## CHAPTER - I INTRODUCTION

### 1.1 Background of Study

Nepal is a least developed country in the world. A large number of population is still below the poverty line. The agro-dominated economy is further worsened by the complex geographical situation. Various factors like the landlocked situation, poor resource mobilization, lack of entrepreneurs, hip lack of institutional commitment, erratic government policies and political instability, etc. are responsible for the slow peace of development in Nepal.

Banking system occupies an important role in the economic development of a country. A banking institution is indispensable in a modern society. It plays a pivotal role in the economic development of a country and focus the core of the money market in an advance country. The basic function of the bank is to collect deposits as much as possible from customers and mobilize it into the most preferable and profitable sector like industry, commerce, agriculture, entertainment etc. Like other countries, Goldsmiths, merchants and moneylenders were the ancient bankers of Nepal. Tejarath Adda established during the tenure of the Prime Minister Ranoddip Singh (B.S. 1993) was the first step towards the institutional development of banking in Nepal. Tejarath Adda did not collect deposits from the public but gave loans to employees and public against the bullion. But the concept of modern banking institution in Nepal was introduced when the first commercial bank, Nepal Bank Limited (NBL) was established in 1994 B.S. under Nepal Bank act 1993 B.S. Being a commercial bank, it was natural that NBL paid more attention to profit generating business and preferred opening branches at urban areas.

Nepal Rastra Bank (NRB) was set up in 2013 B.S. as a central bank under NRB act 2012 B.S. Since then it has been fluctuating as the government,,s bank and has contributed to the growth of financial sector. After this, government set up Rastriya Banijya Bank (RBB) in B.S. 2022 as a fully government owned commercial bank. As the name suggests, commercial banks are to carry out commercial transaction only. But commercial banks had to carry out the function of all type of financials institutions.

Hence, Industrial Development Center (IDC) was set up in 2013 B.S. for industrial development. In 2016, IDC was converted to Nepal Industrial Development Corporation (NIDC). Similarly, Agricultural Development Bank (ADB) was established in B.S. 2024 to provide finance for agricultural produces so that agricultural productivity could be enhance by introducing modern agriculture techniques. The commercial bank have been established gradually after the commercial bank act 2013 B.S. with the passage of time so many commercial banks have been established gradually because of the liberal and market friendly economic policy of Nepal government. The banking activities are getting very much dynamic as well as complex. Because of the higher return on investment, entrepreneurs were interested in setting of new bank including branches of foreign banks. However, current political and economic scenario of the country coupled with new prudential norms of Nepal Rastra Bank and stiff competition may make the entrepreneurs give a second thought to the idea of establishing banks.

### 1.2 Statement of the Problem

Establishment of Joint Venture banks concentrate only in urban area, like Kathmandu, Pokhara, Birgung, Hetauda, Biratnagar, etc. has raised certain questions. This application is not able to contribute the socio- economic development of the country where around $80 \%$ people live in rural and $79 \%$ of the population depends upon agriculture. These banks should expand their operation in rural areas. NRB, as the central bank has ruled that joint venture banks should invest $10 \%$ of their total investment in the rural areas. These banks are inclined to pay fines rather than investing their resources to such less profitable sector.

The main objective of the bank is to collect deposits as much as possible from the customer and to mobilize into the most profitable and preferable sector. The present study basically focused on the financial performance of HBL and EBL. In Nepal many banks and financial companies have opened up within a span of few years. Although joint venture banks have managed to perform better than other local commercial banks within the short period of time they have been facing a neck competition against one another. Therefore, it is necessary to analyze the profitability position of HBL and EBL. Thus the
present study seeks to explore the efficiency and comparative financial performance of HBL and EBL.

In Nepal, the profitability rate, operating expenses and dividend distribution rate among the shareholders has been found different in the financial performance of the two joint venture banks in different period of time. The problem of the study will ultimately find out the reasons about difference in financial performance. A comparative analysis of financial performance of the banks would be highly beneficial for pointing out their strength and weakness. Although joint venture banks are considered efficient, but how far are they efficient? This question does emerge in banking sector. At present we have twenty-six commercial banks. In spite of rapid growth, some indicators show performance is not much encouraging towards the service coverage. In such a situation the study tries to analyze the present performance of banks, which would give the answers of following queries.
a) What are the comparative liquidity, profitability, activity and leverage ratio among HBL and EBL banks?
b) Are the trends of different ratios of these banks satisfactory?

### 1.3 Objective of the Study

The main objectives of the study is to evaluate and analysis the financial performance of these two joint venture banks i.e. HBL and EBL and to recommend the suitable suggestion for improvement.
a) To analyze and compare the financial strengths and weakness as of the sample financial institutions.
b) To determine the financial performance through the use of appropriate financial and statistical tools.
c) To evaluate the financial position of HBL and EBL.
d) To provide recommendations for improvement on the basis of findings

### 1.4 Need of the Study

This study has been mentioned already that the research focuses only on the comparative financial performance between HBL and EBL. This comparative financial performance analysis gives insight into the relative financial condition and performance of these banks. This will provide guideline for improving its performance to achieve the banks overall objectives. Similarly, this study helps the banks to identify its hidden weakness regarding financial administration. This study has following signification: -
a) This study explains the shareholders about the financial performance of their respective banks.
b) The study also compels the management of respective banks for self-assessment of what they have done in the past and guides them in their future plan and programs.

### 1.5 Significance of the study

Commercial banks are not one of the major core components of modern economy. They give greater contribution to GDP too. The production of finance and real - estate sub sector is increasingly comparatively. However various financial sector liberalization programmes such as SAP and ESAP has been initiated with the loan and assistance of World Bank, IMF and ADB, the banking sector continued to be in though in this situation too. The slowdown in the economic segments has a definite impact on the banking sector too. The slowdown in the economic segments has a definite impact on the banking sector too. Globalization and accession to WTO, South Asia Free Trade Area (SAFTA) and BIMSTEC membership has invited more challenges as well as opportunities. In addition, Branches of foreign companies are allowed to insurance services and wholesale banking from January 1, 2010.
At this situation, the commercial banks should be more competitive. They should become financially strength/ healthy and must have growth potentially. And they have to shape their plans and strategies accordingly. In such a situation, this study tried to analyze and indicate the overall financial health whether they are capable to compete the challenges and grab to opportunities or not. So, the study basically covered the commercial banks falling in the same strategic group to be more meaningful. No single measure can tell
much. Thus, a case study was conducted on based on top five private - sector commercial banks ranking by NEPSE according to their market capitalization ratio. Thus the study may be more fruitful and rationale to their stakeholders at present situation, where the commercial bank becomes advancing through IT - integration.

### 1.6 Limitations of the Study

The following are the limitation of the present study: -

- This study is limited to the comparative study of financial performance of two joint venture banks HBL and EBL.
- This study is based on secondary data.
- This study has analyzed and evaluated of data to the latest five years period i.e. since 2004/05 to 2008/09 ( ie. 5 years historical data)
- In this study, only selected financial and statistical tools and techniques are used.
- This research has been conducted on the requirement of partial fulfillment of Master Degree in Business Study.


### 1.7 Organization of the Study

This study has organized into the following five chapters:

## Chapter - I: Introduction

This chapter includes background of the study, focus of the study, statement of the problems, objectives of the study, significance of the study and limitations of the study.

## Chapter - II: Review of Literature

This chapter reviews the existing literature on the concept of financial performance analysis. It also contains reviews of journals and articles, and earlier thesis related to the subject.

## Chapter - III: Research Methodology

This chapter expresses the way and technique of the study applied in the research process. It includes research design, population and sample, data collection procedure and processing, tools and method of analysis.

## Chapter - IV: Analysis and Interpretation of Data

In this chapter collected and processed data are presented, analyzed and interpreted with using financial tools as well as statistical tools.

## Chapter - V: Summary, Conclusion and Recommendations

In this chapter, summary of whole study, conclusions and recommendations are made.

At the end of the study, Bibliography and Appendices have also been incorporated.

## CHAPTER- II REVIEW OF LITERATURE

Review of literature comprises upon the existing literature and research related to the present study with a view to find out what had already been studied. According to Wolf \& Pant "The purpose of the reviewing the literature is to develop some expertise in One's area, to see what new contribution can be made and to review some idea for Developing research design". (Pant and Wolf; 1996:31-44). This portion has been divided into two parts: -
a. Conceptual Framework
b. Review of Related Studies

### 2.1 Conceptual Framework

The modern financial evaluation has greatly affected the role and importance of financial performance. Nowadays, finance is best characterized as ever changing with new ideas and techniques. Only efficient manager of the company can achieve the set up goals. If a bank does not maintain adequate equity capital, it makes the bank more risky. If a bank has inadequate equity capital, it must be used more debt that has high fixed cost. So any firm must have adequate equity capital in their capital structure.

The main objectives of the bank are to collect deposits as much as possible from the customers and to mobilize into the most profitable sector. If a bank fails to utilize it"s collected resources than it can not generate revenue. Resource mobilization management of bank includes resource collection, investment portfolio, loans and advances, working capital, fixed assets management etc. It measures the extent to which bank is successful to utilize its resources. To measure the bank performance in many aspects, we should analyze its financial indicator with the help of financial statements.

Financial analysis is the process of identifying the financial strength and weakness of the concerned bank. It is the process of finding strength and weakness of the concerned bank. It is the process of finding details accounting information given in the financial statement.

It is performed to determine the liquidity, solvency, efficiency and profitability position of an organization. The function or the performance of finance can be broken down into three major decisions i.e. the investment decision, the financing decision, and the dividend decisions. An optional combination of the three decisions will maximize the value of the firm.

### 2.1.1 Banking: An Introduction

The Lexis "Banking" is a derivative of terminology "Bank". Bank itself is an organizational engaged in any or all the various functions of banking viz. receiving, collecting, transferring, paying, lending, investing, dealing exchanging and servicing (safe deposit, trusteeship, agency, custodianship) money and claims to money both domestically and internationally. This is a board concept under which different types of bank includes. There are several popular modalities of banking. It may differ country to country. Commercial banking is one of them. (Prashikshan, 2008, NRB). Banking and Financial Institutions are also the transmission channels of monetary policy, it is important for the effective monetary policy management to ensure that their financial health is sound and overall financial sector is stable.

### 2.1.2 Development of Banking System in Nepal

Nepal's first commercial bank, the Nepal Bank Limited, was established in 1937. The government owned 51 percent of the shares in the bank and controlled its operations to a large extent. Nepal Bank Limited was headquartered in Kathmandu and had branches in other parts of the country. There were other government banking institutions. Rastriya Banijya Bank (National Commercial Bank), a state-owned commercial bank, was established in 1966. The Land Reform Savings Corporation was established in 1966 to deal with finances related to land reforms.

There were two other specialized financial institutions. Nepal Industrial Development Corporation, a state-owned development finance organization headquartered in Kathmandu, was established in 1959 with United States assistance to offer financial and technical assistance to private industry. Although the government invested in the
corporation, representatives from the private business sector also sat on the board of directors. The Co-operative Bank, which became the Agricultural Development Bank in 1967, was the main source of financing for small agribusinesses and cooperatives. Almost 75 percent of the bank was state-owned; 21 percent was owned by the Nepal Rastra Bank, and 5 percent by cooperatives and private individuals. The Agricultural Development Bank also served as the government's implementing agency for small farmers' group development projects assisted by the Asian Development Bank (see Glossary) and financed by the United Nations Development Programme. The Ministry of Finance reported in 1990 that the Agricultural Development Bank, which is vested with the leading role in agricultural loan investment, had granted loans to only 9 percent of the total number of farming families since 1965. Since the 1960s, both commercial and specialized banks have expanded. More businesses and households had better access to the credit market although the credit market had not expanded.

In the mid-1980s, three foreign commercial banks opened branches in Nepal. The Nepal Arab Bank was co-owned by the Emirates Bank International Limited (Dubai), the Nepalese government, and the Nepalese public. The Nepal Indosuez Bank was jointly owned by the French Banque Indosuez, Rastriya Banijya Bank, Rastriya Beema Sansthan (National Insurance Corporation), and the Nepalese public. Nepal Grindlays Bank was coowned by a British firm called Grindlays Bank, local financial interests, and the Nepalese public.

Nepal Rastra Bank was created in 1956 as the central bank. Its function was to supervise commercial banks and to guide the basic monetary policy of the nation. Its major aims were to regulate the issue of paper money; secure countrywide circulation of Nepalese currency and achieve stability in its exchange rates; mobilize capital for economic development and for trade and industry growth; develop the banking system in the country, thereby ensuring the existence of banking facilities; and maintain the economic interests of the general public. Nepal Rastra Bank also was to oversee foreign exchange rates and foreign exchange reserves.

There is a significant growth in the number of banks in Nepal in the last two decades. At the beginning of the 1980s when the financial sector was not liberalized, there were only two commercial banks. During 1980s, there were only few banks. After the liberalization in the 1990s, financial sector has made a progress both in term of the number of banks and financial institutions and their branches. As on Mid July 2009, the number of commercial banks is 27 based on the applications for establishment of new banks as well as for the up gradation of other financial institution, the number is likely to grow in the near future as well.

Banking system occupies an important role in the economic development of a country. A banking institution is indispensable in a modern society. It plays a pivotal role in the economic development of a country and focus the core of the money market in an advance country. The pivotal function of the bank is to collect deposits as much as possible from customers and mobilize it into the most preferable and profitable sector like industry, commerce, agriculture, entertainment etc.

### 2.1.3 Concept and Definition of Commercial Bank

A commercial bank is a type of financial intermediary and a type of bank. Commercial banking is also known as business banking. After the Great Depression, the U.S. Congress required that banks only engage in banking activities, whereas investment banks were limited to capital market activities. As the two no longer have to be under separate ownership under U.S. law, some use the term "commercial bank" to refer to a bank or a division of a bank primarily dealing with deposits and loans from corporations or large businesses. In some other jurisdictions, the strict separation of investment and commercial banking never applied. Commercial banking may also be seen as distinct from retail banking, which involves the provision of financial services direct to consumers. Many banks offer both commercial and retail banking services.

An institution which accepts deposits, makes business loans, and offers related services. Commercial banks also allow for a variety of deposit accounts, such as checking, savings, and time deposit. These institutions are run to make a profit and owned by a group of individuals, yet some may be members of the Federal Reserve System. While commercial banks offer services to individuals, they are primarily concerned with receiving deposits and lending to businesses.

The Nepalese organized financial sector is composed of banking sector and non-banking sector. Besides commercial banks, there are sizeable numbers of development banks, finance companies, micro-credit development banks, co-operative, NGOs and postal saving offices that undertake limited banking and near banking financial services. Nonbank financial sector comprises saving funds and trusts like Employee Provident Fund, Citizen Investment Trusts, and Mutual fund.

The growth of financial sector in Nepal is much better compared to other sectors in the country. The economic reforms initiated by the Government more than one and half decade ago have changed the landscape of several sectors of the Nepalese economy including the financial sector. Despite the decade's conflict and political insurgency, this sector has continued to grow. Over the past 20 years, Nepal's financial significantly both in terms of business volume as well as size of assets and market has increased. Nepal has a reasonably diversified financial sector, as evidenced by the number and variety of institutions that play an active role in this sector, relative to Nepal's small and underdeveloped economic base. Though Nepalese financial sector is reasonably diversified with institutional arrangement of varied nature of financial institutions, commercial banks are the major players in this system and they occupy substantial share in the structure of financial sector.

The banking sector is an important part of the national economy. Banks take deposits, support the payment system and provide the largest source of funds in the market. Safe and sound banking system is of crucial importance for the financial stability and sustainable development. Nepal has a special characteristic of bank dominated financial
sector. As the domestic capital and stock markets are in the initial stage of development, the banking sector largely dominates the entire financial sector.

The financial performance of the commercial banks can be categorized on the basis of assets, composition of assets, composition of liabilities, capital, deposit, loans and advances, non banking assets, investment, earnings, and liquidity. The total assets of the commercial bank increased by 9.03 percent in the year 2008/09 (previous year 8.43\%). The increase in the total assets is mainly on account of the increase in the loan portfolio of the banks. The increase was 40.06 billion on the previous year. The loan portfolio of the banks has posted an increase of Rs. 26.18 billion during the period. The assets of the banking industry comprises of various assets, but is dominated by loans, which accounts for almost half of the total assets. Loans and advances comprises major share in the total assets followed by investment and cash and bank balance in that order. The bank's liability consists of various forms of liability, primarily of share capital and reserves, deposits and borrowings. The consolidated capital of the Nepalese banking industry has shown positive trend during the review period. The capital has improved by Rs. 15.71 billion in 2008/09.The total deposit of the banking sector was approximately Rs. 960.01 billion as on Mid July 2009 which is 141.61 billion higher than mid July 2008. The deposits have increased by 17.30 percent in $2008 / 09$ as compared to 12.55 percent in 2007/08. The total loans and advances extended by the banking industry on Mid July, 2009 rose to 398 billion which is an increment of $31.43 \%$. The total volume of the investment as on Mid July 2009 was Rs. 130.86 billion which is an increment of 20.10 per cent. Total earnings of the banking industry in 2008/09 were Rs. 4337.1 million,

Nepal Rastra Bank is committed to strengthen and ensure the stability and soundness of the banking system. In order to achieve the role of protecting the interests of depositors, the department has crafted a number of prudential requirements to be complied with by banking institutions. The prudential requirements advised on banking institutions are designed to limit risk taking to levels that are manageable and that do not place the individual banking institution and the banking system at risk. In addition other prevailing laws, the main legislative framework for supervision function includes: -

```
포 Nepal Rastra Bank Act 2002
포 Bank and Financial Institutions Act, 2006 (Umbrella Act)
포 Company Act 2007
포 Supervision By-laws
포 Directives to commercial banks and financial institutions
```

NRB has continued to review the relevant legislations and regulations in 2008/08 in order to put in place up-to-date regulatory framework that meets international standards and resolves the issues of the banking industry.

## The role of commercial banks

Normally Commercial banks engaged in the following activities

포 Accepting money on term deposit.
포 Lending money by way of overdraft, installment loan or otherwise.
포 Inward remittance through online services
포 Processing of payments by way of telegraphic transfer, EFTPOS, internet banking or other means.
포 Issuing bank drafts and bank cheques,
포 Providing documentary and standby letter of credit, guarantees, performance bonds, securities underwriting commitments and other forms of off balance sheet exposures

포 Safekeeping of documents and other items in safe deposit boxes (lockers)
포 Foreign currency trading

### 2.1.4 Functions of Commercial bank

Normally, commercial bank's function can be categorized into two types: -
a. Primary function
b. Secondary function

## Primary function

i. Acceptance of deposit: - An important function of commercial bank is to attract deposit from the Public. Those people who want to keep their money safe deposit their cash in the bank. Commercial bank accepts deposits from every class and takes responsibility to repay the deposit in the same currency whenever they are demanded by the depositors. Hence one of the primary functions of commercial bank is acceptance of deposits.
ii. Lending: - Another function of commercial bank is to make loans an advance of deposit received in various forms. Bank apply the accumulated public deposits to productive use by way of loans and advance, overdraft and cash credit against approved security.
iii. Investment: - Now-a-days commercial banks are also involved in the investment activities. Generally investment means long term and mid-term investments.

## Secondary Function

Secondary functions are two types: -

## A. Agency Service: -

1. Collection and payments of Cheques
2. Standing Instruction
3. Acting as correspondence
4. Collecting of bills- electricity, gas, WASA, telephone etc.
5. Purchase \& Sales of stocks/share-act as a banker to issue

## B. Miscellaneous or General Services: -

1. Safe Custody
2. Lockers-Trustee
3. Remittance facilities -DD, TT, MT and PO
4. Advisory Services
5. Providing Credit Reports
6. Opening L/C
7. Demand ForEx/Travers Cheque only Authorized Dealer branches
8. Compete service in Foreign Trade
9. Other Services: Debit Card, Credit Card, On-Line banking SMS Banking
10. Creation of Credit: a multiplier effect, deposit creates credit and credit creates deposits - derivative deposit.
Beside these activities, commercial bank may perform further tasks; all its activities are guided by its authority for the betterment of the company or for society.

### 2.2.1 Review of Related Studies

Finance is a broad field and there are various books written in this subject. The book of M.Y. Khan and P.K. Jain (1990) is considered to be a useful book in the financial management. The modern approach of Khan and Jain views the term financial management in broad sense and provides a conceptual and analytical framework for financial decision making. According to them, "The finance function covers both acquisitions of funds as well as their allocation; hence apart from the issues of acquiring external funds, the main concern of financial management is the efficient and wise allocation of funds to various uses." The major financial decisions according to Khan and Jain are: -

포 The investment decision
포 The financial decision and
포 The dividend policy decision.
I.M. Pandey (1997), in his book "Financial Management" defines financial management as that managerial activity which is concerned with the planning and controlling of the firm's financial resources. I.M. Pandey believes that among the most crucial decision of the firm are those, which relate to finance, and an understanding of the theory of financial management provides the conceptual and analytical insights to make the decisions skill fully.
I.M. Pandey further identifies two kinds of finance functions: -
(a) Routine and (b) Managerial finance functions.

The routine finance function do not require a great managerial ability to carry them out andthey are chiefly clerical in nature. Managerial finance functions on the other hand are so called because they require skill full planning Control and execution of financial activities. There are, according to I.M. Pandey four important managerial finance functions: -

포 Investment or long-term assets miss decision.
포 Financing or capital-mix decision.
포 Dividend of profit allocation decision.
포 Liquidity of short-term asset-mix decision.

A summary of what the study have reviewed in various books of finance have been highlighted below.

Finance is defined as the acquisition and investment of fund for the purpose of enhancing the value and wealth of an organization. The various finance areas include investments, public finance, corporate finance and financial institutions. The basic function of finance is to manage the firm"s balance sheet in most efficient way. The balance sheet reflects how a firm acquired financing through. The objective of the company must be to create value for its shareholders. Market price of company"s stock represents its value and this can be maximized by firm"s optimum investment, financing and dividend decisions. The capital investment decision is the allocation of the capital to investment proposals whose benefits are to be realized in the future. As the future benefits are not known with certainty, investment proposal necessarily involve risk. Consequently they should be evaluated in relation to their expected return and risk. In the financial decision, the financial manager is concerned with determining the best financing mix or an optimum "Capital structure". If a company can change its total valuation by varying its capital structure, an optimal financing would exits, in which market price per share could be maximized.

Another important decision of the firm, according to Van Horne (1994), is its Dividend policy. The decision includes the percentage of earnings paid to stockholders in cash dividends. The dividend payout ratio determines the amount of earnings retained in the firm and must be evaluated in the light of the objective of maximizing shareholder's wealth. The Financial management involves the solution of the three major decisions altogether. They determine the value of a company to its share holders. Van Home believes that the objective of any firm is to maximize its value, and therefore, the firm should strive for an optimal combination of the three inter-related decisions solved jointly. The main thing is that the financial managers relate each decision to its effect on the valuation of the firm debt and equity resources, and it reflects the disposition of acquired financing among the various asset accounts.

The major financial functions required for managing the banks balance sheet are summarized below: -
a. Analysis and planning
b. Financial structure management \&
c. Asset management

The first function financial analysis and planning is to understand the bank's current financial condition and plan for its future financial requirement in different economic scenarios. After analyzing the financial needs, the second function is to manage the financial structure of the bank, which can be done by optimizing the use of debt and equity in the capital structure. While deciding about this optimum structure, a financial manager must concentrate in minimization of cost of funds in one hand, and maximization of value of the firm in the other. Moreover financial structure management for a banking sector includes, a typical treasury function, which is also called funds management this function contributes a significant portion in profits earned by banks.

The final function is the management of asset structure of the bank. Advances of credit and investment in certain portfolios constitute the major portion of the bank"s asset. The major financial function related to assets management is to decide for the least risky and most profitable alternatives of investments. This can be conducted by determining returns and risks associated with the loans and advances made by bank. All the above financial decisions or functions as mentioned by different writers are instrumental towards effective handling of financial management. Which includes activities beginning from rising or funds to efficient and effective use of funds no matter either it is a baking or non-banking institution.

In the book "Financial Management" I.M. Pandey (1997) has defined as "The finance statement provides a summarized view of the financial operation of the firm. Therefore, something can be learnt about a firm and careful examination of the financial statements as invaluable documents or performance reports. Thus, the analysis of financial statement is an important aid to financial analysis or ratio analysis is main tool of financial statement analysis.
B.N. Ahuja (1998), "Financial Performance analysis is a study or relationship among the various financial factor in business a disclosed by a single set of statement and a study of the trend of these fact as shown in a series of statements. By establishing a strategic relationship between the item of a balance sheet and income statements and other operative data, the financial analysis unveils the meaning and signification of such items." According to R.W. Metcalf and P.H. Tatar (1996), "Financial Performance analysis is a process of evaluating the relationship between components parts of a financial statement to obtain a better understanding of a firm's position and performance." Similarly, Khan and Jain have defined that (1990) "The ratio analysis is defined as the systematic use of ratio to interpret the financial performance so that the strength and weakness of firm as well as its historical performance and current financial condition can be determined."

In the word of Van Horne (1994) "Financial ratio can be derived from the balance sheet and the income statement. They must be analyzed on a comparative basis. Ratio may also be judged in comparison with those of similar firms in the same line of business and when appropriate, with an industry average and we can look to future progress in this regard."

A comparative study of financial performance is a basic process, which provides information on profitability, liquidity position, earning capacity, efficiency in operation, sources and use of capital, financial achievement and status of the companies. These information will help to determine the extend of efficiency and effectiveness of the company in respect of deploying financial resources in the profitable manner.

### 2.2.2 Review of Thesis

Prior to this study, the several researchers have found various studies regarding financial performance of commercial and joint venture banks. In this study, only relevant subject maters are reviewed which are as follows: -
A thesis conduct by Shakya, Suman (2010) in "Financial Performance Of Nepal SBI Bank Limited And Everest Bank Limited." analyzed different ratio of NSBIBL and EBL for the period of five years till fiscal year 2008. Here, in some cases the liquidity position of EBL is slightly stronger where as in some cases the ratio of NSBIBL is higher. It concludes that liquidity position of these two banks is sound. NBBL has better utilization of resource in income generating activity than EBL. They are on decreasing trends while interest earned to total assets and return or net worth ratio of EBL is better than NSBIBL. It seems overall profitability position of EBL is better than NSBIBL and both banks are highly leveraged."

Mr. Regmi (2007) thesis "A Comparative Study Of The Financial Performance Of HBL And NBBL" 30, he suggested NBBL to increase its current assets because the bank is not maintaining adequate liquidity position in comparison with HBL. As capital structures of both the bank are highly levered both the banks are recommended to maintain and
improve mix at debt and owner's equity by increasing equity share. He further suggests to HBL to improve the efficiency in utilizing the deposits in loan and advance for generating the profit NBBL should try to maintain present position on this regards. Profitability position of HBL is comparatively better than the same of NBBL. So, NBBL is recommended to utilize its resources more efficiently for generating more profit margins. If resources held idle, bank faces high cost and causes the low profit margin. An ideal dividend payout ratio is based upon shareholders expectations and the growth requirement of the banks. NBBL is suggested to increase its dividend payout ratio. (Regmi, 2001, p.29)

The two banks should extend their resources to rural areas and promote the development of poor and disadvantaged group. In order to do so banks should open their branches in the remote areas with objectives of providing cheaper banking services especially HBL should initiated an this regard because it has few branches in comparison to NBBL. Because of the start competition between banking, sectors both the banks are suggest to formulate and implement some sound and effective financial and non-financial strategies to minimize operational expenses to meet required level of profitability. The banks are further suggested to adopt modern banking technologies to enhance their better and wide market.

A thesis conducted by Oli, Jhalak Bdr. (2007) entitled, "A Comparative Study Of Financial Performance Of HBL, NSBIBL And NBBL" concludes that the liquidity position of two JVBs i.e. NSBIBL and NBBL are always above than non standard and HBL is always below than normal standard. Total debt with respect to shareholders fund and total assets are slightly higher for HBL than NSBIBL and NBBL. The researcher has found from the analysis that NBBL has been successfully utilized their total deposits in terms of extending loan and advances for profit generating purpose on compared to NSBIBL and HBL. But NSBIBL is also better than HBL. It has concluded that net profit to total assets ratio in case of HBL is found better performance by utilizing overall resources but the generated profit is found lower for the overall resources in three JVBs."

Mr.Adhikari(2008) thesis" A Comparative Study Of Financial Performance Of NSBIBL and EBL" conclude that EBL is found superior regarding the liquidity, quality assets they possessed and capital adequacy overall capital structure of NSBIBL appears more levered than that on EBL. But NSBIBL is found superior in terms of profitability and turnover comparatively interest remained more dominant in the total income and expenses of NSBIBL than that of EBL. Regarding the test of hypothesis is (at $5 \%$ level of significance) the performance of the sampled banks significantly different with respect to the ratios, loans and advances to saving deposits. Loan loss provision to total deposit interest earned to total assets and tax per share correlation analysis signifies that EBL is successful to utilize its resources more efficiently than NSBIBL. (Adhikari, 2001, p.28) The review of the above mention bunch of research writes have definitely enriched my vision to elaborate analysis to come to the meaningful conclusion in realistic term and thereby come with some conclusion, few key suggestions that help in improvement of commercial banks. Previous researches on the basis of financial performance of commercial banks in Nepal. But this research is about joint venture bank of Nepal with sample of Nepal SBI Bank Limited and Everest Bank Limited. This research is about the financial performance of selected two banks. In the previous research, there is no clearcut financial performance of joint venture banks. The research can help the people who wanted to know about the overall financial performance of joint venture bank in Nepal. There are two-selected bank to find out the comparative financial position of selected bank. Therefore, this topic may not new but the researches efforts may be appreciable.

Joshi, Archana (2008) conducted a study on "A Comparative Study on Financial Performance of Nepal SBI bank ltd \& Nepal Bangladesh bank Ltd." with the following objectives.

포 To highlight various aspects of relating to financial performance of Nepal Bangladesh bank and Nepal SBI bank.

포 To analyze various aspects of relating to financial performance through the use of appropriate financial tools.
포 To show the cause of change in cash position of the two banks. Through her research she has presented the following findings of the study: -

The analysis of liquidity of these commercial banks shows different position here; the average current ratio of NSBI is greater than that of NBBL. Therefore, the liquidity position of SBI is in normal position. The turnover of the commercial banks is the main indication of income generating activities. These ratios are used to judge how efficiently the firm is using its resources. From the analysis of turnover of these banks, NBBL has better turnover than NSBI in terms of loans and advances to total deposit ratio. Thus, NBBL has better utilization of resources income generating activities than NSBI bank; which definitely lead to increase in income and this making an increment profit for the organization. Despite the fluctuating trend in the ratio of cash and bank balance to total deposit NSBI bank is more efficient than NBBL in cash management i.e., it is more able to keep more cash balance against its various deposits.

The analysis of profitability of these two commercial banks is also different. The overall calculation seems to be better for NBBL though certain ratios like dividend per share, dividend payout ratios etc are better for NSBI bank. From the calculation, NBBL seems o tackle their investors more efficiently. Going through net profit to total deposit ratio, it can be said that NBBL seems to be more successful in mobilizing its customers saving in much more productive sectors. NBBL has slightly riskier debt financing position in comparison to NSBI bank.

### 2.3 Research Gap

In this study, the major areas is to disclose the financial performance relates to Nepalese commercial banks (Joint venture).This type of research were done rarely. This study shows that the unique feature of findings. Previous researches on the basis of financial performance of commercial banks in Nepal.

But this research is about financial performance of joint venture bank of Nepal with sample of Himalayan Bank Limited and Everest Bank Limited. In the previous research, there is no clear-cut accounting and financial performance of joint venture banks. The research can help the people who wanted to know about the overall financial standard and accounting procedure of joint venture bank in Nepal. There are two-selected banks to find
out the problem and prospects of study. Therefore, this topic may be new as well as the researches efforts may be appreciable.

## CHAPTER-III RESEARCH METHODOLOGY

The rationale behind the study is to evaluate and assess the financial position or performance of the two newly operated joint venture banks viz. Nepal SBI Bank Limited and Everest Bank Limited. Thus, this chapter includes those methods and techniques used for finding out a fore said purpose.

Research methodology refers to the various sequential steps (a long with the rationale of each step) to he adopted by a researcher in studying a problem with certain objective in view. It is a way to systematic solve the research problem it may be understood as a science of studying how search is done scientifically. Includes the various steps that are generally adopted by a researcher studying his/ her research problem along with the logic behind them, it would be appropriate to mention here that research project are not meaningful to any one unless they are in sequential order which will be determined by the particular problem at hand therefore, this study aims at analyzing and interpreting the purpose of comparative financial performance or appraisal of two JVBs. This chapter focuses and deals with the following aspects or methodology.

- Research design
- Population and Sample
- Source of data
- Data collection procedure
- Method of Date analysis


### 3.1 Research Design

Research design is the task of defining the research problem. In other words, "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. In fact, the research design is the conceptual structure within which the research is conduct. General objective; of this research study is to examine and evaluate the financial performance of joint venture banks especially that of HBL and EBL in order to achieve the objective, both descriptive and analytical research design has been followed. The
study focuses on the examination of relationship between those variables that influencefinancial decisions of the sampled batiks hence; it is an ex-post factor research.

### 3.2 Population and Sample

The population for this study comprises nine joint venture banks currently operating in the country. All the joint venture banks perform the functions of commercial banks under rules, regulations and directives of Nepal Rastra Bank. The sample consists of two judgmentally selected banks- Himalaya Bank and Everest Bank. These units represent $22.22 \%$ of the total population and are comparable to each other in various aspects.

### 3.3 Sources of Data

Although present study is on secondary data. However, necessary suggestion are also taken form various experts both inside the bank whenever required the necessary data is obtained form the head office of the JVBs such as, published balance sheet, profit and loss account and other related statement of accounts as well as the annual reports of the respectively banks. Likewise, other related arid necessary information are also obtained from the publication of security exchange centre, Nepal Rasta Bank and other publications used for the purpose are book \& booklets magazine journals, newspaper school of thought etc.

### 3.3.1 Data Collection Procedure

The problem of the study lies on the issues related to the comparative strengths and weaknesses of the banks. Because of liberal policy adopted by the government, financial institution has been emerging in the country. The sampled banks have been facing threats from such institutions. Therefore, the study has been ducted to examine and evaluate the financial performance of the sampled units. This study is also intended to fine the weaknesses and strengths so that appropriate suggestion can be provided to enhance the performance of the banks in coming days.
For the purpose, various data are required. With the view of obtaining the data, researcher made several visits of the sampled banks, in first visit, the researcher consulted the
concerned authority of the bank and explained about the above stated problems and objectives of the study. He also explained why he is interested in these two banks and what he wishes to analysis after keeping forth the view of researcher. The authorities got convinced and appraised the effort. They assured that they would have far as possible.

Regarding the information needed, they said that they would make them available up to the extended that does not affect the privacy and secrecy of the bank. Researcher got pleased with the response shown by them arid started the work. In next visit, he approached share department and asked for the profit and loss account and balance sheet of the bank of last five years. In the department after explaining the need of such information the related staff the provided the necessary statement. To acquire the primary data, researcher made some other visit in the bank due to the increasing transactions and business of the employees in the bank; they could not afford time to the researcher whenever he needed. After same efforts, they could manage some time and hence, the researcher got the information through direct interview with them. In late visit, the researcher met the accounting expert in the bank for the clarification of the component items of the statements so as so avoid the ambiguity and confusion. Similarly, researcher obtained economic surveys, annual and periodic reports and banking directive from Nepal Rastra Bank, Baluwatar. There, he visited library and banking operation department. In the department, he explained why he needed such reports and hence, he became able to get those reports. For the reference materials, the researcher visited Nepal Commerce Campus, Shanker dev Campus and Central Department of Management, T.U. Many visits in management department and various sections of central library, TU led the researcher lobe successful in conducting this study.

### 3.4 Data Processing

Data obtained from the, various sources cannot be directly used in there original form further they need to be verified and simplified for the purpose of analysis. Data information, figure and facts so obtained need to be checked, rechecked edited and tabulated for computation. According to the nature of data, they have been inserted in meaningful tables, which have been shown in annexes. Homogenous data have been sorted in one table and similarly various tables have been prepared in understandable
manner odd data excluded form the table. Using financial and statistical tools data have been analyzed and interpreted.

### 3.5 Method of Data Analysis

### 3.5.1 Financial Tools

Financial tools are those, which are used for the analysis and interpretation of financial data. These tools can be used to get the precise knowledge of a business, winch in turn, are fruitful in exploring the strengths and weaknesses of the financial policies and strategies. For the sake of analysis following various financial tools have been used in order to meet the purpose of the study.

## Ratio Analysis

Ratio analysis helps to summarize the large quantities of financial data and to make quantitative judgments about the firm's financial performance. Ratio is the expression of one figure in terms of another. It is the expression of relationship between the mutually independent figures, in financial analysis; ratio is use to as an index of yardstick for evaluating the financial position and performance of firm. Ratio analysis is very much powerful \& widely used tool of financial analysis. It is define as the systematic use of ratio to interpret the financial statements so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. It helps the analysis to make qualitative judgment in about the financial position and performance of the firm. Therefore, it is helps to establish relationship among various ratios and interpret there on specially, based on comparison between two or more firms or inters firm comparison and comparison between present and past ratios for the same firm give enormous and fruitful results to examine the financial performance. The obsolete accounting figure reported in the financial statement does not provide a meaningful understanding of the performance and financial position of the firm. An accounting figure conveys meaning when it is related to some other relevant information. Therefore, the ratio is the relationship between two accounting figures expressed mathematically. It helps to summarize large quantitative relationship helps to form a quality judgment.

However, " A single ratio itself does not is indicate favorable or unfavorable conditions. It should be compared with some standard.

A ratio is simply a number expressed in terms of another number and it expresses the quantitative relation between any two variables. Ratio can be calculated between any two items of financial statements. It means there may be as many ratios as there are the numbers of items. However, under the ratio analysis technique, it is not practical to work out all the ratios. Hence, only the required ratios have been worked out.

There are numerous ratios to analyze and interpret the financial form once of the enterprise or firm. However, for our purpose, only important and relevant ratios are used to check the financial health of two JVBs in Nepal, which are as below;

## Liquidity Ratios

Liquidity ratios are used to judge the firm's ability to moot short-term obligation. These ratios give insights into the present cash solvency of the firms and its ability to remain solvent in the event of adversities. It is the comparison between short-term obligation and the short -term resources available to meet these obligations. These ratios are calculated to find the ability of banks to meet their short-term obligation, which are likely to mature in the short period. The following ratios are developed and used for our purpose to find the liquidity positions of the two joint venture banks.

## a) Current Ratio

This ratio indicated the current short-term solvency position of a current ratio is the relationship between current assets and current liabilities. It is calculated by dividing the current liabilities by current assets, which is expressed as follows:

Current Assets

Current Ratio =

Current Liabilities

Current assets refer in those assets, which are convertible in cash within a year or so. They includes, cash and Bank Balance, investment in treasury bills, money at short call, or placement, loans and advances, bills purchased and discounted, overdrafts. Other short-term loans, foreign currency loans, bills for collection, customer's acceptance liabilities, pre-payment expenses, and other receivable. Similarly, current- liabilities refer to those obligations maturing within a year. It includes, current account deposits, saving account deposits, margin deposits, call deposits, intra-bank reconciliation A/c, bills payable, bank over-draft, provisions, accrued expenses, bill for collection, and customer's acceptance liabilities etc.

A higher ratio indicates better liquidity position. However, "A very high ratio of current assets to current liabilities may be indicative of slack management practice, as it might signals excessive inventories for the current requirement and poor credit management in terms of over-expanded account receivable.

Current ratio is a measure of firm's solvency. It indicates the availability of the current assets in rupees for every one rupee of current liability. As a conventional rule, a current ratio of 2 to 1 in considered satisfactory. However, these rules should not be blindly followed, as it is the test of quantity not quality. In spite of its shortcoming, it is a crudeand quick measure of the firm's liquidity.

## b) Cash and Bank Balance to Current \& Saving Deposit Ratio.

The ratio shows the ability of banks immediate funds to cover their (current Margin, call and saving) deposit. Higher the ratio shows higher liquidity position and ability to cover the deposits and vice versa. The ratio is compute by dividing and bank balance by current and saving deposits. Cash and bank balance to current and saving deposits ratio.

Cash and bank balance
$=$
Current and saving deposits

Cash and bank balance comprises cash in hand, foreign cash in hand, cheques and other cash items, balance with domestic bank and balance held in foreign banks current and saving deposit consists of all types of deposits excluding fixed deposits.

The ratio measures the ability of banks to meet its immediate up to total deposit legations. The bank should maintain adequate cash and bank balance to meet the unexpected as well as heavy withdrawal of deposits. High ratio indicates sound liquidity position of the bank; however, too high ratio is not enough as it reveals the under utilization of fund.

## c) Cash and Bank Balance to Total Deposit Ratio

The ratio is calculated using following formula,
Cash and bank balance to total deposit ratio $=\frac{\text { Cash and Bank Balance }}{\text { Total Deposit }}$

Total deposit consists of current deposit, saving deposit, fixed deposit, money at call and short notice and other deposits.

The ratio shows the proportion of total deposits held as most liquid assets. High ratio shows the strong liquidity position of the bank. Too high ratio is not favorable for the bank because it produces adverse effect on profitability due to idleness of high-interest bearing fund.

## d) NRB Balance to Current and Saving Deposit Ratio

The ratio is computed by dividing the balance held with Nepal Rastra Bank by saving deposits,

NRB Balance
NRB balance to current saving deposit ratio $=$
Current and Saving Deposit

Commercial banks are required to hold certain portion of current and saving deposits in Nepal Rastra Bank's account. It is to ensure the smooth functioning and sound liquidity position of the bank. As per the directive of Nepal Rastra Bank, the required ratio is $8 \%$ therefore the ratio measures whether the bank is following the direction of NRB or not.

## e) NRB balance to fixed deposits ratio

The ratio is computed by dividing the balance held with Nepal Rastra Bank by fixed deposits accepted.

NRB balance
NRB balance to fixed deposit ratio $=$
Fixed deposit

It shows the percentage of amount deposited by the bank in Nepal Rastra Bank as compared to the fixed deposits. According to the direction of NRB, this ratio should be maintained $6 \%$. Hence, the ratio so calculated finds whether the bank has obeyed the direction of central bank or not.

## f) Fixed Deposit to Total Deposit Ratio

It is calculated as follow:
$=\frac{\text { Fixed Deposit }}{\text { Total Deposit }}$

The ratio shows what percentage of total deposit has been collected in form of fixed deposit. High ratio indicates better opportunity available to the bank to invest in sufficient profit generating long-term loans. Low ratio means bank should invest the fund of low cost in short-term loans.

## Leverage Ratio

Leverage or capital structure ratios are used to judge the long-term financial position of the firm. It evaluates the financial risk of long-term creditors greater the proportion of the owner's capital structure, lesser will be the financial risk borne by supplier of credit funds.

Debt is more risky from the firm's point of view. The firm has legal obligation to pay interest to deft holders irrespective of the profit made or losses incurred by the firm.

However, use of debt is advantageous to shareholders in two ways:
포 They can retain control on the firm with a limited stake
포 Their earning in magnified when rate of return of the firm on total capital is higher than the cost of debt.

However, the earning of shareholders reduces if the cost of debt becomes more than the overall rate of return. In case, there is the threat of insolvency. Thus, the debt has two folded impact-increases shareholder earning-increase risk. Therefore, a firm should maintain optimal mix of investors and outsiders fund for the benefit owners and its stability.

Under this group, following ratios are calculated to test the optimality capital structure;
포 Debt-Equity ratio
포 Debt-Asset ratio
포 Debt to total capital ratio
포 Interest coverage ratio

## a) Debt -Equity Ratio

The ratio is calculated by dividing total debt by shareholder's equity.
We calculate

## Debt - Equity Ratio $=$

> Shareholder's equity

Total debt consists of all interest bearing long-term and short-term debts. These include loans and advances taken from other financial institutions, deposits, carrying interest etc. Shareholder's equity includes paid-up capital, reserves and surplus and undistributed profit.
The ratio shows the mix of debt and equity in capital. It measures creditors' claims against owners. A high ratio shows that the creditors' claims are greater than those of owners are. Such a situation introduces inflexibility in the firms operation due to the increasing interference and pressures from creditors' low ratio imply a greater claim of owners than creditors. In such a situation, shareholders are less benefited if economic activities are good enough. Therefore, the ratio should be neither too high nor too low.

## b) Debt-Asset Ratio

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

The ratio shows the contribution of creditors in financing the assets of the bank. High ratio indicates that the greater portion of the bank's assets has been financed through outsider's fund. The ratio should be too high per too low.

## c) Debt to Total Capital Ratio

The ratio is obtained by dividing total debt by total capital of the firm.
$=\frac{\text { Total Debt }}{\text { Total Capital }}$

Total capital refers to the sum of interest- bearing debt and net worth/shareholder's equity.

It shows the proportion of debt in total capital employed by the bank. High ratio indicates greater claim of creditors. Contrary to it, low ratio is the indication of lesser claim of outsiders. For the sound solvency position, the ratio should not be too high or too low.

## d) Interest Coverage Ratio

The ratio is calculated by dividing net profit before deduction of interest and tax by interest charges.
$=\quad \frac{\text { Net profit before of interest and tax }}{\text { Interest charges }}$

The ratio, also known as times interest-earned ratio is used to test the debt servicing capacity of the bank. It shows the number of times the interest charges are covered by funds that are ordinarily available for their payment. It indicates the extent to which the earning may fall without causing any embarrassment to the firm regarding the payment of interest. Higher ratio is desirable, but too high a ratio indicates the firm is very conservative in using debt. A lower ratio indicates excessive use of debt or insufficient operation.

## Capital Adequacy Ratio

Capital adequacy ratio measures whether the firm has maintained sufficient capital or not. In other words, it helps to decide whether the existing capital is adequate or there is the not need or reforms. The ratio is tested to ensure the safety and stability of the firm in long run.

Over capitalization and under capitalization both have adverse effect on profitability of the firm. If the capital is excess, it remains idle, if the capital is insufficient, the firm may not be able to grasp the opportunity from potential profitable sectors. Therefore, the commercial banks have been directed to retain sufficient ratio by the central bank. As per the directive this ratio should be $8 \%$ of there total risk, weighted assets and total offbalance sheet transitions, Here, capital fund refers to the core capital and supplementary capital commercial banks cannot declare and distribute dividend until they meet capital adequacy ratio under this group, following ratios are tested.

포 Net worth to total assets ratio
포 Net worth to total credit ratio

## a) Net Worth to Total Deposit Ratio

The ratio is calculated by dividing net worth by total deposits.
$=\quad \frac{\text { Net worth }}{\text { Total deposits }}$

The ratio measures the percentage of net worth in relation to the total deposits collection in the bank. The ratio is a yardstick to see whether the bank has maintained the capital fund according to the direction of Nepal Rastra Bank.

## b) Net Worth to Total Assets Ratio

The ratio is calculated by dividing the net worth by total assets of the bank.
$=\quad \frac{\text { Net Worth }}{\text { Total Assets }}$

The ratio measure what is the percentage of shareholders' fund is relation to the total assets owned by the bank. High ratio means greater contribution of investors fund and strong capital adequacy position.

## c) Net Worth to Total Credit Ratio

The ratio is obtained when not worth is divided by the total credit of the bank.
$=\quad \frac{\text { Net Worth }}{\text { Total Credit }}$

Total credit refers to the total of loans and advances granted, cash credit overdrafts, bill purchased and discounted.

It measures the relative proportion of the shareholders fund with respect to the credit.
High ratio shows that the firm has adequate capital, which is the index of safety.
Moreover, a bank with higher ratio is less affect by the instability of the financial market.

## Turnover Ratio

Turnover ratios, also known as utilization ratios or activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. They measure how effectively the firm uses investment and economic resources at its command. Investments are made in order to produce profitable sales. Unlike other manufacturing concerns, the bank produces loans, advance and other innovation. So it sells the same High ratio depicts the managerial efficiency in utilizing the resources they show the sound profitability position off the bank low ratio is the result of insufficient utilization of resources. However, too high ratio is also not good enough as it may be due to the insufficient liquidity.

Depending upon special nature of assets and sales made by the bank, following ratios are tested;

포 Loans and advances total deposits ratio
포 Loans and advances to fixed deposits ratio
포 Loans and advances to saving deposit ratio
포 Investment to total deposit ratio
포 Performing assets to total assets ratio
포 Performing assets to total debt ratio

## a) Loan and Advanced to Total Deposit Ratio

The ratio is computed by dividing total loans and advances by total deposit liabilities.
Loans and advances
$=$
Total deposit

Loan and advanced consist of loans, advances, cash credit overdraft, foreign bills purchased and discounted. The ratio indicates the proportion of total deposits invested in loans and advances. High ratio means the greater use of deposits for investing in loans and advances. However, very high ratio shows poor liquidity position and risk in loans on
the contrary; too low ratio may be the causes of idle cash or use of fund in less productive sector.

## b) Loan and Advances to Fixed Deposit Ratio

The ratio is calculated by dividing loans and advances by fixed deposit liabilities
Loan and Advances
$=$
Fixed Deposit

The ratio indicates what proportion of fixed deposit has been used of loans and advances. Since fixed deposits carry high rate of interest, fund so collected need to be invested in such sectors, which yield at least sufficient return to meet the obligation. High ratio means utilization of the fixed deposit in form of loans.

## c) Loan and Advances to Saving Ratio

The ratio is calculated using following formula
$=\quad \frac{\text { Loan and Advances }}{\text { Saving Deposit }}$

The ratio measures what extent of saving deposit has been turned over to loans and advances. Saving deposit also, being an interest bearing liability needs to be invested in productive sector. High ratio indicates greater utilization of the saving deposit in advancing loans.

## d) Investment to Total Deposit Ratio

The ratio obtained by dividing investment by total deposits collection in the bank.
$=\quad \frac{\text { Investment }}{\text { Total Deposit }}$

Investment comprises investment its HMG treasury bills development bonds, company shares and other type of investment.

The ratio shows how efficiently the major resources of the bank have been mobilized. High ratio indicates managerial efficiency regarding the utilization of deposits. Low ratio is the result of less efficiency in use of funds.

## e) Performing Assets to Total Assets Ratio

It is calculated by dividing performing assets by total assets.
$=\quad \frac{\text { Performing Assets }}{\text { Total Assets }}$

Performing assets to total assets include those assets, which are invested for income generating purpose. These consist of loans, advances; bills purchased and discounted investment and money at call or short notice.

The ratio measures what percentage of the assets has been funded for income generation. High ratio indicates greater utilization of assets and hence sound profitability position.

## f) Performing Assets to Total Debt Ratio

It is calculated as follows
$=\quad \frac{\text { Performing Assets }}{\text { Total Debt }}$

It shows the pattern of use of the fund collected from the outsiders High ratio represents the success of bank in utilization of creditors fund in productive areas low ratio indicates idleness of the cost bearing resources.

## Asset Quality Ratio

As explained earlier, turnover ratios measure the turnover of economic resource in terms of quantity. Only the investment is not of great significance, but the return from them with minimum default in payment by debtors is significant. A firm may be in a state of enough profit and though unable to meet liability. Therefore, asset quality ratios are
intended to measure the quality of assets contained by the bank. Following ratios are computed in this group:
a) Loan loss coverage ratio
b) Loan loss provision to total income ratio
c) Loan loss provision to total deposit ratio
d) Accrued interest to total interest income ratio

## a) Loan Loss Coverage Ratio

The ratio is calculated by dividing provision for loans loss by total risk assets.
$=\quad \frac{\text { Loan loss Provision }}{\text { Total Risk Assets }}$

For the purpose, risk assets constitute loans and advances, bills purchased and discounted. Nepal Rastra Bank has directed commercial banks to maintain provision for loan loss based on category of loans and risk grade. The ratio, therefore, measures whether the provision is sufficient to meet the possible loss created by defaulted in payment of loan or not. High ratio indicates that the major portion of loan is risky.

## b) Loan Loss Provision to Total Income Ratio

The ratio is obtained by dividing loan loss provision by total income.

> Loan loss Provision
$=$
Total Income

The ratio shows what portion of total income has been held as safety cushion against the possible bad loan. Higher ratio indicates that the greater portion of loan advanced by the bank is inferior in quality. Low ratio means that the bank has provided most of its loans and advance in secured sector.

## c) Loan Loss Provision to Total Deposit Ratio

The ratio is obtained by dividing the provision for loan loss by total deposit in the bank.

## Loan Loss Provision <br> $=$ <br> Total Deposit

It shows the proportion of bank's income held as loan loss provision in relation to the total deposit collected. Higher ratio means quality of assets contained by the bank in form of loan is not much satisfactory. Low ratio is the index of utilization of resources in healthy sector.

## d) Accrued interest to total interest income ratio

The ratio is obtained by dividing accrued interest by total interest income.
$=\quad \frac{\text { Accrued Interest }}{\text { Total interest income }}$

Accrued interest refers to the interest that is accrued but not collected. Total interest income includes the interest received from the investment in various sectors.

The ratio shows the percentage of accrued interest with respect to total income in form of interest. High ratio indicates the larger portion interest remained to be collected. Lower ratio reflects the better quality of assets in the bank.

## Profitability Ratio

Profitability ratios are designed to highlight the end-result of the business activities, which in the imperfect world of ours, is the sole criterion of cover all efficiency of business unit.

A company should earn profit to survive and grow over a long period. It is a fact that sufficient profit must be earned to sustain the operations of the business, to able to obtain funds from investors for expansion and growth; and to contribute towards the social overheads for the welfare of society. The profitability ratios are calculated to measure the
operating efficiency of the company. Management of the company, creditors and owners are interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a reasonable return from their investment.

To meet the objective of study, following ratios are calculated in this group;

$$
\begin{array}{ll}
\text { 포 } & \text { Return on total assets } \\
\text { 포 } & \text { Return on net deposit } \\
\text { 포 } & \text { Return on total deposit } \\
\text { 포 } & \text { Total interest expenses to total interest income ratio } \\
\text { 포 } & \text { Interest earned to total assets ratio } \\
\text { 포 } & \text { Staff expenses to total income ratio } \\
\text { 포 } & \text { Office operation expenses to total income ratio }
\end{array}
$$

## a) Return on Total Asset

The ratio is calculated by dividing net profit after tax by total on asset on the bank.
$=\quad \frac{\text { Net profit after tax }}{\text { Total assets }}$

Net profit refers to the profit deduction of interest and tax. A total asset means the assets that appear in asset of balance sheet.

It measures the efficiency of bank in utilization of the overall assets. High ratio indicates the success of management in overall operation. Lower ratio means insufficient operation of the bank.

## b) Return on Net Worth

The ratio is computed by dividing net profit after tax by net worth.
Net profit after tax
$=$
Net Worth

The ratio is tested to see the profitability of the owner's investment "reflects the extent to which the objective of business is accomplished". The ratio is of great interest to present as well as prospective shareholders and of great significance to management, which has the responsibility of maximizing the owner's welfare, so higher ratio is desirable.

## C) Return on Total Deposit

The ratio is computed by dividing net profit after tax by total deposit.
$=\quad \frac{\text { Net profit after tax }}{\text { Total Deposit }}$

The ratio shows the relation of net profit earned by the bank with the total deposit accumulated. High ratio is the index of strong profitability position.

## d) Total Interest Expenses to Total Interest Income Ratio

The ratio is obtained by dividing total interest expenses by total interest income.
Total Interest Expenses
$=$
Total Interest Income

Total interest expenses consist of interest expense incurred for deposit, borrowing and loans taken by the bank. Total interest income includes interest income received from loans, advance, cash credit, overdrafts and government securities, inter bank and other investment. The ratio shows the percentage of interest expenses incurred in relation to the interest income realized. Lower ratio is favorable from profitability point of view.

## e) Interest Earned to Total Assets Ratio

The ratio is calculated by dividing interest income by total asset of the bank.
Interest Earned
$=$

Total Assets

The ratio shows percentage of interest income as compared to the assets of the bank. High ratio indicates the proper utilization of bank's assets for income generating purpose. Low ratio represents unsatisfactory performance.

## f) Staff Expenses to Total Income Ratio

The ratio is obtained by dividing the staff expenses by total income.
$=\quad$ Staff $\frac{\text { Expenses }}{\text { Total Income }}$

Staff expenses include the salary and allowances, contribution to the provident fund \& gratuity fund, staff training expenses and other allowance and expenses made for staff. The ratio measures the proportion of income spent for the staff, whose contribution is of great significance in the success of the bank. High ratio indicates that the major portion of income is used for staff. From the firm's point of view, low ratio is advantages. However, the staffs prefer high ratio, as it is the result of higher level of facilities and benefits provided to them.

## g) Office Operation Expenses to Total Income Ratio.

The ratio is obtained by dividing office operation expenses by total income.
Office Operation Expenses
$=$
Total Income

Office operation expenses comprise expenses incurred in house rent, water, electricity, repair, maintenance, legal expenses, audit expenses and other miscellaneous expenses made in course of operation. It shows the percentage of income spent for day-to-day operation of the bank. High ratio shows that large amount of income is spent for the operating activities of the bank. Lower ratio is favorable to the bank, as it is the reflection of operational efficiency.

## Other Indicators

Above stated ratios, throw light on various aspects of bank. Management investors and creditors can get information regarding their interest. Some indicators are dealt here which provide more knowledge about the performance of the bank. They are listed below.

```
#ᄑ Earning per share(EPS)
포 Dividing per share(DPS)
#ᄑ}\quad\mathrm{ Tax per share (TPS)
#ᄑ> Dividend payout ratio(DPR)
포 Price-earning ratio (P/E Ratio)
포 Market value per share to book value per share(MVPS/BVPS)
```


## a) Earning Per Share(EPS)

It is obtained by dividing earning available to common shareholders by number of equity shares out-standing.

$$
=\quad \frac{\text { Earning Available To Common Shareholders }}{\text { Number of Equity Shares Out-Standing }}
$$

Earning per share refers to the income available to the common shareholders on per share basis, it enables us to compare whether the earning based on per share basis has changed over past period or not. The investors favour high EPS. It reflects the sound profitability of the bank.

## b) Divided Per Share (DPS)

It is obtained by dividing earning paid to shareholder by number of equity shares outstanding.

Earning Paid To Common Shareholders<br>$=$<br>Number Of Equity Shares Out-Standing

The net profit after the deduction of preference dividend belongs to equity shareholders. However, the income that really receives is the amount of earning distributed as dividend. Dividend may be distributed in form of cash or bonus share. Dividend distribution affects the price of share. Shareholders prefer high dividend. However, it may sometimes be wise to distribute less amount of profit in investment opportunities are available.

## c) Tax Per Share (TPS)

It is obtained by dividend tax paid to the government by number of outstanding equity shares.
$=\quad \frac{\text { Tax paid to the Government }}{\text { Number Of Equity Shares Out-Standing }}$

Tax is paid to the government after the deduction of interest income. Tax is paid only if profit is earned.

The ratio measures the contribution of shareholders for the development of the country as tax acts as a source of income for government. High TPS represents better profitability position of the bank, as it is the result of high profit.

## d) Dividend Payout Ratio (DPR)

It is obtained by dividing dividend per share by earning per share.
$=\frac{\text { DPS }}{\text { EPS }}$

It shows the percentage of earning distributed to the shareholder. High ratio indicates less retention of earning in the bank. Low ratio means higher portion of income is held in the bank to grasp the profitable opportunities. Generally, the shareholder prefers high DPS.

## e) Price-Earning Ratio( P/E Ratio)

Market Value Per Share

## Earning Per Share

$\mathrm{P} / \mathrm{E}$ ratio is widely used to evaluate the bank's performance as expected by investors. It represents the investors' judgment or expectation about the growth in the banks earning. In other words, it measures how the market is responding towards the earning performance of the concerned institution. High ratio indicates greater expectation of the market towards the achievement of firm.

## f) Market Value per Share to Book Value Per Share (MVPS/BVPS)

It is the ratio of market value per share to book value per share.
= MVPS/BVPS

BVPS is net worth divided by the number of shares outstanding.

The ratio measures the value that the financial market attaches to the management and organization of the bank as a growing concern high ratio is indication of strong management and organization.

## Income and Expenditure Analysis

This is a tool with the help of which the components of income and expenditure can be compared between two competitive firms. By this analysis, one is able to conclude which sources of income\& expenditure are dominant in the related concern. Under income analysis, overall income is split up into major headings. Interest income, commission \& discount, foreign exchange income and other income. Under expenditure analysis, entire operating expenses are split up into four major headings- interest expenses, staff expenses, office operation expenses and bonus facility.

### 3.5.2 Statistical Tools

Various statistical tools can be used to analyze the data available to the researcher. These tools are used in research in order to draw the reliable conclusion through the analysis of financial data.

Following tools are used for are purpose.
포 Arithmetic mean
포 Coefficient of variation
포 Student's T-test
포 Coefficient of correlation
포 Probable error of correlation coefficient
포 Least-square line trend

## Arithmetic Mean

An average is a single value selected from a group of values to represent them in same way, which is supposed to stand for whole group of which it is a pare, as typical of all the values in the group(Waugh A.E.), Out of various measures of the central tendency, arithmetic mean is one of the useful tools applicable here, it is easy to calculate and understand and based on all observations.

Arithmetic mean of a given set of observations is their sum divided by the number of observation. In general, if $\mathrm{X}_{1}, \mathrm{X}_{2}, \mathrm{X}_{3} \ldots \ldots . . . . . . . . . \mathrm{X}_{\mathrm{n}}$ are the given observations, then arithmetic mean usually denoted by X is given by,
$\overline{\mathrm{X}} \quad=\frac{\mathrm{X}_{1}, \mathrm{X}_{2}, \mathrm{X}_{3} \ldots \ldots \ldots \ldots . . . . \mathrm{X}_{\mathrm{n}}}{\mathrm{n}}$

Where, $\mathrm{n}=$ number of observation

## Variance

It is a statistical measure of the variability of $s$ set of observations. The symbol is pronounced "Sigma Square". It is the measure of total risk. The smaller the variance, the lower the risk of the stock and vice versa.

$$
\sigma^{2} \mathrm{X}=\quad \sum_{\mathrm{t}=1}^{\frac{\sum\left(\mathrm{X} 1-(\mathrm{X} 1)^{2}\right)}{} \frac{\mathrm{n}}{} \frac{\mathrm{~m}^{2}}{}}
$$

Where,

$$
\begin{array}{ll}
\mathrm{n}= & \text { No of observation } \\
\overline{\mathrm{X} 1}= & \text { Average rate of Return }
\end{array}
$$

## Standard Deviation

It is the square root of the variance standard deviation


Where,
$\mathrm{X}=$ Expected return of the historical data.
$\mathrm{N}=$ Number of observations.

## Coefficient of Variation

According to Prof. Karl Pearson, coefficient of variation is the percentage variation in mean, standard deviation being considered as the total variation in the mean. It is one of the relative measures of dispersion that is useful in comparing the amount of variation in data groups with different mean.

For comparing the variability o two distributions, we compute the coefficient of variation for each distribution. A distribution with smaller CV is said to more homogeneous or uniform or less variable than other, conversely a series with greater CV is said to be more variable or heterogeneous than the other.

## Student's T-test

Student's t-test is a useful statistical tool to see the significance of the difference between two sample means, the population variances being equal but unknown (Gupta S.C.). Student's t-test is based on the assumption that the present population from which the sample is drowning is normal, the sample observations are independent and the population standard deviation is unknown. The test is applied for the sample less than 30. If $\mathrm{X}_{1}, \mathrm{X}_{2}, \mathrm{X}_{3} \ldots \ldots \ldots \ldots . . \mathrm{X}_{\mathrm{n}}$ and $\mathrm{Y}_{1}, \mathrm{Y}_{2}, \mathrm{Y}_{3}$ $\qquad$ $Y_{n}$ be two independent random samples from the given normal population, null hypothesis is set as; i.e. the sample means X and Y do not differ significantly under the assumption that of population variance are equal but unknown. The test statistic under Ho is i.e. S 2 is in unbiased estimate of the common population variance C 3 based on both samples. By comparing the value of $/ t /$ with the tabulated value of $t$ for iii + rv-2 degree of freedom and at $5 \%$ level o significance, null hypothesis is accepted or rejected. If the calculated value of $t$ came to be less than the tabulated value, null hypothesis is accepted otherwise, rejected.

## Karl Person's Coefficient of Correlation

It is a statistical tool for measuring the intensity or the magnitude of linear relationship between two series. Karl Pearson's measure, known as Pearson's correlation coefficient between two variable and series X and Y is usually denoted by ' i ' and can be obtained as Where,

$$
\mathrm{R}=\frac{\mathrm{n} \sum \mathrm{xy}-\sum \mathrm{x} \cdot \sum \mathrm{y}}{\left[\left\{\sum \mathrm{x}^{2}-\left(\sum \mathrm{x}\right)^{2}\right\}\left\{\sum \mathrm{y}^{2}-\left(\sum \mathrm{y}\right)^{2}\right\}\right]}
$$

Where,

$$
\begin{aligned}
\mathrm{n}= & \text { Number of observations in series } \\
\Sigma \mathrm{x} & =\text { Sum of observation in series } \mathrm{X} \\
\Sigma \mathrm{y} & =\text { Sum of observation in series } \mathrm{Y} \\
\mathrm{X}^{2} & =\text { Sum of squared observation in series } \mathrm{X}
\end{aligned}
$$

## $Y^{2}=$ Sum of squared observation in series $Y$

$\Sigma X Y$ sum of the product of observation in series $X$ and $Y$ value of $r$ lies between -1 and + 1. $\mathrm{r}=1$ implies that there is a perfect positive correlation between the variable, $\mathrm{r}=1$ implies that there is a perfect negative correlation between the variable $r=0$ means the variable are uncorrelated. But $\mathrm{r}=0$ does not always mean that the variables are uncorrelated; they may be related in some other form such as logarithm, quadratic, exponential etc.

## Probable Error of Correlation Coefficient

Probable error of correlation coefficient is a measure of testing the reliability of an observed value of correlation coefficient. It is calculated to find the extent to which correlation coefficient is dependable as it depends upon the condition of random sampling.

As,

$$
\text { P. } \mathrm{E}_{.(\mathrm{r})}=\frac{1-\mathrm{r}^{2}}{\sqrt{\mathrm{n}}}
$$

Where,
r = Standard Error, n = 0.6745

Reason for taking 0.6745 is that in a normal distribution $50 \%$ of observations lie in the range 0.6745 where, $u$ and a denote the population mean and standard deviation. $E(R)$ is used to test it an observed value of sample correlation coefficient is significant of any correlation in the population. If $r<P$.E., correlation is not at all significant. If $r>P . E ., r$ is definitely significant.

## Least Square Linear Trend

Trend analysis is a very useful and commonly applied tool to forecast the future event in quantitative term, based on the tendencies in the dependent variable in the past period.

The straight-line trend implies that irrespective of the seasonal and cyclic as well as irregular fluctuation, the trend value increases or decreases by absolute amount per unit of time. The linear trend values mathematically,
$Y=a+b x$

Where,
$\mathrm{Y}=$ The Value of Dependent Variable
$\mathrm{a}=\mathrm{Y}$ - Intercept
$\mathrm{b}=$ Slope of The Trend Line
$\mathrm{x}=$ Value of The Independent Variable
i.e. time $=$ Year- 2002/03 (with regard to the data used in the study)

## CHAPTER-IV <br> ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of data following the researcher methodology dealt in the chapter. In the course of analysis, data gathered from the various sources have been inserted in the tabular form according to 'heir' homogenous nature. The various tables prepared for the analysis purpose have been shown in annexes. Using financial and statistical tools, the data have been analyzed the result of the analysis has been interpreted keeping in mind the conventional standard with respect to ratio analysis, directives of NRB and other factors while using other tools. Moreover, financial performance of the sampled banks has especially been analyzed in cross-sectional manner. Specifically, the chapter includes analysis and interpretation of the following.

```
포 Ratios analysis
포 Income and expenditure analysis
포 Correlation Analysis
포 Lest Square liner trend analysis
```


### 4.1 Ratio Analysis

Ratio analysis has been adapted to evaluate the financial health, operating result and growth of the sampled banks. In order to analyze and interpret the tabled data, the following ratios have been used.

```
포 Liquidity ratio
포 Leverage ratio
#ᄑ Capital adequacy ratios
포 Turnover ratios
#ᄑM Asset quality ratios
포 Other indicators
```


### 4.1.1 Liquidity Ratios

Liquidity ratios have been employed to test the ability of the banks to pay immediate liabilities. These include current ratio, cash and bank balance to total deposit ratio, NRB balance to current and saving deposit ratios, NRB balance to fixed deposit ratio and fixed deposit ratio and fixed deposit to total deposit ratio.

## a) Current Ratio

Annex 1 show that current ratio of HBL for the study period remained 3.60:1, 2.16:1,1.17:1, 1.19:1 and1.07:1 respectively form the year 2004\2005 to 2008/09. Mean of the ratios appeared 1.84 and CV appeared $52.72 \%$. Similarly the ratios of EBL for the corresponding period remained $2.60: 1,2.38: 1,1.93: 1,2.18: 1$ and $1.88: 1$ means of the ratios came 2.19 whereas CV came $12.32 \%$. The ratio of both the banks showed slightly decreasing trend. In EBL the ratio did not fall below $1.88: 1$ whereas with respect to HBL, it declined in as against non- decreasing trend in other years. Mean of the ratios in EBL was slightly greater than that of HBL which depicts that both of the banks could riot maintain the conventional standard of $2: 1$. Having a glance at the nature of assets and liabilities of the commercial banks, the ratio below the stated standard may be accepted as satisfactory, but it signifies that the bank have the poor liquidity position banks may face the problem of working capital if they need to pay the current liabilities at demand. Delay in payment of the liabilities may lead the banks to lose their goodwill. They will have the problem in winning the confidence of current depositors and short-term lenders. Between the two banks, EBL seems to be slightly in the better position. The ratios remained more consistent in EBL then in HBL.

The calculated value of $\mathrm{t}(0.32)$ remained less than the tabulated value(2.306) at 5\% level of significance. Hence, the null hypothesis has been accepted i.e. the mean of the current ratios of the sampled banks does not differ significantly.

## b) Cash and Bank Balance to Current and Saving Deposit Ratio

Cash and Bank Balance<br>$=\quad \overline{\text { Current and Saving Deposit }}$

Annex 2 shows that, the ratio remained $13.72 \%, 8.76 \%, 8.22 \%, 6.36 \%$, and $13.10 \%$ in the respective years of the period. Mean, SD and CV of the ratios were $10.03 \%$ and 2.88 $28.67 \%$ respectively. Similarly, the ratio remained $18.00 \%, 19.23 \%, 22.34 \%, 18.56 \%$ and $31.38 \%$ in corresponding years of study period in EBL. Mean of the ratios appeared $21.90 \%$ whereas SD and CV appeared 4.93 and $22.54 \%$ respectively.

The ratios of both the banks revealed fluctuation trend over the period, of HBL remained highest in the year 2004/2005 and then it declined in consecutive years, the ratio appeared in decreasing trend, it remained highest in EBL in the year 2008/2009. The means ratio of EBL appeared greater than that of HBL, which indicates that the former is more efficient in paying the immediate obligation. Higher CV of ratio in HBL as compared to EBL signifies greater variation in the ratios. The calculated value of $t$ was less than the tabulated value at $5 \%$ level of significance $(0.0067<2.306)$. Hence null hypothesis has been accepted i.e. there is not significant difference between the ratios of two banks.
c) Cash and Bank Balance to Total Deposit Ratio
$=\quad \frac{\text { Cash and Bank Balance }}{\text { Total Deposit }}$

Annex 3 depicts that the ratios were $9.90 \%, 6.48 \%, 5.85 \%, 4.55 \%$ and 8.79 in HBL in the respective years of study period. Mean SD and CV of the ratios came $7.11 \%, 7.11$ and $27.50 \%$ respectively. In the similar way, the ratio in EBL remained $10.40 \%, 11.25 \%$, $13.15 \%, 11.13 \%$ and $18.50 \%$ in the corresponding years. Mean SD and CV of the ratios came $12.89 \%, 2.95$ and $22.90 \%$ respectively.

Glancing at the nature of ratios, trend of cash and bank, balance to total deposit of both the banks appeared in decreasing trend. But both bank's the ratio reached highest in the year 2007\2009. Mean ratio of EBL came higher than that of HBL which means that EBL has the greater ability to repay the deposit i.e. EBL is more efficient to serve the customers from liquidity point vive. CV the ratios remained lower in EBL, which signifies greater consistency in it.
Calculated value of $t$ appeared less than the tabulated value at $5 \%$ level of significance i.e. $0.02<2.306$. Hence, null hypothesis has been accepted i.e. the difference appeared in the mean value of the ratio is not significant.

## d) NRB Balance to Current and Saving Deposit Ratio

NRB balance to current and saving deposit ratio
$=\frac{\text { NRB Balance }}{\text { Current and saving Deposit }}$

From the annex 4, the ratios of HBL were found to be $9.65 \%, 5.59 \%, 5.95 \%, 4.11 \%$, and $10.00 \%$ in the respective years of study period. Mean SD and CV of the ratios seemed $7.06 \%, 2.34$ and $33.18 \%$ respectively. Similarly the ratios EBL remained $13.37 \%$, $14.11 \%, 11.01 \%, 7.52 \%$ and $24.37 \%$ in the corresponding years. Mean of the ratios came $14.08 \%$ and SD and CV came 5.64 and $54.25 \%$ respectively. The calculated ratios did not show particular direction of change in HBL the ratio remained highest in the last year EBL, also it remained highest in the last. In HBL the ratio are lower than EBL in each year. In both of the banks, mean ratio lay at significant level above the standard. Comparatively, it is greater in EBL, which indicates that EBL is stronger in liquidity position than HBL. EBL has deposited excess cash in NRB, which may affect the profitability adversely because idle cash earns nothing, from the CV analysis, it can be concluded that the ratio of EBL varied to a greater extant than that of HBL.

The calculated value of $t$ was less than the tabulated value at $5 \%$ level of significance ( $0.027<2.306$ ). Therefore null hypothesis has been accepted i.e. two banks do not differ significantly with respect to this ratio.

## e) NRB Balance to Fixed Deposit Ratio

$=\frac{\text { NRB Balance }}{\text { Fixed Deposit }}$

From the Annex 5 Depicts that the ratios of HBL reached $28.92 \%$, $17.26 \%, 15.52 \%$, $14.57 \%$ and $36.51 \%$ in the respective years under the study. Mean of the ratios appeared $22.43 \%$ and CV appeared $38.30 \%$. Similarly, the ratios of EBL were $22.90 \%$, $26.86 \%, 20.94 \%, 16.77 \%$ and $67.90 \%$ respectively mean of the ratios remained $31.08 \%$ and CV remained $60.17 \%$.

The ratio of HBL showed decreasing trend in the period of review except the year 2008/09. It has the minimum of $14.57 \%$ in the year 2007/008 to maximum of $33.51 \%$ in the last year. In all of the years, the ratio remained higher than $6 \%$, the minimum standard set by NRB. In EBL also ratio was highest in the year 2008/2009. In the latter years, it remained almost stagnant around $21 \%$. In all the years of study period, it remained higher than the standard. Mean ratio of EBL came greater than that of HBL. It reveals that EBL has slightly thicker cushion against, the fixed deposit to be repaid than that of HBL. Furthermore, CV of the ratios remained significantly higher in EBL, which reflects the greater fluctuation in the ratio.

The calculated value of $t$ i.e. 0.235 appeared less than the tabulated value at $5 \%$ level of significance i.e. 2.306. So, null hypothesis has been accepted i.e. mean ratio of two banks does not differ significantly.

## f) Fixed Deposit to Total Deposit Ratio

$=\frac{\text { Fixed Deposit }}{\text { Total Deposit }}$

From the Annex 6 Highlights that the ratios of HBL remained 24.61\%, 23.97\%, 27.29\%, $20.17 \%$ and $18.39 \%$ in the respective years of study period. Mean SD and CV of the ratios were $22.89 \%, 3.20$ and 13.98 \% respectively. Similarly the ratios of EBL were $33.71 \%, 30.74 \%, 30.94 \%, 26.89 \%$ and $21.16 \%$ in the corresponding years Mean SD and CV of the ratios appeared $28.69 \%, 4.35$ and $15.15 \%$ in the order mentioned. The ratios of HBL and EBL both are in decreasing trend during the study period. It was highest in the first and third year but the lowest in the last. Mean ratio of EBL came higher than that of HBL. It suggests that greater portion of total deposit in EBL has boon occupied by fixed deposit in contrast to HBL. It can grasp the opportunity of investing the fund in more profitable loans. On the other hand, HBL has the opportunity to invest in current assets so as to strengthen its liquidity position. CV analysis depicts that the ratios in HBL in the past years of research period remained more uniform then that of EBL.
The calculated value of $t$ remained less than the tabulated value at $5 \%$ level of significance ( $0.007<2.306$ ). Therefore null hypothesis has been accepted i.e. there is not significant difference between the mean ratios of two banks. Overall liquidity position of the sampled banks appeared almost similar. In comparison, EBL seemed slightly stronger than HBL.

### 4.1.2 Leverage Ratios

Leverage ratios have been analyzed and interpreted to judge the long-term financial health of the sampled banks. These include dept-equity ratios, debt-asset ratio, debt to total capital ratio and interest coverage ratio.

## a) Debt-equity Ratio

## Debt -Equity Ratio =

Shareholder's equity

Annex7 depicts that the debt-equity ratios of HBL were 16.42, 15.28, 14.2713 .04 and 11.27 in the respective years of study period. Mean and CV of the ratios appeared 14.06 and $12.68 \%$ respectively. Similarly the ratios of EBL remained $12.48,14.64,15.38,12.63$ and 15.39 in the corresponding years. Mean of the ratios came 14.11 whereas CV came $9.18 \%$. The ratio of HBL is in declining trend in sample years. In case of EBL, it is in increasing trend except the year 2007/08 . Average of the ratios appeared slightly greater in EBL as compared to that in HBL. Both of the banks seem levered but in comparison, EBL seems more levered in other words, capital structure of HBL is riskier than that of EBL CV of the ratios remained lower in EBL, which clarifies that the ratios of EBL were less consistent.

The calculated value of $t$ i.e. 0.97 was less than the tabulated value i.e. 2.306 at $5 \%$ level of significance. Hence, null hypothesis has been accepted i.e. two banks do not differ significantly with respect to this ratio.

## b) Debt-Asset Ratio

## Total Debt <br> Debt-Asset Ratio = Total Assets

Annex 8 depicts that the ratios for HBL remained $90.93 \%, 91.63 \%, 91.42 \%, 90.63 \%$ and $89.47 \%$ in the respective years of study period form the years 2004/05 to 2008/09. Average and CV of the ratios were $90.82 \%$ and $0.84 \%$ in that order. In the similar way, the ratios of EBL were $88.62 \%, 88.37 \%, 86.25 \%, 89.42 \%$ and $91.92 \%$ in the corresponding years. Mean of the ratio seemed $88.92 \%$ and CV seemed $2.06 \%$. The ratio reflected inconsistent policy of the banks in financing the assets proportion of interestbearing debt for the purpose. Mean of the ratio came greater in EBL as compared to that in HBL, which signifies that the former followed more aggressive policy in raising the capital. On the other hand capital structure of HBL seems less risky. Form the CV
analysis, it can be noticed that the ratios of EBL varied considerably throughout the review period.

The calculated value of $t$ was less than the table value at $5 \%$ level of significance ( $0.207<2.306$ ). Hence null hypothesis has been accepted i.e. two banks do not differ significantly with respect to the debt-asset ratio maintained by them in immediate past five years.

## c) Debt to Total Capital Ratio

Total Debt<br>Debt. to Total Capital Ratio=<br>Total Capital

Annex 9 highlights that the ratios of HBL remained $94.26 \%, 93.86 \%, 93.45 \%, 92.88 \%$, and $91.85 \%$ in the respective years of study period. Mean of the ratios came $93.26 \%$ and CV came $0.90 \%$. In the similar way, the ratios of EEL for the corresponding years remained $92.59 \%, 93.61 \%, 93.90 \%, 92.67 \%$, and $93.90 \%$ respectively Average of ratios was $93.99 \%$ and CV was $0.63 \%$. The ratio of HBL showed downing trend.. But the ratios of EBL are in increasing trend. The analysis makes it obvious that debt capital i.e. outsider's fund was dominant in the capital structure of both of the banks. EBL seems slightly ahead of HBL in rising the capital through debt as per the higher mean ratio CV of the ratio remained nominally lower in HBL. Which indicates greater uniformity in the ratios of different years.

The calculated value of $t$ came 0.913 , which is less than table value i.e. 2.306 at $5 \%$ level of significance. That's why null hypothesis has been accepted i.e. the mean ratio of two banks does not differ significantly.

## D) Interest Coverage Ratio

$$
=\quad \frac{\text { Net profit before of interest and tax }}{\text { Interest charges }}
$$

Annex 10 reveals that the ratios of HBL remained 1.93:1, 2.04:1, 1.93:1, 2.15:1 and 2.14:1 in the respective year of review period. Mean and CV of the ratios seemed 2.04:1 and $4.70 \%$ respectively. Accordingly, the ratios in EBL were maintained 1.83:1, 1.86:1, 1.86:1, 2.06:1, and 1.90:1 in the corresponding years. Mean of the ratios in the bank was 1.90 whereas CV was $4.26 \%$. The ratio in HBL depicted increasing trend up to the fourth year and then declined in the last year. In all the years of study period, the fund available for the payment of interest remained more than the requirement; however the margin was not satisfactorily high. The ratio in EBL depicted increasing trend up to the fourth year and then declined in the last year. In all the years of study period, the fund available for the payment of interest remained more than the requirement; however the margin was not satisfactorily high. By comparing the CV of the ratio, it can be concluded that the ratio of EBL for different five years varied considerably.
The calculated value of $t$ remained less than the table value $5 \%$ level of significance ( $0.010<20306$ ). That's why, null hypothesis has been accepted i.e. debt-servicing capacity of the sampled banks does not differ significantly.

From the analysis of leverage ratios, both of the banks seemed levered. But in comparison, HBL appeared more levered than EBL. Debt servicing capacity of EBL remained poor in the beginning years. However, the difference in the position of two banks did not appear significant.

### 4.1.3 Capital Adequacy Ratio

Capital adequacy ratios of the banks have been tested to find whether they are successful to reassure the depositors and creditors about their soundness; and also to maintain general confidence in the banking system. These include net worth to total deposit ratio, net worth to total asset ratio and net wroth to total credit ratio.
a) Net Worth to Total Deposit Ratio

Net worth
$=$
Total deposits

Annex 11 reveals that the ratios of HBL were $6.21 \%, 6.67 \%, 7.14 \%, 7.89 \%$ and $9.00 \%$ in the respective years of study period. Mean of the ratios appeared $7.38 \%$ and CV appeared $13.27 \%$. Accordingly, the ratios for EBL remained $8.25 \%, 6.98 \%, 6.61 \%, 8.01 \%$ and $6.61 \%$ in the corresponding years. Mean CV of the ratio were $7.29 \%$ and $9.62 \%$ in that order. The ratio of HBL showed slowly increasing trend up to fifth year, But the ratio of EBL showed fluctuation over the period, it ranged from $8.25 \%$ in the year 2004/05 to $6.61 \%$ in 2008/09. Average ratio of HBL appeared higher than that of EBL, which means the former is better with respect to the capital adequacy position. Higher CV of the ratios in HBL shows less consistency in maintaining net worth with respect to deposits.
The calculated value of $t(0.904)$ was less than the tabulated value at $5 \%$ level of significance (2.306). Therefore, null hypothesis has been accepted that is average ratio of two banks does not differ significantly.

## b) Net Worth to Total Assets Ratio

Net Worth to Total Assets Ratio<br>Net Worth<br>$=$<br>Total Assets

Annex 12 demonstrates that the ratios in HBL remained $5.54 \%, 6.00 \%, 6.40 \%, 6.95 \%$ and 7.93 form 2004/2005 respectively. Mean and CV of the ratios came $6.56 \%$ and $12.62 \%$ respectively. In EBL, the ratios were maintained $7.10 \%, 6.03 \%, 5.61 \%, 7.08 \%$, and $5.97 \%$ in the respective years. Average ratio appeared $6.36 \%$ whereas CV appeared $9.66 \%$. The ratio in HBL remained highest in the last year. It increased in the first year to last year. In EBL, it depicted fluctuating trend, which appeared maximum in year 2004/05 and minimum in last year. Mean ratio in HBL seemed higher which indicates that net worth in it has covered comparatively greater portion of total assets in other words, HBL is superior to EBL to check the possible risk that might arise due to high
leverage. CV of the ratios remained slightly greater in HBL. Which means that the ratios in the bank highly as against EBL.

The calculated value of $t$ was less than the table value at $5 \%$ level of significance ( $0.739<2.306$ ). Therefore, null hypothesis has been accepted i.e. sampled banks do not differ significantly regarding this ratio.

## c) Net Worth to Total Credit Ratio

## $=\quad$ Net Worth $\quad \frac{\text { Total Credit }}{}$

Annex 13 demonstrates that the ratios of HBL remained 6.39\%, 6.92\%, 7.45\%, 7.65\% and $9.31 \%$ in the respective year of study period. Mean and CV of the ratios appeared $7.54 \%$ and $17.07 \%$ respectively. Similarly the ratios in EBL seemed $8.54 \%, 6.88 \%, 6.44 \%$, $8.21 \%$ and $7.39 \%$ in the corresponding years. Mean of the ratios came $7.49 \%$ and CV came $10.53 \%$. The ratios of HBL revealed increasing trend throughout the review period it has $9.31 \%$ in last year form $6.39 \%$ in the base year, in EBL, it is fluctuating. IT has decrease for first two years than increase in fourth year again decreased to $7.39 \%$ in the last year. The ratio showed declining trend in EBL in spite of little rise in the fourth year. Mean ratio of HBL appeared abundantly higher which signifies that the capital adequacy position of EBL is better than that of EBL. But uniformity in maintaining the ratio of different years seems higher in HBL as per the lower CV.

The calculated value of $t$ i.e. 0.943 came less than the tabulated value at $5 \%$ level of significance i.e. 2.306. That is why, null hypothesis has been accepted i.e. there is no significant difference between the two banks with respect to tins ratio. In totality, capital adequacy position of EBL appeared stronger than that of HBL. In tins sense, EBL is more successful to reassure creditors and depositor about its soundness. However, the banks did not differ significantly with respect to capital adequacy position.

### 4.1.4 Turnover Ratio

Turnover ratios have been used to evaluate the efficiency with have managed and utilized their assets. These, include loans and advances to total deposit ratio, loans and advances to fixed deposit ratio, loans and advances saving deposit ratio, investment total deposit ratio, performing assets to total ratio and performing assets to total debt ratio.

## a) Loans and Advances to Total Deposit Ratio

Loans and advances
$=\quad \overline{\text { Total deposit }}$

Annex 14 exhibits that the ratio of HBL remained 97.19, 96.38, 95.92, 103.12 and 96.60 percent in the respective years of study period. Mean and CV of the ratios appeared $97.84 \%$ and $2.73 \%$ in that order. The ratios of EBL were 96.33, 101.44, 102.54, 97.59 and 89.53 percent in the corresponding years. Mean of the ratios came $97.53 \%$ and CV came $4.71 \%$. The ratio in HBL is slightly fluctuated throughout the study period. It descended to $95.92 \%$ in the third year and 96.60 in last year form $97.19 \%$ in the base year. EBL ratio also increase in two years than decreased to 89.53 in last year from 96.53 in the base year.

Mean ratio of HBL appeared considerably higher which signifies that HBL is more successful in utilizing the resources in profitable sectors than EBI "The trend of the ratio in EBI showed that in spite of decrease in the final year, there remained higher utilization capacity in each succeeding year. In last year, fall in the ratio could be noticed due to the increase in the amount of deposit by large volume than the volume of loans and advances. CV of the ratios depicted that the ratio remained more consistent in HBL as compared to EBL.

The calculated value of $t$ i.e. 0.914 remained less than the tabulated value at $5 \%$ level of significance i.e. 2.306. So that null hypothesis has been accepted i.e. two banks do not differ to the significantly with respect to this ratio.

## b) Loans and Advances to Fixed Deposit Ratio

Loans and advances
$=\quad \overline{\text { Total deposit }}$

Annex 15 highlights that the ratio in HBL 3.94, 4.02, 3.51, 5.11 and 5.25 in respective order from fiscal year 2004/05 to2008/09. Mean of the ratio appeared 4.36 and CV appeared $15.73 \%$. Similarly, the ratios of EBL remained 2.86, 3.30, 3.31, 3.62 and 4.23 in the corresponding years. Average and CV of the ratios appeared 3.46 and $13.06 \%$ respectively. The ratio of HBL has increased trend up to the last year of review period, it increased sharply. EBL has also increasing trend over the observation period With respect to this ratio, both of the banks have shown good performance in other words, both of these banks have well utilized the high interest bearing fixed deposit in the sector yielding satisfactory return. HBL seems more efficient in utilizing the fixed deposit between two banks as revealed by higher mean ratio CV analysis showed the lesser uniformity of ratios in it EBL as against the Himalayan Bank.

The calculated value of $t$ came less that the tabulated value at $5 \%$ level significance ( $0.013<2.306$ ). Therefore; null hypothesis has been accepted i.e. the difference noticed in the mean ratio of two banks is not significant.

## c) Loan and Advance to Saving Deposit Ratio

$=\quad \frac{\text { Loan and Advances }}{\text { Saving Deposit }}$

Annex 16 depicts that the ratios in HBL remained 1.87:1, 1.75:1, 1.82:1, 1.82:1 and $1.67: 1$ in the respective years of study period. Mean and CV of the ratios appeared 1.79 and $4.03 \%$, respectively. According to the ratio in EBL came 2.02:1, 2.02:1, 2.06:1, 1.96:1 and 2.01:1 in the corresponding years. Mean of the ratios came 2.02 and CV came $1.52 \%$. The ratio in HBL showed decreasing trend whereas with respect to EBL, is
showed fluctuating trend in third year and last year it has increased. Average of the ratios in EBL seemed higher than EBL which indicates that EBL has more successfully utilized the interest bearing deposit in terms of loans and advances moreover, turnover position of HBL is better than that EBL with respect to this ratio. The consistency in the ratio was found higher in EBL from the CV analysis.

The calculated value of $t$ came less that the tabulated value at $5 \%$ level significance $(0.004<2.306)$. Therefore; null hypothesis has been accepted i.e. the difference noticed in the mean ratio of two banks is not significant.

## d) Investment to Total Deposit Ratio

$=\quad \frac{\text { Investment }}{\text { Total Deposit }}$

Annex 17 exhibits that the ratio of HBL remained $50.07 \%, 41.10 \%, 39.35 \%, 41.89 \%$ and $25.12 \%$ respectively. Mean of the ratios appeared $39.51 \%$, and CV appealed $20.47 \%$. In the similar way the ratios of EBL were $21.08 \%, 30.43 \%, 27.41 \%, 21.10 \%$ and $17.85 \%$ in the corresponding years of the review period. Mean ratio appeared $23.58 \%$ and CV appeared $19.60 \%$ in the bank. The ratio showed decreasing trend in HBL. It descends to $50.07 \%$ in 2004/05 from $39.35 \%$ in third year and $25.12 \%$ in 2008/09 it has almost $100 \%$ decrease in the ratio.. In EBL it showed fewer declining trend. It arrived to $17.85 \%$ in the last year from $21.08 \%$ beginning year of the review period. Mean ratio came much higher in HBL, which signifies that HBL has more successfully allocated its deposit in investment portfolio, EBL has also made good portfolio in investments. CV of the ratios appeared slightly greater in HBL, which indicates lesser uniformity in its ratios.

The calculated value of $t$ came less than the tabulated value is $5 \%$ level of significance ( $0.016<2.306$ ). Hence, null hypothesis has been accepted which means the difference noticed in the mean ratio of two banks for the study period is not significant.

## d) Performing Assets to Assets Ratio

$=\quad \frac{\text { Performing Assets }}{\text { Total Assets }}$

According to annex 18 the ratio of HBL Remains $95.43 \%, 95.91 \%, 96.33 \%, 96.21 \%$ and $95.94 \%$ in the corresponding years of the period. Mean of the ratios appeared $95.96 \%$ whereas CV appeared $0.32 \%$. In the similar way ratios of EBL are $96.89 \%, 97.89 \%$, $98.17 \%, 97.29 \%$ and $97.51 \%$ the mean ratio is $97.55 \%$ and CV is in $0.46 \%$. The ratio in Both bank increased in the first two year then, it declined in the latter year and again increased in last year. The ratio of both bank has similar trend throughout the study period. EBL has higher average ratio than HBL. But HBL utilized its assets in terms of loans and advances, investment and bill discounting and purchasing more effectively than EBL. CV of the ratios in EBL exceeded the same in HBL which clarifies that the ratios remained less consistent in the former.

The calculated value of $t$ remained less than the tabulated value at $5 \%$ level of significance $(0.001<2.306)$. Hence, null hypothesis has been accepted i.e. turnover position of two banks with respect to tins ratio is not significantly different.

## f) Performing Assets to Total Debt. Ratio

## $=\quad \frac{\text { Performing Assets }}{\text { Total Debt }}$

Annex, 19 depicts that the ratios to HBL remained 107.09\%, 106.66\%, 107.45\%, $109.30, \% 108.7 \%$ in the respective years of study period. Mean and CV of the ratios appeared $107.85 \%$ and $0.94 \%$ respectively. In the similar way, the ratios in EBL were $112.58 \%, 113.18 \%, 115.69 \%, 110.16 \%$ and $108.03 \%$ in the corresponding years. Mean and CV of the ratios came $111.93 \%$ and $2.35 \%$ in that order. The ratio in HBL showed fluctuating trend throughout the review period whereas it remained in rising trend in EBL up to the fourth year and decreased in the final year. Mean of the ratios came greater in EBL than in HBL, which indicates that EBL remained more successful regarding the use
of the cost bearing debt in profitable sectors. In other words, EBL seemed at upper level with respect to the wise and beneficial use of outsiders fund. But Present Financial Crises caused to decrease in Deposit increment ratio makes fall down in the PA to TD ratio of Both Banks. CV analysis showed that the variation in the performing assets to total debt of HBL was more uniform than that of EBL.

The calculated value of $t$ was less than the tabulated value at $5 \%$ level of significance ( $0.076<2.306$ ). Therefore, null hypothesis has been accepted i.e. the difference in the mean ratios of the sampled banks is not significant. In totality, HBL seemed more efficient to utilize the resources in profitable sectors. But the performance of the banks did not appear significantly different except in mobilizing saving deposit in terms of loans and advances.

### 4.1.5 Asset Qualify Ratio

Asset quality ratios intend to measure the quality of assets owned by the banks. These include loan loss coverage ratio, loan loss provision to total income ratio, loan provision to total deposit ratio and accrued interest to total interest income ratio.

## a) Loan Loss Coverage Ratio

Loan loss Provision
$=$
Total Risk Assets

Annex 20 exhibits that the ratios for the different year of the review period remained $8.07 \%, 4.23 \%, 2.65 \%, 2.14 \%$, and $2.09 \%$ respectively in HBL. Mean of the ratios came $3.84 \%$ whereas CV came $58.76 \%$. Accordingly, the ratios of EBL remained $2.89 \%, 2.39 \%, 2.24 \% 2.13 \%$, and $1.96 \%$ in the corresponding year. Mean of the ratios appeared $2.32 \%$ and CV $13.60 \%$. The ratio in both of the banks showed fluctuation over the period of study. It reached maximum in the first year and reduced in the second in HBL. But with respect to EBL, it reached highest in the second year and fell the lowest in third. Mean ratio of HBL exceeded that of EBL. It indicates that EBL has been more successful to foresee the quality of loans lent. Conversely, the asset possessed by HBL has higher degree of risk as compared to that of EBL. That's why, the former bank has
maintained comparatively higher ratio to prevent itself from possible default in payment by borrowers. CV of the ratio seemed less in HBL, which reveals to lat the consistency in ratios greater in HBL.
The calculate value of $t$ i.e. 0.195 came less than the tabulated value i.e. $2.306 \%$ at $5 \%$ level of significance therefore, null hypothesis has been accepted, that is, the mean ratio of the sampled banks does not differ significantly.
b) Loan Loss Provision to Total Income Ratio
$=\quad \frac{\text { Loan loss Provision }}{\text { Total Income }}$

Annex21, highlight that the ratios of HBL were 196.46\%, 166.48\%, 110.90\%, $71.88 \%$ and $68.10 \%$ in the respective years of review period. Mean and CV ratio appeared $122.76 \%$ and $41.63 \%$. Similarly, the ratios in EBL were $112.49 \%$, $97.35 \%, 94.97 \%$, $74.44 \%$ and $63.88 \%$ in the corresponding years. Mean is the ratios seemed $88.63 \%$ and CV seeded $19.54 \%$. The ratio in HBL is in decreasing trend through out the period. In the second year it decreased by $15.26 \%$ and $33.38,35.18$ in next two years then in last year decreased by $5.25 \%$ only. It shows that, bank has advanced on secured area so bad loan is reduced and able to make better profit. In EBL, it depicted the decreasing trend. Mean ratio remained higher in HBL than in EBL, which signifies that HBL held comparatively greater portion of risky assets. Moreover, HBL has been forced to retain greater portion of its income idle as the cushion against loans of inferior quality.
CV analysis signifies that the ratios of HBL remained less uniform throughout the period of study.

The calculated value of $t$ remained less than the tabulated value at $5 \%$ level of significance $(0.126<2.306)$. Therefore, null hypothesis has been accepted i.e. the average of the ratios does not significantly between the sampled banks.

## c) Loan Loss Provision to Total Deposit Ratio

Loan loss Provision<br>$=$<br>Total Deposit

Annex22, highlight that the ratios of HBL were 4.14\%, 4.23\%, 2.65\%, 2.14\% and 2.09 in the respective years of review period. Mean and CV ratio appeared $3.05 \%, 30.98 \%$. Similarly, the ratios in EBL were $2.79 \%, 2.43 \%, 2.30 \%, 2.07 \%$ and $1.76 \%$ for the corresponding years Mean and CV of the ratio come $2.27 \%$ and $15.21 \%$ respectively. The ratio in both of the banks showed decreased over the period of study, the ratio in HBL declined to $2.09 \%$ in the last year form $4.14 \%$ in the first year which is around $49.51 \%$ decrease in ratio. EBL was decreased to $1.76 \%$ in last year from $2.79 \%$ from the first year which is around 36.92 \%.Lower CV of the ratios in EBL means that the consistency in the loan loss provision with respect to the deposits as higher in EBL.

The calculated value of $t$ remained less than the tabulated value at $5 \%$ level of significance $(0.081<2.306)$. Therefore, null hypothesis has been accepted i.e. the average of the ratios does not significantly between the sampled banks.

## d) Accrued Interest to Total Interest Income Ratio

## Accrued Interest <br> $=\quad \overline{\text { Total interest income }}$

Annex 23 shows that the ratios in HBL remained $35.34 \%, 33.84 \%, 18.96 \%, 17.70 \%$ and $16.08 \%$ in the respective years of the review period. Mean and CV of the ratios came $24.39 \%$ and $34.43 \%$ respectively. In EBL, the ratios were $22.22 \%, 12.18 \%, 7.28 \%$, $5.95 \%$ and $3.81 \%$ in the corresponding years. Mean of the ratios appealed $10.29 \%$ and CV appeared $63.84 \%$. The ratio in HBL descended slowly during the sample period whereas it revealed screwed decreasing trend in EBL. Mean of the ratios appeared greater in HBL, which signifies that comparatively more portion of total interest income in the bank remained accrued. Moreover, the loans advanced by HBL seemed less effective higher CV of the ratios in EBL indicates greater variability of the ratios in it. The calculated value of $t$ was less than the tabulated value at $5 \%$ level of significance ( $0.002<2.306$ ). Therefore, null hypothesis has been accepted average ratio of two banks does not differ significantly. In totality, the assets possessed by HBL seemed less effective in the sense that the greater default in payment occurred in them. However,
sampled banks did not differ significantly except in the case of loan loss provision to total deposit.

### 4.1.6 Profitability Ratio

Profitability ratios have been employed to measure the operating efficiency of the sampled banks. For the purpose return on asset, return on net worth return on total deposit total interest expenses to total interest income ratio interest earned to total asset ratio, staff expenses to total income ratio and office operation expenses to total income ratio have been analyzed and interpreted.
a) Return on Total Asset


Annex 24 demonstrates that the ratio in HBL remained $1.11 \%, 1.55 \%, 1.47 \%, 1.76 \%$ and $1.91 \%$ in the respective years of review period. Mean and CV of the ratios appeared $1.56 \%$ and $17.64 \%$ respectively. Accordingly, the ratios of EBL in the corresponding years were $1.43 \%, 1.49 \%, 1.38 \%, 1.66 \%$ and $1.73 \%$ Mean of the ratios came $1.54 \%$ and CV came $8.71 \%$. In HBL, the ratio showed fluctuating trend. It rose astonishingly in the second year but declined in the second year of the review period and again increased in fourth year and last year. In EBL, the ratio showed fluctuating trend. It rose in the second year but declined in the second year of the review period and again increased in fourth year and last year.. Mean ratio was considerably higher in HBL, which signifies that the profitability position of the bank in relation to this ratio is far better than that of EBL. CV of the ratios in HBL exceeded the same in EBL by a large amount, which indicates that the variability of the ratios in HBL was much higher.

The calculated value of $t$ i.e. 0.825 was found less than tabulated value at $5 \%$ level of significance. Hence, null hypothesis has been accepted i.e. observed difference in the 4 mean ratio of the sampled banks is not significant.

## b) Return on Net Worth

Net profit after tax<br>$=\quad \overline{\text { Net Worth }}$

Annex 25 depicts that the ratios in HBL for the respective years of the study period were $20.00 \%, 25.90 \%, 22.92 \%, 25.30 \%$, and $24.13 \%$, Mean ratio appeared $23.65 \%$ and CV appeared $8.85 \%$. Om the similar way, the ratios of EBL remained $20.20 \%$, 24.64\%, $24.67 \%, 23.48 \%$ and $38.98 \%$ in the corresponding year. Mean and CV of the ratios seemed $24.40 \%$ and $11.54 \%$ respectively. The ratio in HBL ascended dramatically in the second year as compared to that in the first year and then slightly declined in the third year in last year it has increased by $20 \%$ upon base year. In EBL, it remained increasing, for first three years of the study period and decreases in fourth year. But it increase satisfactory in the last year, It has increase by $40 \%$ during the study period. Mean ratio of EBL appeared higher than that of EBL. CV of EBL is also higher than HBL but ratio is in increasing trend, so it is satisfactory. This indicates that the earning of tine former with respect to the shareholder's fund is appreciably high.

The computed value of $t$ came less than the tabulated value at $5 \%$ level of significance ( $0.569<2.306$ ). Hence, null hypothesis has been accepted profitability position of two banks with respect to this ratio is not significantly different.
c) Return on Total Deposit

```
    Net profit after tax
=
Net Worth
```

Annex 26 exhibits that the ratios in HBL remained $1.24 \%, 1.73 \%, 1.64 \%, 2.00 \%$, and $2.17 \%$ for the respective years of research period. Mean and CV of the ratios appeared $1.75 \%$ and $18.18 \%$ respectively in EBL, the ratios were $1.67 \%, 1.72 \%, 1.63 \%, 1.88 \%$ and $1.92 \%$ in the corresponding years. Mean of the ratios came $1.76 \%$ and CV came $6.56 \%$. The ratios in HBL followed increasing trend through out the sample period except in year 2006/07.In aggregate the ratio increased by $74.71 \%$. In EBL, ratios are in
increasing trend over the four years of period, ratio in the fiscal year 2006/07 is decreased by $15.25 \%$. During the observation period ratio is increased by $15.07 \%$. Mean of the ratio was higher in EBL than in HBL. It signifies that the profitability of HBL is unsatisfactory with respect to EBL the ratio is seems better in spite of sharp decline in the third year. Future more, HBL has better increment ratio than EBL. As depicted by CV analysis, the ratios widely varied in HBI than EBL.
The calculated value of $t$ i.e. 0.949 came less than the tabulated value i.e. 2.306 at $5 \%$ level of significance. So, null hypothesis has been accepted, that is, there is no significant difference between the positions of sampled banks as far this ratio is concerned.

## d) Total Interest Expenses to Total Interest Income Ratio

$=\quad \frac{\text { Total Interest Expenses }}{\text { Total Interest Income }}$

Annex 27 Highlights that the ratio of HBL for the respective years of study period remained $38.85 \%, 39.89 \%, 43.22 \%, 41.95 \%$, and $39.91 \%$. Mean and CV of the ratios appeared $40.76 \%$ and $3.89 \%$ respectively. In EBL, the ratios were $41.65 \%, 44.43 \%$, $45.19 \%, 40.85 \%$ and $46.32 \%$ in the corresponding years means of the ratio came $43.69 \%$ and CV came $4.80 \%$. The ratios in HBL reflected fluctuating trend, it has increased up to third year by $10 \%$ and decreased in later years in EBL, it depicted increasing trend up to the third year and then decreased in the following year and again ratio increased in last year. Lower mean ratio in HBL indicates better profitability position as compared to EBL. Overall picture shows that HBL is more successful in allocating the interest bearing debt in profitable sectors. On the other hand, it is also obvious that interest spread rate is high in the bank CV of the ratios appeared greater in EBL, which mean that were relatively less uniform throughout the review period.

The computed value of $t$ i.e. 0.081 remained less than the tabulated value i.e. 2.306 at 5\% level of significance. Hence null hypothesis has been occupied accepted i.e. mean ratio of the sampled banks does not differ significantly.

## e) Interest Earned to Total Assets Ratio

Total Interest Income<br>$=$<br>Total Assets

Annex 28 exhibits that the ratios of HBL remained $5.19 \%, 5.52 \%, 5.30 \%, 5.43 \%$ and $5.96 \%$ in the respective years of review period. Mean of the ratios appeared $5.48 \%$ and CV appeared 4.80\%. In EBL, the ratios were maintained 6.13\%, 5.66\%, 5.34\%, 5.70\% and $5.92 \%$ in the corresponding years. Mean and CV of the ratios came $5.72 \%$ and $4.68 \%$ respectively. In HBL, the ratio showed slight increasing whereas in EBL, it followed decreasing trend except in the last year of the study period. In HBL, the ratio ranged from $5.19 \%$ in the base year to $5.96 \%$ in the third year. In EBL, it ranged from $6.13 \%$ in the base year to $5.92 \%$ in the last year. Mean ratio was higher in EBL, which loads us to the conclusion that EBL managed the assets more effectively to earn interest. Further more, interest earned to the total assets in different years of the study period remained more uniform in EBL as revealed by lower CV.

The calculated value of $t$ appeared greater than the tabulated value at $5 \%$ level of significance i.e. $0.192<2.306$. Hence null hypothesis has been occupied accepted i.e. mean ratio of the sampled banks does not differ significantly.
f) Staff Expenses to Total Income Ratio

## Total Interest Income <br> $=\quad$ Total Income

Annex 29 demonstrates that the ratios of HBL were 34.18\%, 34.89\%, 40.54\%, 30.79\% and 33.858 in the respective years of the study period. Mean and CV of the ratios appeared $34.85 \%$ and $9.107 \%$ respectively. In the similar way, the ratios of EBL for the corresponding years remained $24.23 \%, 20.61 \%, 19.53 \%, 23.63 \%$ and $20.41 \%$. Mean of the ratios seemed $21.68 \%$ whereas the CV seemed $8.67 \%$. On examining the ratios of different year in HBL, it seems that staff expenses to total income are diminutive up and down over the study period except the f/y 2006/07. But it showed slight decrease in EBL
despite slight increase in the fourth year with respect to the preceding years, ratio in last year is decreased by $15 \%$ than base year. Mean ratio appeared significantly higher in HBL, from this, it can be concluded that considerably large portion of the income was spent for staff in HBL which might have affected the profitability position of the bank adversely. In another angle, it deems more successful to attract the efficient manpower and take the advantage of their talent. Higher level of facilities and incentive provided to the employees raise their moral; and confidence which reduces the labor absenteeism and turn over. On the others hand, EBL seemed to personnel. Higher CV of the ratios in HBL signifies lesser uniformity in maintaining this ratio.
The calculated value of $t$ i.e. 0.005 was less than the tabulated value 2.306 at $5 \%$ level of significance. Hence null hypothesis has been accepted i.e. observed difference in the mean; ratio of the sampled banks is not significant.

## g) Office Operation Expenses to Total Income Ratio

Total Operating Expenses

## $=$ Total Income

Annex 30 demonstrates that the ratios of HBL were 53.08\%, 49.03\%, 45.00\%, 36.28\% and $37.34 \%$ in the respective years of the study period. Mean and CV of the ratios appeared $44.15 \%$ and $14.77 \%$ respectively. The ratios of EBL remained $51.62 \%, 41.74 \%$, $40.27 \%, 34.99 \%$, and $31.89 \%$ in the corresponding years. Mean of the ratios came $40.10 \%$ and CV came $16.87 \%$. The ratios of HBL seemed to decline every year up the fiscal year 2007/08 and rise nominally in the final year. In EBL, it sharply decreased each year. The ratio in the last year decreased by $38.22 \%$ than base year. Mean ratio of EBL was considerably less than that of HBL, which means that the profitability position of the bank is sound enough in comparison to HBL conversely more than forty-four percent of the total income in average was spent for office operation in EBL. It might have affected the profitability of the bank adversely. CV analysts showed that the ratio in EBL were less consistent as compared to that in HBL.
The calculated value of $t$ i.e. 0.026 remained less than the $t$ i.e. 2.306 at $5 \%$ level of significance. Therefore, null hypothesis has been accepted i.e. mean ratio of two banks does not differ significantly. Overall position of EBL appeared better than that of HBL.

HBL is more successful in utilizing the resources effectively. In another side HBL has made more profits than EBL during the study period. But the banks did not differ significantly except in earning interest with respect to the assets.

### 4.1.7 Others Indicators

Besides the above- analyzed ratios, some indicators have been tested to have the broader knowledge of financial performance of the banks. For this, EPS, DPS, TPS, DPR, P/E ratio and MVPS to BVPS have been analyzed.

### 4.1.7.1 Earning Per Share (EPS)

## Earning Available To Common Shareholders <br> $=$ <br> Number of Equity Shares Out-Standing

Annex 31 depicts that the EPS in HBL were Rupees 47.91, 59.25, 60.67, 62.74, and 61.90 in the respective years of review period. Mean of the ratios was 58.49 and CV was $9.27 \%$ similarly the ratios in EBL remained Rupees 53.40, 62.75, 78.41, 91.82 , and 99.98 in the same period. Mean of the ratios appeared 77.27 and CV appeared $22.49 \%$. EPS in HBL depicted rising trend up to the third year of review period but it dropped in the following two year. In the last year EPS is increased by $29.20 \%$ than base year. The ratio in EBL is sharply increased for the first two years and then increased less than previous years, in overall EPS is increased by $87.24 \%$ in last year in comparison to the first year. The net profit in EBL is increased by 2.8 times in the same period. This is the reason for highly increment in EPS. Mean ratio was much higher in EBL is contrast to HBL, which indicates that the profitability position of the formed is far better than that of the latter. In this sense, EBL seems more successful to attract the investors. CV of the ratio in EBL is higher than HBL, which shows lack of consistency in EBL in the different years. But it is due to increasing trend of EPS.

The calculated value of $t$ remained less than the tabulated value $0.048<2.306$ at $5 \%$ level of significance. Hence null hypothesis has been accepted i.e. noticed difference in average EPS of the sampled banks is not significant.

### 4.1.7.2 Dividend Per Share (DPS)

Earning paid To Common Shareholders<br>$=$<br>Number of Equity Shares Out-Standing

Annex 32 highlights that the DPS of HBL remained Rupees 31.44, 34.99, 40.00, 45.00, 43.55 in the respective years of the study period. Mean and CV of DPS are 39.00 and $13.13 \%$ respectively. Accordingly, the ratios in EBL were Rupees 20.00, 25.00, 40.00, 50.00 , and RS60.00 in the respective years of the study period year. Mean of the ratios 39.00 and CV appeared $38.38 \%$. HBL paid dividend in increasing trend up to fourth year. Dividend per share in last year remained declined by little portion. But EBL paid dividend in increasing trend in each year. Mean DPS of both banks came equal. But DPS growth rate of EBL is better than HBL. As dividend is the direct return received by the shareholders, they evaluate the organization paying high dividend as the better one. This means demand on share of EBL is higher than HBL and price of EBL share in secondary market is higher than HBL. Higher CV of the ratios in EBL depicts that income not pay dividend in the consistent manner.

The calculated value of i.e. 2.2003 appeared less than the tabulated value i.e. 2.306 at $5 \%$ level of significance. That's why, null hypothesis has been accepted i.e. average DPS does not differ significantly between the sampled banks.

### 4.1.7.3 Tax Per Share (TPS)

$=\quad \frac{\text { Tax paid to the Government }}{\text { Number Of Equity Shares Out-Standing }}$

Annex 33 depicts that the TPS of HBL in the respective years of the analysis period remained rupees $33.30,27.83,27.82,30.88$ and 25.80 . Mean and CV of the ratios came 29.13 and $9.08 \%$ respectively. In the similar way, the ratios in EBL were 26.00, 28.25,
38.20, 44.14 and 43.35 in the respective years of analysis period. Mean of the ratios appeared 35.99 and CV appeared $20.98 \%$. The ratios in EBL followed increasing trend for first four years and then it nominally declined in the final year. In HBL, it remained fluctuated. In second and third year it has decreased and in third year it increased by $15 \%$ and again decreased in last year. Mean ratio in EBL was much higher which indicates that it might have realized sufficiently good return from investment in contrast to HBL. As a result, shareholders of EBL have contributed more in the revenue of the country as compared to those of HBL. CV analysis signifies that investors of HBL have contributed for the welfare of the nation more ultimately throughout the study period.

The calculated value of i.e. 0.204 appeared less than the tabulated value i.e. 2.306 at 5\% level of significance. That's why, null hypothesis has been accepted i.e. average TPS does not differ significantly between the sampled banks.

### 4.1.7.4 Dividend Payout Ratio (DPR) <br> $=\quad \frac{\mathrm{DPS}}{\mathrm{EPS}}$

Annex 34 highlight that the ratios in HBL remained 65.62\%, 59.05\%, 65.93\%, 71.72\% and $70.36 \%$ in respective years of the study period. Mean DPR and CV appeared $66.54 \%$ and $6.68 \%$ respectively. Same indicator in EBL remained 37.45\%, 39.84\%, 51.01\%, $54.45 \%$ and 60.01 . Mean and CV of the indicators came $48.55 \%$ and $17.75 \%$ in respective order. The indicator in HBL remained increasing trend from first year to the last year. In the last year, it increases by $7.22 \%$ than base year. The indicator in EBL remained increasing trend from first year to the last year. In the last year, it increases by $60.02 \%$ than base year. Mean DPR appeared greater in HBL, which signifies that it distributed comparatively more proportion of dividend out of its earning. In other words, it remained more successful of attract the investors. CV of the indicators came much higher in EBL, which indicates that dividend payout for different years of the period was more variable.

The calculated value of $t$ remained less than the tabulated value at $5 \%$ level of significance i.e. $0.004<2.306$. Therefore, null hypothesis has been accepted i.e. mean DPR of two banks does not differ significantly.

### 4.1.7.5 Price-earning Ratio

## MVPS <br> $=\quad \begin{gathered}\text { EPS }\end{gathered}$

Annex 35 depicts that $\mathrm{P} / \mathrm{E}$ ratio of HBL for the respective years of the study period were 19.31, 26.33, 42.53, 45.47 and 29.79 Mean of the ratio: came 32.68 and CV came $30.23 \%$. Similarly, the ratios of EBL were $16.29,21.89,30.99,34.11$ and 24.55 in the corresponding years of the period Mean of the ratios appeared 25.58 and CV appeared $24.86 \%$. The ratio in HBL has in increasing trend up to fourth year than declined in the last year. The ratio in the third and fourth year was very high as compared to the rest of the years. In EBL, it remained increasing up to the fourth year of the study period. Then it decreased in the last year of study period. Mean ratio of EBL appeared lower which mean the investors are well satisfied with the performance of the bank. In other words, market has positively judged the performance of EBL higher CV of the ratios in HBL indicates that the ratio varied widely in the bank.

The calculated value of $t$ war, loss than time tabulated value at $5 \%$ level of significance i.e. $0.017<2.306$. So, null hypothesis has been accepted i.e. mean $\mathrm{P} / \mathrm{E}$ ratio of the sampled banks does not differ significantly.

### 4.1.7.6 Market Value per Share to Book Value per Share (MVPS/BVPS)

## MVPS <br> $=\quad$ BVPS

Annex 36 exhibits that the indicators in HBL for the respective years of the study period arrived $3.86,6.82,9.75,11.51$ and 7.19. Mean and CV of the indicators appeared 7.82 and 33.51 respectively. Same indictors of EBL were $3.29,5.41,7.64,8.01$ and 7.12 for the corresponding years. Mean of the ratio came 6.30 and CV come $27.73 \%$. The
indicator in HBL depicted increasing trend up to the fourth year of study period and then down in the final year. The indicator in EBL also depicted increasing trend up to the fourth year of study period and then down in the final year. Mean value of the indicators appeared greater in HBL, which indicates comparatively not stronger management and organization in HBL than in EBL. CV of the indicators came less in EBL, which means indicator, varied less over the period of study.
The calculated value of $t$ was less than the tabulated value at $5 \%$ level of significance. Hence, null hypothesis has been accepted mean value of the indicators does not differ significantly between the sampled banks. Other indicators show that the performance of EBL is better than that of HBL But the banks did not seem to differ significantly except in the; case to tax per share.

### 4.2 Income and Expenditure Analysis

Income and expenditure analysis evaluates major sources of income and expenses. Tines help the analyst to conclude the areas to be focused for investment and tin possibilities for affective control over expenses. The analysis cover is the followings.

포 Income analysis
포 Expenditure analysis

### 4.2.1 Income Analysis

Commercial banks generate income form the investment made in various sectors. The banks, being service-oriented organizations, do not produce physical goods they produce loans and advances and innovations and sell the same. In the courses of carrying out their functions, they receive income form various sources which been split up into the following major headings.

```
포 Interest
포 Commission and discount
#ᄑ Foreign exchange fluctuation income
포 Other income
```



Fig -4.2


## a) Interest Income

Interest is the main and major source of income in the commercial banks. These banks charge interest on loan and advances provided by thorn they also receive interest form investment made in government securities, debentures and inter- bank lending.

Annex 37 shows that interest income in HBL remained 82.29\%, 79.64\%, 82.18\%, $81.10 \%$ and $80.14 \%$ in the respective years of study period. Interest income downed from $82.29 \%$ in the first year to $80.14 \%$ in the last. In each year, more than Four-Fifth of the
income was occupied by the interest. Mean of the ratio came $81.07 \%$ and CV come 1.31\%

Annex 38 depicts that the interest income in EBL registers 84.03\%, 84.95\%, 84.24\%, $84.24 \%$ and $85.50 \%$ over the study period form the fiscal year 2004/05 to 2008/09 respectively. Interest income ranged from $84.03 \%$ in the first year of the study period to $85.50 \%$ in the last year. It showed a little increasing trend. In each year, interest income seemed to cover more than four-fifth of the total income. Hence, interest income remained dominant in the total income. Mean of the ratio came $84.55 \%$ and CV come 0.68\%

While discussing on interest income we have to consider about interest receivable which accrued on interest income. For this purpose we have added accrued interest on interest received. By this analysis we can see how much interest is accrued in total interest income.

Annex 39 exhibits that the accrued interest to total interest income ratio in HBL for the respective years of the study period arrived $26.11 \%, 25.28 \%, 15.94 \%, 15.04 \%$ and 13.86 . Mean and CV of the indicators appeared $19.25 \%$ and $27.61 \%$ respectively. Same ratios of EBL were $12.22 \%, 10.86 \%, 6.79 \%, 5.62 \%$ and $3.67 \%$ for the corresponding years. Mean of the ratio came $7.38 \%$ and CV come $41.06 \%$. The indicator in HBL depicted decreasing trend up to the last year of study period. The indicator in EBL also depicted decreasing trend up to the last year of study period. Mean value of the indicators appeared greater in HBL, which indicates comparatively not stronger advances and investment management and organization in HBL than in EBL. CV of the indicators came less in HBL, which means indicator, varied less over the period of study.

## b) Commission and Discount

Commercial banks render various types of services to their customers. They provide remittance facility, guarantees, standing instructions, open letter of credit, Issuance of
demand drafts, purchase and discount bill of exchange along with other agency functions for making such facilities available, they receive certain charges in form of commission in and discount. It also covers significant portion of total income.

Annex 37 depicts that part of commission and discount earned by HBL in the respective years of the study period remained $7.55 \%, 8.10 \%, 8.94 \%, 7.76 \%$ and $9.73 \%$. The portion of commission and discount is in increasing trend except the fiscal year 2007/08.
Annex38 deposit that the commission and discount be $9.12 \%, 9.10 \%, 8.66 \%, 8.16 \%$ and 7.90 respectively form 2004/05 to 2008/09. It ranged form $9.12 \%$ in the first year to $7.90 \%$ in the final year. It revealed decreasing trend throughout the study period.

Average of the income in HBL and EBL remained $8.42 \%$ and $8.49 \%$ respectively. It signifies that commission and discount covered almost same proportion in the total income of both of the banks. CV of the incomes in HBL came $9.61 \%$ whereas it came $5.74 \%$ in EBL. This shows that the proportion commission and discount in total income remained less uniform in HBL.

## c) Foreign Exchange Fluctuation Income

One of the major functions of the commercial bank is transaction of foreign currency. Commercial banks are allowed to purchase and sell foreign currencies under the directives of NRB and rules, regulations and laws in effect. Income under this heading encompasses them trading gain derived form the exchange of foreign currencies due to the fluctuations in the exchange rate.

Annex 37 depicts that the foreign exchange fluctuation income shared $7.81 \%, 9.70 \%$, $7.02 \%, 8.58 \%$ and $8.55 \%$ of total income of HBL in the respective year of the study period. Proportion of this income remained least in the year 2006/007 and most in 2005/2006. We cam interpret that the proportion is in decreasing trend.

From the annex 38, the income of EBL appeared 3.17\%, 1.35\%, 2.09\%, 3.50\% and $2.44 \%$ from the year 2004/05 to 2008/09 respectively. The percentage of income showed
fluctuation over the years. Minimum percentage of income was noticed in the year 2005/06, whereas the maximum percentage in 2007/2008.

On the average, income remained $8.33 \%$ in HBL and $2.51 \%$ in EBL. From this result, it can be concluded that foreign exchange fluctuation income occupied comparatively greater portion in HBL. The income in various years remained more uniform in HBL as depicted by lower CV i.e. $10.71 \%<30.44 \%$.

## d) Other Income

Income not included in any of the above heading comes under this heading. Other income comprises revaluation gain and non-operating income such as dividend.

Annex 37 highlight that portion of other income in HBL in the respective years of the study period recorded $2.35 \%, 2.56 \%, 1.87 \%, 2.56 \%$ and $1.58 \%$. The income in different years of the study period revealed fluctuating. Minimum percentage of income was noticed in the year 2006/07, whereas the maximum percentage in 2004/2005.

From the Annex38, other income in EBL appeared 3.68\%, 4.60\%, 5.01\%, 4.29\% and $4.16 \%$ in the respective years of the period. It remarkably rose up to the third year and then slightly decreased in the latter years. In the bank, income under this heading has also covered significant portion.

Mean of the incomes in HBL came $2.18 \%$ and $4.35 \%$ in EBL. Greater mean in EBL signifies that other income contributed slightly more portion of total income. CV of the incomes remained higher in $\operatorname{HBL}$ (18.03\%>10.18).EBL in the income received turn this source appeared less consistent in HBL.

### 4.2.2 Expenses Analysis

Expenses are the cost incurred in course of operating various activities the banks need to pay interest for the deposits and borrowings to handle all other resources, there is a term of personnel whom the bank pays lagans and provide other facilities. Besides, a
significant potion of income is spent for daily operation. For the study purpose evaluation of the following form of expenses been made.

| 포 | Interest expenses |
| :--- | :--- |
| 포 | Staff expenses |
| 포 | Office operation expenses |
| 포 | Bonus facility |

Fig 4.3


Fig 4.4


## a) Interest Expenses

It is one of the major parts of operation expenses. Commercial banks pay interest on various types of deposit, loans and advances taken from other banking and financial institution, government etc. Since transfer of the money from the excess units to the deficit units is the significant function of the commercial banks, interest occupies more than three fourth of the total operating expenses.

Annex 40 depicts that interest expenses remained $52.23 \%, 50.68 \%, 52.82 \%, 52.97 \%$ and $51.91 \%$ in the respective years of the study period in HBL. Interest expenses showed fluctuating trend over the period. It ranged from $52.23 \%$ in the first year to $51.91 \%$ in the last. It shows the increasing success of the bank, to attract the deposit loans and advances. As observed in Annex 41, the interest expenses out of total expenses in EBL recorded $57.90 \%, 61.71 \%, 62.59 \%, 58.03 \%$, and $64.07 \%$ respectively from $2004 / 05$ to 2008/09. The proportion of expenses showed increasing trend except in the fourth year, it was decreased by $7.28 \%$ than the last year.
Mean of the interest expenses in HBL and EBL appeared 52.12\% and 60.86\% respectively. This shows that interest expenses covered more portions in EBL as compared to that in HBL and CV of the expenses came $1.57 \%$ in HBL whereas it came
$4.08 \%$ in EBL. It signifies that interest expenses in the total mix of the operation expenses remained more consistent in HBL.

## b) Staff Expenses

In any organization, manpower plays vital role in the success of failure so that organization. Well-motivated staffs are the ornaments of the organization. In return of the service provided by them, they need to be paid remuneration which is included under this heading. Staff expenses; include salary, different, forms of allowances incentives, fringes benefits etc.

Annex 40 reveals that the staff expenses in HBL remained $16.60 \%, 18.32 \%, 20.02 \%$, $18.79 \%$ and 20.05 in the respective years of the study period. It showed increasing trend up to the third year and decreased in the fourth year and then increased in the last year.

From the Annex 41 it is seen that the stall expenses in EBL were $11.71 \%, 10.90 \%$, $10.42 \%, 14.48 \%$ and $11.82 \%$ respectively form the year 2004/05 to 2008/09 it occupied significantly high portion of total expenses in the first year and the mean gradually up to the fourth year. In the final year, it slightly grows on.

Average of the staff expenses came $18.76 \%$ and $11.87 \%$ in HBL and EBL respectively it means the proportion of staff expenses in HBL, was more than fifty percent the same in HBL. From the staff point of view, HBL seems more attractive and HBL seems more efficient in its operation. CV of the expenses appeared $6.79 \%$ and $11.86 \%$ in HBL and EBL respectively. Hence, the ratio of staff expenses to total expenses varied more in HBL.

## c) Office Operation Expenses

For the routine work of the commercial banks, considerable amount of expenses in incurred. All the expenses made for the operation of the bank such as rent, hire, telephone-telex-fax charge, electricity charge, administrative expenses etc come under this heading. Generally, these expenses occupy second major portion in the composition of total expenses.

Annex 40 reveals that the office operation expenses in HBL remained 25.78\%, 25.75\%, $22.22 \%, 22.14 \%$ and $22.12 \%$ in the respective years of the study period. It showed
decreasing trend over the period. It declined to $22.12 \%$ in the last year from $25.78 \%$ in the beginning year. In other words, the efficiency of the bank increased latter year. Annex 41 shows that the office operation expenses covered $24.95 \%, 22.08 \%, 21.48 \%$, $21.45 \%$, and $18.47 \%$ in the respective years of the review period in EBL. It showed decreasing trend over the period. It declined to $18.47 \%$ in the last year from $24.95 \%$ in the beginning year. In other words, the efficiency of the bank increased latter year. The trend of the expenses shows that the bank gradually improved its operational efficiency. Mean expenses came $23.60 \%$ and $21.69 \%$ in HBL and EBL respectively. Lower mean expenses in EBL signifies that it is more successful to perform its operation efficiently, CV of the expenses appeared higher in EBL ( $9.51 \%>7.48 \%$ ) which means it maintained less consistency in making office operation expenses over the study period.

## d) Bonus Facility

When the bank earns profit, dividend is paid to the owners. Similarly, a part of the profit is paid to the staff as bonus, which is as the reward for their service. Generally, staffs prefer that bank which pays greater percentage of bonus. It acts as the motivator for them but it increases the volume of operating expenses.

Annex 40 shows that HBL spent $5.39 \%, 5.25 \%, 4.93 \%, 6.10 \%$ and $5.92 \%$ respectively for staff bonus. The bonus showed fluctuating trend in the period, it ranged from 5.39\% in the first year to $6.10 \%$ in the fourth year.

Annex 41 depicts that expenses for bonus in EBL remained 5.43\%, 5.32\%, 5.51\%, 6.04\% and $5.64 \%$ in the respective years of the study period. The proportion is in increasing trend in aggregate, it ranged from $5.39 \%$ in the first to $5.92 \%$ in the last year.
It reveals that EBL is more efficient in updating and encouraging its staff CV of the expenses appeared $7.82 \%$ in HBL whereas it appeared $4.43 \%$ in EBL. It signifies that EBL paid bonus to its staffs more consistently as compared to HBL.

### 4.3 Correlation Analysis

It is a useful statistical for measuring the intensity of the magnitude of linear relationship between two series. Karl Pearson's coefficient of correlation is most common and useful tool to measure the relationship between two variables in the bank. The correlation coefficient (r) between two variables X and Y can be obtained by using following formula.

$$
r=\frac{n \sum X Y-\sum X \sum Y}{\sqrt{n \sum x^{2}-\left(\sum x\right)^{2}} \sqrt{n \sum y^{2}-\left(\sum y\right)^{2}}}
$$

Where,
$\mathrm{n}=$ Number of observations in series X and Y
$\Sigma \mathrm{X}=$ Sum of observations in series X
$\Sigma Y=$ Sum of squared observations in series $Y$
$\Sigma X^{2}=$ Sum of squared observations in series $X$
$\Sigma Y^{2}=$ Sum of squared observations in series $Y$
$\Sigma X Y=$ Sum of the product of observations in series in $X$ and $Y$
Here,

| Degree | Direction |  |
| :--- | :--- | :--- |
|  | Positive | Negative |
| Perfect | +1 | -1 |
| Significant ( very high ) | +0.75 to +1 | -0.75 to -1 |
| High | +0.50 to +0.75 | -0.50 to -0.75 |
| Low | +0.25 to +0.50 | -0.25 to -0.50 |
| Insignificant (very Low) | 0 to +0.25 | 0 to -0.25 |
| Absent | 0 | 0 |

## Probable Error (PE)

The probable error is used to measure the reliability and test of significance of correlation coefficient. It is calculated by the following formula.
$1-\mathrm{r}^{2}$
P.E. $=0.6745$
$V_{n}$
P.E. is used in interpretation whether the calculated value of r is significant of not.
I.If $\mathrm{r}<$ P.E., it is insignificant, i.e. there is no evidence of correlation
II.If $r>6$ P.E., it is significant.
III.If P.E. < r < 6P.E. nothing can be concluded.

Under the correlation analysis, the intensity of linear relation between the following variables has been measured.

포 Total deposit and net profit
포 Performing assets and net profit
포 Net worth and net profit
포 Total deposit and investment
포 Total deposit and loans and advance
포 EPS and MVPS
포 DPS and MVPS
포 DPR and MVPS

## a) Correlation Analysis between Deposit and Net Profit

Annex 42 shows that the coefficient of correlation and probable error (P.E.) of correlation coefficient between total deposit and net profit in HBL 0.968 and 0.019. I the review period respectively correlation coefficient higher than six times the probable error i.e. $0.968>6 \mathrm{X} 0.019$. It deposit and net profit of the bank are positively correlated and the correlation is significant. The coefficient of correlation and probable error of the coefficient between the same variables in EBL were 0.996 and 0.00204 respectively. Correlation coefficient came greater than six times the probable error i.e. $0.9966>6 \mathrm{x}$ 0.002043 , that implies that the total deposit and net profit in the bank are highly and positively correlated in other word, net profit of the bank increases almost to the same degree with increase in the amount of deposit. Between two banks, EBL seems more efficient regarding the utilization of the deposit for income generating purpose as revealed by greater coefficient of correlation in EBL. In the review period, net profit of

EBL seemed to increase in line with increase in deposit that's why; it retains potentiality of increasing net profit by accumulating more despite.

## b) Correlation between Performing Assets and Net Profit

Annex 43 highlights that the coefficient of correlation and probable error of the coefficient between performing assets and net profit in HBL remained 0.969 and 0.018 respectively correlation coefficient is higher than six times the probable error i.e. 0.969 > $6 \times 0.018$. It signifies that the net profit and performing assets of the bank are positively related, and the correlation significant. Band can raise its net profit bye investing the fund in performing assets. And the coefficient of correlation and probable error of the coefficient between performing assets and net profit in EBL were 0.9930 and 0.0042 respectively. Correlation coefficient appeared greater the six times the probable error i.e. $0993<6 \times 0.004211$. It indicates that the net profit and performing assets of the bank are highly and positive related. Furthermore, the bank can raises its net profit by increasing the performing assets.
From the above analysis, there seems a significant correlation between the performing assets and net profit in EBL and HBL.

## c) Correlation between Net Worth and Net Profit

Annex 44 shows that the correlation coefficient and probable error of correlation coefficient between net worth and net profit in HBL remained 0.976 and 0.0140 respectively. Correlation coefficient appeared higher than six times of probable error. Hence it implies that the relation between net worth and net profit the bank is highly positive and seem specific relationship. Same as in EBL seems 0.9794 and 0.0123 respectively. Coefficient of correlation appeared greater than six times the probable error i.e. $0.9645>6 \times 0.0181$ it implies that the correlation between the stated components is positive at significant level. Net profit in the bank seems to rise almost to the same degree as rise in the net worth.

On comparing two banks, net profit in both Banks seemed rises continuously with increase in the amount of net worth. In other words, EBL is slightly more successful to utilize the investors fund more prudently and effectively to realize the return.

## d) Correlation between Total Deposit and Investment

Annex 45 depicts that the coefficient of correlation and probable error of correlation coefficient between total deposit and investment in HBL remained -0.331 and 0.2685 in the study period. Since correlation coefficient is negative and in low degree, it shows that increase in deposit will not decrease investment in same proportion. The coefficient of correlation and probable error of coefficients between the variable in EBL are seen 0.8715 and 0.0725 respectively. Coefficient of correlation came greater than six times the probable error i.e. $0.8715<6 \times 0.0725$. It indicates that the correlation between total deposit and investment of the bank are correlated at significant level.

With the increase in the amount of deposit, investment of the bank seems to increase between the two banks, it seems that HBL allocated greater portion of the fund collected form depositors in investment. In contrast, it seems that investment of EBL increased or decreased in slow pace with respect to the increase or decrease in the deposit.

## e) Correlation between Total Deposit and Loans and Advances

Annex 46 depicts that the coefficient of correlation and probable error of correlation coefficient between total deposit and loan and advances in HBL remained 0.978 and 0.0 .0131 in the study period. Correlation coefficient is higher than six times the probable error i.e. $0.978<6 \times 0.0131$. It shows that increase in deposit will increase advances in same proportion. It signifies that a positive relation occurs between the two components and the degree of relation is very highly significant, the coefficient of correlation and probable error of coefficients between the variable in EBL are seen 0.997 and 0.0018 respectively. Coefficient of correlation came greater than six times the probable error i.e. $0.997<6 \times 0.0018$. It indicates that the correlation between total deposit and loan and advances of the bank are correlated at significant level.

With the increase in the amount of deposit, advances of the bank seems to increase between the two banks, it seems that HBL allocated greater portion of the fund collected form depositors in advances. In contrast, it seems that investment of HBL increased or decreased in slow pace with respect to the increase or decrease in the deposit.

## f) Correlation between EPS and MVPS

Annex 46 highlight that lays correlation coefficient and probable error of coefficient between EPS and MVPS were 0.815 and 0.1011 respectively throughout the study period. Correlation coefficient appeared greater than six times the probable error I .e $0.0 .815>6 \times 0.1101$. It means MVPS and EPS of the bank are correlated at significant level. In other words, market price of share seems to rise with increase in the earning per share. The correlation coefficient and probable error of the correlation coefficient between EPS and MVPS in EBL were 0.0 .8937 and 0.0607 in the respective order. It signifies that EPS and MVPS of the bank are positively correlated moreover; market price of the share seems to increase with the increase in earning per share thought the degree.

## g) Correlation between DPS and MVPS

Annex 47 highlight that lays correlation coefficient and probable error of coefficient between DPS and MVPS were 0.835 and 0.0914 respectively throughout the study period. Correlation coefficient appeared greater than six times the probable error I .e $0.835>6 \times 0.0914$. It means MVPS and DPS of the bank are correlated at significant level. In other words, market price of share seems to rise with increase in the dividend payout per share. The correlation coefficient and probable error of the correlation coefficient between DPS and MVPS in EBL were 0.8624 and 0.0773 in the respective order. It signifies that DPS and MVPS of the bank are positively correlated moreover; market price of the share seems to increase with the increase in dividend pay out per share thought the degree.

## h) Correlation between DPR and MVPS

Annex 48 highlight that lays correlation coefficient and probable error of coefficient between DPR and MVPS were 0.501 and 0.2259 respectively throughout the study period. DPR and MVPS are positively correlated but Correlation coefficient appeared less than six times the probable error I .e $0.0 .501<6 \times 0.2259$. It means MVPS and DPS of the bank correlation is not at significant level. In other words, there is no relationship between market price of share and dividend payout ratio. The correlation coefficient and probable error of the correlation coefficient between DPS and MVPS in EBL were
0.8800 and 0.0681 in the respective order. It signifies that DPS and MVPS of the bank are positively correlated moreover; market price of the share seems to increase with the increase in dividend pay out per share thought the degree. Since r $>6$ PE, correlation between two variables is significant.

### 4.4 Least Square Liner Trend Analyses

Trend analysis is very useful to predict the future events on the basis of the past tendencies. This method is based on the assumption that past tendency continues in the future.

The future trend of any variable is forecasted using the equation,
Where,
$\mathrm{Yc}=$ the dependent variable
$\mathrm{a}=\mathrm{Y}$-intercept
$b=$ the slope of trend hue
$\mathrm{X}=$ Year 2004/05 (with regard to the date used in the study). The normal equations on fitting the trend equation are;

$$
\begin{aligned}
& \Sigma Y=N a+b \Sigma X \\
& \Sigma X Y=a \Sigma X+b \Sigma X^{2} \\
& \Sigma X=0, a=\frac{\Sigma y}{\sum \mathrm{n}}, \mathrm{~b}=\frac{\Sigma X Y}{\Sigma \mathrm{X}^{2}}
\end{aligned}
$$

With the help of trend equation, future value of the following variable for coming five year, have been predicated.

| 포 | Total deposit |
| :--- | :--- |
| 포 | Net worth |
| 포 | Total investment |

```
포 Loans and advance 포 EPS
```


## a) Least Square Linear Trend of Total Deposit

Annex 49 depicts that a i.e. y-intercept and b i.e. slope of the trend line of the total deposit in HBL appeared Rs 295,754.60 and 25,086.60 lakhs respectively. Throughout the review period, total deposit showed increasing trend on an average, total deposit increased by Rs 25086.00 lakh per year in the past period. Therefore, trend equation of the total deposit is.

$$
\mathrm{Yc}=295,754.60+25,086.60 \times \mathrm{X}
$$

On the basis of trend equation, forecasted total deposit for coming five years would be Rs $371,014.40,396,101.00,421,187.60,446,274.20$ and $471,360.80$ lakh respectively.
Annex 50 depicts that a i.e. y-intercept and b i.e. slope of the trend line of the total deposit in EBL were Rs 198,771.27 and 56,624.36 lakhs respectively. Total deposit revealed increasing trend throughout the study period. On an average total deposit increased by $56,624.36$ lakh per year. Therefore, trend equation of the total deposit is.

$$
\mathrm{Yc}=198,771.27+56,624.36 \mathrm{x} \mathrm{X}
$$

On the basis of trend equation, forecasted total deposit for coming five years (i.e. 2009/10 to 2013/14) would be Rs 368,644.36, 425,268.72, 481,893.09, 538,517.45 and 595,141.81 lakh respectively.

The Below table shows the trend values of deposits of Two banks for historical five years and forecasted trend value of upcoming five years and trend lines for whole ten years.

Table No.-4.1
Trend Value of Total Deposit


| $2007 / 08$ | $320,841.20$ | $255,395.63$ |
| :--- | :--- | :--- |
| $2008 / 09$ | $345,927.80$ | $312,019.99$ |
| $2009 / 10$ | $371,014.40$ | $368,644.36$ |
| $2010 / 11$ | $396,101.00$ | $425,268.72$ |
| $2011 / 12$ | $421,187.60$ | $481,893.09$ |
| $2012 / 13$ | $446,274.20$ | $538,517.45$ |
| $2013 / 14$ | $471,360.80$ | $595,141.81$ |
|  |  |  |

Source: Annex 49 and 50
The above chart shows the trend behavior of total deposits in HBL and EBL along with a actual line for past five years and trend line of average of these two banks. In the first year of trend HBL line has posses the highest area but due to the lowest degree of slope in its trend line. EBL has nearly equalized the deposit in 2008/09. Between two banks, average deposit and rate of the increase in total deposit both seem higher in EBL. In other words, total deposit if EBL will increase in higher rate for coming five year if the post trend continues.

## b) Lest Square Linear Trend of Net Worth

Annex 51 highlights that a i.e. o y-intercept and bi.e. slope of the trend line of the net worth in HBL were Rs 22,174.40 and Rs 3,903.0 lakh respectively. Throughout the review period, loans and advance revealed increasing trend. On an Year HBL Everest Bank Average, net worth increased by Rs 3,903.0 thousands per year in the past period. Therefore, trend equation of the loans and advances is

$$
\mathrm{Yc}=22,174.40+3,903.0 \times \mathrm{X}
$$

As per the trend equation obtained above, forecasted loans and advances for coming five years would be Rs 33,883.40, 37,786.40, 41,689.40, 45,592.40 and 49,495.40 lakhs respectively.
As shown by Annex 52, a i.e. Y- Intercept and bi.e. slope of the trend line of net worth are EBL were Rs 14,243.61 and 3,700.44 lakhs respectively. In the study period net worth revealed increasing trend and the rate of increase was Rs 3,700.44 lakh per year. Therefore, trend equation of the loans and advances is,

$$
\mathrm{Yc}=14,243.61+3,700.44 \times \mathrm{X}
$$

On the basic of the above trend equation, forecasted loans and advances for coming five years would be Rs 25,344.94, 29,045.38, 32,745.83, 36,446.27 and 40,146.72 respectively.

Table No.-4.2
Trend Value of Net Worth

| Year | HBL | EBL | Trend line(X axis -F/Y, Y-axis Net Worth) |
| :---: | :---: | :---: | :---: |
| 2004/05 | 14,368.40 | 6,842.72 | $\square \mathrm{HBL}-$ - EBL |
| 2005/06 | 18,271.40 | 10,543.16 | 60,000.00 |
| 2006/07 | 22,174.40 | 14,243.61 | 50,000.00 |
| 2007/08 | 26,077.40 | 17,944.05 | 40,000.00 |
| 2008/09 | 29,980.40 | 21,644.50 | 30,000.00 |
| 2009/10 | 33,883.40 | 25,344.94 | 20,000.00 |
| 2010/11 | 37,786.40 | 29,045.38 | 10,000.00 $\square$ |
| 2011/12 | 41,689.40 | 32,745.83 |  |
| 2012/13 | 45,592.40 | 36,446.27 |  |
| 2013/14 | 49,495.40 | 40,146.72 |  |

Source: Annex 51 and 52
The above chart shows the trend behaviors of net worth in HBL and EBL along with a trend line of average of these two banks. Between two banks average net worth and rate on increase the increase both seem higher in HBL. In other words, net worth will increase with higher rate in HBL for coming five years if the past trend continues.

## c) Lest Square Linear Trend of Investment

As depicted by Annex 53 a i.e. y-intercept and b i.e. slope of trend line of investment in HBL remained Rs $112,910.40$ and $-3,512$ lakhs respectively. Throughout the study period, investment of the bank showed decreasing trend. It decreased by an average amount of Rs 3,512 lakh per year.

Therefore, trend equation of investment is,

$$
\mathrm{Yc}=112,910.40+(-3,512) \times \mathrm{X}
$$

On the basis of above trend equation, forecasted investment of HBL for coming five years would be Rs. 10,2374.40, 98,862.40, 95,350.40, $91,838.40$ and 88,326.40 lakhs respectively.

Annex 54 depicts that a i.e. y-intercept and b i.e. slope of trend line of investment in EBL were Rs $44,643.60$ and $8,498.14$ laksh respectively. Investment of the bank showed increasing trend throughout the study. It increased by an average amount of Rs 8,498.14 lakh per year.

Therefore, trend equation of investment is,

$$
\mathrm{Yc}=44,643.60+8,498.14 \times \mathrm{X}
$$

As per the trend equation obtained above, forecasted investment of the bank for coming five years would be Rs 70,138.01, 78,636.15, 87,134.00, 95,632.42 and 104,130.56 lakhs respectively.

The below chart shows the trend behaviors of Investment in HBL and Everest bank along with a trend line shows the actual investment positions for last five years and trend of coming five years. On comparing two banks average investment of HBL is decreasing and EBL has increasing trend. It means investment will increase in higher rate in EBL for coming years if past trend remained same.

Table No.-4.3
Trend Value of Investment

| Year | HBL | EBL | Trend line(X axis -F/Y, Y-axis Investment) |
| :---: | :---: | :---: | :---: |
| 2004/05 | 119,934.40 | 27,647.32 |  |
| 2005/06 | 116,422.40 | 36,145.46 |  |
| 2006/07 | 112,910.40 | 44,643.60 |  |
| 2007/08 | 109,398.40 | 53,141.73 |  |
| 2008/09 | 105,886.40 | 61,639.87 |  |


| $2009 / 10$ | $102,374.40$ | $70,138.01$ |
| :--- | ---: | ---: |
| $2010 / 11$ | $98,862.40$ | $78,636.15$ |
| $2011 / 12$ | $95,350.40$ | $87,134.29$ |
| $2012 / 13$ | $91,838.40$ | $95,632.42$ |
| $2013 / 14$ | $88,326.40$ | $104,130.56$ |

Source: Annex 53 and 54

## d) Lest Square Linear Trend of Loan and advances

Annex 55 highlights that a i.e. y-intercept and b i.e. slope of trend line of loan and advances in HBL remained Rs 176,711.40 and 29,592.10 lakhs respectively. Loan and advances revealed increasing trend in review period. Average rate of increase in the amount of net worth came Rs 29,592.10 lakhs per year.

Hence, trend equation of loan and advances is

$$
\mathrm{Yc}=176,711.40+29,592.10 \times \mathrm{X}
$$

From the trend equation obtained above, forecasted loan and advances for coming five years would be Rs 265,487.70, 295,079.80, 324,671.90, 354,264.00 and 383,856.10 respectively.

From the Annex 56 a i.e. y-intercept and b i.e. slope of trend line of loan and advances in EBL seems Rs 146,615.64 and 41,069.78 lakhs respectively. Loan advances increases average amount of Rs 41,069.78 lakhs per year.

Therefore, trend equation of Loan and advances is,

$$
Y c=146,615.64+41,069.78 \times X
$$

On the basic of trend equation obtained above, the forecasted loan and advances of EBL for coming five years would be Rs $269,824.99,310,894.78,351,964.56,393,034.35$ and 393,034.13 lakhs respectively.

Table No.-4.4
Trend Value of Loan and Advances

| Year | HBL | EBL | Trend line(X axis -F/Y, Y-axis Loan \& Adv.) |
| :---: | :---: | :---: | :---: |
| 2004/05 | 117,527.20 | 64,476.07 | $\rightarrow$ HBL - - EBL |
| 2005/06 | 147,119.30 | 105,545.86 | 450000 |
| 2006/07 | 176,711.40 | 146,615.64 | $\begin{array}{l\|l\|l\|l\|l\|l\|l\|l\|l\|l\|} \hline 400000 & & & & & & & & \\ \hline \end{array}$ |
| 2007/08 | 206,303.50 | 187,685.43 | $300000{ }^{-}$ |
| 2008/09 | 235,895.60 | 228,755.21 | 200000 |
| 2009/10 | 265,487.70 | 269,824.99 |  |
| 2010/11 | 295,079.80 | 310,894.78 | $50000$ |
| 2011/12 | 324,671.90 | 351,964.56 | 10, 0 人 |
| 2012/13 | 354,264.00 | 393,034.35 | $\bigcirc \sim \sim$ |
| 2013/14 | 383,856.10 | 434,104.13 |  |

Source: Annex 55 and 56

The above chart shows the trend behaviors of loan and advances in HBL and Everest bank along with a actual line of loan and advances for sample period and trend line of loan and advance for next five years of two banks. On observing the past trend, average rate of increase is higher in HBL and slope of Loan and advances seems higher in EBL. Therefore, Loan and advances of EBL will increase in higher speed for coming year of trend of past trend continues.

## d) Least Square Linear Trend of EPS

Annex 57 shows that a i.e. $y$-intercept and b i.e. slope of trend line of EPS in HBL were Rs 58.49 and 3.15 respectively. EPS revealed increasing trend through out the study period. It increased with the rate of Rs 3.15 per year.

Hence, trend equation of EPS is

$$
\mathrm{Yc}=58.49+3.15 \times \mathrm{X}
$$

On the basic of trend equation obtained above, forecasted EPS of HBL for coming five years would be Rs $67.94,71.08,74.23,77.38$ and 80.52 respectively.

As shown by Annex 69 i.e. y-intercept and b i.e. slope of trend of EPS in EBL were Rs 77.27 and 12.22 respectively. EPS revealed increasing mean and the period of study. It increased with the rate of Rs 12.22 per year.

Therefore, trend equation of EPS is

$$
\mathrm{Yc}=77.27+12.22 \times \mathrm{X}
$$

As per the trend equation obtained above, forecasted EPS of EBL for coming five years would be Rs $113.94,126.16,138.69,150.61$ and 162.83 respectively.

Table No.-4.5
Trend Value of EPS

| Year | HBL | EBL | Trend line(X axis -F/Y, Y-axis EPS.) |
| :---: | :---: | :---: | :---: |
| 2004/05 | 52.20 | 52.83 | $\longrightarrow-\mathrm{HBL}-$ - EBL |
| 2005/06 | 55.35 | 65.05 |  |
| 2006/07 | 58.49 | 77.27 |  |
| 2007/08 | 61.64 | 89.50 | $\begin{array}{l\|l\|l\|l\|l\|l\|l\|} 140.00 \\ 120.00 \\ \hline \end{array}$ |
| 2008/09 | 64.79 | 101.72 |  |
| 2009/10 | 67.94 | 113.94 | $\begin{aligned} & 60.00 \\ & 40.00 \\ & \end{aligned}+$ |
| 2010/11 | 71.08 | 126.16 | 20.00 |
| 2011/12 | 74.23 | 138.39 |  |
| 2012/13 | 77.38 | 150.61 | $\because \quad \geqslant \quad \geqslant \quad \geqslant \quad \geqslant$ |
| 2013/14 | 80.52 | 162.83 |  |

Source: Annex 57 and 58
The above chart shows the trend behaviors of earning per share in HBL and EBL along with a trend line of average of these two banks. Between two banks, average EPS and rate of increase both are higher in EBL. Therefore, EPS of EBL will be higher in coming five years if past trend continues.

### 4.5 Major Findings

The following findings have been derived form the analysis and interpretation of date.

## 1) Liquidity Position

포 In term of current ratio both banks are below than the normal standard but EBL is slightly better than HBL. The average ratio of EBL is higher than HBL i.e. ( $2.19 \%>1.84 \%$ ). The C.V. of HBL is higher than EBL which indicates that HBL is riskier and there are fluctuations in the ratios of EBL, in HBL ratios are decreasing

포 In term of Cash and bank balance to deposit ratio the average ratio of EBL is $12.89 \%$, which is higher than HBL of $7.11 \%$. And with comparing to average ratio, EBL is more profitable because the liquidity position of EBL is better than that of HBL.

포 In term of cash and bank balance to current and saving deposit ratio, the average ratio of EBL is higher than HBL i.e. $21.90 \%>10.03 \%$ which indicates that a very high ratio indicates the unwise investment decision. This shows that the bank is unable to invest its current deposits in productive or profitable area.

포 Mean fixed deposit to the total deposit ratio came higher in EBL. It means that EBL can grasp the opportunity of investing the fund in more profitable sectors like long term loans. On the other hand, EBL can utilize less cost bearing fund in current assets and hence to strengthen the liquidity position.

## 2) Leverage ratio or Capital Structure ratio

포 The total debt to shareholders equity ratio describes the lenders contribution for each rupee of the owners' contribution. On the basis of C.V., EBL is lower than HBL. The variability of EBL is lower than HBL. This explains that EBL ratio is less fluctuating over the study period, than HBL. With comparing between HBL and EBL, EBL has slight higher average ratio than HBL. High total debt to shareholders equity ratio refers that the use of debts by the banks helps to enhance the rate of return of shareholders fund.

포 While comparing total debt to total assets ratio, the average ratio of HBL is higher than that of EBL i.e. $90.82 \%>88.92 \%$. From above analysis, debt to equity ratio of HBL is always higher than EBL, Which implies that HBL has riskier debt financing position as, compared to EBL over the study period.

포 In respect of Debt to total capital ratio both bank are using same level of Debt financing.

## 3) Activity Turnover Ratio

포 The loan and advance to total deposit ratio is employed to measure the utilization of their total deposit on loan and advances. The average ratio of EBL is nominally lower than that of HBL ( $97.53 \%<97.84 \%)$. It shows that both banks has better utilization of deposits at same level. According to co-efficient of variation, EBL is more fluctuating than HBL over the study period. The C.V. of EBL is $4.71 \%$ which is higher than EBL which is $2.73 \%$.

포 In term of loan and advance to fixed deposit ratio, the average ratio of HBL is higher than that of EBL i.e. $436.98 \%>346.80 \%$. In this analysis, it is concluded that HBL has proper utilization of fixed assets than EBL because HBL has higher average ratio than EBL.

포 In term of loan and advance to saving deposit ratio, the average ratio of HBL is lower than that of EBL i.e. $179.01 \%<202.02 \%$. Over fluctuation ratio of all fiscal year saving deposit is not efficiently utilized to invest in loan and advances due to the over function. The C.V. of HBL is higher than that of EBL which is $4.03 \%$ > $1.52 \%$. It shows that the ratios are fluctuating more in HBL than EBL. There is higher variability in ratios of HBL than EBL.

포 The investment by total deposit ratio measures the capacity utilization. The average ratio of HBL is higher than that of EBL i.e. $39.51 \%>23.58 \%$. The C.V. of EBL is lower than that of HBL which is $19.60 \%$ < $20.47 \%$. It shows that greater
fluctuation in ratios of HBL than EBL. From the above analysis it is employed that EBL is utilizing its deposits more on investment. It has better position in utilizing its proportion of deposits.

## 4) Profitability Ratio

포 Profitability ratio is measurement of efficiency and the search for it provides the degree of success in achieving desired profit. Profitability in term of Net Profit to total assets ratio of HBL is found higher than that of EBL. The yearly ratio of both banks is in fluctuating trend. It can be seen that EBL net profit to total assets ratio is less than that of HBL i.e. $1.54 \%<1.56 \%$. HBL has managed to earn a steady rate of return on its assets employed in each fiscal year. The average rate of return of HBL is higher than that of EBL, which concludes that HBL has found better performance by utilizing overall resources.

포 Net Profit to Total Deposit ratio of EBL is higher than that of HBL i.e. $1.76 \%>1.75 \%$. Comparatively, it can be said that EBL seems to be more successful in mobilizing its customers saving in much more productive sectors as its average ratio is higher in compare to HBL. C V shows HBL has not consistence in utilizing the resources than EBL.

## 5) Other Ratios

포 Income analysis shows that interest income remained dominant in both of the banks. More than three-fourth of the income was occupied by interest. Commission and discount occupied second major portion of the income in. HBL whereas other income occupied this portion in EBL. In both of the banks, interest expenses remained dominant and then overhead expenses.

## 6) Statistical Analysis

포 Test of Hypothesis suggested there is no significant difference between liquidity position, leverage position, profitability position and other major indicators of HBL and EBL, under t-test all the calculated values are lower than tabulated value

## CHAPTER V SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter is dedicated to provide conclusions after comparatively analyzing the financial performance of two joint venture banks named EBL and HBL. It also tries to provide some recommendations to the concerned banks from the conclusion derived from the study.

### 5.1 Summary

Banks, which deal with commercial activities, are known as commercial banks. These financial institutes help to integrate every financial activity of the community. The main objective of a commercial bank is to play a vital role in the development of good trade. Commercial banks are mechanisms of mobilizing funds in returnable resources. They offer financial support to all types of business through providing various types of loans and other financial services. Commercial banks aid the economic development of the nation.

Commercial banks pool together the savings of the community and use the funds productively through prudent investments. The commercial act 2031 defines a commercial banks as a bank which deals in exchanging currency, accepting deposits, giving loans an is involved in commercial activities.

Integrated and speedy developed of the country is possible only when competitive banking service reach every nooks and corners of the country. Today number of commercial bank are concentrated in only few places because lack of development of infrastructure in remote places. Government must give attention toward remote places.

Bank plays vital role in the economic development of nations. So today it is challenging for government to formulate the new banking policy rationally in remote area. Actually more than $60 \%$ of total areas of Nepal is covered with rural areas. For the economic development of rural areas it is necessary to provide banking services in rural areas.

The research work entitled the comparative study on financial performance analysis of commercials banks include the following banks: -

1) Everest Bank Ltd.
2) Himalayan Bank Ltd.

The research work should have reached the destiny where we satisfy with the queries of research problems which were specified in the statement of the problem in the introductory chapter. To conduct the research work, the researcher consulted mainly the secondary sources such as documents published by concerned banks and also consulted the personalities of the related bank as primary sources where as necessary. Before presenting and analyzing the data, there was also need to review of related books, prior research on the topic. Obviously, it helped the researcher to construct conceptual framework and to analyze and interpret the secondary data according to objective set forth previously. Then the research work was analyzed and interpreted by financial tools such as liquidity ratio, activity turnover ratio, leverage ratio, earning per share, profitability ratio and dividend per share as well as statistical tools such as mean, standard deviation, CV and F-test (one - way ANOVA).

In this way, the researcher analyzed and presented the 4th chapter, which was the main body of the research work. On the basis of data analysis and presentation, the researcher extracted some major findings. It has been explained along with the data analysis and presentation. So, on the basis of major findings the researcher reached in the conclusions keeping in the previously set objectives in mind. Ultimately, the researcher will recommend on the research problem to its stakeholders.

To know the real performance of banks, the researcher observed and analyzed the comparative performance analysis of two commercial banks for five years period. It is hoped that the comparative performance analysis of the commercial banks will give a rational result and represent the overall banking scenario in terms of performance analysis.

### 5.2 Conclusion

Establishment of commercial banks especially joint venture banks have continued in response to the economic liberalization policies of the government. So, now in Nepal there are twenty six (research period) commercial banks competing with each other in their business. These joint venture banks are mainly concentrated themselves on financing foreign trade, commerce and industry. This study has been mentioned already that the research concentrates. The researcher has evaluated data for the least 5 years period i.e. 2004/05 to 2008/09. The researcher has analyzed the data by using financial tools like ratio analysis as well as statistical tools like mean, s.d., hypothesis etc.

포 The liquidity ratio measures the ability of a firm to meet its short-term obligations and select the short-term financial solvency of a firm. The liquidity position of the banks in term of current ratios shows that the ratios of both banks EBL and HBL are always below the normal standard (i.e. 2:1) where as HBL average ratio is lower than EBL. It shows that the liquidity position in term of current assets to current liabilities of EBL is better than HBL. So, it is concluded that EBL is better short-term solvency position as compared with HBL. The Liquidity position of cash and bank balance to deposit ratio of EBL is higher than that of EBL (i.e. $12.89 \%$ > $7.11 \%$ on an average). So, it is concluded that EBL has sufficient cash and bank balance to deposit than that of EBL. Likewise, the liquidity position of EBL in terms of cash and bank balance to current and saving deposit ratio is found higher than HBL (i.e. $21.90 \%>10.03 \%$ in an average). Here, EBL has so high ratio that it is not better because "ideal assets earn nothing". So, both banks should invest in productive area. This analysis shows that EBL has more cash ideal than HBL. In the same way, fixed deposit to total deposit ratio of EBL is better than that of HBL. The ratio of EBL is higher. So, the higher ratio of fixed deposit to total deposit ratio indicates the strong liquidity position.

포 The activity turnover ratio is used to examine the efficiency with which the firm manages and utilizes its assets. The activity turnover of HBL in terms of loan and advances to total deposit ratio is slightly higher than that of EBL. The minimum ratio of HBL is $95.92 \%$ where as the maximum ratio of EBL is only $89.3 \%$. And the
average ratio of loan and advances to total deposit ratio of HBL and EBL are (i.e. $97.84 \%>97.53 \%$ ). From the analysis; it is concluded that HBL has been successfully utilized their deposits in term of loan and advances for profit generating purpose compared to EBL.

In terms of Loan and advances to fixed deposit ratio of HBL is higher than that of EBL (i.e. $436.98 \%>346.80 \%$ in an average) which means that HBL is utilizing its collected resources in the form of fixed deposits much more efficiently, which definitely lead to the increase income and thus, making an increment profit for the organization. The turnover position in term of loan and advances to saving deposit ratio, EBL is greater than HBL within the study period of 5 years. So, it is concluded that EBL has better turnover than HBL. EBL has invested high proportion of saving deposit in loan and advances as compared to HBL. But in terms of investment by total deposit ratio of HBL has higher average ratio ( $39.51 \%$ ) than that of EBL ( $23.58 \%$ ). So, it can be concluded that HBL is successful in utilizing its deposits on investment for income generating purpose. So in term of investment by total deposit ratio, HBL seems better than that of EBL.

포 The capital structure position in terms of total debt to shareholders equity ratio of EBL is higher than that of HBL. The average of total debt to shareholders equity ratio implies that the proportion of outsiders claim, in the total capitalization, is higher in EBL. It seems relatively more leverage. Thus, EBL has more risky and aggressive capital structure than HBL. Total debt to total assets ratio implies a banks success in exploiting debts to be more profitable as well as its riskier capital structure. The average of total debt to total assets ratio of HBL (90.82\%) is higher than EBL ( $88.92 \%$ ). Total debt to total assets ratio of HBL is higher as compared to EBL which implies that total debt the HBL has riskier debt financing position than that of EBL. From this analysis, capital structure ratio has clearly referred that total debt to shareholders fund and total assets are slightly higher for HBL as compared to EBL.

포 Profitability ratio is measurement of efficiency. It provides the degree of success in achieving desired profit. Profitability in terms of net profit to total assets
ratio, net profit to total deposit ratio, return to net worth (shareholders equity), return on net worth ratio and net profit margin ratio, EBL average ratio is always greater than that of HBL. Thus, it can be concluded that EBL is getting good return from its investment.

포 The analyzed data proved that the major source of income of both banks i.e., EBL and HBL is interest receipt. The collection of interest of EBL is the volume of total earning. The average of collection of interest income is from the calculation the researcher has found that the net profit margin ratio of EBL is more fluctuated than HBL.

포 The major expenses, for the banks EBL and HBL, are interest expenses, staff expenses, office expenses and provision for bonus.

포 In case of EBL, the EPS is more fluctuated than HBL. The average EPS of EBL is higher than HBL i.e. $77.27>58.49 \%$ within the study period. This shows that, EBL is found better performance in term of EPS than HBL.

### 5.3 Recommendation

Based on the summary and conclusion, the following suggestions and recommendations are forwarded: -

포 The liquidity position in terms of current ratio of both banks is below than normal standard. The average ratio of EBL is higher than HBL. But, both bank should increase current assets.

포 The overall liquidity position of EBL is better than HBL. HBL was loosing its liquidity position continuously up to the fourth of study period in the last year it has improved the ratio, So HBL has to maintain this ratio forwards.

포 The turnover of the commercial banks is the main factor of income generating activity. From the analysis of turnover of these two banks, HBL has better turnover than EBL in terms of loan and advances to fixed deposit ratio and investment by total deposit ratio. So, HBL has better utilization of resources in income generating activities than EBL. So, it is recommended that EBL should invest its deposit in profit generating sector.

포 The leverage position of EBL and HBL shows that, both banks are highly leveraged. Use of more debt helped to enhance the rate of return on shareholders fund. However, excessive use of debt may cause solvency of the bank. So, these banks should maintain a proper balance of total debt to shareholders fund.

포 Profitability position of EBL is in best condition as the bank is incurring higher profit. Here, comparatively, EBL has better profitability position. However, both banks are not in satisfactory level. So both banks are recommended to utilize the resources more efficiently for profit generating sector. If assets remain idle, banks should bear high cost and cause low profit margin.

포 From the point of view of income and expenditure analysis, the major source of income is interest received. The balance sheet as well as calculation shows that EBL has invested more amounts in government securities rather than loan and advances. So, EBL is recommended to invest in loan and advances.

포 The second major part of total expenses is operating expenses. The analyzed data proved that the EBL is comparatively, more efficient to reduce in operating as well as other expenses too. Even both banks should minimize their expenses as far as possible to enhance the volume of profit.

포 The commercial banks have been established gradually after the commercial bank act 2031 B.S. With the passage of time so many commercial banks,
as a joint venture, have been established gradually because of the liberal and market friendly economic policy of government.

포 Seventy percent of population is not getting banking facility yet, so bank should provide some social response by expanding their operation in rural areas rather than urban areas. In terms of rural Banking EBL has started Branch less banking which makes easily access on banking activities. Banks have to give response to poor and disadvantages groups. By establishing the branches in rural areas, minimum amount for opening accounts and interest rate should be reduced for priority sector creditor.
포 For the nation development banks should contribute from their side, development of infrastructure and hydropower sector are not invested by commercial banks. Banks are not interested in agricultural sector. They should lend in these sectors.

## BIBLIOGRAPHY

Agrawal, O P. Principles and Practices of Banking, New Delhi, Macmillan Publishers Bernstein, Leopoled. A and Wild, Jon J. (1998). Financial Statement Analysis, New York, McGraw- Hill Publication.

Bhalla, V.K. (2003).Investment Management Security Analysis and portfolio Management, India, S. Chanda publishing Company, Mumbai.
Bohara, Bhojraj. (1992). A Comparative Study of Financial Performance of NGBL and NIBL, Kathmandu, An unpublished master degree thesis submitted to FOM T.U. Chandra, Prasanna. (1994). Financial Management Theory and Practice, New Delhi, Tata Mc Graw-Hill Publishing Co. Ltd.

Chenney, John M. and Moses, Edward A. (1995). Fundamentals of Investment, New York, St. Paul West Publishing Company.

Chopra, Sunil (2046). Role of Foregin Banks in Nepal,Kathmandu, NRB Samachar, $34^{\text {th }}$ Anniversary.

Fischer, Donald E. Nad Jordan.(2000). India, Security Analysis of Portfolio Management, New Delhi.Prentices Hall of India.

Francis, Jack Clark.(1986). Investment analysis and Management, New York, Mc GrawHill publication.

Gautam, Rishi Raj and Thapa, Kiran (2008). Capital Structure Management, Kathmandu, Asmita publication

Ghimire, L.N.(1995). A Comparative Study of Financial Performance of HBL and NSBIBL, Kathmandu, An unpublished master degree thesis submitted to FOM T.U.

Gupta, O.P.(1985). Behavior of share Prices in India, India, A Test of Market Efficiency, New Delhi National Publishing House.
Gupta, S.P.(1991). Statistical Methods, India, Sultan Chand and sons Publications, New Delhi. India

Hampton, John J.(2005). Financial Decision Making, India, Prentice Hall of India Private Ltd. New Delhi.

Kene, Simon M. (1983).Stock Market Efficiency Theory, Evidence and Implication, India, Heritage Publisher New Delhi.

Khan, M.Y. and Jain P.K.(1997).Management Accountancy, India, Mc Graw- Hill Publishing company Ltd, New Delhi.

Kothari, C.P.(1994). Quantitative Techniques,India, Vikas Publishing House Pvt. Ltd, New Delhi.

Kuchhal, S.C. (1974).Financial Management, India,Chaitanya Publishing House Pvt. Ltd, New Delhi.

Panday, I.M. (2000). Financial Management, India, Vikas Publishing House Pvt. Ltd. New Delhi.

Pradhan, I.M.(2003). Financial Management Practices in Nepal, India, Vikas Publishing House pvt. Ltd, New Delhi.

Pradhan, Surendra,(1992). Basic Management, Kathmandu, Edcutional Enterprises Pvt. Ltd, Kathmandu.
Pradhan, Radhe s. (1993). Stock Market Behaviour in a small Capital market, Kathamdu, A Case of Nepal. The Nepalese Management Review, No 9 Central Department of Management.

Raghu Palat, (1991). Share for Investment and Wealth, A Guide to Investing Wisely, India, India Book Distributor, New Delhi.

Ragmi, M.C.(1969). Growth of Banking in Developing Economy, India, Sahity Bhawan Agra.

Sharma, Bhaskar(2007).Nepal's only secondary market in shambles, Kathmandu, Business age vol.3.

Sharm, Murari R.(1980). Jobs in Nepal, Coexisting or Crowingout,Kathmandu,The Nepales Journal of Public Administration, Lalitpur Prakashan.

Shrestha, M. K.1980).Financial Management Theroy and practice, Kathmandu, Curriculum Development Centre.
Shrestha, M.K. (1998). An Appraisal of Financial Position, Kathmandu, Nepal Bank Limited.

Van Horne, James C, (1998).Financial Management Policy, New Delhi, Prentice- Hall of India Private Ltd.

Van Horne, James C. (2000).Financial Management \& Policy, New Delhi, Prentice Hall India Pvt. Ltd.

Weston, J.F and Copeland, T.E. (1989).Managerial Finance, New York, The Dryden press.

Weston, J Fred and Brigham, Eugence F. (1972). Managerial Finance, New York, Holt Saunders, International Editions.

Websites
www.himalayanbankltd.com
www.everestbankltd.com
www.nrb.org.np

## ANNEX-1

## Current Ratio

(Amount in Lakh)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Current Assets | Current Liabilities | Current Ratio | Current Assets | Current Liabilities | Current Ratio |
| 2004/05 | 223360 | 62040 | 3.60 | 103695 | 39825 | 2.60 |
| 2005/06 | 237850 | 110330 | 2.16 | 113988 | 47839 | 2.38 |
| 2006/07 | 269999 | 231704 | 1.17 | 142268 | 73642 | 1.93 |
| 2007/08 | 294490 | 246960 | 1.19 | 247616 | 113548 | 2.18 |
| 2008/09 | 298130 | 279680 | 1.07 | 324255 | 172897 | 1.88 |
| Mean | 1.84 |  |  | 2.19 |  |  |
| S. D. | 0.97 |  |  | 0.27 |  |  |
| C. V | 52.72 |  |  | 12.32 |  |  |
| COMBINED S. D. |  |  |  | 0.63 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.32 |  |  |

Computation table of $\mathrm{SD}, \mathrm{CV}$, combined CD value of t
We here assume that current ratio of HBL as value X and current ratio of EBL as value Y

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Current <br> Ratio | ( $\mathrm{x}-\overline{\mathrm{X}}$ ) | $(x-\overline{\mathrm{x}})^{2}$ | Current <br> Ratio | $(\mathrm{Y}-\overline{\mathrm{Y}})^{2}$ | $(\mathrm{Y}-\overline{\mathrm{Y}})^{2}$ |
| 2004/05 | 3.60 | 1.76 | 3.11 | 2.60 | 0.41 | 0.17 |
| 2005/06 | 2.16 | 0.32 | 0.10 | 2.38 | 0.19 | 0.04 |
| 2006/07 | 1.17 | -0.67 | 0.45 | 1.93 | -0.26 | 0.07 |
| 2007/08 | 1.19 | -0.64 | 0.41 | 2.18 | -0.01 | 0.00 |
| 2008/09 | 1.07 | -0.77 | 0.59 | 1.88 | -0.32 | 0.10 |
|  | $\sum \mathrm{X}=9.18$ |  | $\begin{aligned} & \sum(\mathrm{x}-\overline{\mathrm{x}})^{2}= \\ & 4.67 \end{aligned}$ | $\sum \mathrm{Y}=10.97$ |  | $\Sigma(\mathrm{Y}-\overline{\mathrm{Y}})^{2}=0.37$ |

$\operatorname{Arithmetic} \operatorname{Mean}(X)=\frac{\sum X}{\mathrm{n} 1}=\frac{9.18}{5}=1.84$
$\operatorname{Arithmetic} \operatorname{Mean}(\mathrm{Y})=\frac{\sum \mathrm{Y}}{\mathrm{n} 2}=\frac{10.97}{5}=$

Standard Deviation (S.D.) of X

$$
\sigma_{\mathrm{X}}=\sqrt{\frac{\sum \mathrm{X}}{\mathrm{n} 1}-\frac{\left(\overline{\Sigma \mathrm{X})^{2}}\right.}{\mathrm{n}}}=\sqrt{\frac{\sqrt{(\mathrm{X}-\mathrm{X})^{2}}}{\mathrm{n}}}=\sqrt{\frac{\sqrt{4.67}}{5}}=0.97
$$

Standard Deviation (S.D.) of Y

$$
\sigma_{\mathrm{Y}}=\sqrt{\frac{\Sigma \mathrm{Y}}{\mathrm{n} 2}-\frac{(\overline{\Sigma \mathrm{Y}})^{2}}{\mathrm{n}}}=\sqrt{\frac{{ }^{(\overline{\mathrm{Y}}-\mathrm{Y})^{2}}}{\mathrm{n}}}=\sqrt{\frac{0.37}{5}}=0.27
$$

Coefficient of Variation of X

$$
\mathrm{CVx}=\frac{\sigma \mathrm{x}}{\mathrm{X}} \times 100 \%=\frac{0.97}{1.84}=52.72
$$

Coefficient of Variation of X

$$
\mathrm{CVy}=\begin{aligned}
& \sigma \mathrm{y} \\
& \mathrm{y}
\end{aligned} \mathrm{X} 100 \%=\begin{aligned}
& 0.27 \\
& 2.19
\end{aligned}=12.32
$$

Combined Standard Deviation (combine SD)

$$
\sqrt{\frac{\sum(\mathrm{x}-\overline{\mathrm{x}})^{2}+(\mathrm{Y}-\overline{\mathrm{Y}})^{2}}{\mathrm{n} 1+\mathrm{n} 2-2}}
$$

$$
=\sqrt{\frac{4.67+0.37}{5+5-2}}=0.63
$$

Test Statistics,

$=-0.93$
$/ t /=0.93$


ANNEX-2
Cash and Bank Balance to Current and Saving Deposit Ratio


ANNEX-3

## Cash and Bank Balance to Total Deposit Ratio



ANNEX-4
NRB Balance to Current and Saving Deposit Ratio


## ANNEX-5

## NRB Balance to Fixed Deposit Ratio


(Source: Annual reports of HBL and EBL from fiscal year 2004/05 to 2008/09)

ANNEX-6
Fixed Deposit to Total Deposit Ratio
Rupees in Lakh ('00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Fixed Deposit | Total Deposit | Ratio (\%) | Fixed Deposit | Total Deposit | Ratio (\%) |
| 2004/05 | 61074 | 248140 | 24.61 | 34040 | 100976.9 | 33.71 |
| 2005/06 | 63502 | 264908 | 23.97 | 42424 | 138024.4 | 30.74 |
| 2006/07 | 82011 | 300484 | 27.29 | 56267 | 181862.5 | 30.94 |
| 2007/08 | 64239 | 318428 | 20.17 | 64462 | 239763 | 26.89 |
| 2008/09 | 63771 | 346813 | 18.39 | 70500 | 333229.5 | 21.16 |
| Mean |  |  | 22.89 |  |  | 28.69 |
| S. D. |  |  | 3.20 |  |  | 4.35 |
| C. V (\%) |  |  | 13.98 |  |  | 15.15 |
| COMBINED S. D. |  |  |  | 4.79 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.007 |  |  |

(Source: Annual reports of HBL and EBL from fiscal year 2004/05 to 2008/09)

ANNEX-7
Debt Equity Ratio

| Banks |  |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HBL |  |  |  |  |  |
| Year | Total Debt | Equity | Ratio (\%) | Total Debt | Equity | Ratio (\%) |
| 2004/05 | 253200 | 15417 | 1642.34 | 103976.9 | 8326.18 | 1248.79 |
| 2005/06 | 269954 | 17662 | 1528.45 | 141024.4 | 9628.08 | 1464.72 |
| 2006/07 | 306444 | 21465 | 1427.65 | 184862.5 | 12015.15 | 1538.58 |
| 2007/08 | 327860 | 25130 | 1304.66 | 242763 | 19212.38 | 1263.58 |
| 2008/09 | 351813 | 31198 | 1127.68 | 339349.5 | 22036.25 | 1539.96 |
| Mean |  |  | 1406.15 |  |  | 1411.13 |
| S. D. |  |  | 178.36 |  |  | 129.49 |
| C. V (\%) |  |  | 12.68 |  |  | 9.18 |
| COMBINED S. D. |  |  |  | 155.86 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.97 |  |  |

ANNEX-8
Debt Assets Ratio

|  |  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | Total Debt | Total Assets | Ratio (\%) | Total Debt | Total Assets | Ratio (\%) |
| 2004/05 | 253200 | 278445 | 90.93 | 103976.9 | 117325.2 | 88.62 |
| 2005/06 | 269954 | 294603 | 91.63 | 141024.4 | 159592.8 | 88.37 |
| 2006/07 | 306444 | 335191 | 91.42 | 184862.5 | 214325.7 | 86.25 |
| 2007/08 | 327860 | 361755 | 90.63 | 242763 | 271493.4 | 89.42 |
| 2008/09 | 351813 | 393202 | 89.47 | 339349.5 | 369168.5 | 91.92 |
| Mean |  |  | 90.82 |  |  | 88.92 |
| S. D. |  |  | 0.76 |  |  | 1.83 |
| C. V (\%) |  |  | 0.84 |  |  | 2.06 |
| COMBINED S. D. |  |  |  | 1.69 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.207 |  |  |

ANNEX-9
Debt to Total Capital Ratio


ANNEX-10
Interest Coverage Ratio

|  |  |  |  | EBL Rupees in Lakh ( 00000 ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | EBIT | Interest | Ratio (\%) | EBIT | Interest | Ratio (\%) |
| 2004/05 | 10846 | 5620 | 192.99 | 5497 | 2996 | 183.48 |
| 2005/06 | 13212 | 6488 | 203.64 | 7454 | 4014 | 185.70 |
| 2006/07 | 14849 | 7674 | 193.50 | 9580 | 5172 | 185.23 |
| 2007/08 | 17726 | 8237 | 215.20 | 13007 | 6326 | 205.61 |
| 2008/09 | 20014 | 9348 | 214.10 | 19285 | 10129 | 190.39 |
| Mean |  |  | 203.88 |  |  | 190.08 |
| S. D. |  |  | 9.58 |  |  | 8.10 |
| C. V (\%) |  |  | 4.70 |  |  | 4.26 |
| COMBINED S. D. |  |  |  | 11.238 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.010 |  |  |

## ANNEX-11

## Net Worth to Total Deposit Ratio

|  |  |  |  | EBL Rupees in Lakh (0000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Net Worth | Total Deposit | Ratio (\%) | Net Worth | Total Deposit | Ratio (\%) |
| 2004/05 | 15417 | 248140 | 6.21 | 8326.18 | 100976.9 | 8.25 |
| 2005/06 | 17662 | 264908 | 6.67 | 9628.08 | 138024.4 | 6.98 |
| 2006/07 | 21465 | 300484 | 7.14 | 12015.15 | 181862.5 | 6.61 |
| 2007/08 | 25130 | 318428 | 7.89 | 19212.38 | 239763 | 8.01 |
| 2008/09 | 31198 | 346813 | 9.00 | 22036.25 | 333229.5 | 6.61 |
| Mean |  |  | 7.38 |  |  | 7.29 |
| S. D. |  |  | 0.98 |  |  | 0.70 |
| C. V (\%) |  |  | 13.27 |  |  | 9.62 |
| COMBINED S. D. |  |  |  | 0.853 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.904 |  |  |

ANNEX-12
Net Worth to Total Assets Ratio
Rupees in Lakh ('00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Net Worth | Total Assets | Ratio (\%) | Net Worth | Total Assets | Ratio (\%) |
| 2004/05 | 15417 | 278445 | 5.54 | 8326.18 | 117325.2 | 7.10 |
| 2005/06 | 17662 | 294603 | 6.00 | 9628.08 | 159592.8 | 6.03 |
| 2006/07 | 21465 | 335191 | 6.40 | 12015.15 | 214325.7 | 5.61 |
| 2007/08 | 25130 | 361755 | 6.95 | 19212.38 | 271493.4 | 7.08 |
| 2008/09 | 31198 | 393202 | 7.93 | 22036.25 | 369168.5 | 5.97 |
| Mean |  |  | 6.56 |  |  | 6.36 |
| S. D. |  |  | 0.83 |  |  | 0.61 |
| C. V (\%) |  |  | 12.62 |  |  | 9.66 |
| COMBINED S. D. |  |  |  | 0.736 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.739 |  |  |

ANNEX-13
Net Worth to Total Credit Ratio

|  |  |  |  | EBL $\quad$ Rupees in Lakh (00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Net Worth | Total credit | Ratio (\%) | Net Worth | Total Credit | Ratio (\%) |
| 2004/05 | 15417 | 241168 | 6.39 | 8326.18 | 97476.03 | 8.54 |
| 2005/06 | 17662 | 255316 | 6.92 | 9628.08 | 140018.2 | 6.88 |
| 2006/07 | 21465 | 288210 | 7.45 | 12015.15 | 186484 | 6.44 |
| 2007/08 | 25130 | 328377 | 7.65 | 19212.38 | 233986.4 | 8.21 |
| 2008/09 | 31198 | 335038 | 9.31 | 22036.25 | 298331.5 | 7.39 |
| Mean |  |  | 7.54 |  |  | 7.49 |
| S. D. |  |  | 0.99 |  |  | 0.79 |
| C. V (\%) |  |  | 13.07 |  |  | 10.53 |
| COMBINED S. D. |  |  |  | 0.893 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.943 |  |  |

ANNEX-14
Loan and Advances to Total Deposit Ratio

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Loan and Advances | Total Deposit | Ratio (\%) | Loan and Advances | Total Deposit | Ratio (\%) |
| 2004/05 | 241168 | 248140 | 97.19 | 97476.03 | 100976.9 | 96.53 |
| 2005/06 | 255316 | 264908 | 96.38 | 140018.2 | 138024.4 | 101.44 |
| 2006/07 | 288210 | 300484 | 95.92 | 186484 | 181862.5 | 102.54 |
| 2007/08 | 328377 | 318428 | 103.12 | 233986.4 | 239763 | 97.59 |
| 2008/09 | 335038 | 346813 | 96.60 | 298331.5 | 333229.5 | 89.53 |
| Mean |  |  | 97.84 |  |  | 97.53 |
| S. D. |  |  | 2.67 |  |  | 4.59 |
| C. V (\%) |  |  | 2.73 |  |  | 4.71 |
| COMBINED S. D. |  |  |  | 3.761 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.914 |  |  |

ANNEX-15
Loan and Advances to Fixed Deposit Ratio
Rupees in Lakh ('00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Loan and Advances | Fixed Deposit | Ratio (\%) | Loan and Advances | Fixed Deposit | Ratio (\%) |
| 2004/05 | 241168 | 61074 | 394.88 | 97476.03 | 34040 | 286.36 |
| 2005/06 | 255316 | 63502 | 402.06 | 140018.2 | 42424 | 330.04 |
| 2006/07 | 288210 | 82011 | 351.43 | 186484 | 56267 | 331.43 |
| 2007/08 | 328377 | 64239 | 511.18 | 233986.4 | 64462 | 362.98 |
| 2008/09 | 335038 | 63771 | 525.38 | 298331.5 | 70500 | 423.17 |
| Mean |  |  | 436.98 |  |  | 346.80 |
| S. D. |  |  | 68.75 |  |  | 45.31 |
| C. V (\%) |  |  | 15.73 |  |  | 13.06 |
| COMBINED S. D. |  |  |  | 73.641 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.013 |  |  |

ANNEX-16

## Loan and Advances to Saving Deposit Ratio



ANNEX-17
Investment to Total Deposit Ratio

|  |  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | Investment | Total Deposit | Ratio (\%) | Investment | Total Deposit | Ratio (\%) |
| 2004/05 | 124245 | 248140 | 50.07 | 21289.32 | 100976.9 | 21.08 |
| 2005/06 | 108890 | 264908 | 41.10 | 42005.15 | 138024.4 | 30.43 |
| 2006/07 | 118230 | 300484 | 39.35 | 49843.14 | 181862.5 | 27.41 |
| 2007/08 | 133402 | 318428 | 41.89 | 50595.57 | 239763 | 21.10 |
| 2008/09 | 87107 | 346813 | 25.12 | 59484.8 | 333229.5 | 17.85 |
| Mean |  |  | 39.51 |  |  | 23.58 |
| S. D. |  |  | 8.09 |  |  | 4.62 |
| C. V (\%) |  |  | 20.47 |  |  | 19.60 |
| COMBINED S. D. |  |  |  | 10.336 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.016 |  |  |

ANNEX-18

## Performing Assets to Total Assets Ratio

|  |  |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Performing <br> Assets | Total Assets | Ratio (\%) | Performing <br> Assets | Total Assets | Ratio (\%) |
| 2004/05 | 265723 | 278445 | 95.43 | 113675.9 | 117325.2 | 96.89 |
| 2005/06 | 282542 | 294603 | 95.91 | 156217.5 | 159592.8 | 97.89 |
| 2006/07 | 322883 | 335191 | 96.33 | 210398.2 | 214325.7 | 98.17 |
| 2007/08 | 348043 | 361755 | 96.21 | 264126.2 | 271493.4 | 97.29 |
| 2008/09 | 377231 | 393202 | 95.94 | 359975.2 | 369168.5 | 97.51 |
| Mean |  |  | 95.96 |  |  | 97.55 |
| S. D. |  |  | 0.31 |  |  | 0.45 |
| C. V (\%) |  |  | 0.32 |  |  | 0.46 |
| COMBINED S. D. |  |  |  | 0.881 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.001 |  |  |

ANNEX-19

## Performing Assets to Total Deposit Ratio

|  |  |  |  | EBL $\quad$ Rupees in Lakh (00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Performing Assets | Total Deposit | Ratio (\%) | Performing Assets | Total Deposit | Ratio (\%) |
| 2004/05 | 265723 | 248140 | 107.09 | 113675.9 | 100976.9 | 112.58 |
| 2005/06 | 282542 | 264908 | 106.66 | 156217.5 | 138024.4 | 113.18 |
| 2006/07 | 322883 | 300484 | 107.45 | 210398.2 | 181862.5 | 115.69 |
| 2007/08 | 348043 | 318428 | 109.30 | 264126.2 | 239763 | 110.16 |
| 2008/09 | 377231 | 346813 | 108.77 | 359975.2 | 333229.5 | 108.03 |
| Mean |  |  | 107.85 |  |  | 111.93 |
| S. D. |  |  | 1.01 |  |  | 2.63 |
| C. V (\%) |  |  | 0.94 |  |  | 2.35 |
| COMBINED S. D. |  |  |  | 2.848 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.076 |  |  |

ANNEX-20
Loan Loss Coverage Ratio
Rupees in Lakh ('00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Loan loss Provision | Total Risk Assets | Ratio (\%) | Loan loss Provision | Total Risk Assets | Ratio (\%) |
| 2004/05 | 10267 | 127203 | 8.07 | 2813.29 | 97476.03 | 2.89 |
| 2005/06 | 11194 | 264908 | 4.23 | 3348.92 | 140018.2 | 2.39 |
| 2006/07 | 7957 | 300484 | 2.65 | 4186.18 | 186484 | 2.24 |
| 2007/08 | 6821 | 318428 | 2.14 | 4973.14 | 233986.4 | 2.13 |
| 2008/09 | 7264 | 346813 | 2.09 | 5849.26 | 298331.5 | 1.96 |
| Mean |  |  | 3.84 |  |  | 2.32 |
| S. D. |  |  | 2.25 |  |  | 0.32 |
| C. V (\%) |  |  | 58.76 |  |  | 13.60 |
| COMBINED S. D. |  |  |  | 1.779 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.195 |  |  |

ANNEX-21
Loan Loss Provision to Total Income Ratio

|  |  |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Loan loss Provision | Total Income | Ratio (\%) | Loan loss Provision | Total Income | Ratio (\%) |
| 2004/05 | 10267 | 5226 | 196.46 | 2813.29 | 2501 | 112.49 |
| 2005/06 | 11194 | 6724 | 166.48 | 3348.92 | 3440 | 97.35 |
| 2006/07 | 7957 | 7175 | 110.90 | 4186.18 | 4408 | 94.97 |
| 2007/08 | 6821 | 9489 | 71.88 | 4973.14 | 6681 | 74.44 |
| 2008/09 | 7264 | 10666 | 68.10 | 5849.26 | 9156 | 63.88 |
| Mean |  |  | 122.76 |  |  | 88.63 |
| S. D. |  |  | 51.11 |  |  | 17.32 |
| C. V (\%) |  |  | 41.63 |  |  | 19.54 |
| COMBINED S. D. |  |  |  | 41.800 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.126 |  |  |

ANNEX-22

## Loan Loss Provision to Total Deposit Ratio

|  |  |  |  | EBL Rupees in Lakh (00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Loan loss Provision | Total Income | Ratio (\%) | Loan loss Provision | Total Income | Ratio (\%) |
| 2004/05 | 10267 | 248140 | 4.14 | 2813.29 | 100976.9 | 2.79 |
| 2005/06 | 11194 | 264908 | 4.23 | 3348.92 | 138024.4 | 2.43 |
| 2006/07 | 7957 | 300484 | 2.65 | 4186.18 | 181862.5 | 2.30 |
| 2007/08 | 6821 | 318428 | 2.14 | 4973.14 | 239763 | 2.07 |
| 2008/09 | 7264 | 346813 | 2.09 | 5849.26 | 333229.5 | 1.76 |
| Mean |  |  | 3.05 |  |  | 2.27 |
| S. D. |  |  | 0.94 |  |  | 0.34 |
| C. V (\%) |  |  | 30.98 |  |  | 15.21 |
| COMBINED S. D. |  |  |  | 0.811 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.081 |  |  |

ANNEX-23

## Accrued Interest to Total Interest Income Ratio



ANNEX-24

## Return To Total Assets Ratio

Rupees in Lakh (‘00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Net Profit After Tax | Total Assets | Ratio (\%) | Net Profit After Tax | Total Assets | Ratio (\%) |
| 2004/05 | 3083 | 278445 | 1.11 | 1682 | 117325.2 | 1.43 |
| 2005/06 | 4575 | 294603 | 1.55 | 2372 | 159592.8 | 1.49 |
| 2006/07 | 4919 | 335191 | 1.47 | 2964 | 214325.7 | 1.38 |
| 2007/08 | 6359 | 361755 | 1.76 | 4512 | 271493.4 | 1.66 |
| 2008/09 | 7528 | 393202 | 1.91 | 6387 | 369168.5 | 1.73 |
| Mean |  |  | 1.56 |  |  | 1.54 |
| S. D. |  |  | 0.28 |  |  | 0.13 |
| C. V (\%) |  |  | 17.64 |  |  | 8.71 |
| COMBINED S. D. |  |  |  | 0.217 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.825 |  |  |

## ANNEX-25

## Return On Net Worth Ratio

|  |  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | Net Profit After Tax | Net Worth | Ratio (\%) | Net Profit After Tax | Net Worth | Ratio (\%) |
| 2004/05 | 3083 | 15417 | 20.00 | 1682 | 8326.18 | 20.20 |
| 2005/06 | 4575 | 17662 | 25.90 | 2372 | 9628.08 | 24.64 |
| 2006/07 | 4919 | 21465 | 22.92 | 2964 | 12015.15 | 24.67 |
| 2007/08 | 6359 | 25130 | 25.30 | 4512 | 19212.38 | 23.48 |
| 2008/09 | 7528 | 31198 | 24.13 | 6387 | 22036.25 | 28.98 |
| Mean |  |  | 23.65 |  |  | 24.40 |
| S. D. |  |  | 2.09 |  |  | 2.81 |
| C. V (\%) |  |  | 8.85 |  |  | 11.54 |
| COMBINED S. D. |  |  |  | 2.508 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.569 |  |  |

ANNEX-26

## Return On Total Deposit Ratio

|  |  |  |  | EBL Rupees in Lakh (00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Net Profit After Tax | Total Deposit | Ratio (\%) | Net Profit After Tax | Total Deposit | Ratio (\%) |
| 2004/05 | 3083 | 248140 | 1.24 | 1682 | 100976.9 | 1.67 |
| 2005/06 | 4575 | 264908 | 1.73 | 2372 | 138024.4 | 1.72 |
| 2006/07 | 4919 | 300484 | 1.64 | 2964 | 181862.5 | 1.63 |
| 2007/08 | 6359 | 318428 | 2.00 | 4512 | 239763 | 1.88 |
| 2008/09 | 7528 | 346813 | 2.17 | 6387 | 333229.5 | 1.92 |
| Mean |  |  | 1.75 |  |  | 1.76 |
| S. D. |  |  | 0.32 |  |  | 0.12 |
| C. V (\%) |  |  | 18.18 |  |  | 6.56 |
| COMBINED S. D. |  |  |  | 0.240 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.949 |  |  |

ANNEX-27
Total Interest Income to Total Interest Expenses ratio

|  |  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | Total Interest Expenses | Total Interest Income | Ratio (\%) | Total Interest Expenses | Total Interest Income | Ratio (\%) |
| 2004/05 | 5620 | 14465 | 38.85 | 2996 | 7193 | 41.65 |
| 2005/06 | 6488 | 16265 | 39.89 | 4014 | 9034 | 44.43 |
| 2006/07 | 7674 | 17756 | 43.22 | 5172 | 11444 | 45.19 |
| 2007/08 | 8237 | 19636 | 41.95 | 6326 | 15486 | 40.85 |
| 2008/09 | 9348 | 23422 | 39.91 | 10129 | 21868 | 46.32 |
| Mean |  |  | 40.76 |  |  | 43.69 |
| S. D. |  |  | 1.59 |  |  | 2.10 |
| C. V (\%) |  |  | 3.89 |  |  | 4.80 |
| COMBINED S. D. |  |  |  | 2.365 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.081 |  |  |

ANNEX-28
Total Interest Income to Total Assets ratio

|  |  |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Total Interest Income | Total Assets | Ratio (\%) | Total Interest Income | Total Assets | Ratio (\%) |
| 2004/05 | 14465 | 278445 | 5.19 | 7193 | 117325.2 | 6.13 |
| 2005/06 | 16265 | 294603 | 5.52 | 9034 | 159592.8 | 5.66 |
| 2006/07 | 17756 | 335191 | 5.30 | 11444 | 214325.7 | 5.34 |
| 2007/08 | 19636 | 361755 | 5.43 | 15486 | 271493.4 | 5.70 |
| 2008/09 | 23422 | 393202 | 5.96 | 21868 | 369168.5 | 5.92 |
| Mean |  |  | 5.48 |  |  | 5.75 |
| S. D. |  |  | 0.26 |  |  | 0.27 |
| C. V (\%) |  |  | 4.80 |  |  | 4.62 |
| COMBINED S. D. |  |  |  | 0.298 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.192 |  |  |

ANNEX-29

## Staff Expenses to Total Income Ratio

| Rupees in Lakh ('00000) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | Staff Expenses | Total Income | Ratio (\%) | Staff <br> Expenses | Total Income | Ratio (\%) |
| 2004/05 | 1786 | 5226 | 34.18 | 606 | 2501 | 24.23 |
| 2005/06 | 2346 | 6724 | 34.89 | 709 | 3440 | 20.61 |
| 2006/07 | 2909 | 7175 | 40.54 | 861 | 4408 | 19.53 |
| 2007/08 | 2922 | 9489 | 30.79 | 1579 | 6681 | 23.63 |
| 2008/09 | 3610 | 10666 | 33.85 | 1869 | 9156 | 20.41 |
| Mean |  |  | 34.85 |  |  | 21.68 |
| S. D. |  |  | 3.17 |  |  | 1.88 |
| C. V (\%) |  |  | 9.10 |  |  | 8.67 |
| COMBINED S. D. |  |  |  | 7.081 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.005 |  |  |

ANNEX-30

## Office Operating Expenses to Total Income Ratio

| $\begin{array}{\|l} \hline \text { Banks } \\ \hline \text { Year } \\ \hline \end{array}$ |  |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HBL |  |  |  |  |  |
|  | Operating Expenses | Total Income | Ratio (\%) | Operating Expenses | Total Income | Ratio (\%) |
| 2004/05 | 2774 | 5226 | 53.08 | 1291 | 2501 | 51.62 |
| 2005/06 | 3297 | 6724 | 49.03 | 1436 | 3440 | 41.74 |
| 2006/07 | 3229 | 7175 | 45.00 | 1775 | 4408 | 40.27 |
| 2007/08 | 3443 | 9489 | 36.28 | 2338 | 6681 | 34.99 |
| 2008/09 | 3983 | 10666 | 37.34 | 2920 | 9156 | 31.89 |
| Mean |  |  | 44.15 |  |  | 40.10 |
| S. D. |  |  | 6.52 |  |  | 6.77 |
| C. V (\%) |  |  | 14.77 |  |  | 16.87 |
| COMBINED S. D. |  |  |  | 6.945 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.026 |  |  |

## ANNEX-31

## Earning Per Share(EPS)

|  |  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | EAT | NO. of shareholders | Ratio (Rs) | EAT | NO. of shareholders | Ratio (Rs) |
| 2004/05 | 3083 | 64.35 | 47.91 | 1682 | 31.5 | 53.40 |
| 2005/06 | 4575 | 77.22 | 59.25 | 2372 | 37.8 | 62.75 |
| 2006/07 | 4919 | 81.08 | 60.67 | 2964 | 37.8 | 78.41 |
| 2007/08 | 6359 | 101.35 | 62.74 | 4512 | 49.14 | 91.82 |
| 2008/09 | 7528 | 121.62 | 61.90 | 6387 | 63.88 | 99.98 |
| Mean |  |  | 58.49 |  |  | 77.27 |
| S. D. |  |  | 5.42 |  |  | 17.38 |
| C. V (\%) |  |  | 9.27 |  |  | 22.49 |
| COMBINED S. D. |  |  |  | 15.932 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.048 |  |  |

## ANNEX-32

## Dividend Per Share (DPS)

|  |  |  |  | EBL $\quad$ Rupees in Lakh (00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  |  |  |  |
| Year | Earning paid to <br> Shareholders | NO. of shareholders | $\begin{aligned} & \text { Ratio } \\ & \text { (Rs) } \end{aligned}$ | Earning paid to <br> Shareholders | NO. of shareholders | Ratio (Rs) |
| 2004/05 | 2023 | 64.35 | 31.44 | 630 | 31.5 | 20.00 |
| 2005/06 | 2702 | 77.22 | 34.99 | 945 | 37.8 | 25.00 |
| 2006/07 | 3243 | 81.08 | 40.00 | 1512 | 37.8 | 40.00 |
| 2007/08 | 4561 | 101.35 | 45.00 | 2457 | 49.14 | 50.00 |
| 2008/09 | 5297 | 121.62 | 43.55 | 3832.8 | 63.88 | 60.00 |
| Mean |  |  | 39.00 |  |  | 39.00 |
| S. D. |  |  | 5.12 |  |  | 14.97 |
| C. V (\%) |  |  | 13.13 |  |  | 38.38 |
| COMBINED S. D. |  |  |  | 11.185 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.999 |  |  |

ANNEX-33
Tax per Share

|  |  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | Tax Paid | NO. of shareholders | $\begin{aligned} & \hline \text { Ratio } \\ & \text { (Rs) } \end{aligned}$ | Tax Paid | NO. of shareholders | $\begin{aligned} & \text { Ratio } \\ & \text { (Rs) } \end{aligned}$ |
| 2004/05 | 2143 | 64.35 | 33.30 | 819 | 31.5 | 26.00 |
| 2005/06 | 2149 | 77.22 | 27.83 | 1068 | 37.8 | 28.25 |
| 2006/07 | 2256 | 81.08 | 27.82 | 1444 | 37.8 | 38.20 |
| 2007/08 | 3130 | 101.35 | 30.88 | 2169 | 49.14 | 44.14 |
| 2008/09 | 3138 | 121.62 | 25.80 | 2769 | 63.88 | 43.35 |
| Mean |  |  | 29.13 |  |  | 35.99 |
| S. D. |  |  | 2.64 |  |  | 7.55 |
| C. V (\%) |  |  | 9.08 |  |  | 20.98 |
| COMBINED S. D. |  |  |  | 6.616 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.204 |  |  |

## ANNEX-34

## Dividend pay out Ratio

Rupees in Lakh (‘00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | DPS | EPS | Ratio (\%) | DPS | EPS | Ratio (\%) |
| 2004/05 | 31.44 | 47.91 | 65.62 | 20 | 53.4 | 37.45 |
| 2005/06 | 34.99 | 59.25 | 59.05 | 25 | 62.75 | 39.84 |
| 2006/07 | 40 | 60.67 | 65.93 | 40 | 78.41 | 51.01 |
| 2007/08 | 45 | 62.74 | 71.72 | 50 | 91.82 | 54.45 |
| 2008/09 | 43.55 | 61.9 | 70.36 | 60 | 99.98 | 60.01 |
| Mean |  |  | 66.54 |  |  | 48.55 |
| S. D. |  |  | 4.44 |  |  | 8.62 |
| C. V (\%) |  |  | 6.68 |  |  | 17.75 |
| COMBINED S. D. |  |  |  | 11.307 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.004 |  |  |

## ANNEX-35

## Price Earning Ratio- P/E Ratio



ANNEX-36
Market value per share to Book value per share MVPS/BVPS


ANNEX-37
INCOME ANALYSIS OF HIMALAYAN BANK LTD (HBL)

| Year |  | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income |  |  |  |  |  |  |
| Interest Income | $\underset{(\mathrm{lakh})}{\mathrm{RS}}$ | 14,465.00 | 16,265.00 | 17,756.00 | 19,636.00 | 23,422.00 |
|  | \% | 82.29 | 79.64 | 82.18 | 81.10 | 80.14 |
| Commission and Discount | $\underset{(\mathrm{Rs}}{\mathrm{l} \mathbf{~ l a k h )}}$ | 1,328.00 | 1,654.00 | 1,932.00 | 1,878.00 | 2,843.00 |
|  | \% | 7.55 | 8.10 | 8.94 | 7.76 | 9.73 |
| Foreign exchange income | $\underset{(\text { lakh })}{\mathbf{R s}}$ | 1,373.00 | 1,981.00 | 1,516.00 | 2,077.00 | 2,500.00 |
|  | \% | 7.81 | 9.70 | 7.02 | 8.58 | 8.55 |
| Other Income | $\underset{(\mathrm{Rakh})}{\overline{\text { (las }}}$ | 413.00 | 523.00 | 403.00 | 621.00 | 463.00 |
|  | \% | 2.35 | 2.56 | 1.87 | 2.56 | 1.58 |

ANNEX-38
INCOME ANALYSIS OF EVEREST BANK LTD (EBL)

| Year |  | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income |  |  |  |  |  |  |
| Interest Income | $\underset{(\mathrm{lakh})}{\mathrm{RRs}}$ | 7,193.00 | 9,034.00 | 11,444.00 | 15,486.00 | 21,868.00 |
|  | \% | 84.03 | 84.95 | 84.24 | 84.05 | 85.50 |
| Commission and Discount | $\underset{(\text { lakh })}{\mathbf{R s}}$ | 781.00 | 968.00 | 1,177.00 | 1,503.00 | 2,021.00 |
|  | \% | 9.12 | 9.10 | 8.66 | 8.16 | 7.90 |
| Foreign exchange income | $\underset{\text { (lakh) }}{\mathbf{R s}}$ | 271.00 | 144.00 | 284.00 | 644.00 | 625.00 |
|  | \% | 3.17 | 1.35 | 2.09 | 3.50 | 2.44 |
| Other Income | $\underset{(\text { lakh })}{\mathbf{R s s}}$ | 315.00 | 489.00 | 680.00 | 791.00 | 1,064.00 |
|  | \% | 3.68 | 4.60 | 5.01 | 4.29 | 4.16 |

ANNEX-39
ACCRUED INTEREST TO TOTAL INTEREST INCOME
Amount in lakh ('00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Accrued Interest | Total Interest* | Ratio (\%) | Accrued Interest | Total Interest* | Ratio (\%) |
| 2004/05 | 5,111.81 | 19,576.81 | 26.11 | 1001.74 | 8,194.74 | 12.22 |
| 2005/06 | 5,503.69 | 21,768.69 | 25.28 | 1100.1 | 10,134.10 | 10.86 |
| 2006/07 | 3,367.11 | 21,123.11 | 15.94 | 833.73 | 12,277.73 | 6.79 |
| 2007/08 | 3,476.29 | 23,112.29 | 15.04 | 922.16 | 16,408.16 | 5.62 |
| 2008/09 | 3,767.47 | 27,189.47 | 13.86 | 833.41 | 22,701.41 | 3.67 |
| Mean |  |  | 19.25 |  |  | 7.83 |
| S. D. |  |  | 5.31 |  |  | 3.22 |
| C. V (\%) |  |  | 27.61 |  |  | 41.06 |
| COMBINED S. D. |  |  |  | 7.202 |  |  |
| CALCULATED VALUE OF t |  |  |  | 0.001 |  |  |

Note: For the purpose of Accrued interest calculation, total Interest includes interest received and accrued interest income.

ANNEX-40
EXPENDITURE ANALYSIS OF HIMALAYAN BANK LTD (HBL)

| Year |  | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income |  |  |  |  |  |  |
| Interest <br> Expenses | $\begin{array}{\|c\|} \hline \mathbf{R s} \\ \text { (lakh) } \\ \hline \end{array}$ | 5,620.00 | 6,488.00 | 7,674.00 | 8,237.00 | 9,348.00 |
|  | \% | 52.23 | 50.68 | 52.82 | 52.97 | 51.91 |
| Staff Expenses | $\begin{array}{\|c} \hline \text { Rs } \\ \text { (lakh) } \end{array}$ | 1,786.00 | 2,346.00 | 2,909.00 | 2,922.00 | 3,610.00 |
|  | \% | 16.60 | 18.32 | 20.02 | 18.79 | 20.05 |
| Office Operation Expenses | $\begin{array}{\|c\|c\|} \hline \mathbf{R s} \\ \text { (lakh) } \end{array}$ | 2,774.00 | 3,297.00 | 3,229.00 | 3,443.00 | 3,983.00 |
|  | \% | 25.78 | 25.75 | 22.22 | 22.14 | 22.12 |
| Staff Bonus Facility | $\begin{array}{\|c} \hline \text { Rs } \\ \text { (lakh) } \end{array}$ | 580.00 | 672.00 | 717.00 | 949.00 | 1,066.00 |
|  | \% | 5.39 | 5.25 | 4.93 | 6.10 | 5.92 |

ANNEX-41
EXPENDITURE ANALYSIS OF EVEREST BANK LTD (EBL)

| Year |  | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income |  |  |  |  |  |  |
| Interest Expenses | $\underset{\text { (lakh) }}{\mathbf{R s s}}$ | 2,996.00 | 4,014.00 | 5,172.00 | 6,326.00 | 10,129.00 |
|  | \% | 57.90 | 61.71 | 62.59 | 58.03 | 64.07 |
| Staff Expenses | $\underset{\text { (lakh) }}{\text { Rs }}$ | 606.00 | 709.00 | 861.00 | 1,579.00 | 1,869.00 |
|  | \% | 11.71 | 10.90 | 10.42 | 14.48 | 11.82 |
| Office Operation Expenses | $\underset{(\mathrm{Rakh})}{\mathbf{R S}}$ | 1,291.00 | 1,436.00 | 1,775.00 | 2,338.00 | 2,920.00 |
|  | \% | 24.95 | 22.08 | 21.48 | 21.45 | 18.47 |
| Staff Bonus Facility | $\underset{(\text { (lakh) }}{\mathbf{R s}}$ | 281.00 | 346.00 | 455.00 | 658.00 | 891.00 |
|  | \% | 5.43 | 5.32 | 5.51 | 6.04 | 5.64 |

## ANNEX-42

## Correlation analysis between Total Deposit and Net Profit

| Rupees in Lakh ('00000) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | $\begin{aligned} & \text { DEPOSIT } \\ & \text { (X) } \end{aligned}$ | NET <br> PROFIT(Y) |  | DEPOSIT(X) | NET PROFIT(Y) |  |
| 2004/05 | 248,140.00 | 3,083.00 | $\begin{array}{r} \sum \mathrm{X}^{2}=443,7 \\ 15,990,47 \\ 3.00 \\ \hline \end{array}$ | 100,976.91 | 1,682.00 | $\begin{array}{r} \sum X^{2}=119, \\ 807,352,4 \\ 24.19 \end{array}$ |
| 2005/06 | 264,908.00 | 4,575.00 |  | 138,024.44 | 2,372.00 |  |
| 2006/07 | 300,484.00 | 4,919.00 | $\begin{aligned} & \sum Y^{2}=151,7 \\ & 39,740.00 \end{aligned}$ | 181,862.54 | 2,964.00 | $\begin{array}{r} \sum Y^{2}=78,3 \\ 92,717.00 \end{array}$ |
| 2007/08 | 318,428.00 | 6,359.00 |  | 239,762.98 | 4,512.00 |  |
| 2008/09 | 346,813.00 | 7,528.00 | $\begin{aligned} & \sum X Y=8 \\ & , 090,7 \\ & 42,432 \\ & .00 \end{aligned}$ | 333,229.46 | 6,387.00 | $\begin{array}{r} \sum X Y=4,2 \\ 46,424,82 \\ 9.64 \end{array}$ |
|  | $\begin{array}{r} \sum \mathrm{X}= \\ 1,478,773.00 \end{array}$ | $\begin{array}{r} \Sigma \mathrm{Y}= \\ 26,464.00 \end{array}$ |  | $\begin{array}{r} \Sigma X= \\ 993,856.33 \end{array}$ | $\begin{array}{r} \sum \mathrm{Y}= \\ 17,917.00 \end{array}$ |  |
| Correlation | 0.968 |  |  | 0.9966 |  |  |
| P. E. |  |  | 0.019 |  |  | 0.002043 |

ANNEX-43
Correlation analysis between Performing Assets and Net Profit

| Rupees in Lakh ('00000) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | Performing <br> Assets (X) | $\begin{aligned} & \hline \text { NET } \\ & \text { PROFIT(Y) } \\ & \hline \end{aligned}$ |  | Performing <br> Assets (X) | $\begin{aligned} & \hline \text { NET } \\ & \text { PROFIT(Y) } \end{aligned}$ |  |
| 2004/05 | 278,445.00 | 3,083.00 | $\begin{gathered} \sum \mathrm{X}^{2}= \\ 562,150,0 \\ 44,944.00 \end{gathered}$ | 117,325.16 | 1,682.00 | $\begin{array}{r} \sum X^{2}= \\ 158,879,2 \\ 64,486.28 \end{array}$ |
| 2005/06 | 294,603.00 | 4,575.00 |  | 159,592.83 | 2,372.00 |  |
| 2006/07 | 335,191.00 | 4,919.00 | $\begin{aligned} & \sum Y^{2}=151,7 \\ & 39,740.00 \\ & \hline \end{aligned}$ | 214,325.74 | 2,964.00 | $\begin{array}{r} \sum Y^{2}=78,3 \\ 92,717.00 \end{array}$ |
| 2007/08 | 361,755.00 | 6,359.00 |  | 271,493.42 | 4,512.00 |  |
| 2008/09 | 393,202.00 | 7,528.00 | $\begin{aligned} & \sum X Y=9 \\ & 11,543 \\ & , 890.0 \\ & 0 \end{aligned}$ | 369,168.47 | 6,387.00 | $\begin{array}{r} \sum \mathrm{XY}= \\ 4,794,013 \\ , 934.17 \end{array}$ |
|  | $\begin{array}{r} \sum \mathrm{X}= \\ 1,663,196.00 \end{array}$ | $\begin{array}{r} \sum \mathrm{Y}= \\ 26,464.00 \end{array}$ |  | $\begin{array}{r} \sum \mathrm{X}= \\ 993,856.33 \end{array}$ | $\begin{array}{r} \sum \mathrm{Y}= \\ 17,917.00 \end{array}$ |  |
| Correlation |  |  | 0.969 |  |  | 0.9930 |
| P. E. |  |  | 0.018 |  |  | 0.004211 |

## ANNEX-44

## Correlation analysis between Net worth and Net Profit

| Rupees in Lakh ('00000) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | Net worth (X) | $\begin{aligned} & \hline \text { NET } \\ & \text { PROFIT(Y) } \end{aligned}$ |  | Net worth (X) | $\begin{aligned} & \hline \text { NET } \\ & \text { PROFIT(Y) } \end{aligned}$ |  |
| 2004/05 | 15,417.00 | 3,083.00 | $\begin{aligned} & \sum X^{2}=2, \\ & 615,20 \\ & 8,462 \end{aligned}$ | 8,326.18 | 1,682.00 | $\begin{array}{r} \sum X^{2}= \\ 675,504,5 \\ 72.67 \end{array}$ |
| 2005/06 | 17,662.00 | 4,575.00 |  | 9,628.08 | 2,372.00 |  |
| 2006/07 | 21,465.00 | 4,919.00 | $\begin{array}{r} \sum Y^{2}=151,7 \\ 39,740.00 \end{array}$ | 12,015.15 | 2,964.00 | $\begin{array}{r} \sum Y^{2}=78,3 \\ 92,717.00 \\ \hline \end{array}$ |
| 2007/08 | 25,130.00 | 6,359.00 |  | 19,212.38 | 4,512.00 |  |
| 2008/09 | 31,198.00 | 7,528.00 | $\begin{aligned} & \sum X Y= \\ & 628,58 \\ & 0,810 . \\ & 00 \end{aligned}$ | 22,036.25 | 6,387.00 | $\begin{array}{r} \sum \mathrm{XY}= \\ 299,887,1 \\ 32.43 \end{array}$ |
|  | $\begin{array}{r} \Sigma X= \\ 110,872.00 \end{array}$ | $\begin{array}{r} \Sigma \mathrm{Y}= \\ 26,464.00 \end{array}$ |  | $\begin{array}{r} \sum X= \\ 71,218.04 \end{array}$ | $\begin{array}{r} \sum \mathrm{Y}= \\ 17,917.00 \end{array}$ |  |
| Correlation | 0.976 |  |  | 0.9794 |  |  |
| P. E. | 0.0140 |  |  | 0.0123 |  |  |

## ANNEX-45

## Correlation analysis between Total Deposit and Investment

Rupees in Lakh ('00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\begin{aligned} & \text { DEPOSIT } \\ & \text { (X) } \end{aligned}$ | $\begin{aligned} & \text { INVESTME } \\ & \text { NT(Y) } \end{aligned}$ |  | DEPOSIT(X) | $\begin{aligned} & \hline \text { INVESTME } \\ & \text { NT(Y) } \end{aligned}$ |  |
| 2004/05 | 248,140.00 | 116,923.00 | $\begin{array}{r} \sum X^{2}=443,7 \\ 15,990,47 \\ 3.00 \\ \hline \end{array}$ | 100,976.91 | 21,289.32 | $\begin{array}{r} \sum X^{2}=119, \\ 807,352,4 \\ 24.19 \end{array}$ |
| 2005/06 | 264,908.00 | 108,890.00 |  | 138,024.44 | 42,005.15 |  |
| 2006/07 | 300,484.00 | 118,230.00 | $\begin{aligned} & \Sigma \mathrm{Y}^{2}= \\ & 64,890,07 \\ & 5,982.00 \end{aligned}$ | 181,862.54 | 49,843.14 | $\begin{array}{r} \sum \mathrm{Y}^{2}=10,8 \\ 00,359,51 \\ 2.31 \end{array}$ |
| 2007/08 | 318,428.00 | 133,402.00 |  | 239,762.98 | 50,595.57 |  |
| 2008/09 | 346,813.00 | 87,107.00 | $\begin{aligned} & \sum X Y= \\ & 166,074,1 \\ & 00,707.00 \\ & \hline \end{aligned}$ | 333,229.46 | 59,484.80 | $\begin{array}{r} \sum X Y=48, \\ 965,099,5 \\ 17.65 \end{array}$ |
|  | $\begin{array}{r} \sum \mathrm{X}= \\ 1,478,773.00 \end{array}$ | $\begin{array}{r} \Sigma \mathrm{Y}= \\ 26,464.00 \end{array}$ |  | $\begin{array}{r} \Sigma X= \\ 993,856.33 \end{array}$ | $\begin{array}{r} \Sigma \mathrm{Y}= \\ 223,217.98 \end{array}$ |  |
| Correlation | -0.331 |  |  | 0.8715 |  |  |
| P. E. |  |  | 0.2685 |  |  | 0.0725 |

## ANNEX-45

## Correlation analysis between Total Deposit to Loan and Advances

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | $\begin{aligned} & \text { DEPOSIT } \\ & (\mathrm{X}) \end{aligned}$ | $\begin{aligned} & \text { INVESTME } \\ & \text { NT(Y) } \end{aligned}$ |  | DEPOSIT(X) | $\begin{aligned} & \text { INVESTME } \\ & \text { NT(Y) } \end{aligned}$ |  |
| 2004/05 | 248,140.00 | 124,245.00 | $\begin{array}{r} \sum X^{2}=443,7 \\ 15,990,47 \\ 3.00 \\ \hline \end{array}$ | 100,976.91 | 76,186.71 | $\begin{array}{r} \sum X^{2}=119 \\ 807,352,4 \\ 24.19 \end{array}$ |
| 2005/06 | 264,908.00 | 146,426.00 |  | 138,024.44 | 98,013.08 |  |
| 2006/07 | 300,484.00 | 169,980.00 | $\begin{aligned} & \Sigma Y^{2}= \\ & 165,255,6 \\ & 25,287.00 \end{aligned}$ | 181,862.54 | 136,640.82 | $\begin{array}{r} \sum \mathrm{Y}^{2}=10,8 \\ 00,359,51 \\ 2.31 \end{array}$ |
| 2007/08 | 318,428.00 | 194,975.00 |  | 239,762.98 | 183,390.86 |  |
| 2008/09 | 346,813.00 | 87,107.00 | $\begin{aligned} & \sum X Y= \\ & 268,767,0 \\ & 36,631.00 \end{aligned}$ | 333,229.46 | 238,846.74 | $\begin{gathered} \sum \mathrm{XY}= \\ 169,6 \\ 32,25 \\ 4,922 \\ .75 \end{gathered}$ |
|  | $\begin{array}{r} \sum \mathrm{X}= \\ 1,478,773.00 \end{array}$ | $\begin{aligned} & \sum \mathrm{Y}=883,5 \\ & 57.00 \end{aligned}$ |  | $\begin{array}{r} \sum X= \\ 993,856.33 \end{array}$ | $\begin{array}{r} \sum \mathrm{Y}= \\ 733,078.21 \end{array}$ |  |
| Correlation | 0.978 |  |  | 0.9970 |  |  |
| P. E. | 0.0131 |  |  | 0.0018 |  |  |

## ANNEX-46

## Correlation analysis between EPS and MVPS

|  | Rupees in Lakh ('00000) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banks | HBL |  |  | EBL |  |  |
| Year | EPS (X) | MVPS (Y) |  | EPS (X) | MVPS (Y) |  |
| 2004/05 | 47.91 | 925.00 | $\begin{array}{r} \Sigma X^{2}=1725 \\ 4.70 \end{array}$ | 53.40 | 870.00 | $\begin{array}{r} \Sigma X^{2}=21,3 \\ 68.16 \end{array}$ |
| 2005/06 | 59.25 | 1,560.00 |  | 62.75 | 1,379.00 |  |
| 2006/07 | 60.67 | 2,580.00 | $\begin{aligned} & \sum \mathrm{Y}^{2}= \\ & 21,485,57 \\ & 0.00 \end{aligned}$ | 78.41 | 2,430.00 | $\begin{array}{r} \sum Y^{2}=24,3 \\ 99,890.00 \end{array}$ |
| 2007/08 | 62.74 | 2,853.00 |  | 91.82 | 3,132.00 |  |
| 2008/09 | 61.90 | 1,844.00 | $\begin{aligned} & \sum X Y= \\ & 5,86,416.1 \\ & 7 \\ & \hline \end{aligned}$ | 99.98 | 2,455.00 | $\begin{aligned} & \sum X Y= \\ & 856,5 \\ & 57.69 \end{aligned}$ |
|  | $\begin{array}{r} \Sigma X= \\ 292.47 \end{array}$ | $\begin{aligned} & \sum \mathrm{Y}=9,762 \\ & .00 \end{aligned}$ |  | $\begin{array}{r} \Sigma X= \\ 386.27 \end{array}$ | $\begin{aligned} & \sum \mathrm{Y}= \\ & 10,266.00 \end{aligned}$ |  |
| Correlation | 0.815 |  |  | 0.8937 |  |  |
| P. E. | 0.1011 |  |  | 0.0607 |  |  |

## ANNEX-47

## Correlation analysis between DPS and MVPS

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | DPS (X) | MVPS (Y) |  | DPS (X) | MVPS (Y) |  |
| 2004/05 | 31.44 | 925.00 | $\begin{array}{r} \sum X^{2}=7,734 \\ .00 \\ \hline \end{array}$ | 20.00 | 870.00 | $\begin{array}{r} \Sigma X^{2}=5.12 \\ 5.00 \\ \hline \end{array}$ |
| 2005/06 | 34.99 | 1,560.00 |  | 25.00 | 1,379.00 |  |
| 2006/07 | 40 | 2,580.00 | $\begin{aligned} & \sum Y^{2}= \\ & 21,485,57 \\ & 0.00 \end{aligned}$ | 40.00 | 2,430.00 | $\begin{array}{r} \sum Y^{2}=24,3 \\ 99,890.00 \end{array}$ |
| 2007/08 | 45 | 2,853.00 |  | 50.00 | 3,132.00 |  |
| 2008/09 | 43.55 | 1,844.00 | $\begin{aligned} & \sum X Y= \\ & 395,557.6 \\ & 0 \end{aligned}$ | 60.00 | 2,455.00 | $\begin{aligned} & \sum X Y= \\ & 452,9 \\ & 75.00 \end{aligned}$ |
|  | $\begin{array}{r} \Sigma X= \\ 194.84 \end{array}$ | $\begin{aligned} & \sum Y=9,762 \\ & .00 \end{aligned}$ |  | $\begin{aligned} & \sum X= \\ & 195 \end{aligned}$ | $\sum \sum$ |  |
| Correlation |  |  | 0.835 |  |  | 0.8624 |
| P. E. |  |  | 0.0914 |  |  | 0.0773 |

## ANNEX-48

## Correlation analysis between DPR and MVPS

Rupees in Lakh ('00000)

| Banks | HBL |  |  | EBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | DPR (X) | MVPS (Y) |  | DPR (X) | MVPS (Y) |  |
| 2004/05 | 65.62 | 925.00 | $\begin{array}{r} \Sigma X^{2}=22,23 \\ 4.98 \end{array}$ | 37.45 | 870.00 | $\begin{array}{r} \Sigma X^{2}=8,55 \\ 7.71 \end{array}$ |
| 2005/06 | 59.05 | 1,560.00 |  | 39.84 | 1,379.00 |  |
| 2006/07 | 65.93 | 2,580.00 | $\begin{aligned} & \sum \mathrm{Y}^{2}= \\ & 21,485,57 \\ & 0.00 \end{aligned}$ | 51.01 | 2,430.00 | $\begin{array}{r} \sum Y^{2}=24,3 \\ 99,890.00 \end{array}$ |
| 2007/08 | 71.72 | 2,853.00 |  | 54.45 | 3,132.00 |  |
| 2008/09 | 70.36 | 1,844.00 | $\begin{aligned} & \sum X Y= \\ & 657,293.0 \\ & 3 \end{aligned}$ | 60.01 | 2,455.00 | $\begin{aligned} & \sum X Y= \\ & 529,3 \\ & 68.83 \end{aligned}$ |
|  | $\begin{array}{r} \Sigma X= \\ 332.69 \end{array}$ | $\begin{aligned} & \sum Y=9,762 \\ & .00 \end{aligned}$ |  | $\begin{array}{r} \Sigma X= \\ 242.77 \end{array}$ | $\sum \begin{aligned} & \sum \mathrm{Y}= \\ & 10,266.00 \end{aligned}$ |  |
| Correlation | 0.501 |  |  | 0.8800 |  |  |
| P. E. | 0.2259 |  |  | 0.0681 |  |  |

## ANNEX-49

Least Square Linear Trend of Total Deposit of HBL


ANNEX-50
Least Square Linear Trend of Total Deposit of EBL


## ANNEX-51

Least Square Linear Trend of Net Worth of HBL

| Year |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deposit (Y) | Year (X) | $\mathrm{X}^{2}$ | X X Y | $\mathrm{Yc}=\mathrm{a}+\mathrm{bX}$ |
| 2004/05 |  |  |  |  |  |
|  | 15417 | -2 | 4 | -30834 | 14,368.40 |
| 2005/06 |  |  |  |  |  |
|  | 17662 | -1 | 1 | -17662 | 18,271.40 |
| 2006/07 |  |  |  |  |  |
|  | 21465 | 0 | 0 | 0 | 22,174.40 |
| 2007/08 |  |  |  |  |  |
|  | 25130 | 1 | 1 | 25130 | 26,077.40 |
| 2008/09 |  |  |  |  |  |
|  | 31198 | 2 | 4 | 62396 | 29,980.40 |
|  | $\begin{aligned} & \sum \mathrm{y}= \\ & 110872.00 \end{aligned}$ | $\Sigma \mathrm{X}=0$ | $\Sigma \mathrm{X}^{2}=10$ | $\Sigma \mathrm{XY}=39030$ |  |
| $\mathrm{a}=22174.40$ |  | $\mathrm{b}=3903$ |  |  |  |

ANNEX-52
Least Square Linear Trend of Net Worth of EBL

| Year | Deposit (Y) | Year (X) |  | Rupees in Lakh | $\mathrm{Yc}=\mathrm{a}+\mathrm{bX}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\mathrm{X}^{2}$ |  |  |
| 2004/05 |  | -2 | 4 | -16652.36 | 6,842.72 |
|  | 8326.18 |  |  |  |  |
| 2005/06 |  |  | 1 |  | 10,543.16 |
|  | 9628.08 | -1 |  | -9628.08 |  |
| 2006/07 |  |  |  | 0 |  |
|  | 12015.15 | 0 | 0 |  | 14,243.61 |
| 2007/08 |  |  |  |  |  |
|  | 19212.38 | 1 | 1 | 19212.38 | 17,944.05 |
| 2008/09 |  |  |  |  |  |
|  | 22036.25 | 2 | 4 | 44072.5 | 21,644.50 |
|  | $\begin{aligned} & \sum \mathrm{y}= \\ & 71218.04 \end{aligned}$ | $\Sigma \mathrm{X}=0$ | $\Sigma X^{2}=10$ | $\begin{aligned} & \sum \mathrm{XY} \\ & =37004.44 \end{aligned}$ |  |
| $\mathrm{a}=14,243.61$ |  | $\mathrm{b}=3,700.44$ |  |  |  |

ANNEX-53
Least Square Linear Trend of Total Investment on HBL

|  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Deposit (Y) | Year (X) | $\mathrm{X}^{2}$ | X X Y | $\mathrm{Yc}=\mathrm{a}+\mathrm{bX}$ |
| 2004/05 |  |  |  |  |  |
|  | 116923 | -2 | 4 | -233846 | 119,934.40 |
| 2005/06 |  |  |  |  |  |
|  | 108890 | -1 | 1 | -108890 | 116,422.40 |
| 2006/07 |  |  |  |  |  |
|  | 118230 | 0 | 0 | 0 | 112,910.40 |
| 2007/08 |  |  |  |  |  |
|  | 133402 | 1 | 1 | 133402 | 109,398.40 |
| 2008/09 |  |  |  |  |  |
|  | 87107 | 2 | 4 | 174214 | 105,886.40 |
|  | $\Sigma \mathrm{y}=564552$ | $\Sigma \mathrm{X}=0$ | $\Sigma \mathrm{X}^{2}=10$ | $\begin{aligned} & \sum \mathrm{XY}=- \\ & 35120 \end{aligned}$ |  |
| $\mathrm{a}=112,910.40$ |  | $\mathrm{b}=-3,512$ |  |  |  |

ANNEX-54
Least Square Linear Trend of Investment of EBL

| Year |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deposit (Y) | Year (X) | $\mathrm{X}^{2}$ | X $\times$ Y | $\mathrm{Yc}=\mathrm{a}+\mathrm{bX}$ |
| 2004/05 | 21289.32 | -2 | 4 | -42578.64 | 27,647.32 |
|  |  |  |  |  |  |
| 2005/06 |  |  |  |  | 36,145.46 |
|  | 42005.15 | -1 | 1 | -42005.15 |  |
| 2006/07 | 49843.14 |  |  | 0 |  |
|  |  | 0 | 0 |  | 44,643.60 |
| 2007/08 |  |  |  |  |  |
|  | 50595.57 | 1 | 1 | 50595.57 | 53,141.73 |
| 2008/09 |  |  |  |  |  |
|  | 59484.8 | 2 | 4 | 118969.6 | 61,639.87 |
|  | $\begin{aligned} & \sum \mathrm{y}= \\ & 223217.98 \end{aligned}$ | $\Sigma \mathrm{X}=0$ | $\Sigma \mathrm{X}^{2}=10$ | $\begin{aligned} & \sum X Y= \\ & 84981.37 \end{aligned}$ |  |
| $\mathrm{a}=44,643.60$ |  | $\mathrm{b}=8,498.14$ |  |  |  |

ANNEX-55
Least Square Linear Trend of Loan and advances of HBL


ANNEX-56
Least Square Linear Trend of Loan and advances of EBL


ANNEX-57
Least Square Linear Trend of EPS of HBL

|  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Deposit (Y) | Year (X) | $\mathrm{X}^{2}$ | X X Y | $\mathrm{Yc}=\mathrm{a}+\mathrm{bX}$ |
| 2004/05 |  |  |  |  |  |
|  | 47.91 | -2 | 4 | -95.82 | 52.20 |
| 2005/06 |  |  |  |  |  |
|  | 59.25 | -1 | 1 | -59.25 | 55.35 |
| 2006/07 |  |  |  |  |  |
|  | 60.67 | 0 | 0 | 0 | 58.49 |
| 2007/08 |  |  |  |  |  |
|  | 62.74 | 1 | 1 | 62.74 | 61.64 |
| 2008/09 |  |  |  |  |  |
|  | 61.90 | 2 | 4 | 123.8 | 64.79 |
|  | $\Sigma \mathrm{y}=292.47$ | $\Sigma \mathrm{X}=0$ | $\Sigma X^{2}=10$ | $\Sigma \mathrm{XY}=31.47$ |  |
| $\mathrm{a}=58.49$ |  | $\mathrm{b}=3.15$ |  |  |  |

ANNEX-58
Least Square Linear Trend of EPS of EBL

|  |  |  | Rupees in Lakh ('00000) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Deposit (Y) | Year (X) | $\mathrm{X}^{2}$ | X X Y | $\mathrm{Yc}=\mathrm{a}+\mathrm{bX}$ |
| 2004/05 |  |  |  |  |  |
|  | 53.40 | -2 | 4 | -106.8 | 52.83 |
| 2005/06 |  |  |  |  |  |
|  | 62.75 | -1 | 1 | -62.75 | 65.05 |
| 2006/07 |  |  |  |  |  |
|  | 78.41 | 0 | 0 | 0 | 77.27 |
| 2007/08 |  |  |  |  |  |
|  | 91.82 | 1 | 1 | 91.82 | 89.50 |
| 2008/09 |  |  |  |  |  |
|  | 99.98 | 2 | 4 | 199.96 | 101.72 |
|  | $\Sigma \mathrm{y}=386.27$ | $\Sigma \mathrm{X}=0$ | $\Sigma \mathrm{X}^{2}=10$ | $\begin{aligned} & \sum \mathrm{XY}= \\ & 122.23 \end{aligned}$ |  |
| $\mathrm{a}=77.27$ |  | $\mathrm{b}=12.22$ |  |  |  |

