13161.34, 24302.83, 27786.02, 29417.68 and 19488.14 respectively. It is

increased to 32783.77, 84708.84, 88033.19, 54468.01 and 70802.90 for the forecast year 2016. Among the sample banks NABIL has the highest trend of total deposit. It means NABIL is successful in mobilizing the deposit.

❖ All the sample banks have increasing trend of the loan and advances. Among them NIBL has the highest increasing trend and BOK has the lowest increasing trend. In fiscal year 2008 the trend values of BOK, NABIL, NIBL, HBL and EBL are 10404.74, 15810.30, 20264.44, 17324.38 and 14527.54 respectively. It is increased to 27837.02, 67654.98, 75983.89, 59588.92 and 54367.30 for the forecast year 2017.

❖ Although all sample banks has increasing trend of the investment EBL has the highest increasing trend and BOK has the lowest increasing trend. In fiscal year 2008 the trend values of BOK, NABIL, NIBL, HBL and EBL are 1793.06, 3734.96, 2863.18, 5182.10 and 4385.56 respectively. It is increased to 5556.77, 13785.80, 5674.15, 7973.09 and 8281.39 for the forecast year 2016.This shows that NABIL is successful in mobilizing the investment than other sample banks.

❖ Although all sample banks has increasing trend of Net Profit NABIL has the highest increasing trend. In fiscal year 2008 the trend values of BOK, NABIL, NIBL, HBL and EBL are 273.34, 640.34, 524.39, 521.38 and 299.66 respectively. It is increased to 1023.31, 2199.59, 2252.12, 1129.33 and 1785.38 for the forecast year 2017.

\CHAPTER-5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is a complete suggestive package, which contains summary, conclusion and recommendation. This chapter also highlighted some selected action NABIL conclusions and recommendation on the basis of the major findings, which are derived from the analysis of BOK, NABIL, NIBL, HBL and EBL. Summary covers the brief explanation to all the chapters of the study and shows the actual facts that have been taken from the analytical section. And the analysis is performed with the help of financial and statistical tools. Conclusions are based on the principal findings of the study representing the strengths and weakness of the performance of the commercial banks. Recommendations are presented in the form of suggestions, which are prepared on the basis of findings.

5.1   Summary

Industrialization is an important factor for achieving the basic objective of a country's economic and social progress. Industrialization not only provides necessary products and services to the community but also create employment opportunities. Industrial development thus has a multiplier effect on the economy. Banking industries been regarded as one of the component of economy. It transfers the scattered funds collected from saving of the public into various productive sectors. Economic activities remains halt in absence of banking industries as it plays the role of catalyst for economic development of the country in the developing country where there prevail unorganized transactions. It helps to enhance economic activities of the country by providing capital funds for the smooth operation of business activities, create employment opportunities, investing agriculture, industry. At present there are altogether 31 commercial banks operating in the country among which NBL and RBB has occupied wide range of the business due to access to most of the corner of the country. Slowly private banks are also initiating to move toward every corner of the country but due to prevailing political crisis they are not being able to meet their objects to reach to every corner of the country. Due to increasing competition banks are forced to innovate new products to their customer and they are also

shifting from traditional service procedure to various sophisticated services like ATM card, debit cards, credit card, housing loan, educational loans, vehicle financing.

The NRB has also declare to new commercial bank to have minimum paid up capital Rs. 250 million to operate all over Nepal except Kathmandu valley and Rs. 2,000 billion to operate all over Nepal this is effective form 15th May 2002. It also directed commercial banks to invest in the shares and securities of an organization not more than 10 percent paid-up capital of the organization. Likewise, the commercial banks could invest not more than 10 percent in the securities of any one of it's financially self-interest bearing organizations that of not more than 20 percent in case of those financially self-interest bearing organizations. For making investment in the securities like this, the total investment was required to be not more than 30 percent of banks paid-up capital; the investment should be made only in the shares and securities of those organizations which were already listed and were in the process being listed within one year in stock exchange; and the banks could not invest in the shares, securities and hybrid capital instruments in those issued by the banks and financial institutions that took permission from NRB to operate their transactions. If such investment made prior to the issuance of this directive, they required to withdraw within the limit prescribed by this directive as at end of FY 2003/04.

Financial analysis is the process of determining the significant operation and financial characteristics of a firm from accounting data. It shows the relationship between the various component which can be found in balance sheet and profit and loss statement. The analyzed statement contains that information which is useful for management, shareholder, creditors, investors, depositors etc. As in other industries banking industries also need financial analysis, as it is crucial for evaluating and analyzing the performance of the particular company as compare to the other and also from the previous performance of the same company. So, this study almost concentrated in following problems of the sampled banks.

The study covers only three banks BOK, NABIL, NIBL, HBL and EBL among 31 commercial banks. Operating date of these banks are 12th March 1995, 16th July 1984, 27th February 1986, 18th January 1993 and 18th October 1994 respectively. Head office of all sample banks are in Kathmandu. The study completely based on secondary data

accumulated from websites. The study is based on five fiscal years from 2007/08 to 2011/12. Therefore the conclusion is concern with only above period. The specific objective of the study will be pointed out as follows:

a) To analysis the financial performance of sample banks in terms of liquidity, profitability, growth, leverage and capital adequacy.

b) To identify relationship between net profit with respect to deposit, loan and advances and investment.

c) To analysis the trend of total deposit, loans and advances, total investment, net profit of the selected banks.

Research Methodology followed to achieve the objective of the study and which constitute Research Design, Source of Date, Population and sample, Data Collection process and Method of Analysis. As it has already mentioned that the procedure has been divided into two parts that is financial analysis and statistical analysis. Both parts have made comparative analysis and their interpretation. There are various tools and technique of financial analysis, each of which is used according to purpose for which the analysis is carried out. The widely technique used is as follows:

- Ratio Analysis
- Statement of changes in financial position
- Cash flow statement

Among them ratio analysis is used by most companies. Therefore in this study we have discussed only about ratio analysis. Under statistical analysis Coefficient of Correlation, Simple regression, Test of Hypothesis and Trend line analysis have been used.

5.2   Conclusions

The overall performance of sample banks found to be satisfactory. All sample banks are not strong in all performance. Some are strong in liquidity position and some are strong in profit making. The analysis of liquidity position of these commercial banks shows different positions. The current ratio measures only total rupees worth of current assets and total rupees of current liabilities, i.e. it indicates the availability of current assets in rupees for everyone rupee of current liability Since mean ratios of EBL found to be highest than other sample banks from which we can conclude that EBL is successful to meet their current obligation. Even though BOK, NABIL,NIBL and HBL have failed to maintain the current

obligation they are not failed in earning the profit. From point of view of working policy they have taken the aggressive policy.

The turnover of the commercial banks is the main indication of income generating activity. These ratios are used to judge how efficiently the firm has been using its resources. From the analysis of turnover of banks all the sample banks are comparatively successful in assets management. Among sample banks HBL found to be comparatively best in mobilizing its assets and deposits in profitable sectors in form of loan and advances, Investment in Government securities and shares & debentures.

The main objective of a bank is to make profit providing different types of services to its customers. Profit is necessary to survive in any business field for its successful operation and further expansion. Profitability shows the overall efficiency of the business concerns. From profitability point of view, NABIL found to be better among sample banks because they pay lower interest rate for debt fund and earn higher interest by mobilizing its deposit and assets to different productive and profitable sectors.

Leverage ratio is calculated to measure the long-term financial position of a firm. The analysis of leverage ratio shows that all the sample banks use a high equity fund rather than debt fund. Debt fund need to pay an interest until debt is hold by bank. Therefore debt fund is burden for the bank and it should decrease according to the necessity.

The capital adequacy ratio is used to measure the strength of the capital adequacy of the available capital. The capital base of bank is strongest in NIBL, since they have higher capital adequacy ratio. NABIL also have more assets from its shareholder's fund which shows they are strong from point of view of shareholder's fund.

EBL have highest positive growth rate of net profit among sample banks. BOK and NIBL has almost same ratio NABIL and HBL Is less successful than NIBL and BOK in increasing a net profit. HBL also has not satisfied growth rate of net profit. All the sample banks have positive growth rate in EPS and DPS. Although HBL have lowest growth rate of net profit it has highest growth rate in EPS and DPS. This defined that their EPS are higher than other sample banks also define that EBL has distribute the much dividend than other banks.

Deposits are the main tool for developing banking performance of the banks as well as investment and loan and advances are keys to mobilize the deposit. All sample banks have a positive relation between The Deposit and Loan & Advances, Deposit and Investment, Investment and Net Profit and also Loan and Advances and Net Profit, which shows by the correlation between these variables. All the sample banks use their deposit use in proper way as Loan and Advances and Investment. Among them NIBL is best. HBL is weak in earning the net profit through the investment whereas all the sample banks are successful to earn net profit by mobilizing the deposit to the investment except BOK. Because it has negative correlation Coefficient of correlation between Loan and Advances and Net profit shows that all sample banks are successful in earning the net profit by mobilizing the loan and advances.

The regression analysis shows that increase in Loan and Advances, Deposit and Investment ultimately increases net profit for each sampled banks.

Testing of Hypothesis conclude that there is insignificance difference Net profit and Total Deposit as well as net profit and Loan and Advances of all the sample banks are 5% level of significance. There is no significant difference between Net Profit and Investment of all five sample banks.

The Trend Line Analysis of Total Deposit, Loan and Advance, Investment and Net Profit shows increasing trend which indicates futures of those variables are bright. Among them NIBL has highest increasing trend in Total Deposit and Loan and Advances where as NABIL has Highest increasing trend in Investment and   NIBL and NABIL both are successful in trend line of Net Profit that shows these banks mobilizing the deposit and Loan and Advances Where as NABIL has successfully mobilize their Investment.

The overall sample banks is satisfactory however inflation in the current situation came as a major factor in narrowing the scope of operation of these banks. Therefore Nepal Rastra Bank has to play more active role to enhance the operation. The analysis of financial performance shows that all the banks have aggressive polices in investment and lending. Deposits are main tool of investing and all bank's deposit and net profit are in increasing trend.

Strengthening and the institutionalization of the banks are very important to have a meaningful relationship between financial institution and national development through shift of credit to the productive industrial sectors. At the same time the series of reforms such as consolidation of banks, good relationship between financial institution and commercial banks, directing attention to venture capital financing, appropriate risk return trade of by linking credit to timely repayment schedules, avoiding imperfections, allowing flexibility in lending, one window service from NRB, need of a strong supervision and monitoring from NRB, diversify scope of activities to fee based services, allow funds transfer, refinancing facilities for banks, professional culture within banks, etc. All these are necessary to ensure better future performance of banks that have already been established and growing in Nepal.

Banks have to prove that they are the potential contributors to the national economy ensuring adequate rate of return on investment, efficient and viable agencies for mobilization of savings and its channels into productive sectors and strategically well planned to be competitive with competitors and other agencies and are trust worthy.

5.3   Recommendations

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

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

- ❖ The Company must apply different development scheme such as deposit, insurance scheme, workers saving scheme and women development scheme through which banks can attract more customers.

- ❖ Due to negative correlation, HBL have less mobilization of total deposit to loan and advances among sample banks. The purpose of loan and advances is to generate an income for the banks. So, HBL should increase a loan and advances to different productive or profitable sectors. HBL should maintain the consistency.

- ❖ Fixed deposits are deposited for long period and need to pay higher interest. Therefore fixed deposit can use for long time investment and generate an income for the bank. Since mobilization of fixed deposit by HBL is low among all five sample banks, they should mobilize its fixed deposit to different productive sector in form of loan and advances or investment etc.

- ❖ EBL are failed to maintain the average ratio which indicate that they are not very much successful in mobilizing the loan and advance with respect to the total assets. So EBL should try to mobilize the Loan and Advance with respect to Total Assets.

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

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

- ❖ EBL also should increase its investment toward government securities and decrease a variation of investment on government securities. Even though Government Securities have low interest rate, they are risk free assets because government securities have marketability and can sell any time when needed.

- ❖ Profit is a key of success of any business. The bank also cannot survive without the profit. So, they should keep in the mind for profit maximization. But in long term business bank also should be concern with the shareholder's wealth maximization as they are investor of the bank.

❖ HBL is not successful as other four sample banks to earn a net profit by utilizing its assets and deposits. So, HBL should invest its deposits and utilize its assets in different productive and profitable sectors on the basis of portfolio management. The portfolio management of assets basically means allocation of funds into different components of banking assets having different degrees of risk and varying rate of return in such a way that the conflicting goal of maximum yield and minimum risk. So, portfolio condition of each bank should carefully be examined from time to time and attention should be made to maintain equilibrium in the portfolio condition as far as possible keeping the statement in mind that all eggs should not be kept in the same basket. Even though EBL has higher net profit with respect to total assets and deposit, they are failed to maintain stability. Therefore they should decrease a variation level. NIBL also fail to maintain consistency. They should try to maintain consistency level.

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

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

❖ NIBL paid a higher interest among sample bank which mean that they used more creditors funds or paid higher interest rate in investment. So, they need to use equity fund rather than debt or should pay a less interest rate. NABIL should maintain stability in paying the interest because their variation in interest rate is low.

❖ The discrimination in lending interest should not be done by the bank because it will bring the not satisfaction to the general public. This may lead to discourage toward deposit in the bank in long term business. The rate of interest should be fixed accordance to the situation of the country. There should not be unhealthy competition regarding the interest rate to attract customer

❖ All the sample banks have more creditors fund to acquire an assets & investment. This means they all have more debt financing in assets. Since debt financing need

to pay an interest regularly, higher debt are burden to bank. Among sample banks highest debt is used by NABIL. Therefore they should decrease a debt financing and increase an equity financing, which may help in increasing profit to some extent. Equity fund is invest by shareholder and banks should pay dividend which may be very low than interest. So, more financing should do from equity fund rather than debt fund.

❖ The Growth rate of net profit of HBL is very low in compare to other sample banks. Since, profit is a key of success of business they should increase a net profit by launching different new product or investing in profitable sectors. Even HBL have lower rate in DPS even though they have no satisfactory growth rate of net profit. This may occur due to highest retain of profit for future prospect. Other three banks should increase a DPS to bring a strong impact toward shareholder because they are the investor of bank.

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

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

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

❖ Today is an age of competition. Bank should be survived within these competitions. Therefore for attraction of the deposit, they should brought different attractive

programmed , facilities , technology etc. like ATM, credit cards, 365 days banking service, Any branch Banking (ABBS) Service prompt service etc.

❖ In the present situation, it is the must important to provide security and the reliability. So the bank should focus on the security concern in order to make the customer feel that they more secured in investing in the bank whether it may be BOK, NABIL, NIBL , HBL or EBL

❖ It is suggested to all the sample banks that they should use well-trained manpower. Well trained manpower will provide better services to the bank and customer. They will try to increase the operating efficiency of the bank, so the banks have to conduct "Banking Training School" for their personal.

Banks play a vital role in development of economy of the country. However all the banks have satisfactory performance, there is s3ituation of inflation which is a cause of narrow scope operation. Therefore NRB has to come with strong supervision and monitoring with one window service in lending and investment activities. Banks have to prove that they are the potential contributors to the national economy ensuring adequate rate of return on investment, efficient and viable agencies for mobilization of savings and its channels into productive sectors and strategically well planned to be competitive with banks and other agencies and are trust worthy.

Bibliography

Books:

American Institute of Banking, *"Principals of Banks Operation",* USA,1972, pp 345

Cheney. J.M and Moses, *"Fundamentals of Investment",* St. Paul West Publishing Company 1998.

Dahal B. & Dahal S., 2056 B.S *"A hand book to banking",* Kathmandu : First Edition, Time Graphic Printer Pvt. Ltd.

Kothari C.R.; 1989*, "Research Methodology, Methods and Techniques",* N.D. Willey Eastery Ltd.

Munakarmi S.P., 2002 A.D*., "Management Accounting"* First Edition, Buddha Academic Enterprise Pvt. Ltd.

Pandey IM., 1992, *"Financial Management",* New Delhi: Vokas Publishing House Pvt. Ltd., India

Sharma P.K. & Chudhary A.K. (2058 B.S.) *"Statistical Method"* Minbhawan, Kathmandu, First Edition, Khanal Books Prakashan

Ahrestha Dr. Sunity and Silwal Dhruba Prasad, 2057 B.S, *"Statistical Methods in Management"* Taleju Prakashan Bhotahity, Kathmandu

Shrestha K.N. and Manandhar K.D. *"Statistics and Quantitative Techniques for Management"* Second Edition.

Chaudhary A.K. and Panda G.D ., *"Business Statistics and Mathematich"* (2055 B.S.) Bhundi Puran Prakashan, Bagbazaar, Kathmandu.

Chaudhary A.K. and Sharma P.K. *"Statistical Methods,"* Khanal Books And Stationary (2064 B.S.) Minbhawan, Khamandu.

Yadav R.P. , Dhakal B., Shrestha H.K., Panta K.R., Tamang G.*"Statistical Methods",* (2009 A.D.) Asmita Books Publisher and Distributors (P.) Ltd Stationary, Bhotahiti, Khamandu

Unpublished Thesis:

Gurung B. C. (2005) *"A financial study of joint venture bank: A comparative study of Nepal Grindlays Bank Limited and Nepal Indosuez Bank Limited"* Unpublished Master's Thesis, Nepal Commerce Campus, Tribhuwan University.

Gurung N. (2011) *"Comparative Analysis of Finance Companies in Nepal"* Unpublished Master's Thesis, Shanker Dev Campus, Tribhuwan University.

Jha. R. (1999 A.D.) *"A comparative analysis of financial performance of the HBL, NABIL, NIBL and NGBL"* Unpublished Master's Thesis, Central Department of Management Tribhuwan University.

Joshi D. (2007) *"A study on Commercial Banks of Nepal with Special Reference to Fonancial Analysis of Rastriya Banijya Bank"* Unpublished Master's Thesis, Nepal Commerce Campus, Tribhuwan University.

Pandey B. D.(2008) *"A Study of Financial Analysis on HBL"* Unpublished Master's Thesis, Shanker Dev Campus, Tribhuwan University.

Shakya S. (2009) *"Comparative analysis of Financial Performance of selected JVBs, A case study of NGBL and HBL"* Unpublished Master's Thesis, Central Department of Management Tribhuwan University.

Shrestha B. (2012) *"Comparative Analysis of Finance Companies in Nepal"* Unpublished Master's Thesis, Shanker Dev Campus, Tribhuwan University.

Journal and Article:

Dr. Shrestha M.K., *"Commercial Banks Comparative Performance Evaluation"*

NRB, Annual Report on Economic and Financial situation of the country, Operations and Accounts of NRB, Kathmandu: NRB Research Department 2001/02

Poudel D.P., *"An Overview Financial Companies of Nepal"*

Poudel N.P., *"Financial Statement Analysis: An Approach to Evaluate Bank's Performance"*

Poudel U. K., *"Present Condition Of Financial Companies"*

Pradhan K., *"Transaction Analysis of Financial Companies in Nepal."*

Shrestha R.L., *"Capital Adequacy of Bank in the Nepalese Context"*

APPENDIX-1

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2
2008	0.3012	0.0330	0.0011	0.4089	0.0295	0.0009	0.3385	0.0371	0.0014	0.3595	0.0322	0.0010	0.3655	0.0121	0.0001
2009	0.2600	0.0083	0.0001	0.4593	0.0800	0.0064	0.3237	0.0519	0.0027	0.3088	0.0185	0.0003	0.2636	0.0898	0.0081
2010	0.3156	0.0474	0.0022	0.4454	0.0661	0.0044	0.4399	0.0643	0.0041	0.35863	0.0313	0.0010	0.3945	0.0411	0.0017
2011	0.2507	0.0176	0.0003	0.2967	0.0826	0.0068	0.3560	0.0196	0.0004	0.3375	0.0102	0.0001	0.4338	0.0804	0.0065
2012	0.2137	0.0546	0.0546	0.2861	0.0932	0.0087	0.4200	0.0444	0.0020	0.2723	0.0550	0.0030	0.3097	0.3504	0.1228
$\sum X$	1.3413			1.8964			1.8781			1.6367			1.7671		
Mean($\bar{X}$)	0.2683			0.3793			0.3756			0.3273			0.3534		
$\sum d^2$			0.0583			0.0272			0.0106			0.0054			0.1392
S.D.		0.1207			0.0825			0.0515			0.0367			0.1865	
C.V. (In %)			44.98%			21.75%			13.70%			11.21%			52.77%

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

BOK	**Nabil Bank**	**Nepal Investment Bank**	**Himalayan Bank**	**Everest Bank Ltd.**
1.3413÷5	1.8964÷5	1.8781÷5	1.6367÷5	1.7671÷5
=0.2683	=0.3793	=0.3756	=0.3273	=0.3534

$$S.D. = \sqrt{\frac{\sum d^2}{N-1}}$$

BOK **Nabil Bank** **Nepal Investment Bank** **Himalayan Bank** **Everest Bank Ltd.=**

$$\sqrt{\frac{0.0583}{5-1}} \qquad =\sqrt{\frac{0.0272}{5-1}} \qquad =\sqrt{\frac{0.0106}{5-1}} \qquad =\sqrt{\frac{0.0054}{5-1}} \qquad =\sqrt{\frac{0.1392}{5-1}}$$

= 0.1207   =0.0825   =0.0515   =0.0367   =0.1865

Coefficient of Variations (C.V.) = $\dfrac{S.D.}{Mean} \times 100$

BOK **Nabil Bank** **Nepal Investment Bank** **Himalayan Bank** **Everest Bank Ltd.**

$$=\frac{0.1207}{0.2683}\times100 \qquad =\frac{0.0825}{0.3793}\times100 \qquad =\frac{0.0515}{0.3756}\times100 \qquad =\frac{0.0367}{0.3273}\times100 \qquad =\frac{0.1865}{0.3534}\times100$$

=44.98%   =21.75%   =13.70%   =11.21%   =52.77%

APPENDIX-2

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²
2008	0.1053	0.0084	0.0001	0.0600	0.0026	0.0000	0.0997	0.0357	0.0013	0.0518	0.0200	0.0004	0.1744	0.0066	0.0000
2009	0.0910	0.0059	0.0000	0.0837	0.0211	0.0004	0.1090	0.0264	0.0007	0.0439	0.0279	0.0008	0.1190	0.0488	0.0024
2010	0.1199	0.0230	0.0005	0.0903	0.0277	0.0008	0.1696	0.0342	0.0012	0.0879	0.0161	0.0003	0.1850	0.0172	0.0003
2011	0.8822	0.0087	0.0001	0.0301	0.0325	0.0011	0.1361	0.0007	0.0000	0.1028	0.0310	0.0010	0.2117	0.0439	0.0019
2012	0.0799	0.0170	0.0003	0.0489	0.0137	0.0002	0.1624	0.0270	0.0007	0.0724	0.0006	0.0000	0.1489	0.0189	0.0004
$\sum X$	0.4843			0.313			0.6768			0.3588			0.839		
Mean($\bar{X}$)		0.0969			0.0625			0.1354			0.0718			0.1678	
$\sum d^2$			0.0010			0.0025			0.0039			0.0025			0.0050
S.D.	0.0158			0.0250			0.0312			0.0250			0.0354		
C.V. (In %)		16.30			39.94			23.04			34.82			21.09	

$$\text{Mean} = \frac{\sum X}{N}$$

BOK	Nabil Bank	Nepal Investment Bank	Himalayan Bank	Everest Bank Ltd.
0.4843÷5	0.313÷5	0.6768÷5	0.3588÷5	0.839÷5
=0.0969	=0.0625	=0.1354	=0.0718	=0.1678

$$\text{S.D.} = \sqrt{\frac{\sum d^2}{N-1}}$$

BOK	Nabil Bank	Nepal Investment Bank	Himalayan Bank	Everest Bank Ltd.=
$\sqrt{\dfrac{0.0010}{5-1}}$	$=\sqrt{\dfrac{0.0025}{5-1}}$	$=\sqrt{\dfrac{0.0039}{5-1}}$	$=\sqrt{\dfrac{0.0025}{5-1}}$	$=\sqrt{\dfrac{0.0050}{5-1}}$
= 0.0158	=0.0250	=0.0312	=0.0250	=0.0354

Coefficient of Variations (C.V.) $= \dfrac{S.D.}{Mean} \times 100$

BOK	Nabil Bank	Nepal Investment Bank	Himalayan Bank	Everest Bank Ltd.
$=\dfrac{0.0158}{0.0969}\times100$	$=\dfrac{0.0250}{0.0625}\times100$	$=\dfrac{0.0312}{0.1354}\times100$	$=\dfrac{0.0250}{0.0718}\times100$	$=\dfrac{0.0354}{0.1678}\times100$
=16.30%	=39.94%	=23.04%	=34.84%	=21.09%

APPENDIX-3

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²
2008	0.3480	0.0049	0.0000	0.1431	0.0146	0.0002	0.2696	0.0665	0.0044	0.1436	0.0757	0.0057	0.4690	0.0071	0.0001
2009	0.3482	0.0047	0.0000	0.1797	0.0220	0.0005	0.3150	0.0211	0.0004	0.1416	0.0777	0.0060	0.4372	0.0247	0.0006
2010	0.3780	0.0251	0.0006	0.1980	0.0403	0.0016	0.3657	0.0296	0.0009	0.2441	0.0248	0.0006	0.4583	0.0036	0.0000
2011	0.3505	0.0024	0.0000	0.0999	0.0578	0.0033	0.3639	0.0278	0.0008	0.3020	0.0827	0.0068	0.4754	0.0135	0.0002
2012	0.3398	0.0131	0.0002	0.1676	0.0099	0.0001	0.3665	0.0304	0.0009	0.2650	0.0457	0.0021	0.4696	0.0077	0.0001
$\sum X$	1.7645			0.7885			1.6806			1.0963			2.3094		
Mean($\bar{X}$)		0.3529			0.1577			0.3361			0.2193			0.4619	
$\sum d^2$			0.0008			0.0075			0.0074			0.0212			0.0010
S.D.	0.0141			0.0433			0.0430			0.0728			0.0158		
C.V. (In %)		3.995%			27.46%			12.79%			33.20%			3.42%	

$$\text{Mean} = \frac{\sum X}{N}$$

BOK	Nabil Bank	Nepal Investment Bank	Himalayan Bank	Everest Bank Ltd.
1.7645÷5	0.7885÷5	1.6806÷5	1.0963÷5	2.3094÷5
=0.3529	=0.1577	=0.3361	=0.2193	=0.4619

$$\text{S.D.} = \sqrt{\frac{\sum d^2}{N-1}}$$

BOK	Nabil Bank	Nepal Investment Bank	Himalayan Bank	Everest Bank Ltd.=
$\sqrt{\frac{0.0008}{5-1}}$	$=\sqrt{\frac{0.0075}{5-1}}$	$=\sqrt{\frac{0.0074}{5-1}}$	$=\sqrt{\frac{0.0212}{5-1}}$	$=\sqrt{\frac{0.0010}{5-1}}$
= 0.0141	=0.0433	=0.0430	=0.0728	=0.0158

$$\text{Coefficient of Variations (C.V.)} = \frac{S.D.}{Mean} \times 100$$

BOK	Nabil Bank	Nepal Investment Bank	Himalayan Bank	Everest Bank Ltd.
$=\frac{0.0141}{0.3529} \times 100$	$=\frac{0.0433}{0.1577} \times 100$	$=\frac{0.0430}{0.3361} \times 100$	$=\frac{0.0728}{0.2193} \times 100$	$=\frac{0.0158}{0.4619} \times 100$
=3.9955%	=27.46%	=12.79%	=33.20%	=3.42%

APPENDIX-4

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²
2008	0.7819	0.0295	0.0009	0.6708	0.0452	0.0020	0.7139	0.0704	0.0050	0.5909	0.1076	0.0116	0.7362	0.0199	0.0004
2009	0.8017	0.0097	0.0001	0.6741	0.0419	0.0018	0.7879	0.0036	0.0000	0.6284	0.0701	0.0049	0.7847	0.0286	0.0008
2010	0.8236	0.0122	0.0001	0.7448	0.0288	0.0008	0.7763	0.0080	0.0001	0.7293	0.0308	0.0009	0.7312	0.0249	0.0006
2011	0.8293	0.0179	0.0003	0.7101	0.0059	0.0000	0.8123	0.0280	0.0008	0.7705	0.0720	0.0052	0.7617	0.0056	0.0000
2012	0.8206	0.0092	0.0001	0.7801	0.0641	0.0041	0.8310	0.0467	0.0022	0.7736	0.0751	0.0056	0.7667	0.0106	0.0001
$\sum X$	4.0571			3.5799			3.9214			3.4927			3.7805		
Mean($\bar{X}$)		0.8114			0.7160			0.7843			0.6985			0.7561	
$\sum d^2$			0.0015			0.0087			0.0081			0.0282			0.0019
S.D.	0.0192			0.0466			0.0450			0.0840			0.0218		
C.V.(in %)			2.3663			6.5084			5.7376			12.0258			2.8832

APPENDIX-5

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²	X	d=X-$\bar{X}$	d²
2008	3.182	0.227	0.052	2.881	0.219	0.048	2.326	0.383	0.147	2.155	0.672	0.452	2.485	0.227	0.052
2009	3.428	0.473	0.224	2.542	0.120	0.014	3.417	0.708	0.501	3.111	0.285	0.081	2.852	0.140	0.020
2010	3.329	0.374	0.140	3.347	0.685	0.469	3.117	0.408	0.166	3.966	1.139	1.297	3.434	0.733	0.521
2011	2.639	0.316	0.100	2.237	0.425	0.181	2.418	0.291	0.085	2.558	0.268	0.072	2.694	0.018	0.000
2012	2.197	0.758	0.575	2.302	0.360	0.131	2.267	0.442	0.195	2.344	0.483	0.233	2.094	0.618	0.382
$\sum X$	14.775			13.309			13.544			14.134			13.559		
Mean($\bar{X}$)		2.955			2.662			2.709			2.827			2.712	
$\sum d^2$			1.091			1.275			1.094			2.135			0.975
S.D.	0.522			0.565			0.274			0.731			0.494		
C.V. (In %)		17.665			21.225			10.114			25.858			50.667	

APPENDIX-6

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2
2008	0.644	0.041	0.002	0.528	0.057	0.003	0.612	0.051	0.003	0.510	0.0804	0.0065	0.602	0.047	0.002
2009	0.699	0.014	0.000	0.559	0.026	0.001	0.675	0.012	0.000	0.533	0.0574	0.0033	0.659	0.010	0.000
2010	0.709	0.024	0.001	0.605	0.020	0.000	0.664	0.001	0.000	0.620	0.0296	0.0009	0.641	0.008	0.000
2011	0.700	0.015	0.000	0.603	0.018	0.000	0.683	0.020	0.000	0.647	0.0566	0.0032	0.669	0.020	0.000
2012	0.6742	0.011	0.000	0.632	0.047	0.002	0.679	0.016	0.0004	0.642	0.0516	0.0027	0.672	0.023	0.001
$\sum X$	3.426			2.927			3.313			2.952			3.243		
Mean($\bar{X}$)		0.685			0.585			0.663			0.590			0.649	
$\sum d^2$			0.003			0.006			0.003			0.16			0.003
S.D.	0.0273			0.0387			0.0273			0.0632			0.0273		
C.V. (In %)	39.85			6.62			4.12				10.71			4.21%		

APPENDIX-7

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2	X	$d=X-\bar{X}$	d^2
2008	0.1887	0.0378	0.0014	0.2059	0.0463	0.0021	0.1330	0.0433	0.0019	0.2158	0.0545	0.0030	0.2463	0.0669	0.0045
2009	0.1335	0.0174	0.0003	0.1456	0.0140	0.0002	0.0945	0.0048	0.0000	0.2349	0.0736	0.0054	0.2046	0.0252	0.0006
2010	0.0965	0.0544	0.0030	0.0992	0.0604	0.0036	0.0542	0.0355	0.0013	0.1215	0.0398	0.0016	0.1544	0.0250	0.0006
2011	0.1454	0.0055	0.0000	0.1714	0.0118	0.0001	0.0839	0.0058	0.0000	0.1187	0.0426	0.0018	0.1179	0.0615	0.0038
2012	0.1904	0.0395	0.0016	0.1759	0.0163	0.0003	0.0857	0.0040	0.0000	0.1155	0.0458	0.0021	0.1737	0.0057	0.0000
$\sum X$	0.7545			0.7980			0.4483			0.8064			0.8969		
Mean($\bar{X}$)		0.1509			0.1596			0.0897			0.1613			0.1794	
$\sum d^2$			0.0063			0.0063			0.0032			0.0139			0.0095
S.D.	0.0397			0.0397			0.0283			0.0589			0.0487		
C.V. (In %)	26.31			24.87			31.55			36.52			27.15%		

APPENDIX-8

F.Year	BOK			NABIL			NIBL			HBL			EBL		
	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²
2008	0.1555	0.0287	0.00082	0.162	0.0317	0.0010	0.114	0.0381	0.0015	0.1863	0.0494	0.002	0.202	0.0487	0.0024
2009	0.1164	-0.01	0.00011	0.1208	0.0095	0.0001	0.0785	0.0026	0.0000	0.1991	0.0622	0.004	0.172	0.0189	0.0004
2010	0.0831	-0.044	0.0019	0.0807	0.0496	0.0024	0.0463	0.0296	0.0009	0.1033	0.0336	0.001	0.135	0.0175	0.0003
2011	0.1228	-0.004	0.0000	0.1454	0.0151	0.0002	0.0706	0.0053	0.0000	0.0997	0.0372	0.001	0.104	0.0494	0.0024
2012	0.1564	0.0296	0.00088	0.1426	0.0123	0.0001	0.07	0.0059	0.0000	0.0959	-0.041	0.002	0.152	0.0005	0.0000
$\sum X$	0.6342			0.6515			0.3793			0.6843			0.764		
Mean($\overline{X}$)		0.1268			0.1303			0.0759			0.1369			0.1529	
$\sum d^2$			0.0037			0.0039			0.0024			0.010			0.0055
S.D.	0.0304			0.0312			0.0245			0.0512			0.037		
C.V.(In %)	23.97			23.94			32.28			37.40			24.26		

APPENDIX-9

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²
2008	0.0175	-0.0034	0.0000	0.0227	0.00126	0.0000	0.0175	0.00086	0.0000	0.0142	0.0016	0.0000	0.0127	0.0043	0.00
2009	0.0199	-0.001	0.0000	0.0194	0.00204	0.0000	0.0173	0.00106	0.0000	0.0169	0.0011	0.0000	0.0158	0.0012	0.00
2010	0.0220	0.0011	0.0000	0.0224	0.00096	0.0000	0.0165	0.00186	0.0000	0.0185	0.0027	0.0000	0.0168	0.0002	0.00
2011	0.0212	0.0003	0.0000	0.0208	0.00064	0.0000	0.0213	0.00294	0.0000	0.0114	0.0044	0.0000	0.0198	0.0028	0.00
2012	0.0237	0.0028	0.0000	0.0219	0.00046	0.0000	0.0193	0.00084	0.0000	0.0181	0.0017	0.0000	0.0199	0.0029	0.00
$\sum X$	0.1043			0.1072			0.0918			0.0791			0.0850		
Mean($\overline{X}$)		0.0209			0.0214			0.0184			0.0158			0.0170	
$\sum d^2$			0.0000			0.0000			0.0003			0.0000			0.00
S.D.	0.0906			0.0014			0.0088			0.0027			0.00322		
C.V. (In %)	4.33%			6.54%			47.93			17.07%			18.82		

APPENDIX-10

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²
2008	0.0212	-0.003	0.0000	0.0289	0.00258	0.0000	0.0250	0.00126	0.000	0.0164	0.00228	0.000	0.0155	-0.0042	0.00
2009	0.0228	-0.002	0.0000	0.0234	0.00292	0.0000	0.0202	0.00156	0.000	0.0200	0.00132	0.000	0.0188	-0.0009	0.00
2010	0.0255	0.0008	0.0000	0.0276	0.00128	0.0000	0.0193	0.00246	0.000	0.0217	0.00302	0.000	0.0192	-0.0005	0.00
2011	0.0251	0.0004	0.0000	0.0246	0.00172	0.0000	0.0253	0.00354	0.000	0.0135	0.00518	0.000	0.0225	0.00278	0.00
2012	0.0288	0.0041	0.0000	0.0271	0.00078	0.0000	0.0235	0.00174	0.000	0.0218	0.00312	0.000	0.0226	0.00288	0.00
$\sum X$	0.1234			0.1316			0.1088			0.0934			0.0986		
Mean($\overline{X}$		0.0247			0.0263			0.0218			0.0187			0.0197	
$\sum d^2$			0.0045			0.004499			0.01077			0.0126			0.005
S.D.	0.00286			0.012479			2.5314			3.535			2.7386		
C.V. (In %)		11.60			47.45			11.61			18.96			13.89	

APPENDIX-11

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²
2008	0.3123	-0.009	0.0001	0.3595	0.0145	0.0002	0.3658	0.0503	0.0025	0.2785	0.0191	0.0004	0.3073	-0.0153	0.0002
2009	0.3681	0.0463	0.0021	0.3629	0.0111	0.0001	0.3557	0.0402	0.0016	0.2962	0.0368	0.0014	0.2817	-0.0409	0.0017
2010	0.344	0.0222	0.0005	0.4332	0.0592	0.0035	0.2633	0.0522	0.0027	0.2996	0.0402	0.0016	0.3091	-0.0135	0.0002
2011	0.2924	-0.029	0.0008	0.3638	0.0101	0.0001	0.3362	0.0207	0.0004	0.1631	0.0963	0.0093	0.3775	0.0548	0.0030
2012	0.2921	-0.03	0.0009	0.3504	0.0236	0.0006	0.2566	0.0589	0.0035	0.2597	0.0003	0.0000	0.3375	0.0148	0.0002
$\sum X$	1.609			1.869			1.577			1.297			1.613		
Mean($\overline{X}$		0.3218			0.3739			0.3155			0.2594			0.3226	
$\sum d^2$			0.0044			0.0045			0.0108			0.0126			0.005
S.D.	0.0316			0.0335			0.0519			0.0570			0.0353		
C.V. (In %)		9.82%			8.95%			16.44			21.97			10.94	

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²
2008	0.0546	-0.015	0.0002	0.0535	0.01164	0.0001	0.0555	-.01302	0.0002	0.0512	-.0126	0.0002	0.0490	-0.016	0.0003
2009	0.0569	-0.012	0.0002	0.0514	0.01374	0.0002	0.0546	-.01392	0.0002	0.0523	-.0115	0.0001	0.0542	-0.011	0.0001
2010	0.0642	-0.005	0.0000	0.0609	0.00424	0.0000	0.0598	-.00872	0.0000	0.0574	-.0064	0.0000	0.0575	-0.008	0.0000
2011	0.0778	0.0084	0.0001	0.0741	0.00896	0.0000	0.0781	0.00958	0.0000	0.0703	0.0065	0.0000	0.0738	0.0084	0.0000
2012	0.0933	0.0239	0.0006	0.0858	0.02066	0.0004	0.0946	0.02608	0.0007	0.0878	0.024	0.0006	0.0924	0.0270	0.0007
$\sum X$	0.3468			0.3260			0.3426			0.3190			0.3269		
Mean($\overline{X}$)		0.0694			0.0652			0.0685			0.0638			0.0653	
$\sum d^2$			0.00104			0.0008			0.0012			0.0009			0.001
S.D.	0.0161			0.01457			0.0174			0.01541			0.0158		
C.V. (In %)	23.20			22.35			25.39			24.15			24.18		

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²	X	d=X-$\overline{X}$	d²
2008	0.0226	-0.009	0.0001	0.0187	-.0108	0.0001	0.0240	0.0123	0.0002	0.0222	0.00796	0.0001	0.0222	-.0103	0.0001
2009	0.230	-0.009	0.0001	0.0197	-.0098	0.0001	0.0247	-.0116	0.0001	0.0220	-.00816	0.0001	0.0221	-.0104	0.0001
2010	0.0268	-0.005	0.0000	0.0251	-.0044	0.0000	0.0309	-.0054	0.0000	0.0229	-.00726	0.0001	0.0267	-.0058	0.0000
2011	0.0375	0.006	0.0000	0.0359	0.0064	0.0000	0.0429	0.0066	0.0001	0.0347	0.00454	0.0000	0.0374	0.0049	0.0000
2012	0.0476	0.0161	0.0003	0.0481	0.0186	0.0004	0.0590	0.0227	0.0005	0.0490	0.01884	0.0003	0.0541	0.0216	0.0005
$\sum X$	0.1576			0.1475			0.1814			0.1508			0.1625		
Mean($\overline{X}$)		0.0315			0.0295			0.0363			0.0302			0.0325	
$\sum d^2$			0.0004			0.0006			0.0009			0.0006			0.0007
S.D.	0.0108			0.0124			0.0148			0.0118			0.0132		
C.V. (In %)	34.29			42.03			40.77			37.07			40.32		

APPENDIX-14

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\bar{X}$	d^2	X	d=X-$\bar{X}$	d^2	X	d=X-$\bar{X}$	d^2	X	d=X-$\bar{X}$	d^2	X	d=X-$\bar{X}$	d^2
2008	0.9187	0.0092	0.0001	0.9137	.00066	0.0000	0.932	0.0211	0.0004	0.9213	0.01086	0.0002	0.8924	-0.0223	0.0005
2009	0.9257	0.0162	0.0003	0.927	0.0126	0.0002	0.9306	0.0197	0.0003	0.9138	0.00336	0.0000	0.9038	-0.0109	0.0001
2010	0.9016	-0.008	0.0001	0.9116	.00276	0.0000	0.9194	0.0085	0.0001	0.9077	-.00274	0.0000	0.9289	0.01416	0.0002
2011	0.9064	-0.003	0.0000	0.9028	.01156	0.0001	0.8681	-.04282	0.0018	0.9066	-.00384	0.0000	0.9275	0.01276	0.0002
2012	0.8951	-0.014	0.0002	0.9167	0.0023	0.0000	0.9045	-.00642	0.0000	0.9028	-.00764	0.0001	0.9211	0.00636	0.0000
$\sum X$	4.5476			4.571			4.554			4.5522			4.573		
Mean($\bar{X}$)		0.9095			0.9144			0.9109			0.9104			0.9147	
$\sum d^2$			0.006			0.0003			0.002			0.002			0.001
S.D.	0.0125			0.008			0.026			0.0072			0.016		
C.V. (In %)	1.37			0.9624			2.854			0.790			1.73		

APPENDIX-15

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\bar{X}$	d^2	X	d=X-$\bar{X}$	d^2	X	d=X-$\bar{X}$	d^2	X	d=X-$\bar{X}$	d^2	X	d=X-$\bar{X}$	d^2
2008	16.399	2.1574	4.6543	14.455	-1.447	2.0946	19.426	3.6176	13.0870	18.073	3.1264	9.77438	21.61	3.9766	15.813
2009	17.118	2.8764	8.2737	17.341	1.4387	2.0699	19.099	3.2906	10.8280	15.976	1.0294	1.05966	16.121	-1.512	2.2874
2010	14.114	-0.128	0.0163	17.1914	1.2891	1.6618	14.683	-1.125	1.26652	14.734	-0.212	0.0452	17.081	-0.552	0.3051
2011	12.522	-1.72	2.9570	15.876	-0.026	0.0006	13.731	-2.077	4.31559	13.01	-1.936	3.75042	17.7	0.0666	0.0044
2012	11.055	-3.187	10.154	14.648	-1.254	1.5732	12.103	-3.705	13.7299	12.94	-2.007	4.02644	15.655	-1.978	3.9141
$\sum X$	71.208			79.511			79.042			74.733			88.167		
Mean($\bar{X}$)		14.242			15.902			15.808			14.947			17.633	
$\sum d^2$			26.055			7.4003			43.2272			18.656			22.234
S.D.	2.5522			1.3602			3.2874			2.1596			2.3576		
C.V. (In %)	17.92			8.55			20.79			14.45			13.37		

APPENDIX-16

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\overline{X}$	d^2	X	d=X-$\overline{X}$	d^2	X	d=X-$\overline{X}$	d^2	X	d=X-$\overline{X}$	d^2	X	d=X-$\overline{X}$	d^2
2008	0.068	-0.01	0.000	0.0803	0.00936	0.000	0.056	-0.0145	0.00021	0.0591	0.01412	0.0002	0.0505	-0.0107	0.0001
2009	0.062	-0.016	0.000	0.0645	0.0064	0.000	0.057	0.01368	0.00019	0.0675	0.00572	0.0000	0.0668	0.00558	0.0000
2010	0.0742	-0.003	0.000	0.0652	0.00574	0.000	0.073	0.00272	0.0000	0.0725	-0.0007	0.0000	0.062	0.00078	0.0000
2011	0.0857	0.008	0.000	0.0675	0.00344	0.000	0.075	0.00462	0.0000	0.083	0.00978	0.0000	0.0597	-0.0015	0.0000
2012	0.0986	0.0208	0.000	0.0772	0.00626	0.000	0.092	0.02092	0.00043	0.084	0.01078	0.0001	0.0671	0.00588	0.0000
$\sum X$	0.388			0.355			0.353			0.3661			0.306		
Mean($\overline{X}$		0.0777			0.0709			0.0705			0.0732			0.0612	
$\sum d^2$			0.0008			0.0002			0.000866			0.000444			0.0002
S.D.	0.145			0.007			0.014			0.0105			0.007		
C.V. (In %)	18.77			10.30			20.83			14.34			11.60		

APPENDIX-17

F.Year	BOK			NABL			NIBL			HBL			EBL		
	X	d=X-$\overline{X}$	d^2	X	d=X-$\overline{X}$	d^2	X	d=X-$\overline{X}$	d^2	X	d=X-$\overline{X}$	d^2	X	d=X-$\overline{X}$	d^2
2008	0.056	-0.009	0.0001	0.0632	0.00528	0.0000	0.048	-0.0114	0.0001	0.051	-0.0108	0.0001	0.0413	-0.011	0.0001
2009	0.0541	-0.011	0.0000	0.0535	-0.0044	0.0000	0.0487	-0.0107	0.0001	0.0572	-0.0046	0.0000	0.0561	0.0035	0.0000
2010	0.0639	-0.002	0.0000	0.053	-0.0049	0.0000	0.0626	0.00316	0.0000	0.0616	-0.0002	0.0000	0.0544	0.0018	0.0000
2011	0.0724	0.0069	0.0000	0.0573	-0.0006	0.0000	0.0632	0.00376	0.0000	0.0697	0.00784	0.0001	0.0524	0.0002	0.0000
2012	0.081	0.0155	0.00024	0.0626	0.00468	0.0000	0.0747	0.01526	0.0002	0.0698	0.00794	0.0001	0.0588	0.0062	0.0000
$\sum X$	0.3274			0.2896			0.2972			0.2972			0.3093		
Mean($\overline{X}$		0.0655			0.0579			0.0594			0.0619			0.0526	
$\sum d^2$			0.0003			0.0002			0.0004			0.0003			0.0001
S.D.	0.0113			0.0048			0.0112			0.0081			0.0071		
C.V. (In %)	17.25			8.29			18.86			13.09			13.50%		

APPENDIX-19

We have

Correlation(r)= $r = \dfrac{N\sum xy - \sum x \times \sum y}{\sqrt{N\sum x^2 - (\sum x)^2}\,\sqrt{N\sum y^2 - (\sum y)^2}}$

Where, Where,

r = Co-efficient of Correlation
x = Independent Variable
y = Dependent Variable
N = Number of Periods

Coefficient of Correlation between Total Deposits to Loan & Adv. For BOK

F/Y	Total Deposit(X)	Loan & Adv(Y).	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	xy
2007/08	12358.6	9663.6	-5163.28	-4605.6	26659460.4	21211736	23780105.6
2008/09	15832.7	12692.9	15832.7	-1576.3	250674389	2484784.7	-24957402
2009/10	18083.9	14894.7	562.02	625.48	315866.48	391225.23	351532.27
2010/11	20315.8	16847.1	2793.92	2577.9	7805988.97	6645465.3	7202390.49
2011/12	21018.4	17247.8	3496.52	2978.6	12225652.1	8871938.8	10414664.5
Total Sum	**87609.4**	**71346.1**	**17521.88**	**0.08**	**297681357**	**39605150**	**16791291.3**

Correlation (r) =0.1735

Coefficient of Correlation between Total Deposits to Loan & Adv. For NABL

F/Y	Total Deposit(X)	Loan & Adv(Y).	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	23342.4	15657.1	-14383.98	-11674	206898881	136287880	167922035
2008/09	31915	21514.6	31915	-5816.7	1018567225	33834464	-185641257
2009/10	37348.3	27816.6	-378.08	485.26	142944.486	235477.27	-183467.1
2010/11	46334.8	32902.8	8608.42	5571.5	74104894.9	31041167	47961467.7
2011/12	49691.4	38765.6	11965.02	11434	143161704	130742302	136811150
Total Sum	**188631.9**	**136656.7**	**37726.38**	**0.0000**	**1442875649**	**332141289**	**166869928**

Correlation (r) =**0.2407**

Coefficient of Correlation between Total Deposits to Loan & Adv. For NIBL

F/Y	Total Deposit(X)	Loan & Adv(Y).	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	24488.9	17482	-16685.38	-15165	278401906	229963273	253026112
2008/09	34451.8	27145.5	34451.8	-5501	1186926523	30261441	-189520730
2009/10	46697.9	36250.4	5523.62	3603.9	30510377.9	12987807	19906353.2
2010/11	50094.7	40689.6	8920.42	8043.1	79573893	64690814	71747473.3
2011/12	50138.1	41665.2	8963.82	9018.7	80350069	81336228	80841644.9
Total Sum	**205871.4**	**163232.7**	**41174.28**	**-0.3**	**1655762769**	**419239564**	**236000854**

Correlation (r) =**0.1312**

Coefficient of Correlation between Total Deposits to Loan & Adv. For HBL

F/Y	Total Deposit(X)	Loan & Adv(Y).	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	29905.8	17672	-5078.62	-7044.5	25792381.1	49624980	35776338.6
2008/09	31805.3	19985.2	31805.3	-4731.3	1011577108	22385200	-150480416
2009/10	34681	25292.1	-303.42	575.6	92063.6964	331315.36	-174648.55
2010/11	37609.4	28976.6	2624.98	4260.1	6890520	18148452	11182677.3
2011/12	40920.6	31656.6	5936.18	6940.1	35238233	48164988	41197682.8
Total Sum	174922.1	123582.5	34984.42	-30	1079590306	138654935	-62498366

Correlation (r) =**0.620**

Coefficient of Correlation between Total Deposits to Loan & Adv. For EBL

F/Y	Total Deposit(X)	Loan & Adv(Y).	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	19097.7	14059.2	-11793.72	-9321.6	139091831	86892599	109936576
2008/09	23976.3	18814.3	23976.3	-4566.5	574862962	20853105	-109488253
2009/10	33322.9	24366.2	2431.48	985.38	5912094.99	970973.74	2395931.76
2010/11	36932.3	28129.7	6040.88	4748.9	36492231.2	22551861	28687414.2
2011/12	41127.9	31534.7	10236.48	8153.9	104785523	66485759	83467029.5
Total Sum	154457.1	116904.1	30891.42	0.08	861144642	197754298	114998698

Correlation (r) =**0.4931**

<div align="center">

APPENDIX-20

</div>

Coefficient of Correlation between Total Deposits to Investment for BOK

F/Y	Total Deposit(X)	Investment	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	12358.6	2332	-5163.3	-297.44	26659460.4	88470.554	1535766
2008/09	15832.7	2113.2	15832.7	-516.24	250674389	266503.74	-8173473
2009/10	18083.9	1745	562.02	-884.44	315866.48	782234.11	-497072.97
2010/11	20315.8	2954.9	2793.92	325.46	7805988.97	105924.21	909309.203
2011/12	21018.4	4002.1	3496.52	1372.66	12225652.1	1884195.5	4799533.14
Total Sum	87609.4	13147.2	17521.9	0	297681357	3127328.1	-1425937.7

Correlation (r) =-0.0525

Coefficient of Correlation between Total Deposits to Investment for NABIL

F/Y	Total Deposit(X)	Investment	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	23342.4	4805.7	-14384	-25037	206898881	626836347	360127392
2008/09	31915	4646.9	31915	-1321.6	1018567225	1746573.7	-42178226
2009/10	37348.3	3706.2	-378.08	-2262.3	142944.486	5117910.8	855322.822
2010/11	46334.8	7941.3	8608.42	1972.82	74104894.9	3892018.8	16982863.1
2011/12	49691.4	8742.3	11965	2773.82	143161704	7694077.4	33188811.8
Total Sum	188631.9	29842.4	37726.4	-23874	1442875649	645286928	368976164

Correlation(r) =0.2407

Coefficient of Correlation between Total Deposits to Investment for NIBL

F/Y	Total Deposit(X)	Investment	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	24488.9	3256.4	-16685	-231.44	278401906	53564.474	3861664.35
2008/09	34451.8	3155	34451.8	-332.84	1186926523	110782.47	-11466937
2009/10	46697.9	2531.3	5523.62	-956.54	30510377.9	914968.77	-5283563.5
2010/11	50094.7	4201.9	8920.42	714.06	79573893	509881.68	6369715.11
2011/12	50138.1	4294.6	8963.82	806.76	80350069	650861.7	7231651.42
Total Sum	205871.4	17439.2	41174.3	0	1655762769	2240059.1	712530.289

Correlation(r) =0.1312

Coefficient of Correlation between Total Deposits to Investment for HBL

F/Y	Total Deposit(X)	Investment	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	29905.8	6454.8	-5078.6	652.48	25792381.1	425730.15	-3313698
2008/09	31805.3	7471.7	31805.3	1669.38	1011577108	2786829.6	53095131.7
2009/10	34681	4212.3	-303.42	-1590	92063.6964	2528163.6	482443.868
2010/11	37609.4	4465.4	2624.98	-1336.9	6890520	1787355.1	-3509388.3
2011/12	40920.6	6407.4	5936.18	605.08	35238233	366121.81	3591863.79
Total Sum	174922.1	29011.6	34984.4	0.04	1079590306	7894200.2	50346353.1

Correlation(r) =0.0620

Coefficient of Correlation between Total Deposits to Investment for EBL

F/Y	Total Deposit(X)	Investment	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	19097.7	4704.6	-11794	-2440.4	139091831	5955552.2	28781394.3
2008/09	23976.3	4906.5	23976.3	-344.8	574862962	118887.04	-8267028.2
2009/10	33322.9	5146	2431.48	-105.3	5912094.99	11088.09	-256034.84
2010/11	36932.3	4354.4	6040.88	-896.9	36492231.2	804429.61	-5418065.3
2011/12	41127.9	7145	10236.5	1893.7	104785523	3586099.7	19384822.2
Total Sum	154457.1	26256.5	30891.4	-1893.7	861144642	10476057	34225088.1

Correlation(r) =0.4931

APPENDIX-21

Coefficient of Correlation between Investments to Net Profit   for BOK

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	2332	262.38	-317.44	-177.62	100768.2	31549.57	56384.33
2008/09	2213.2	361.49	2213.2	-78.512	4898254	6164.134	-173763
2009/10	1745	461.73	-904.44	21.728	818011.7	472.106	-19651.7
2010/11	2954.9	509.26	305.46	69.258	93305.81	4796.671	21155.55
2011/12	4002.1	605.15	1352.66	165.148	1829689	27273.86	223389.1
Total Sum	13247.2	2200.01	2649.44	-0.014	7740029	70256.35	107514.5

Correlation(r) =0.1526

Coefficient of Correlation between Investments to Net Profit   for NABIL

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	4805.7	673.96	-1162.78	-4260.3	1352057	18149900	4953757
2008/09	4646.9	746.47	4646.9	-240.38	21593680	57780.62	-1117003
2009/10	3706.2	1031.05	-2262.28	44.204	5117911	1953.994	-100002
2010/11	7941.3	1138.57	1972.82	151.724	3892019	23020.17	299324.1
2011/12	8742.3	1344.18	2773.82	357.334	7694077	127687.6	991180.2
Total Sum	29842.4	4934.23	5968.48	-3947.4	39649744	18360343	5027256

Correlation(r) =0.2893

Coefficient of Correlation between Investment to Net Profit   For NIBL

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	3256.4	501.4	-231.44	-406.87	53564.47	165541.6	94165.53
2008/09	3155	696.73	3155	-211.54	9954025	44748.33	-667402
2009/10	2531.3	900.62	-956.54	-7.648	914968.8	58.4919	7315.618
2010/11	4201.9	1265.95	714.06	357.682	509881.7	127936.4	255406.4
2011/12	4294.6	1176.64	806.76	268.372	650861.7	72023.53	216511.8
Total Sum	17439.2	4541.34	3487.84	0	12083302	410308.3	-94003

Correlation(r) =0.2944

Coefficient of Correlation between Investments to Net Profit   for HBL

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	6454.8	491.82	652.48	-164.67	425730.2	27115.55	-107443
2008/09	7471.7	635.87	7471.7	-20.618	55826301	425.1019	-154052
2009/10	4212.3	752.83	-1590.02	96.342	2528164	9281.781	-153186
2010/11	4465.4	508.8	-1336.92	-147.69	1787355	21811.75	197447
2011/12	6407.4	893.12	605.08	236.632	366121.8	55994.7	143181.3
Total Sum	29011.6	3282.44	5802.32	0.296	60933672	114628.9	-74051.5

Correlation(r) =0.2705

Coefficient of Correlation between Investments to Net Profit   for EBL

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	4704.6	296.14	-546.7	-635.16	298880.9	403428.2	347242
2008/09	4906.5	451.21	4906.5	-178.62	24073742	31904.39	-876389
2009/10	5146	638.73	-105.3	8.902	11088.09	79.2456	-937.381
2010/11	4354.4	831.76	-896.9	201.932	804429.6	40776.53	-181113
2011/12	7145	931.3	1893.7	301.472	3586100	90885.37	570897.5
Total Sum	26256.5	3149.14	5251.3	-301.47	28774241	567073.8	-140300

Correlation(r)=0.2950

APPENDIX-22

Coefficient of Correlation between Loan & Adv. To Net Profit   for BOK

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	9663.6	262.38	-4614.98	-177.622	21298040.4	31549.57	819722
2008/09	12692.9	361.49	12692.9	-78.512	161109710	6164.134	-996545
2009/10	14894.7	461.73	616.12	21.728	379603.854	472.106	13387.06
2010/11	16894.1	509.26	2615.52	69.258	6840944.87	4796.671	181145.7
2011/12	17247.6	605.15	2969.02	165.148	8815079.76	27273.86	490327.7
Total Sum	71392.9	2200.01	14278.58	0	198443379	70256.35	508037.5

Correlation (r)=0.1611

Coefficient of Correlation between Loan & Adv. to Net Profit   for NABIL

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	15657.1	673.96	-11674.2	-4260.27	136287880	18149900	49735414
2008/09	21514.6	746.47	21514.6	-240.376	462878013	57780.62	-5171593
2009/10	27816.6	1031.05	485.26	44.204	235477.268	1953.994	21450.43
2010/11	32902.8	1138.57	5571.46	151.724	31041166.5	23020.17	845324.2
2011/12	38765.6	1344.18	11434.26	357.334	130742302	127687.6	4085850
Total Sum	136656.7	4934.23	27331.34	-3947.38	761184838	18360343	49516445

Correlation(r)=0.4374

Coefficient of Correlation between Loan & Adv. to Net Profit   for NIBL

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	17482	501.4	-15164.5	-406.868	229963273	165541.6	6169966
2008/09	27145.5	696.73	27145.5	-211.538	736878170	44748.33	-5742305
2009/10	36250.4	900.62	3603.86	-7.648	12987806.9	58.4919	-27562.3
2010/11	40689.6	1265.95	8043.06	357.682	64690814.2	127936.4	2876858
2011/12	41665.2	1176.64	9018.66	268.372	81336228.2	72023.53	2420356
Total Sum	163232.7	4541.34	32646.54	0	1125856293	410308.3	5697313

Correlation(r)=-0.0472

Coefficient of Correlation between Loan & Adv. to Net Profit   for HBL

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	17672	491.82	-7044.5	-164.668	49624980.3	27115.55	1160004
2008/09	19985.2	635.87	19985.2	-20.618	399408219	425.1019	-412055
2009/10	25292.1	752.83	575.6	96.342	331315.36	9281.781	55454.46
2010/11	28976.6	508.8	4260.1	-147.688	18148452	21811.75	-629166
2011/12	31656.6	893.12	6940.1	236.632	48164988	55994.7	1642250
Total Sum	123582.5	3282.44	24716.5	0	515677955	114628.9	1816487

Correlation=0.-0.0555

Coefficient of Correlation between Loan & Adv. to Net Profit   for EBL

F/Y	Total Deposit(X)	Net Profit	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	14059.2	296.14	-9321.62	-333.688	86892599.4	111347.7	3110513
2008/09	18814.3	451.21	18814.3	-178.618	353977884	31904.39	-3360573
2009/10	24366.2	638.73	985.38	8.902	970973.744	79.2456	8771.853
2010/11	28129.7	831.76	4748.88	201.932	22551861.3	40776.53	958950.8
2011/12	31534.7	931.3	8153.88	301.472	66485759.1	90885.37	2458167
Total Sum	116904.1	3149.14	23380.82	0	530879078	274993.2	3175829

Correlation=0.0485

APPENDIX-23

Regression between Total Deposit as independent variable (X) and Net profit as dependent variable (Y)
BOK

F/Y	Total Deposit(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	12358.6	262.38	-5163.28	-177.62	26659460.4	31549.575	917112.12
2008/09	15832.7	361.49	15832.7	-78.512	250674389	6164.1341	-1243056.9
2009/10	18083.9	461.73	562.02	21.728	315866.48	472.10598	12211.5706
2010/11	20315.8	509.26	2793.92	69.258	7805988.97	4796.6706	193501.311
2011/12	21018.4	605.15	3496.52	165.15	12225652.1	27273.862	577443.285
Total Sum	87609.4	2200.01	17521.88	0.004	297681357	70256.347	457211.345

y=0.0008+0.0015x   r=0.1122   T-test=1.4744

NABL

F/Y	Total Deposit(X)	Net Profit (y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	23342.4	673.96	-14383.98	-312.89	206898881	97897.649	4500545.97
2008/09	31915	746.47	31915	-240.38	1018567225	57780.621	-7671600
2009/10	37348.3	1031.05	-378.08	44.204	142944.486	1953.9936	-16712.648
2010/11	46334.8	1138.57	8608.42	151.72	74104894.9	23020.172	1306103.92
2011/12	49691.4	1344.18	11965.02	357.33	143161704	127687.59	4275508.46
Total Sum	188631.9	4934.23	37726.38	-0.016	1442875649	308340.02	2393845.65

y=-0.0032+0.0017x   r=0.7094   T-test=3.176

NIBL

F/Y	Total Deposit(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	24488.9	501.4	-16685.38	-406.87	278401906	165541.57	6788747.19
2008/09	34451.8	696.73	34451.8	-211.54	1186926523	44748.325	-7287864.9
2009/10	46697.9	900.62	5523.62	-7.648	30510377.9	58.491904	-42244.646
2010/11	50094.7	1265.95	8920.42	357.68	79573893	127936.41	3190673.67
2011/12	50138.1	1176.64	8963.82	268.37	80350069	72023.53	2405638.3
Total Sum	205871.4	4541.34	41174.28	-0.008	1655762769	410308.33	5054949.64

y=-0.0016+0.0305x   r=0.2174   T-test=3.4648

HBL

F/Y	Total Deposit(X)	Net Profit (y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	29905.8	491.82	-5078.62	-164.67	25792381.1	27115.55	836286.198
2008/09	31805.3	635.87	31805.3	-20.618	1011577108	425.10192	-655761.68
2009/10	34681	752.83	-303.42	96.342	92063.6964	9281.781	-29232.09
2010/11	37609.4	508.8	2624.98	-147.69	6890520	21811.745	-387678.05
2011/12	40920.6	893.12	5936.18	236.63	35238233	55994.703	1404690.15
Total Sum	174922.1	3282.44	34984.42	-0.006	1079590306	114628.88	1168304.53

y=0.0012+0.0011x   r=0.2932   T-test=2.9439

EBL

F/Y	Total Deposit(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	19097.7	296.14	-11793.72	-333.69	139091831	111347.68	3935422.84
2008/09	23976.3	451.21	23976.3	-178.62	574862962	31904.39	-4282598.8
2009/10	33322.9	638.73	2431.48	8.902	5912094.99	79.245604	21645.035
2010/11	36932.3	831.76	6040.88	201.93	36492231.2	40776.533	1219846.98
2011/12	41127.9	931.3	10236.48	301.47	104785523	90885.367	3086012.1
Total Sum	154457.1	3149.14	30891.42	-0.008	861144642	274993.22	3980328.2

y=0.0016+0.0046x   r=0.1194   T-test=2.5995

APPENDIX-24

Regression between Loan & Adv. as independent variable (X) and Net profit as dependent variable (Y)

BOK

F/Y	Loan & Adv.(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	9663.6	262.38	-4614.98	-177.622	21298040.4	31549.57	819722
2008/09	12692.9	361.49	12692.9	-78.512	161109710	6164.134	-996545
2009/10	14894.7	461.73	616.12	21.728	379603.854	472.106	13387.06
2010/11	16894.1	509.26	2615.52	69.258	6840944.87	4796.671	181145.7
2011/12	17247.6	605.15	2969.02	165.148	8815079.76	27273.86	490327.7
Total Sum	71392.9	2200.01	14278.58	0	198443379	70256.35	508037.5

y=0.0028+0.01389x   r=0.1526   T-test=2.7891

NABIL

F/Y	Loan & Adv.(X)	Net Profit (y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	15657.1	673.96	-11674.2	-4260.27	136287880	18149900	49735414
2008/09	21514.6	746.47	21514.6	-240.376	462878013	57780.62	-5171593
2009/10	27816.6	1031.05	485.26	44.204	235477.268	1953.994	21450.43
2010/11	32902.8	1138.57	5571.46	151.724	31041166.5	23020.17	845324.2
2011/12	38765.6	1344.18	11434.26	357.334	130742302	127687.6	4085850
Total Sum	136656.7	4934.23	27331.34	-3947.38	761184838	18360343	49516445

y=-789.48+0.1268x   r=0.2893   T-test=2.5698

NIBL

F/Y	Loan & Adv.(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	17482	501.4	-15164.5	-406.868	229963273	165541.6	6169966
2008/09	27145.5	696.73	27145.5	-211.538	736878170	44748.33	-5742305
2009/10	36250.4	900.62	3603.86	-7.648	12987806.9	58.4919	-27562.3
2010/11	40689.6	1265.95	8043.06	357.682	64690814.2	127936.4	2876858
2011/12	41665.2	1176.64	9018.66	268.372	81336228.2	72023.53	2420356
Total Sum	163232.7	4541.34	32646.54	0	1125856293	410308.3	5697313

y=-0+-0.0078x   r=0.2944   T-test=2.4027

HBL

F/Y	Loan & Adv.(X)	Net Profit (y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	17672	491.82	-7044.5	-164.668	49624980.3	27115.55	1160004
2008/09	19985.2	635.87	19985.2	-20.618	399408219	425.1019	-412055
2009/10	25292.1	752.83	575.6	96.342	331315.36	9281.781	55454.46
2010/11	28976.6	508.8	4260.1	-147.688	18148452	21811.75	-629166
2011/12	31656.6	893.12	6940.1	236.632	48164988	55994.7	1642250
Total Sum	123582.5	3282.44	24716.5	0	515677955	114628.9	1816487

y=0.0592+-0.0012x   r=0.2705   T-test=1.1707

EBL

F/Y	Loan & Adv.(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	14059.2	296.14	-9321.62	-333.688	86892599.4	111347.7	3110513
2008/09	18814.3	451.21	18814.3	-178.618	353977884	31904.39	-3360573
2009/10	24366.2	638.73	985.38	8.902	970973.744	79.2456	8771.853
2010/11	28129.7	831.76	4748.88	201.932	22551861.3	40776.53	958950.8
2011/12	31534.7	931.3	8153.88	301.472	66485759.1	90885.37	2458167
Total Sum	116904.1	3149.14	23380.82	0	530879078	274993.2	3175829

y=60.294+0.0005x   r=0.2950   T-test=2.0623

APPENDIX-25

Regression between Investments as independent variable (X) and Net profit as dependent variable (Y)
BOK

F/Y	Investment(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	2332	262.38	-317.44	-177.62	100768.2	31549.57	56384.33
2008/09	2213.2	361.49	2213.2	-78.512	4898254	6164.134	-173763
2009/10	1745	461.73	-904.44	21.728	818011.7	472.106	-19651.7
2010/11	2954.9	509.26	305.46	69.258	93305.81	4796.671	21155.55
2011/12	4002.1	605.15	1352.66	165.148	1829689	27273.86	223389.1
Total Sum	13247.2	2200.01	2649.44	-0.014	7740029	70256.35	107514.5

y=0+0.000256011x   r=0.1611   T-test=2.9419

NABIL

F/Y	Investment(X)	Net Profit (y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	4805.7	673.96	-1162.78	-4260.3	1352057	18149900	4953757
2008/09	4646.9	746.47	4646.9	-240.38	21593680	57780.62	-1117003
2009/10	3706.2	1031.05	-2262.28	44.204	5117911	1953.994	-100002
2010/11	7941.3	1138.57	1972.82	151.724	3892019	23020.17	299324.1
2011/12	8742.3	1344.18	2773.82	357.334	7694077	127687.6	991180.2
Total Sum	29842.4	4934.23	5968.48	-3947.4	39649744	18360343	5027256

y=-789.47+0.0650x   r=0.4374   T-test=1.6551

NIBL

F/Y	Investment(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	3256.4	501.4	-231.44	-406.87	53564.47	165541.6	94165.53
2008/09	3155	696.73	3155	-211.54	9954025	44748.33	-667402
2009/10	2531.3	900.62	-956.54	-7.648	914968.8	58.4919	7315.618
2010/11	4201.9	1265.95	714.06	357.682	509881.7	127936.4	255406.4
2011/12	4294.6	1176.64	806.76	268.372	650861.7	72023.53	216511.8
Total Sum	17439.2	4541.34	3487.84	0	12083302	410308.3	-94003

y=-0+0.0050x   r=-0.0472   T-test=6.4204

HBL

F/Y	Investment(X)	Net Profit (y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	6454.8	491.82	652.48	-164.67	425730.2	27115.55	-107443
2008/09	7471.7	635.87	7471.7	-20.618	55826301	425.1019	-154052
2009/10	4212.3	752.83	-1590.02	96.342	2528164	9281.781	-153186
2010/11	4465.4	508.8	-1336.92	-147.69	1787355	21811.75	197447
2011/12	6407.4	893.12	605.08	236.632	366121.8	55994.7	143181.3
Total Sum	29011.6	3282.44	5802.32	0.296	60933672	114628.9	-74051.5

y=0+0.0035x   r=-0.0555   T-test=1.9321

EBL

F/Y	Investment(X)	Net Profit (Y)	$x = X - \overline{X}$	$y = Y - \overline{Y}$	X^2	y^2	Xy
2007/08	4704.6	296.14	-546.7	-635.16	298880.9	403428.2	347242
2008/09	4906.5	451.21	4906.5	-178.62	24073742	31904.39	-876389
2009/10	5146	638.73	-105.3	8.902	11088.09	79.2456	-937.381
2010/11	4354.4	831.76	-896.9	201.932	804429.6	40776.53	-181113
2011/12	7145	931.3	1893.7	301.472	3586100	90885.37	570897.5
Total Sum	26256.5	3149.14	5251.3	-301.47	28774241	567073.8	-140300

y=0+0.00598x   r=0.0485   T-test=0.6367

Calculation of Trend Value of Deposits
Trend Line Analysis of Deposits Yc=a+bx
BOK

Year (t)	Deposit(y)	x=t-2010	Xy	x^2	yc=a+bx
2008	12358.6	-2	-24717.2	4	13161.34
2009	15832.7	-1	-15832.7	1	15341.61
2010	18083.9	0	0	0	17521.88
2011	20315.8	1	20315.8	1	19702.15
2012	21018.4	2	42036.8	4	21882.42
2013		3			24062.69
2014		4			26242.96
2015		5			28423.23
2016		6			30603.5
2017		7			32783.77
Total Sum	$\sum y =$ 87609.4	$\sum x = 25$	$\sum xy =$ 21802.7	$\sum x^2$ =10	87609.4

NABIL

Year (t)	Deposit(y)	x=t-2010	Xy	x^2	yc=a+bx
2008	23342.4	-2	-46684.8	4	24302.82
2009	31915	-1	-31915	1	31014.6
2010	37348.3	0	0	0	37726.38
2011	46334.8	1	46334.8	1	44438.16
2012	49691.4	2	99382.8	4	51149.94
2013		3			57861.72
2014		4			64573.5
2015		5			71285.28
2016		6			77997.06
2017		7			84708.84
Total Sum	188631.9	25	67117.8	10	188631.9

NIBL

Year (t)	Deposit(y)	x=t-2010	Xy	x^2	yc=a+bx
2008	24488.9	-2	-48977.8	4	27786.02
2009	34451.8	-1	-34451.8	1	34480.15
2010	46697.9	0	0	0	41174.28
2011	50094.7	1	50094.7	1	47868.41
2012	50138.1	2	100276.2	4	54562.54
2013		3			61256.67
2014		4			67950.8
2015		5			74644.93
2016		6			81339.06
2017		7			88033.19
Total Sum	205871.4	25	66941.3	10	205871.4

HBL

Year (t)	Deposit(y)	x=t-2010	Xy	x^2	yc=a+bx
2008	29905.8	-2	-59811.6	4	29417.68
2009	31805.3	-1	-31805.3	1	32201.05
2010	34681	0	0	0	34984.42
2011	37609.4	1	37609.4	1	37767.79
2012	40920.6	2	81841.2	4	40551.16
2013		3			43334.53
2014		4			46117.9
2015		5			48901.27
2016		6			51684.64
2017		7			54468.01
Total Sum	174922.1	25	27833.7	10	174922.1

EBL

Year (t)	Deposit(y)	x=t-2010	Xy	x^2	yc=a+bx
2008	19097.7	-2	-38195.4	4	19488.14
2009	23976.3	-1	-23976.3	1	25189.78
2010	33322.9	0	0	0	30891.42
2011	36932.3	1	36932.3	1	36593.06
2012	41127.9	2	82255.8	4	42294.7
2013		3			47996.34
2014		4			53697.98
2015		5			59399.62
2016		6			65101.26
2017		7			70802.9
Total Sum	154457.1	25	57016.4	10	154457.1

APPENDIX-27

Calculation of Trend Value of Loan & Advances
Trend Line Analysis of Loan & Advances=a+bx
BOK

Year (t)	Loan & Adv.(y)	x=t-2010	xy	x^2	yc=a+bx
2008	9663.6	-2	-19327.2	4	10404.74
2009	12692.9	-1	-12692.9	1	12341.66
2010	14894.7	0	0	0	14278.58
2011	16894.1	1	16894.1	1	16215.5
2012	17247.6	2	34495.2	4	18152.42
2013		3			20099.34
2014		4			22026.26
2015		5			23963.18
2016		6			25900.1
2017		7			27837.02
Total Sum	71392.9	25	19369.2	10	71392.9

NABIL

Year (t)	Loan & Adv.(y)	x=t-2010	xy	x^2	yc=a+bx
2008	15657.1	-2	-31314.2	4	15810.3
2009	21514.6	-1	-21514.6	1	21570.82
2010	27816.6	0	0	0	27331.34
2011	32902.8	1	32902.8	1	33091.86
2012	38765.6	2	77531.2	4	38852.38
2013		3			44612.9
2014		4			50373.42
2015		5			56133.94
2016		6			61894.46
2017		7			67654.98
Total Sum	136656.7	25	57605.2	10	136656.7

NIBL

Year (t)	Loan & Adv.(y)	x=t-2010	xy	x^2	yc=a+bx
2008	17482	-2	-34964	4	20264.44
2009	27145.5	-1	-27145.5	1	26455.49
2010	36250.4	0	0	0	32646.54
2011	40689.6	1	40689.6	1	38837.59
2012	41665.2	2	83330.4	4	45028.64
2013		3			51219.69
2014		4			57410.74
2015		5			63601.79
2016		6			69792.84
2017		7			75983.89
Total Sum	163232.7	25	61910.5	10	163232.7

HBL

Year (t)	Loan & Adv.(y)	x=t-2010	xy	x^2	yc=a+bx
2008	17672	-2	-35344	4	17324.38
2009	19985.2	-1	-19985.2	1	21020.44
z2010	25292.1	0	0	0	24716.5
2011	28976.6	1	28976.6	1	28412.56
2012	31656.6	2	63313.2	4	32108.62
2013		3			35804.68
2014		4			39500.74
2015		5			43196.8
2016		6			46892.86
2017		7			50588.92
Total Sum	123582.5	25	36960.6	10	123582.5

EBL

Year (t)	Loan & Adv.(y)	x=t-2010	xy	x^2	yc=a+bx
2008	14059.2	-2	-28118.4	4	14527.54
2009	18814.3	-1	-18814.3	1	18954.18
2010	24366.2	0	0	0	23380.82
2011	28129.7	1	28129.7	1	27807.46
2012	31534.7	2	63069.4	4	32234.1
2013		3			36660.74
2014		4			41087.38
2015		5			45514.02
2016		6			49940.66
2017		7			54367.30
Total Sum	116904.1	25	44266.4	10	116904.1

APPENDIX-28

Calculation of Trend Value of Investment
Trend Line Analysis of Investment Yc=a+bx
BOK

Year (t)	Investment(y)	x=t-2010	xy	x^2	yc=a+bx
2008	2332	-2	-4664	4	1793.06
2009	2113.2	-1	-2113.2	1	2211.25
2010	1745	0	0	0	2629.44
2011	2954.9	1	2954.9	1	3047.63
2012	4002.1	2	8004.2	4	3465.82
2013		3			3884.01
2014		4			4302.2
2015		5			4720.39
2016		6			5138.58
2017		7			5556.77
Total Sum	13147.2	25	4181.9	10	131472

NABIL

Year (t)	Investment(y)	x=t-2010	xy	x^2	yc=a+bx
2008	4805.7	-2	-9611.4	4	3734.96
2009	4646.9	-1	-4646.9	1	4851.72
2010	3706.2	0	0	0	5968.48
2011	7941.3	1	7941.3	1	7085.24
2012	8742.3	2	17484.6	4	8202
2013		3			9318.76
2014		4			10435.52
2015		5			11552.28
2016		6			12669.04
2017		7			13785.8
Total Sum	29842.4	25	11167.6	10	29842.4

NIBL

Year (t)	Deposit(y)	x=t-2010	xy	x^2	yc=a+bx
2008	3256.4	-2	-6512.8	4	2863.18
2009	3155	-1	-3155	1	3175.51
2010	2531.3	0	0	0	3487.84
2011	4201.9	1	4201.9	1	3800.17
2012	4294.6	2	8589.2	4	4112.5
2013		3			4424.83
2014		4			4737.16
2015		5			5049.49
2016		6			5361.82
2017		7			5674.15
Total Sum	17439.2	25	3123.3	10	17439.2

HBL

Year (t)	Deposit(y)	x=t-2010	xy	x^2	yc=a+bx
2008	6454.8	-2	-12909.6	4	5182.1
2009	7471.7	-1	-7471.7	1	5492.21
2010	4212.3	0	0	0	5802.32
2011	4465.4	1	4465.4	1	6112.43
2012	6407.4	2	12814.8	4	6422.54
2013		3			6732.65
2014		4			7042.76
2015		5			7352.87
2016		6			7662.98
2017		7			7973.09
Total Sum	29011.6	25	-3101.1	10	29011.6

EBL

Year (t)	Deposit(y)	x=t-2010	xy	x^2	yc=a+bx
2008	4704.6	-2	-9409.2	4	4385.56
2009	4906.5	-1	-4906.5	1	4818.43
2010	5146	0	0	0	5251.3
2011	4354.4	1	4354.4	1	5684.17
2012	7145	2	14290	4	6117.04
2013		3			6549.91
2014		4			6982.78
2015		5			7415.65
2016		6			7848.52
2017		7			8281.39
Total Sum	26256.5	25	4328.7	10	26256.5

Calculation of Trend Value of Net Profit
Trend Line Analysis of Net Profit Yc=a+bx
BOK

Year (t)	Net Profit (y)	x=t-2010	xy	x^2	yc=a+bx
2008	262.38	-2	-524.76	4	273.342
2009	361.49	-1	-361.49	1	356.672
2010	461.73	0	0	0	440.002
2011	509.26	1	509.26	1	523.332
2012	605.15	2	1210.3	4	606.662
2013		3			689.992
2014		4			773.322
2015		5			856.652
2016		6			939.982
2017		7			1023.312
Total Sum	2200.01	25	833.31	10	13084.19

NABIL

Year (t)	Net Profit (y)	x=t-2010	xy	x^2	yc=a+bx
2008	673.96	-2	-1347.92	4	640.34
2009	746.47	-1	-746.47	1	813.59
2010	1031.05	0	0	0	986.84
2011	1138.57	1	1138.57	1	1160.09
2012	1344.18	2	2688.36	4	1333.34
2013		3			1506.59
2014		4			1679.84
2015		5			1853.09
2016		6			2026.34
2017		7			2199.59
Total Sum	4934.23	25	1732.54	10	4934.23

NIBL

Year (t)	Net Profit(y)	x=t-2010	xy	x^2	yc=a+bx
2008	501.4	-2	-1002.8	4	524.39
2009	696.73	-1	-696.73	1	716.36
2010	900.62	0	0	0	908.33
2011	1265.95	1	1265.95	1	1100.3
2012	1176.64	2	2353.28	4	1292.27
2013		3			1484.24
2014		4			1676.21
2015		5			1868.18
2016		6			2060.15
2017		7			2252.12
Total Sum	4541.34	25	1919.7	10	4541.34

HBL

Year (t)	Net Profit	x=t-2010	xy	x^2	yc=a+bx
2008	491.82	-2	-983.64	4	521.38
2009	635.87	-1	-635.87	1	588.93
2010	752.83	0	0	0	656.48
2011	508.8	1	508.8	1	724.03
2012	893.12	2	1786.24	4	791.58
2013		3			859.13
2014		4			926.68
2015		5			994.23
2016		6			1061.78
2017		7			1129.33
Total Sum	3282.44	25	675.53	10	8253.44

EBL

Year (t)	Net Profit	x=t-2010	xy	x^2	yc=a+bx
2008	296.14	-2	-592.28	4	299.66
2009	451.21	-1	-451.21	1	464.74
2010	638.73	0	0	0	629.82
2011	831.76	1	831.76	1	794.9
2012	931.3	2	1862.6	4	959.98
2013		3			1125.06
2014		4			1290.14
2015		5			1455.22
2016		6			1620.3
2017		7			1785.38
Total Sum	3149.14	25	1650.87	10	3149.1