CHAPTER - I

INTRODUCTION

1.1 Background of the study

Nepal is a developing country whose financial market is also at the developing stage. For the development of every country, the financial market as well as the capital market plays a vital role.

Financial Market is the place where the financial instruments like share, bond and debenture are traded. A financial market is a market for creation and exchange of financial assets. If you buy or sell financial assets, you will participate in financial market (Pradhan, 2002:24). There are different types of financial markets, each market serves a different set of customer or deal with different types of security.

Finance is Art and Science of managing money, which affect the lives of every person and every organization. Finance, is concerned with the process, institutions, markets and instructions involved in the transfer of money among and between individuals business and governments. Previously finance was limited for pronouncement of long-term fund. The traditional concept of Finance is changed due to Industrialization, technological innovations and intense competition while the specifics vary among organizations, the key finance functions are the investment, financing and dividend decision for organization. Funds are raised for external financial sources and allocated for different uses.

Financial analysis is the process of identifying strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account. Quality governance is

impossible without effective analysis and evaluation of financial information.

In financial analysis, a ratio is used as an index for evaluating the financial position and performance of a firm. Analysis and interpretation of various ratios should give an experience and skilled analyst a better understanding of financial condition and performance of a firm. Then he/she would obtain from analysis depends to a very large extent on the use of ratio through other equally important tools of such analysis.

Traditional financial ratio analysis has focused on the numbers. The value of this approach is that quantitative relation can be used to diagnose strength and weakness in the firm's performance. It provides a framework for financial planning and control. After identifying so much scopes and importance of financial analysis, this study also focus on financial performance of Everest bank limited.

The development of any country cannot be imagined without economic activities. The development of the banking system is one of the grounds of economic development. So, to solve problems relating to economic development, development of banking system is necessary.

1.1.1 Introduction to Banking

Bank is a financial institution, and the backbone of a country for the economic development. Banking concept existed even in the ancient period when the goldsmiths and the rich people used to issue the common people against provides of safe keeping of their valuable items on the presentation of the receipt. The depositors would get bank their gold and valuables of the paying a small amount for safe-keeping and saving.

A bank is an institution which deals with money and credit. It accepts deposit from the public and mobilizes the fund to productive sectors. It is also provides remittance facility to transfer money from one place to another. Generally, Bank accepts deposit from business institutions and individuals, which is mobilized into productive sectors mainly business and consumers lending. Therefore, bank is known as an institution accepting deposits and disbursing loan. In addition to this a bank may be engaged in different types of function such as remittance, exchange currency, joint venture, underwriting, bank guarantee, discounting bills etc. Bank refers to an institution having the following features. According to a French writer Revil pout, Bank notes were in practice in Babylonia around 600 B.C. This could be considered as the first ever step to the inception of banking system. It has been assumed that the practice of modern banking functions such as exchange of money, transfer of funds, note issue accepting deposits, lending money etc. Already began in Rome around the late 14^{th} century. However, the banking development collapsed with the Roman civilization.

The banking business revived in the 12^{th} century as Jews conducted functions such as safe keeping of valuables, lending money at interest and similar other functions. As a result bank of Venice, the first bank in the world come into existence in 1157 A.D.

Prior to the development of modern banking system, the role of merchant, money lenders and gold smith was dominant in the society Therefore, they can consider as the three ancestors of modern banking. Gradually the function of accepting deposits and granting loans were handed over from individual to the joint stock company.

Subsequently 'Bank of Barcelona' Spain was established as the first modern bank in 1401 A.D. The modern banks undertook the function of issuing notes, credit creations, accepting deposits, lending money, transfer of fund, accepting bills of exchange, promissory notes etc. later only the central bank were authorized to issue the notes.

The European Industrial revolution of the 17th century brought about drastic increase in production, thereby lending to rise in marine transportation and overseas trade. Most of the European countries rushed for seeking new colonies.

In the ground of the favorable economic environment, 'Bank of England' came into begins in 1694 A.D. The bank of England gave scientific shape to Modern banking. After the formulation of the act regarding 'Bank of England' in 1833 A.D., the prominence of Joint stock bank was further enhanced. From 1844 A.D., Bank of England was allowed to function as the central bank.

Around 1850, the 'Credit Mobilizes' was established in Paris as the first venture bank. The existence of many ventures banks facilitated industrialization in Europe. In the 19th century, commercial banks were opened in almost all countries in the world. Thus, development of the modern banking system gains full momentum and various monitory problems. Now banks have been the vital part of economic and business life of each economy. The three ancestors of bank i.e. merchants, Money lenders and Gold Smith were performing the work i.e. accepting deposits, keeps valuable things in the custody and granting loans those who needed. This was all their individual effort.

Banks are principle source of credit for millions of individuals and families and for money unit of government .They are among the most

important financial institution in the economy. Moreover, for small local business ranking from grocery store to automobiles dealers, banks are often the major source of credit to stock the shelves with merchandise. Bank grants more installment loan to consumers than any other financial institution.

In most recent years, they are among the lending buyers of bonds and notes issued by government to finance public facilities. Moreover bank reserve the principal channel for government economic policy to stabilize the economy.

Bank are among the most important source of short term working capital for business .They have becomes increasingly active in recent years in making long-term business loans for few new plant and equipment .When business and consumers must make payments for purchase of goods and services, more often they use bank provides cheque, Creditors debit cards or electronic account connected to a computer network. It is the banker to whom they turn most frequently for advice and counsel, when they need financial information and financial planning.

1.1.2. Function of commercial bank

Regarding the function of commercial banks, a commercial bank Act state that commercial bank is one that exchanges money, accept deposit, grants loan performs commercial banking functions. The functions and services of modern commercial banks classified under the following heading.

1. Accepting deposit
2. Granting loan and deposits.
3. Agency services.
4. Guarantee on behalf of customers

5. Issuance of traveler's cheque.
6. Opening letter of credit.
7. Remittance function.
8. Others services.

Accepting deposit

Commercial bank accepts deposit from customers in the form of current, saving and fixed deposits are repayable on demand. The depositors other than current account are paid interest.

Granting loan and deposits

The second main function of the commercial bank is to grant loans and advances to businessman, the industrialist, the individuals, the different organizations etc, in the form of term loans, cash credit overdraft trust receipts, hire purchase loans etc. banks charge interest on such loan and advances, which is the largest source of total income.

Agency services

A modern commercial banks acts as an agent of individual customer, business institutions and different organization. The agency services of banks may involve collection of interest and dividends on debt and share capital. A bank buys and sells securities on behalf of customers. Bank also collect cheques, draft promissory notes etc and receive their payments. Sometimes it make payments of insurance premium, bills of electricity, telephone etc. it takes commission for the services rendered.

Guarantee on behalf of customers

The need of the bank guarantee arises in business generally business customers enjoy these services. Sometimes, personally customers may

also need a bank guarantee. A guarantee is a definite and irrevocable under taking by a bank on behalf of its customers to make payment up to a specified sum of money to the beneficiary on demand incase default by its customers.

Issuance of traveler's cheque

The people travelling outside the country want to reduce the fear of getting money stolen during the travel. Bank sells the traveler's cheque. The unique feature of the traveler cheque that unless the buyer of traveler cheque sign for encashment it cannot cash.

Opening letter of credit

Today letter of credit has become very popular in foreign business. The letter of credit is established\opened by bank on the request of customers

Remittance function

Sending and receiving fund from various places is the necessity of today the remittance service has benefited both business and personal customers. Funds transfers are made through various models like demand drafts, telegraphic payment order, swift, fax mail payment orders.

Others services

Modern commercial banks are equally important in undertaking safe custody of important valuable and documents. Banks also offer some of the door of highly valued customers few large banks conduct research and survey in the economic conditions and they supply trade statistics and information. In addition to these, banks also inform their customers about the credit standing of others particles.

Bank is the necessary of every country as it plays crucial role in enriching economic and social life of country. Banks are the backbone of the country. It is the financial institution, which provides wide range of banking services such as the financial supermarket providing all kinds of monitory service, which is necessary for the industrialization and economic development of the country.

1.1.3. Commercial Banking in Nepal

Institutional banking systems come into existence in Nepal on nineteen century. Nepal bank limited is the first modern banks of Nepal. It is taken as the milestone of the modern banking of the country. This was established in 1937 A.D. from the beginning it has rendered the following services to the customers.

1. Accept deposit.
2. Extend loan.
3. Render customer-related services i.e. issue of bills of exchange
4. Invest in government bonds and securities.
5. Perform agency function.
6. Act as banker to government.

Until mid -1940s only metallic coins were used as medium of exchange. So the H.M.G felt the need of separate institution or body to issue national currencies and promote financial organization in the country. Hence the Nepal Rastra Bank Act 1955 was formulated which was approved by H.M.G. accordingly, the Nepal Rastra Bank was established in 1956 A.D. as a central bank.

In 1957 A.D Industrial Development Bank was established to promote the industrialization in Nepal was converted into Nepal Industrial Development Corporation (NIDC) in 1959 A.D. Rastrya Banijya Bank

was established in 1965 A.D. as the second commercial bank of Nepal. As the agriculture is the basic occupation of major Nepalese. The development of this sector plays the prime role in economy, so separate Agriculture Development Bank was established in 1968.A.D. This is first institution in agricultural financing. For more than two decades, no more banks have been established in the country. After declaring free economy and privatization policy, H.M.G encouraged the foreign banks for joint venture in Nepal. As a result, Nepal Arab Bank ltd (NABIL) was established in 1984 A.D. This is the first modern bank with latest banking technology. Then a lot of commercial banks have been opened in the country. Nepal Indosuez Bank limited was established in 1986 A.D.as private joint venture bank. Nepal Grindlays Bank was established in 1987 A.D. Himalayan Bank limited is a joint venture with Habib Bank of Pakistan. It started to operation in 1993 A.D with paid –up capital of 60 Millions. Nepal SBI Bank limited is a joint venture between employee's provident fund and State Bank of India, where Indian bank holds 50 percent of equity. The initial paid-up capital was Rs.119.95 Million in 1993A.D. Nepal Bangladesh Bank was established in 1993 A.D. in technical collaboration with IFIC Bank Ltd of Bangladesh. Everest Bank limited started its operation in 1994 A.D. It entered into joint venture with Punjab National Bank of India (PNB). PNB holds 20 percent equity in this bank.

Similarly, Bank of Kathmandu was established in 1995 A.D. Nepal Bank of Ceylon (Nepal Credit and commerce Bank) was established in 1998 A.D. Nepal Industrial and commercial Bank was established in 1998 A.D. It doesn't have any joint venture yet but it has employed senior manager from India to handle its operations. Machhapuchhare Bank started its operation from 2000 A.D. Its head office is established in Pokhara.

Kumari Bank was established in 2001 A.D. The bank has introduced internet banking which is Hi-Tech banking system of the world. Laxmi Bank established in 2002 A.D. Siddhartha Bank was established was in 2002 A.D. Development Credit Bank Limited and Nepal Merchant Bank limited upgraded as commercial bank from 2008 A.D. respectively. Likewise Global Bank Limited, Citizens Bank International Limited, Prime Commercial Bank, Bank of Asia Limited, Sunrise Bank Limited, Mega Bank Limited, Civil Bank Limited, Century Commercial bank, Commerz and Trust Bank are newly established banks. There are 31 commercial bank provides services till date.

1.1.4. Introduction to Everest Bank Limited

1.1.4.1. Introduction

Everest Bank Limited (EBL) started its operations in 1994 with a view and objective of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer-friendly services through its Branch Network. All the branches of the bank are connected through Anywhere Branch Banking System (ABBS), which enables customers for operational transactions from any branches.

With an aim to help Nepalese citizens working abroad, the bank has entered into arrangements with banks and finance companies in different countries, which enable quick remittance of funds by the Nepalese citizens in countries like UAE, Kuwait, Bahrain, Qatar, Saudi Arabia, Malaysia, Singapore and U K. With an aim to help Nepalese citizens working abroad, the bank has entered into arrangements with banks and finance companies in different countries, which enable quick remittance of funds by the Nepalese citizens in countries like UAE, Kuwait, Bahrain, Qatar, Saudi Arabia, and Malaysia.

Bank has set up its representative offices at New Delhi (India) to support Nepalese citizen remitting money and advising banking related services.

Punjab National Bank (PNB), joint venture partner (holding 20% equity in the bank) is the largest nationalized bank in India. With its presence virtually in all the important centers at India, Punjab National Bank offers a wide variety of banking services which include corporate and personal banking, industrial finance, agricultural finance, financing of trade and international banking. Among the clients of the Bank are Indian large, medium and small industrial units, exporters, non-resident Indians and multinational companies. The large presence and vast resource base have helped the Bank to build strong links with trade and industry.

Awards

- The bank has been conferred with "Bank of the Year 2006, Nepal" by the banker, a publication of financial times, London.
- The bank was bestowed with the "NICCI Excellence award" by Nepal India chamber of commerce for its spectacular performance under finance sector
- EBL was one of the first banks to introduce Any Branch Banking System (ABBS) in Nepal.
- EBL has introduced Mobile Vehicle Banking system to serve the segment deprived of proper banking facilities through its Birtamod Branch, which is the first of its kind.
- EBL has introduced branchless banking system first time in Nepal to cover unbanked sector of Nepalese society.
- EBL is first bank that has launched e-ticketing system in Nepal. EBL customer can buy yeti airlines ticket through internet.

Corporate vision

- To evolve & position the bank as a progressive, cost effective & customer friendly institution providing comprehensive financial and related services.
- To integrate the frontiers of technology & serving the various segments of society.
- To be committed to excellence in corporate values.

Corporate Mission

- To provide excellent professional services & improve its position as a leader in the field of financial related services.
- To build & maintain a team of motivated and committed workforce with high work ethos.
- To use the latest technology aimed at customer satisfaction & act as an effective catalyst for socio-economic developments.

This sustained growth of the bank is attributable to its strong systems and procedures, professional approach, quality lending and highly motivated staff members.

The bank is providing its services through a wide network of 44 branches across the nation and over 200 correspondents across the globe. All the major branches of the bank are connected through Anywhere Branch Banking System (ABBS), a facility which enables a customer to do banking transactions from any of the branches irrespective of their having accounts in other branch.

The bank in association with smart choice technology (SCT) is providing ATM services for its customers. EBL Debit card can be accessed at more than 60 ATMs and over 200 point of sales across the nation. The bank is also managing the SCT ATM at Tribhuwan International Airport for the

convenience of the customers and the travelers, the first and the only in Nepal to place ATM outlet at the Airport.

EBL is plying a vital role in facilitating remittance to and from across globe. Being the first Nepalese bank to open representative offices in Delhi, India the Nepalese in India can open account in Nepal from the designated branches of Punjab National bank and remit their savings economically through banking channels to Nepal. The bank has a Draft Drawing Arrangement with 175 branches of PNB all over India.

With an aim to help Nepalese citizens working aboard, the bank has entered into arrangements with banks and finance companies in different countries which enable quick remittance of funds by the Nepalese citizens in countries like UAE, Kuwait, Bahrain, Qatar, Saudi Arabia, Malaysia, Singapore and UK.

The bank recognizes the value of offering a complete range of services. Bank have pioneered in extending various customer friendly products such as Home Loan, Education Loan, EBL flexi Loan, EBL property plus (future lease Rentals) , Home Equity Loan, Car loan , Loan Against shares, Loan Against life insurance policies and Loan for professionals.

Pioneering achievements

Recognizing the value of offerings a complete range of services, bank have pioneered in extending various customer friendly products such as Home Loan, Education Loan, EBL Flexi Loan, EBL Property Plus (Future Lease Rental), Home Equity Loan, Vehicle Loan, Loan Against Share, Loan Against Life Insurance Policy and Loan for Professionals.

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1.1.4.2 Deposit schemes

1) Current account
2) Saving account.
3) Saving premium account
4) Fixed deposit
5) Cumulative deposit scheme.
6) Sunaulo Bhavishya yojana.
7) Saral sambridhi bachat
8) Nari bachat
9) Baal bacht
10) Hajurko kamai Everest ko uchai yojana

1.1.4.3 Loan schemes

1) Home Loan
2) Vehicle Loan schemes.
3) Education loan schemes.
4) Property plus Loan scheme.
5) Professional Loan scheme.

1.1.4.4 Trade finance Activates

1) Remittance facilities.
2) Foreign Exchange.

1.2. Focus of the study

Joint venture commercial banks play a vital role in a developing nation. It also helps in the economic sector of the country. Typically commercial bank's main motive is to make a profit by providing quality service to the customers in Nepal. In Nepalese context most of the commercial bank are joint venture bank. Although joint venture banks have managed to perform better than other local commercial bank within short span of time. They have been facing a neck to neck competition against one another among the joint venture bank. This study is based on EBL.

The study of financial performance is basic process which provides information about profitability, liquidity position earning capacity, efficiency in operation, credit worthiness, source and use of capital, financial achievement and status of bank. The information obtained can be used to measure the efficiency and effectiveness of the bank in respect of deploying financial resources in the profitable manner.

The main objective of this study is to analyze the financial performance through the use of appropriate financial tools. Study is based on the certain financial tools .e. Ratio analysis and necessary tools.

1.3 Statement of the problem

Everest Bank Ltd has been improving its performance from the beginning since its establishment. EBL has achieved its remarkable success in banking sector and provided its high status in the eye of the public.

EBL basic objectives are to uplift the economic activities and strength welfare of the general public facilitate loan in different sector and provide the banking services to its country and people. Therefore this study concentrates on it to meet its objective.

The study financial performance is basic process, which provides information about the profitability, liquidity position, earning capacity, efficiency in operation, credit worthiness, source and uses of capital, financial achievement and status of the bank. The information obtained can be used to measure the efficiency and effectiveness of the bank respect of deploying financial resource in the profitable manner.

1.4 Objective of the study

The main objective of this research is to analyze the financial performance through the appropriate financial tools i.e. Ratio analysis and necessary statistical tools.

1) To evaluate the financial performance of EBL in different kind of ratio.
2) To explain the relationship between deposit and profit, investment and profit, deposit and investment of EBL.
3) To analyze the financial performance of EBL through the use of trend analysis of deposit and profit.

1.5 Limitation of the study

There some limitations while undergoing this study. The main limitations of the study are as follows:

1) The study was based on secondary data.
2) The balance sheet, profit and loss account and accompanying note are considered be true.
3) Although there are many joint venture banks the study limits to only one EBL.
4) The study has covered only the latest five fiscal year from 2006 to 2010.
5) Only limited variables are considered for this study.

1.6 Organization of the study

The rationale behind this kind of organization is to follow a simple research methodology approach. The contents of each of the parts of this study are briefly mentioned here.

The first chapter entitled **“Introduction”** introduces the subject; present the research problem, reason for studying, objective of the study, along with limitation.

The second chapter entitled **“Review of Literature”** concerned with the study of financial performance and return to investor have been reviews & presented.

The third chapter discussed the **“Research Methodology”** used in the study. It comprises research design, nature & source of data, data gathering method and analytical tools used.

The fourth chapter deals with the **“Presentation & Analysis”** of data & scoring the empirical finding out the study through definite course of research methodology.

The last chapter **“Summary”** of the study, which is followed by the basic conclusion of the study based in the fourth chapter on the basic of these conclusion and recommendation has also been presented for consideration.

CHAPTER-II

REVIEW OF LITERATURE

The review of literature provides basis foundations to this study. The various approaches employed in the study are, in fact derived from the different literature surveyed in this part. The main reason for a full review of research in the past is to know the outcomes of those investigations in areas where similar concept and methodologies has been used successfully. Further, an extensive or even exhaustive process of such review may offer vital link with the various trends and phases in the researcher in one's area of specialization, with the characteristic percepts, concepts and interpretation, with the special terminology, with the rationale for understanding one's proposed investigation.

2.1 Theoretical or conceptual framework

Scientific research must be based on past knowledge. The previous studies cannot be ignored because they provide the foundation to present study. The purpose of literature review is thus to find out what research studies have been conducted in one's chosen field of study and what remain to be done (Wolff and pant;2005:30).

Every business organization is established with the view of earning profit. Profit is one of the indicators of sound performance, which indicates the result of sound business management. A bank is also established with the objective of maximizing profit. "The profit earned by the firm is the main financial performance indicator of business enterprises. Profit results mainly from successful business management, cost control, credit risk management and Successful efficiency of operation. *(Robinson, 1957:21-22)*

2.1.1 Joint Venture Bank in Nepal

In global prospective, Joint Ventures (JVs) is meant trading through the partnership among nations and also as a form of negotiation between various groups of industries. There has been substantial growth in the numbers of JVBs in Nepal since 1990s the basic reason behind this is the government's liberal policy of allowing foreign joint ventures banks to operate in Nepal. Government liberalization policy also encourages the traditionally run domestic commercial banks (Nepal Bank Limited and Rastriya Banijya Bank) to enhance their efficiency and to improve services and competitiveness through modernization, mechanization via computerization and prompt customer service by setting them to the exposure of the JVs.

D.P. Gupta has defined the joint ventures as It is a process of joining of forces between two or more enterprises for the purpose of carrying out of specific operation (Industrial or Commercial, Investment, Production or Trade (Gupta: 1984:15-24).

In Nepal, Nepal Arab Bank Limited was the first joint venture bank which was established in 2041 B.S. Now its name is Nabil Bank Limited. Lists of licensed Joint Ventures Banks which have been obtained license from Nepal Rastra Bank are given below:

Table No. 1

Joint Venture Banks in Nepal

Name of Joint Venture Banks	**Pattern of Ownership**	**Participating Foreign Bank &Finance Inst**
Nepal Arab Bank Ltd(NABIL)	Nepalese-50% Foreign Joint venture-50%	NB International, Ireland
Standard Chartered Bank Nepal Ltd	Nepalese-25% Foreign Joint venture-75%	Standard chartered Group (Australia & UK)
Himalayan bank Ltd.	Nepalese-80% Foreign Joint venture-20%	Habib Bank Ltd, Pakistan
Nepal SBI Bank Ltd.	Nepalese-50% Foreign Joint venture 50%	State Bank of India, India
Nepal Bangladesh Bank Ltd.	Nepalese-75%Foreign Joint venture-25%	International Finance Investment and Commerce(IFIC) Bank, Bangladesh
Everest Bank Ltd.	Nepalese-80% Foreign Joint venture-20%	Punjab National Bank, India

Source: Banking and financial statistics of NRB.www.nrb.org.np

The functions provided by JVBs (Joint Venture Banks) are as of other commercial banks. It plays important role in attracting foreign investment and have international assistance to improve their quality and extend service. They have been instrumental in collecting capital more efficiently, investing in productive and profitable sector, providing quality and quick services to the customers and introducing new and internationally accepted debit/credit cards, visa card, automated teller machine, etc.

2.1.2 Financial performance analysis (Ratio Analysis)

The financial manager can plan future financial requirement in accordance with the forecasting and budgeting procedures, but the plan must begin with the type of financial analysis. Financial analysis is the process of determining the significance operating and financial characteristics of a firm from accounting data financial statement. The goal of such analysis is to determine the efficiency and performance of the firm's management, as reflected in the financial records and reports. The analyst is attempting to measure the firm's liquidity, profitability and other indications that business is conducted in a rational and orderly way. If firm doesn't achieve financial norms for its industry or relationships among data that seen reasonable, the analysts note the deviations. The burden of the explaining the apparent problems may then be placed upon management (Hampton; 2006:98). Financial analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account (Pandey; 1999: 108). Traditional financial ratio analysis has focused on the numbers but the world is becoming more dynamic and subject to rapid changes. Ratio analysis is the process of determining and interpreting numerical relationship based on financial

statements. A ratio is a statistical yardstick that provides a measure of the relationship between two variable and figures. This relationship can be express as percent (cost of goods sold as a percentage of sales) or as a quotient (current assets as a certain number of times the current liabilities).

Financial statement analysis and techniques used by stakeholders like creditors, Shareholders, Potential investors, Management, Government and so on. Since the financial statements reflect a firm overall performance as well as its future growth and solvency. Financial statement contents Balance sheet and Profit and Loss Account. Every balance sheet and profit and loss account of a company shall give a true and fair view of the company. Banking sector, which is governed by special statures, have different forms prescribed for the profit and loss account and the balance sheet under the respective statutes *(Gupta and Radhaswamy, 1998; 4. 264).* Financial analysis involves the use of various financial statement the first is the balance sheet, which represents a firm financial position at a moment in time and next is the income statement that describe a summary of the firms profitability over time (Van Horne and Wachowiez; 1997:120)

2.1.3 Purposes of financial performance Analysis

Financial performance analysis is a study of relationship among the various financial factors, strength and weakness of a firm so that forecast may be made of the prospects for future earnings. In the recent time financial performance analysis has played an increasing important role as a tool of examining the real worth of going concern, which is one of the important assumptions of fundamental accounting assumption. Financial statements are usually analyzed with the help of financial tools and

financial ratios are out of the primary tools. The term ratio refers to the numerical and quantities relationship between two variables. Important ratios can be calculated from the balance sheet and profit and loss account. Ratio analysis is relevant in assessing the performance and position of firms. Various ratios are used for this purpose.

Financial performance analysis is helpful in assessing the financial position and profitability of a business concern. The analysis of financial statements refers to the treatment of the information contained in the financial statement. In this a way to afford full diagnosis of the profitability and financial position. Financial performance analysis is helpful to the decision maker for finding out favorable situation of a business concern. Therefore financial analysis reflect the financial position of a firm, which is the process of determining the operational and financial characterizes.

Financial analysis is helpful in assessing the financial position and profitability of a concern. This is done through compression by ratio for the same concern over a period of years, or for one concern against another, or for one concern against the industry as a whole, or for one concern against the predetermined standards, or for one department of a concern against another of the same concern. In short the main purposes/objectives of analysis of financial statements are to assess.

- The present and future earning capacity or profitability of the concern.
- The operational efficiency of the concern as a whole and of its various parts and departments.
- The short term and long term solvency of the concern for the benefit of the debenture holders and trade creditors.

- The comparative study in regard to one firm with another firm or one department to another department and financial stability of a business concern.
- The possibility of the development in the future by making forecast and preparing budgets.

2.1.5 Uses/Importance of financial performance Analysis

The information given in the financial statements is very useful to a number stakeholder's .These are the followings:

Owners: The owner provide fund for the operation of the business and they want to know whether their funds are being properly utilized or not. The financial statements prepared from time to time satisfy their curiosity.

Creditors: Creditors want to know the financial position of a concern before giving loans or granting credit. The financial statement helps them in judging such position.

Employees: Employees are interested in the financial position of the concern they served, particularly when payment of bonus depends upon the size of the profits earned. They would like to know that the bonus being paid to them is correct or not so they become interested in the preparation of correct profit and loss account.

Managers: Management is the art of getting things doing through others. This requires that the subordinates are doing work properly. Financial statements are an aid in this respect because they serve the managers in appraising the performance of the subordinates. Actual result achieve by the employees can be measured against the budgeted performance they were expected to achieve and remedial auction can be taken if the performance isn't up to the mark.

Government: Central and state governments are interested in the financial statements because they reflected the earning for a particular period for purpose for taxation.

Investors: prospective investors, who want to invest money in a firm, would like to make an analysis of the financial statements of that firms know how save the proposed investment will be.

Research Scholars: The financial statements, being a mirror of the financial position of the firm. The research scholar wants to make study in to financial operation of a particular firm.

2.2. Review of Related Studies

The opinions or views expressed regarding commercial banks and their activities on journal, books and booklets, and magazines, thesis etc. are focused as follows:

Dambolena and Khoury (1980) in *"Ratio Stability and Corporate Failure"* analyzed that as about the stability of all financial ratios overtime, as well as the level of their ratios as explanatory variables in the derivation of a discriminate function. The data were collection from 68 firms half on them didn't fail. By using the profitability ratio, activity ratio turnover ratio and independent ratios study found that the standard deviation of ratio over times appeared to be the strongest measure of ratio stability and the ratio of net profit to sales, net profit to total assets, funded debt to net working capital, capital and fixed assets to net worth have shown to be relevant in predicting corporate failure.

Pant (2006), in "Nepal membership in WTO and financial services sector" explain that globalization and liberalization have flounced across the world no longer it is choice but reality. A financial service is the key sector that global economic growth and plays a major role in the

development of infrastructure for trade in goods and services. Liberalization of trade in goods and services, when undertaken in conjunction with transparent and strong regulatory, benefits countries in many ways, with this said there is proportion to gain for Nepal from the liberalization of the financial sector. But the political instability have raised the risk for the foreign investors to investors to invest in the country. Risk rating on Nepal is at the highest degree.

Bajracharya (1990), in "*Rastriya Banijya Bank a Comparative Performance Study"* explained that deposit growth commercial bank is not consistent indigenous banks and better in mobilize, but they are not much efficient in credit expansion. Credit deposit ratio is better in joint venture banks. Non-performing loan is greater in domestic banks but profitability is greater in JVBs. Local banks are focused to open and continue their branches at the rural areas but JVBs' are relevant but ready to pay fines for do not doing so.

James .C.Van Horne writer of "*Financial Management and Policy*" had written in his book about financial analysis in which he had divided financial ratio into four types. Liquidity ratio, Debt ratio, Profitability ratio and Coverage ratio. These ratios are helpful for managerial control and for the better understanding of what outside suppliers of the capital expect in a financial condition and performance. He defines until and unless there is comparison, financial analysis is meaningless so it can be compare with one firm overtime an inter firm. (James C.Van Horne: 1988:799)

Hodlock and James (2002), in *"Do Banks Provide Financial Slack ?"* state that the banks have ability to accurately price financial claim, thus including a preference for undervalued firms to chose bank debt as their

managerial financial source. They refers to this motivation for using bank debt as the information benefit will be weighed against a variety of contracting cost in a firm's ultimate financing choice.

Boyd and Nicolo (2005), in *"The Theory of Bank Risk Taking and Competition Revisited"* explained that when confronted with increasing competition moral hazard is exacerbated and bank internationally take on more risk , shown that a positive relationship between the number of bank competitors and risk seeking is fragile. In particular it makes an enormous difference when one allows for the existence of loan markets and requires that there be the same number of banks competing for both deposits and for loan. They assumed that borrowers entirely determine project risk conditional on the loan rate set by banks. In effects bank a raised portfolio problem and transform it into a contracting problem with moral hazard. Without structure, banks use increasing market power to raised loan rates and when confronted with increased funding cost, borrowers optimally choose risk projects.

Subedi (2002) conducted his master's thesis on *"A Comparative Study of Financial Performance between Himalayan Bank Limited and Everest Bank Limited"* with an objectives of examine and comparing the financial performance of two joint ventures and has concluded that the current ratio of HBL is greater than that of EBL. The variability of the ratio of HBL is more uniform than that of HBL. The liquidity of bank may be affected by external internal factor such as interest rate supply and demand position of loan and saving to investment situation. HBL has maintained the ratio of cash and bank balance to total deposit is not satisfactory. EBL has lower capital adequacy ratio in comparison to directive issued by NRB. EBL's loan and advances to total deposit ratio significant to lower than that of HBL.

Paudel (2002) in his thesis *"Financial Performance Analysis of EBL"*, has focused on the objectives as to examine the financial statement of the bank and analyze them to explain the financial soundness of the bank, to observe the return over the equity, to highlight the relationship between different variables, to provide suggestions and recommendations for the improvement of the future performance of EBL.

Darshandhari (2005) ,conducted his master thesis on *"Financial Perfomamance Analysis of Everest Bank Limited"* had a major objectives to evaluate the earning generating capacity and analyze the liquidity , turnover and profitability of the EBL and conducted that current ratio of the over five year is 1.03 times on a average. The average of cash and bank balance to current assets ratio is 14.26 percent that indicates that the cash and bank balance proportion with respect to the current assets is moderate. The ratios for loan and advance to current assets have been lent to the customers as loan and advances. The result of the analysis indicates that the share of fixed deposit is high in the total deposit, which may be termed as favorable one from view point of liquidity. Cash and bank balance has been maintained properly against anticipated calls of its depositors. Hence, in general the liquidity position of the bank is good enough to meet the short-term obligation.

2.3. Limitation of financial performance Analysis

Ratios are constructed from accounting data and these data are subject to different interpretations and ever top manipulation. For example any two firms use different depreciation methods or inventory valuation method, depending on the procedures followed reported profits could be lowered. If the firm use different fiscal years, and if seasonal factors are important, this can influence the comparative ratios. Thus if the ratios of the two

firms are to be compared, it is important to analyze the basic accounting data upon which the ratios were based need to reconcile any major differences.

We should also note that while ratio analysis can provide useful information concerning a company's operation and financial condition, it doesn't inherent problems and limitations that necessitate care and judgment .Some potential problems are listed below:

- Financial statement may not be realistic because they are prepared by followings certain concepts and conventions. For example going concern concept gives us an idea that the business will continue and assets are to be recorded at cost but the book value which the assets is showing may not be actually reliable.
- Financial statements are influenced by the personal judgment of the accountant. He may select any method of depreciation, valuation of stock etc. Such judgment if based on integrity and competency of the accountant will definitely affect the preparation of the financial statements.
- Financial statements disclosed only monetary facts. Those transactions which can't be measured in monetary terms such as conflict between production manager and marketing managers may be very important for a business concern but not recorded in the business book.
- These statements are drawn after the actual happening of the events. They attempt to present a view of the past performance and have nothing to do with the accounting for the future. Modern management is forward looking but these statements do not directly help in making future estimates and taking decision for the future.

These statements do not give a real and correct report about the worth of the assets and their loss of value as these are shown on the historical cost basis. Thus these statements provide artificial view in market or replacement value and the effect of the changes in the price level are completely ignored.

- Financial statement does not dispatch the exact position and essentially interim reports. The exact position can be only known if the business is closed.
- These statements are sometimes prepared according to the needs of the situation. A highly efficient concern may cancel its real profitability by disclosing loss or minimum profit whereas an efficient concern may declare dividend wrongly showing profit in the profit and loss account.
- There are many parties that are interested in the information given in the financial statements but their objective and requirements differ. The financial statements as prepared under the provision of the company act fail to meet the needs of all. These are mainly prepared to safeguard the interest of shareholders.
- Many firms' wants to be better than average, so merely attaining average performance is not necessarily good, as a target for high level performance, it is best to look at the industry leaders' ratio.
- It is difficult to generalize about whether a particular ratio is "good" or bad" a firm may have some ratios which looks good and others bad making it difficult to tell whether the company is on balance or in strong or a weak position .However statistical producers can be used to analyze the net effects of a set of ratios.

CHAPTER - III

RESEARCH METHODOLOGY

How research is conducted and by which way research objective is achieved is the main concern of this chapter. This chapter has been divided into 4 sections. Section –I presents the research design of the study, while section –II describes the nature and source of data as well as the selection of concern bank. Section –III presents the population and sample of data. Section –IV explains the method of analysis employed in interpretation of data.

3.1. Research Design

Research design is the main part of the thesis or any research work. Research design is the plan structure and strategy of investigation conceived so as to obtain answer to research question and to control variance. It includes an outline of what the investigator will do from writing the hypothesis and their operational implications to the financial analysis of data (Kothari, C.R, 1990:390).

The research design refers to the conceptual structure within which the research is conducted. A research design will always help in knowing successive stages. It will be a logically sequence and one after the other stages will scientifically the importance of each step in the whole scheme of things. Research design decides the fate of the proposal and its outcome. The study has used analytical research design and Descriptive research design. An analytical research design is used to analyze the presented data as well facts to be specific. In the context of EBL, the different types of financial and statistical tools and techniques are to be used where as the descriptive research design is used to show the causes of increasing or decreasing the financial variations. Research design is the

plan, structure and strategy of investigation conceived so as to obtain answer to research question and control variance (kerlinger; 1986:275). Considering the objective of the study descriptive analytical research design has been used. Descriptive techniques have adopted to interpret performance of EBL. For the analytical part, statistical and financial tools have been used with the help of annual report and financial statement published by EBL.

3.2. Nature and source of data

The primary thing for any research is that the collected data should be reliable. So it is very important for a researcher to know how the data are collected and how much is the reliability of the data this study mainly based on secondary data of the concerned banks, Nepal Rastra Bank, SEBON, and different library are the providers of the data. The review of literature of the proposed study was based on the text books, official publications, journals, unpublished thesis, web site etc. The necessary data and information at macro level have been collected from relevant institutions and authorities such as NRB, Ministry of Finance, NEPSE, SEBON and their respective publications similarly the required micro level data derived from annual reports of selected banks, SEBON and NEPSE. In addition to above, supplementary data and information were collected from different library such as library of Shankar Dev Campus, T.U. Central library, SEBON etc. The major sources of data and information are as follows:

- NRB Economic Report, NRB
- Banking and Financial Statistics, NRB
- Economic Survey, Ministry of Finance

- Annual Reports of Concern Commercial Banks (from 2004/05 to 2009/10)
- Annual Report of SEBON Nepal
- Trading Report of NEPSE
- Journal of Finance
- Journal of Business
- Previous Research Studies, Dissertation and Articles on the Subject
- Various Text Books
- Different Library

This is conducted on the basis of secondary data. The data relating to investment deposit, loan and advances and profit are directly obtained from balance sheet and profit and loss account of concerned Bank's (EBL) annual reports published on web site of concern bank. Supplementary data and information are collected from number of institution and regulating authorities like www.nrb.org.com.np, www.nepalstock.com.np. Etc.

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

The study is based on the wide range of variables and factors influencing financial decision of the listed banks. Comparative data are presented in such a way so as to make the research informative to the readers. Financial as well as statistical tools have been used to analyze and interpret the balance sheet, income statement and other accounting information.

3.3 Population and sample

A population is most studies usually consists of large group because of its large size it is fairly difficult to collect detailed information from each member of population, rather than collecting information from each member, a sub-group is chosen which is believed to be representative of population. This sub-group is called a sample allows the researcher more choosing this subgroup is done by sampling. The sampling allows the researcher more time to make an intensive study of a research problem. At present, there are 31 commercial banks operating in Nepal. All the commercial bank that is operating in Nepal is considered as the population.

Due to limited time period and resource factors, it is not possible to study all the data related with all the JVBs of them regarding the study topic. From all the commercial bank of Nepal, One of them joint venture Banks is selected as sample i.e. Everest Bank Limited for the present study from the whole population. The present study is undertaken for a period of past 5 years from the year 2004/05 to 2009/10.

3.4 Method of Analysis

To achieve the objective of the study, various financial, statistical and accounting tools have been used in the study. The analysis of data will be done according to pattern of data available.

The various calculated result obtained through financial, accounting and statistical tools are tabulated under different heading. Then they compared with each other to interpret the result.

3.4.1 Financial Tools

Financial tools are used to get knowledge of business which in turn is fruitful in exploring the strengths and weakness of financial policies and strategies. These tools are used for the financial data.

3.4.1.1 Ratio Analysis

The relation between two accounting figures expressed mathematically is known as a financial ratio. An analysis of the firm's ratios generally is the first step in financial analysis. The ratios are designed to show relationship between firms. Translating accounting number into relative value or ratio, allow us to compare the financial position of the firm to another, even if their sizes are significantly different.

There are various types of ratio that can be used to analyze the financial performance of the firm. In this research only the important and relevant ratios are used to find the financial strength of EBL. Thus ratio analysis is used to compare a firm's financial performance and status to that of other firm's to it overtime. Thus ratio analysis provides a strong foundation for qualitative judgment regarding financial performance of a firm. There are different financial ratios which can be described as follows.

3.4.1.1. A. Liquidity Ratio

Liquidity ratios are used to judge a firm's ability to meet its short term obligations. Banking industry has its survival in its ability to create credit and its credit creation ability is dependent upon its liquidity ratio. The liquidity ratio of banking industry depends upon the banking habit of people. Where the banking practice is more prevalent, the low current ratio does not necessarily increase its liquidity risk. Therefore, it is necessary to have a proper balance between high liquidity and lack of

liquidity. The ratios used in short term liquidity analysis evaluate the adequacy of the firm's cash resources relative to cash obligations.

As financial tools following ratios have been used to find out the liquidity position of EBL.

i. Current Asset to Current Liabilities ratio (Current Ratio)
ii. Cash and Bank Balance to Current Assets Ratio
iii. Loan and Advance to Current Assets Ratio
iv. Investment on Government Securities to Current Asset Ratio
v. Cash & Bank Balance to Total Deposit Ratio

Current Assets to Current liabilities Ratio

The current ratio is the ratio of total current assets and current liabilities which shows the relationship between current assets and current liabilities.

Mathematically:

$$\text{Current ratio} = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$$

Total Current assets include cash and bank balance, loans and advances, money at call or short-term notice, investment in government securities and other interest receivable and miscellaneous current assets where as current liabilities include loans and advances ,deposits and other accounts of short-term loan, dividend payable , tax provision, staff bonus and miscellaneous current liabilities. The widely accepted standard of current ratio is 2:1 but accurate standard depends on business nature just like seasonal business.

Cash and Bank Balance to Current Assets Ratio

This is the ratio of most liquid asset, cash and bank balance with the current assets. Higher the ratio means the firm has good capacity of fulfilling the cash demand.

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

Where, cash and banks balance includes cash in hand, foreign cash and cash in foreign banks.

Loan and Advances to Current Assets Ratio

Loans are also considered as current assets as most of them are maturing within a period of one year. This ratio shows how much amount of current asset is allocated in loan and advances which is calculated by dividing the loan and advance by current asset. A Bank should maintain the appropriate ratio according to market.

$$\text{Loan \& Advances to Current Assets Ratio} = \frac{\text{Total Loan \& Advances}}{\text{Current Assets}}$$

Investment on Government Securities to Current Asset Ratio

This ratio shows the percentage of current assets invested on government securities. This is calculated dividing the amount of investment on government securities by the total amount of current assets.

$$\text{Investment of Government Securities to Current Asset Ratio} = \frac{\text{Investment on Government Securities}}{\text{Current Assets}}$$

Cash and Bank Balance to Total Deposit Ratio

Cash and bank balance are the most liquid current assets of a firm. Any financial institution should maintain the sufficient amount of cash and bank balance to meet the cash demand of the clients. Maintaining so many amounts of cash is also not good because money is stored which can be mobilized to earn profit. This ratio is calculated by dividing the amount of cash and bank balance by the total deposits. This measure how much most liquid asset required to pay depositors immediately. It can be presented as,

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

Where, total deposits consist of deposits on current account; saving account; fixed account, money at call and other deposits.

3.4.1.1. B.Turnover Ratios /Activity Ratios / Efficiency Ratios

Turnover ratio measures the performance efficiency of an organization that whether it is using its resources properly or not. To carry out operations, a firms needs to invest in both short term and long term. Turnover ratios describe the relationship between the firm's level of operations and the assets needed to sustain the activity. Activity ratio can also be used to forecast a firm's capital requirement. Activity ratios enable to analyst to forecast these requirements and to access the firm's ability to acquire the assets needed to sustain the forecasted growth. The activity ratios analyzed in the study are:

i. Loan and Advance to Total Deposit Ratio.
ii. Total Investment to Total Deposit Ratio.

iii. Investment on Government Securities to Total Working Fund Ratio

iv. Performing Assets to Total Assets Ratio.

Loan and Advances to Total Deposit Ratio

This ratio indicates how efficiently the selected banks and finance companies are utilizing their total collections/deposits on loan and advances for optimization of profit.

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

Total Investment to Total Deposit Ratio

This ratio indicates how properly firms' deposits have been invested on government securities and shares and debentures of other companies and it is calculated by diving total amount of investment by total amount deposit .Mathematically,

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

Investment on Government Securities to Total Working Fund Ratio

Investment on government securities to working fund ratio indicates how much amount of total investment is on government securities. Mathematically;

$$\text{Investment on Government Securities} = \frac{\text{Investment on Govt. Securities}}{\text{Total Working Fund}}$$

Performing Assets to Total Assets Ratio

The ratio measure what portion of assets has been funded for income generation. Performing assets includes loan and advances, bills purchased

and discounted investment and money at call or short notice. The ratio is calculated by dividing performing assets as follows:

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

3.4.1.1. C.Profitability Ratio

Any business organization is run primarily for profit. Profitability ratios give some yardsticks to measure profit in relative terms, either with reference to sales or assets or capital employed. Profitability is the difference between the revenues and the expenditure over a period. Profitability ratios measure the efficiency of business enterprise. Profit is the main element that makes an organization to survive for long term. There are two areas when judging profitability, one is relationship between on the income statement that indicate a company's ability to recover the costs and expenses and other is relationship of income of various balance sheet measure that indicate the company's relative ability to earn incomes on assets employed. Following ratio is analyzed:

1. Return on total assets (ROA)
2. Total Interest Earned to Total Working Fund Ratio.
3. Return on common equity (ROE)
4. Return on Loan and Advances Ratio.

Return on Total Assets (ROA)

This is the ratio of net profit with total assets and calculated by dividing return on net profit/loss by total working fund and mathematically written as;

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

Total Interest Earned to Total Working Fund Ratio

Higher this ratio indicates the better performance of financial institutions in the form of interest earning on the better working fund. This ratio is calculated dividing total interest earned from investment by total working fund. Mathematically;

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

Return on Equity Ratio (ROE)

The ratio measures how efficiently the banks have used the funds of the owners. The ratio is calculated by dividing net profit by total equity capital (net worth). This can be started as,

$$\text{Return on Equity (ROE)} = \frac{\text{Net Profit}}{\text{Total Equity Capital}}$$

Return on Loan and Advances Ratio

This ratio shows how efficiently bank used his resource to get return from provided loan and advances. This is calculated by dividing net profit/loss by the total amount of loan and advances. Mathematically;

$$\text{Return on Loan \& Advances Ratio} = \frac{\text{Net Profit or Loss}}{\text{Total Loan \& Advances}}$$

3.4.1.1. D. Leverage Ratios /Solvency Ratios /Capital Structure Ratio

The leverage ratios are calculated to judge the long term financial position of a bank. These ratios measure the enterprise's ability to pay the

interest regularly and to repay the principal on maturity. The following ratios are included in leverage ratios.

i. Total Debt to Shareholder's Equity Ratio
ii. Total Debt to Total Assets Ratio
iii. Interest coverage Ratio.
iv. Fixed coverage Ratio.

Debt –Equity Ratio

The relationship between long term debts and owner's equity is known as Debt-Equity Ratio. It is a poplar measure of the long term financial solvency of a firm. It is calculated as follows:

$$\text{Debt-Equity Ratio} = \frac{\text{Long Z term debt}}{\text{Shareholder's equity}}$$

A high ratio shows the large share of financing by the creditors as compared to that of owners. It indicates the margin of safety to the owners. The creditors prefer low debt-equity ratio. A low debt-equity ratio implies larger safety margin for creditors.

Debt to Total assets Ratio

This ratio shows the relationship between the long term debt and total capital. Total capital includes the shareholder's equity as well as long term debt. This ratio is the debt to total assets ratio gives the similar indications as the debt-equity ratio.

The ratio is calculated as: debt to total assets Ratio= $\frac{\text{Total debt}}{\text{Total assets}}$

Interest coverage Ratio

This ratio indicates the ability of a firm to pay interest charges on its borrowed capital. It is also called “Debt Service Ratio” or “Time Interest Earned Ratio”. It is calculated by dividing net profit before interest and taxes (NPBIAT) by the amount of fired interest charges.

Its formula: interest coverage ratio= $\frac{\text{Net profit before interest and taxes}}{\text{Interest}}$

A high ratio is a sign of low burden of borrowing of the business and lower utilization of borrowing capacity. Form the point of view of creditors, debenture holder, and loan creditors, the higher the coverage, the greater the ability of the firm to make the payment of interest.

Fixed Coverage Ratio

This is the ratio of net profit before interest and tax of fixed charges. It indicates the number of times the fixed charge covered by NBIAT. The fixed charge includes interest, preference dividend and debt payment.

Its formula:

Fixed Coverage Ratio = $\frac{\text{Net profit before interest and taxes}}{\text{Fixed charges}}$

Fixed charge = Interest + Preference Dividend + Debt Payment.

3.4.2 Statistical Tools

Statistical analysis is an important technique to analyze the financial performance of the bank. Statistical methods may be defined as the collection, presentation, analysis and interpretation of numerical data. Statistical analysis is very useful for policy maker. It helps policy maker for formulating policies regarding business and forecasting future trends.

Modern business has its roots in the accuracy of the estimates and statistical forecasting regarding the future demand for the service, market trend and so on.

Correct estimation and decision making of the policy maker depends upon his experience and proper use of statistical method. Statistical analysis is very useful in solving economic problems of the banking organization. All economic plans of the bank are formulated on the basis of statistical analysis. The successfulness of the plan is also evaluated with the help of statistical analysis.

The numerical data should be comparable as statistics are collected mostly for the purpose of comparisons. The numerical data collected constitutes statistics if they are comparable. In order to make valid comparisons the data should be homogeneous and uniform.

The main statistical tools used in analyzing the data obtained are:- Measures of central tendency like mean, measures of dispersion like standard deviation, Karl Pearson's coefficient of correlation between different variables, and straight line trend analysis of important variables.

3.4.2.1 Standard Deviation

It is quantitative measure of the total risk of assets. It provides more information about the risk of the asset. It is a measure of the total risk of the asset. It measures the dispersion of returns around the mean. Its advantage is that the uncertainty of returns can be summarized into a single easily calculated number.

The standard deviation of a distribution is the square root of the variance of returns around the mean. The following formula is applied to calculate the standard deviation, using historical returns:

$\sigma_j = \sqrt{\frac{\sum(HPR - \overline{HPR})^2}{n}}$, *where:* HPR = holding period rate of return; σ_j = standard deviation of stock 'j'. $\overline{HPR}$ = average holding period rate of return; n = no. of observations;

3.4.2.2 Karl Pearson's Coefficient of Correlation

It is a statistical tool for measuring the intensity or magnitude of linear relationship between the two variables series. Karl Pearson's measure, known as Person Ian correlation coefficient between two variables (series) X and Y, usually denoted by 'r(X,Y)' or 'r_{xy}' or simply 'r' can be obtained as :-

$$r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{\left[n\sum X^2 - (\sum X)^2\right] \times \left[n\sum Y^2 - (\sum Y)^2\right]}}$$

, *where:* n = number of observations in series X and Y;

$\sum X$ = sum of observations in series X, $\sum Y$ = sum of observation in series Y;

$\sum X^2$ = sum of squared observations in series X; $\sum Y^2$ = sum of squared observations in series Y; $\sum XY$ = sum of the product of observations in series X and Y The value of correlation coefficient 'r' lies between -1 to 1, i.e. $-1 \leq r \leq 1$.

If r =1, there is perfect positive relationship. If r = -1, there is perfect negative relationship. If r = 0, there is no correlation at all. *(Gupta, 1999:519-521)*

The closer the value of 'r' is 1 or -1, the closer the relationship between the variables and the closer 'r' is to 0, the less close relationship. [*Shrestha and Manandhar, 1999 (2056): 234]*

3.5 Method of Data Presentation

The researcher has accumulated all the necessary data and financial information. Collected data for five year period (i.e. from the Year 2004/05 A.D-2009/10 A.D) (B.S 2061/62 to FY B.S 2066/67) are presented in tabular form. Tables are prepared to show various financial ratios of the same period. In appendix also the ratio analysis are stated. The appendix also included the computation table of master list of specific value for coefficient of correlation, averages and standard deviation. All the financial and statistical values are computed manually. Similarly, all the financial numerical values are determined under million of Nepalese rupees and expressed in a round figure. From the analysis of the financial statement, researcher find the financial performance and financial position of the firm.

CHAPTER–IV

PRESENTATION AND ANALYSIS OF DATA

This chapter includes the analysis and result of gathered data in order to evaluate financial performance of the bank for the period of five years. The strength and weakness of those banks, to some extent, is evaluated and the significance of the different financial variables is also analyzed. In this chapter, the data are presented, calculated and analyzed. The five years secondary data (2006 to 2010) of the bank is taken for the analysis. Each detail of calculation is tabulated in the respective appendix.

4.1 Financial position analysis

It is the process of identifying the financial strength and weakness of a firm by properly establishing the relationship between the items of balance sheet and income statement .for this purpose, analysis and interpretation are categorized into three headings.

1) Financial analysis
2) Statistical analysis
3) Major finding of the study

4.1.1 Financial analysis

Financial analysis typically involves the use of ratios, comparison with prior periods and with the budget and other heading .financial ratios are evaluated, analyzed and then interpreted. It is note able that all types of financial ratios are not studied here. Only those ratios are calculated and analyzed which are very much important in the view of performance evaluation of a commercial bank.

Various financial ratios related to the investment management and the fund mobilization are presented and discussed to evaluate and analyze the performance of EBL. The ratios are designed and calculated to highlight the relationship between financial items and figures. Those ratios are as follows.

a) Liquidity Ratio
b) Activity ratios/Turnover ratios/Efficiency ratios
c) Profitability ratio
d) Leverage ratio/Solvency ratio/Capital structure ratio

4.1.1. A. Liquidity ratio

Liquidity is a pre-requisite for the very survival of a firm. It is very important for a firm to be able to meet its obligations as they become due. A firm should ensure that it does not suffer from the liquidity crunch, and also that it is not too much highly liquid. The failure of a company to meet its obligation due to lack of sufficient liquidity will result in bad credit image and loss of creditor's confidence. A very high degree of liquidity is also bad, idle or non-performing assets earn nothing. The firm's funds will unnecessarily tied up in the current assets. Therefore, it is necessary to strike a proper balance between liquidity and lack of liquidity. Adequate liquidity is a must in the banking sector also, in order to protect its solvency and to honor its short-term obligations or liabilities. Failing to do so, banks might have to go for liquidation, and hence to protect the creditor's interest. NRB has directed all the banks to maintain adequate Cash Reserve Ratio (CRR). 5.5%of total deposit. A bank must ensure that it has a sound liquidity position to face the instant claims by its creditors.

Liquidity ratio measures the ability to meet the short-term obligations and reflects the short-term financial strength and solvency of any bank. Since, the depositors of the banks are interested in the short-term solvency or liquidity of the firm. It is regarded as one of the most important ratios. To measure the solvency position of Everest Bank Limited, there have been calculated some liquidity ratios which have been thought to be important. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the public .The following ratios are calculated and interpreted under liquidity ratios.

I. Current Ratio.
II. Cash and bank balance to current Assets ratio
III. Loan and Advances to Current Assets Ratio
IV. Investment on government Securities to Current Asset Ratio
V. Cash and Bank Balance to Total Deposit Ratio

Current Ratio

$$\text{Current ratio} = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$$

Table No. 2

Current Ratio

*in million

F/Y	Current Assets	Current Liabilities	Ratio (Times)
2006	15147.85999	14696.47639	1.03 : 1
2007	20982.79469	19940.05903	1.33 :1
2008	26550.8776	24928.1053	0.841 :1
2009	35687.2567	34101.2236	1.046 :1
2010	40265.71182	37921.29577	1.061 :1
Average (X)			1.0614: 1
Standard Deviation (σ)			0.1564

Source: Annual Report EBL from FY 2006-2010 and Appendix-1

This ratio shows the relation between current assets and current liabilities. The current ratio is calculated by dividing current assets by current liabilities. The objectives of this ratio is to measure the ability of the firm to meet its short term obligation .this analysis covers five years from 2006 to 2010. current assets consists cash balance, investment in government securities, bank balance, balance with other financial institutions, money at call , loan and advances , bills purchase and other assets.

Current liabilities include deposit liabilities, bills payable and other liabilities. Above calculated ratio of EBL shows current ratio is below the standard 2:1, however looking at the nature of assets and liabilities of the commercial banks the ratio below the standard may be accepted as satisfactory. But it signifies bank have poor liquidity position. The bank may face the problem of working capital if they need to pay the current liabilities at demand. Bank may lose their goodwill in case of delay in the payment of liabilities. Bank will have the problem in winning the confidence of current depositors and short term lenders. The average (X) ratio is 1.0641 times which seems quite satisfactory and the standard deviation is 0.1564 for the period. The standard ratio is 2:1 times.

Cash and bank balance to current Assets ratio

It is the ratio of total cash and bank balance to total current assets. Cash and bank balance are two major components of current assets. These are ready cash, which can be used anywhere according to the need of a bank. By nature, almost all the current assets of a firm remain idle or earn very little. So, there is no chance of earning from cash balance held in the business and bank balance refers to that balance which can be converted into cash at any needed time and it also generally remains idle. Hence, the

cash and bank balance to current assets ratio shows what portion of total of current assets represents cash or how much from total current assets can be used as ready cash to discharge short term obligations of the bank.

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

Table No. 3

Cash and Bank Balance to Current Assets Ratio

*in million

F/Y	Cash and bank balance	Current assets	Ratio (%)
2006	1552.967494	15147.85999	10.25205867
2007	2477.262839	20982.79469	11.8061625
2008	2582.129585	26550.8776	9.725213697
2009	6164.371163	35687.2567	17.27331191
2010	7818.815003	40265.71182	19.41804739
Average (X)			13.69
Standard Deviation (σ)			3.91

Source: Annual Report EBL from FY 2006-2010 and Appendix-2

The table shows that the cash and bank balance and current assets ratio shows how much of current assets of the bank represent cash and bank balance. In year 2006 10.25 percentages of total assets represent cash. In year 2007 the percentage increases to 11.80 from 10.25. In year 2008 decrease to 9.72 from 11.80.similary in the year 2009 increase to 17.27 from 9.72 and this year (2010) it again increases 19.41 percentages. The ratio are in fluctuating trend and become highest in year 2010, which means the percent of the current assets are cash bank balance. The average (X) ratio is 13.69 and the standard deviation is 3.91 percentages for the period.

Loan and Advances to Current Assets Ratio:

Loans are also considered as current assets as most of them are maturing within period of one year. The main business of a bank is mobilization of resources. The resources/fund collected from different sources is mobilized in terms of loan and advances and by investing on various types of securities and projects. The major part of the collected fund is invested in the form of loan and advances, i.e. loan is granted to needy persons or needy sectors of the economy which is also a main business of any commercial bank.

Loans and advances cannot be converted into cash on the desires of the investors. Loans and advances pay interest at a certain rate. But, it's not always sure that the principal and interest of the loan and advances will be recovered in the stated time. Hence, this ratio indicates the percentage of total current asset which have been lent to the customers with a promise to be paid interest at a certain rate.

$$\text{Loan and advances to current assets ratio (\%)} = \frac{\text{Loan \& Advances}}{\text{Current Assets}}$$

Table No. 4

Loan and Advances to Current Assets Ratio

*in million

F/Y	Loan and advances	Current assets	Ratio (%)
2006	9801.307676	15147.85999	64.70423996
2007	13664.08166	20982.79469	65.12040872
2008	18339.08556	26550.8776	69.07148546
2009	23884.67362	35687.2567	66.92773787
2010	27556.35603	40265.71182	68.43628185
Average (X)			66.85
Standard Deviation (σ)			1.736

Source: Annual Report EBL from FY 2006-2010 and Appendix-3

The table shows the loan and advances to current assets ratio. In the year 2006 64.70 percentages of current assets have lent as loan advances. In the year 2007 the ratio increase little bit to 65.12 percentages. In the year 2008 the ratios also increase to 69.07 percentages and then decrease in year 2009 and 2010.

As already stated, loan and advances earn returns at a certain rate and to invest more amounts of resources in the portfolio yielding return at a fixed rate is always a positive aspect from view point of maximizing profit if there is no risk of recovering principal and interest from them. But, the recent trends of recovering loan have shown that a very large amount of loan has been facing difficulties to be recovered. Failure in recovering the loan has been the main reason for slow trend of profitability for the bank. From the table it is also clear that the EBL is investing higher amount in loan and advance from the funds collected in other sectors as well as. The average (X) ratio is 66.85 and the standard deviation is 1.736 percentages for the period.

Investment on government Securities to Current Asset Ratio

This ratio shows the percentage of current assets invested on government securities by the total amount of current assets.

$$= \frac{\text{Investment Govt. Securities}}{\text{Current Assets}}$$

Table No. 5

Investment on government securities to current assets ratio

*in million

F/Y	Investment on govt securities	Total current assets	Ratio (%)
2006	3548.616968	15147.85999	23.42652342
2007	4704.632426	20982.79469	22.4213814
2008	4821.604744	26550.8776	18.15986958
2009	5146.045773	35687.2567	14.41984128
2010	4354.353089	40265.71182	10.81404722
Average (X)			17.84
Standard Deviation (σ)			4.76

Source: Annual Report EBL from FY 2006-2010 and Appendix-4

The above table shows that the ratio of EBL is in decreasing trend from by 2006 to 2010. In overall, investment on government securities to current ratio is lower. It means EBL had invested its lower portions of current assets on government securities. The average (X) ratio is 17.84 percentages and standard deviation is 4.76 percentages for the period.

Cash and Bank Balance to Total Deposit Ratio

This ratio shows the percentage of total deposit which can be immediately discharged by the bank from its ready cash. Total of the deposits is the most important source of a bank's fund. This fund should be utilized into various sectors in a profitable manner and cash and bank balances is that part of bank's fund which has not been invested anywhere with a view to generating income. Excess cash and bank balance, from viewpoint of liquidity, shows a firm's strong position and it is always harmful from viewpoint of profitability to maintain excess cash and bank balance. Following table shows the cash and bank balance to total deposit ratio of the bank for the period of study. This measure how much most

liquid asset required to pay depositors immediately. It can be presented as,

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

Table No. 6

Cash and Bank Balance to Total Deposit Ratio

*in million

F/Y	Cash and bank balance	Total deposit	Ratio (%)
2006	1552.967494	13802.44499	11.25139419
2007	2391.420594	18186.25354	13.14960549
2008	2667.97183	23976.29854	11.12753842
2009	6164.371163	33322.94625	18.49887797
2010	7818.815003	36932.31001	21.17066331
Average (X)			15.034
Standard Deviation (σ)			4.09

Source: Annual Report EBL from FY 2006-2010 and Appendix-5

The total deposit includes current deposit, saving deposit, fixed deposit and call deposit and other deposit. In a year 2010 the ratio is 21.17 percentages, which indicated strong liquidity position and in a year 2008 ratio is 11.12 percentages, which is lowest ratio of study period. Trend of the ratios appeared to be fluctuating in the study period. Though high ratios indicate its high liquidity position but it also affects profitability due to idleness of high interest bearing fund. The average (X) ratio is 15.034 percentages and standard deviation is 4.09 percentages for the period.

4.1.1. B. Profitability Ratio

Profit is the main element for financial institution to survive and grow over the long run. But only earning profit is not the ultimate aim of the institution and it should never be earned at the cost of employees,

customers and society. However, profitability is a measure of efficiency and search for it provides an incentive to outside efficiency. This ratio indicates the degree of success in achieving desired profit levels of the working funds. These ratios are of two types: those showing profitability in relation to sales and those showing profitability in relation to investment. A firm should earn profits to survive and grow over a long period of time. Profits are indispensable but it would be wrong to assume that every action initiated by management of a firm should be aimed at maximizing profits, irrespective of social magnitude and responsibilities. Even then, profit plays a fundamental role to make a firm stand strong to meet its social responsibilities. Profit is the difference between revenues and expenses over a period of time. Profit is the ultimate output of a firm, and it will have no future if it fails to make sufficient profit. The profitability ratios are calculated to measure the operating efficiency of the firm. The profitability ratio measures the profit of a company makes in relation to assets. A company's value is in its income stream, and its assets are simply a means to achieve this goal. The ideal company would produce income without assets. Besides the management of the firm, creditors and owners are also interested in the profitability of the firm. Profit must be earned to sustain the operations of the business to be able to obtain funds from investors for expansion and growth and to contribute towards the social overheads for the welfare of the society.

To measure the profitability of the EBL, a number of ratios have been calculated.

I) Return on total assets (ROA).
II) Total interest earned to total working fund ratio.
III) Return on common equity (ROE)
IV) Return on loan and advances ratio.

Return on total assets (ROA):

This ratio measures how far the management has utilized all the assets of a firm for profit generating activities. This ratio provides the foundation necessary for a company to deliver a good return on equity. Higher ROA ratio indicates higher efficiency in the utilization of total assets and vice-versa. ROA is calculated by dividing Net Income after Tax by Total Assets.Net profit is the after tax profit of a firm, which can be utilized by the firm for its own purpose or for the benefit of owners. Total assets also termed, as working fund is the total utilization of a firm's fund. Net profit stated other way, is the reward to a firm for efficient utilization of its various assets. Following table shows the net profit to total assets ratio of the bank for the period of study.

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

Table No. 7

Return on total assets (ROA)

*in million

F/Y	Net profit after tax	Total assets	Ratio (%)
2006	237.290936	15959.28469	1.486851953
2007	296.409281	21432.5743	1.382984969
2008	451.218613	27149.34288	1.661987235
2009	638.732757	36916.84865	1.73019307
2010	831.756632	41382.76071	2.009910933
Average (X)			1.6512
Standard Deviation (σ)			0.2388

Source: Annual Report EBL from FY 2006-2010 and Appendix-6

The ratio measure the productivity of assets net profit refers to the profit after deduction of interest and tax .total assets appear in assets side of balance sheet. Bank is able to earned profit so its ratio was in positive form. Its ratio fluctuated over five periods. In a year 2007 shows 1.38

percentages was lowest ratio and in year. 2010 shows 2.00 percentages was highest ratio over study period. Highest ratio indicates the success of management in overall operation. The ratio measures the profitability of financial resources invested in the firm's assets. Hence, the higher the ratio implies that the available source and tools are employed efficiency. The average (X) ratio is 1.6512 percentages and standard deviation is 0.2388 percentages for the period.

Total interest earned to total working fund ratio

The ratio measurer the percentage of total interest paid against the total working fund. A higher ratio indicates the higher interest expenses to total working fund and vice-versa.

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

Table No. 8

Total interest earned to total working fund ratio

*in million

F/Y	Total interest paid	Working fund	Ratio (%)
2006	401.397351	15959.28469	2.515133722
2007	517.166241	21432.5743	2.41299171
2008	632.609264	27149.34288	2.330108934
2009	1012.874353	36916.84865	2.74366418
2010	1572.790306	41382.76071	3.800592998
Average (X)			2.758
Standard Deviation (σ)			0.53

Source: Annual Report EBL from FY 2006-2010 and Appendix-7

The above table shows that total interest paid to total working capital ratio of EBL. The ratio is decreasing trend at first three years. Its ratio fluctuated over five year of the study period. In a year 2010 shows 3.80 percentages was highest and in year 2008 shows 2.33 percentages lowest ratio over study period. In conclusion we can say that EBL successful to

collect its working capital fund for less expensive sources. The average (X) ratio is 2.758 percentages and standard deviation is 0.53 percentages for the period.

Return on common equity (ROE)

The ratio of net income to common equity measures the rate of return on common stockholders' investment. This is the king among the ratio. This ratio measures the profit earned by the EBL by utilizing owner's equity there by generating return to satisfy the owners. Higher the ratio indicates sound management and efficiency and wealth maximization of the banks, which in turn is the wealth maximization of the banks. ROE is calculated by dividing Net Income after-Tax (NIAT) by Common Equity.

Here, NIAT refers to net profit after tax from profit and loss a/c and shareholder equity refers to paid up capital, reserve and surplus and undistributed profits.

$$\text{Return on Equity (ROE)} = \frac{\text{Net Profit}}{\text{Total Equity Capital}}$$

Table No. 9

Return on common equity (ROE)

*in million

F/Y	Net profit after tax	Total Equity capital	Ratio (%)
2006	237.290936	822.808301	28.83915193
2007	296.409281	1579.5	18.76601969
2008	451.218613	2412.6	18.70258696
2009	638.732757	2842.421	22.47143393
2010	831.756632	3589.5673	23.17150126
Average (X)			22.388
Standard Deviation (σ)			3.71

Source: Annual Report EBL from FY 2006-2010 and Appendix-8

In above table the ROE of the bank for the 5 years. It also reveals that net income is highest in year 2010. The ROE ratios have increasing trend. This ratio indicates how well the firm has used the resources contributed by owners. It is good for the firm to be the return of investment high. Higher ratio shows the more efficient management and utilization of shareholder's fund. The average (X) ratio is 22.388 percentages and standard deviation is 3.71 percentages for the period.

Return on loan and advances ratio:

This ratio shows how efficiently bank used his resource to get return from provided loan and advances. This is calculated by dividing net profit/loss by the total amount of loan and advances. Mathematically;

$$\text{Return on Loan \& Advances Ratio} = \frac{\text{Net Profit or Loss}}{\text{Total Loan \& Advances}}$$

Table No. 10

Return on loan and advances ratio

*in million

F/Y	Net profit after tax	Total loan and advances	Ratio (%)
2006	237.290936	9801.307676	2.421013031
2007	296.409281	13664.08166	2.169258705
2008	451.218613	18339.08556	2.460420458
2009	638.732757	23884.67362	2.674236907
2010	831.756632	27556.35603	3.018383966
Average (X)			2.54
Standard Deviation (σ)			0.286

Source: Annual Report EBL from FY 2006-2010 and Appendix-9

The table indicates Net Income to Total loan and advances ratio for 5 years. Ratio of EBL remained 2.42, 2.16, 2.46, 2.67 and 3.08 respective year of the study period of five years. Highest ratio and lowest ratio were 3.01 percentages and 2.17 percentages respectively in year 2010 and

2007. Return and loan advances ratio measures the earning capacity of commercial bank on its mobilized fund based loan and advances. A high ratio indicates a greater success to mobilize fund and vice-versa. This ratio shows how efficiently bank used his resource to get return from provided loan and advances. The average (X) ratio is 2.54 percentages and standard deviation is 0.286 percentages for the period.

4.1.1. C. Leverage Ratios /Solvency Ratios /Capital Structure Ratio

It is also called Debt management Ratio. Debt management ratios measures the extent to which firms is using debt financing or financial leverage and the degree of safety afforded to creditors. A solvency ratio is measures the relationship between debts and owners equity and examine the proportion of debt the company is using. This ratio is calculated to judge the long-term financial position of the firm. This ratio indicates mixture of funds provided by the owners and lenders, as per the general rule. Debt is more risky from firm's point of view. The firm has a legal obligation to pay interest to debt holders, irrespective of the profit or loss incurred by the firm. This ratio of institution highlights the long term financial position, debt servicing capacity and strength and weaknesses of the firm. As institution should have short term liquidity as well as long term solvency as short term creditors are interested to know about the liquidity position and long term creditors are interested to know the term financial position of the firm to determine to whether the firm can pay regular interest or not. The following ratios are examined under these heading.

I) Total Debt to Shareholder's Equity Ratio
II) Total Debt to Total Assets Ratio
III) Interest coverage Ratio.

IV) Fixed coverage Ratio.

Total Debt to Shareholder's Equity Ratio

This ratio is calculated by dividing total debt by total equity. This ratio measures the proportion of external liability in the total capital of the firm. This ratio indicates how well creditors are protected in case of the company's insolvency. It is calculated to measure the firm's obligation to creditors in relation to the funds invested by the owners. In this study, total debt refers to all depositors, bills payable, borrowing made from other banks and other liabilities. Similarly, total equity refers to paid up capital, reserve and surplus and undistributed profit. Generally, very high debt to equity ratio is unfavorable to the business firm because debt gives third parties legal claims over the company. Which can be for regular payment of interest plus repayment of principal within the agreed time?

On the other hand, a very low debt to equity ratio is also unfavorable from the shareholder's point of view. They want this ratio to be high so that they can have better return with smaller capital. Investment of debt in the business is considered beneficial when the interest rate is less than the return as increase shareholders wealth. This process is known as trading on equity. Therefore an appropriated mixture of debt and equity capital should be maintained by the firm for maximization of owner's wealth.

$$\text{Debt-Equity Ratio} = \frac{\text{Long Term debt}}{\text{Shareholder's equity}}$$

Table No. 11

Total Debt to Shareholder's Equity Ratio

*in million

F/Y	Total debt	Total Equity	Ratio (times)
2006	12464.86602	822.808301	15.14917388
2007	16229.41352	1579.5	10.2750323
2008	21110.68624	2412.6	8.750180818
2009	28126.31512	2842.421	9.895196779
2010	32213.11884	3589.5673	8.974095246
Average (X)			10.6
Standard Deviation (σ)			2.336

Source: Annual Report EBL from FY 2006-2010 and Appendix-10

The total debt to equity ratio of EBL remains 15.14, 10.27, 8.75, 9.89 and 8.97 times over the five year study period. The ratios shows EBL has high portion of debt in capital structure from the year 2006 to 2008 debt equity ratio decreased. Regular decrease in debt equity ratio shows it might decrease in coming year also. The average (X) ratio is 10.6 percentages and standard deviation is 2.336 percentages for the period.

Total Debt to Total Assets Ratio

This ratio measures the relationship between financial contribution of outsiders and owners on total assets of the firm or it measures the proportion of debt out of total assets of the firm. It also provides security to outsider to pay their regular interest, dividend and principal within prescribed time. Generally creditor prefers the components to use low debts and owners, on the contrary prefer high debt ratio to earn more return. This ratio is similar as debt to equity ratio. Higher debt ratio indicates higher financial risk as well as increasing claims of outsiders over the total assets and lower ratio indicates lower financial risk as well as decreasing claim of outsiders over the total assets of the firm. Here, total debt refers to short-term loan; long term loans and all kinds of

deposits and other liabilities and total assets include all the assets that are in the assets side of balance sheet of the firm.

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

Table No. 12

Debt to total assets ratio

*in million

F/Y	Total debt	Total assets	Ratio (%)
2006	12464.86602	15959.28469	78.10416486
2007	16229.41352	21432.5743	75.72311797
2008	21110.68624	27149.34288	77.75763241
2009	28126.31512	36916.84865	76.18828841
2010	32213.11884	41382.76071	77.84187978
Average (X)			77.11
Standard Deviation (σ)			0.967

Source: Annual Report EBL from FY 2006-2010 and Appendix-11

Total debt includes long term and short term interest bearing obligation which are loans and advances taken from other financial institution and deposit carrying interest i.e., saving deposit, fixed deposit and call deposit. Total assets include current assets and fixed assets. Debt assets ratio of EBL remained 78.104, 75.723, 77.757, 76.188 and 77.8418 percentage over the study period. Above calculated ratios shows larger portion of the bank's assets has been financed through outsider's fund. This ratio shows that bank is following high profit high risk strategy. The average (X) ratio is 77.11 percentages and standard deviation is 0.967 percentages for the period.

Interest Coverage Ratio

This ratio indicates the ability of a firm to interest charges on its borrowed capital. It is also called "debt service ratio" or "time interest earned ratio".

The ratio of Earnings before Interest and Taxes (EBIT) to interest charges is measures the ability of the firm to meet its annual interest payment. The times interest earned (TIE) ratio is determined by dividing earnings before interest and taxes by interest charge.

TIE ratio measures the extent to which operating income can decline before the firm is unable to meet its annual interest costs.

Earnings before interest and tax includes interest expenses, net profit and provision for taxation .Interest includes all the interest expenses paid to outsiders parties.

$$\text{Interest coverage ratio} = \frac{\text{Net profit before interest and taxes}}{\text{Interest}}$$

Table No. 13

Interest coverage ratio

*in million

F/Y	**NPBIT**	**Interest expenses**	**Ratio (Times)**
2006	746.997679	401.397351	1.860993046
2007	971.874698	517.166241	1.87923074
2008	1300.741179	632.609264	2.056152594
2009	1928.471411	1012.874353	1.903959169
2010	2761.576068	1572.790306	1.755845047
Average (X)			1.88
Standard Deviation (σ)			0.098

Source: Annual Report EBL from FY 2006-2010 and Appendix-12

A high ratio is a sign of low burden of borrowing of the business and lower utilization of borrowing capacity. From the point of view of creditors, debenture holder, and loan creditors, the higher coverage is the greater ability of the firm to make the payment of interest. Interest coverage ratio remained 1.86, 1.87, 2.05, 1.90 and 1.75 times over the five years of study period. Highest ratio was in 2008 of 2.05 times. A high ratio is a sign of low burden of borrowing of the bank and lower utilization of borrowing capacity. Lower ratio indicates more use of debt for which interest is paid or insufficient operation. The average (X) ratio is 1.88 percentages and standard deviation is 0.098 percentages for the period.

Fixed coverage ratio

This is the ratio of net profit before interest and tax of fixed charges. It indicates the number of times the fixed charge covered by NBIAT. The fixed charge includes interest, preference dividend and debt payment.

$$\text{Fixed Coverage Ratio} = \frac{\text{Net profit before interest and taxes}}{\text{Fixed charges}}$$

Table No. 14

Fixed coverage ratio

*in million

F/Y	Net profit interest and taxes	Fixed charges	Ratio(times)
2006	746.997679	413.997351	1.804353765
2007	971.874698	529.766241	1.834534976
2008	1300.741179	656.332552	1.981832495
2009	1928.471411	1029.22175	1.873718089
2010	2761.576068	1574.190306	1.754283493
Average (X)			1.84
Standard Deviation (σ)			0.077

Source: Annual Report EBL from FY 2006-2010 and Appendix-13

It shows the ability of the firm to make the payment of fixed charges. Hence, the higher coverage ratio is preferable for the company. Higher the coverage, the higher profitability will be. Fixed coverage ratio remained 1.80, 1.83, 1.98, 1.87 and 1.75 times over the five years of study period. Highest ratio was in 2008 of 1.98 times. A high ratio is a sign of strong capacity of the bank. The average (X) ratio is 1.84 percentages and standard deviation is 0.077 percentages for the period.

4.1.1. D. Turnover Ratios /Activity Ratios / Efficiency Ratios

Turnover ratio measures the performance efficiency of an organization that whether it is using its resources properly or not. To carry out operations, a firms needs to invest in both short term and long term. Turnover ratios describe the relationship between the firm's level of operations and the assets needed to sustain the activity. Activity ratio can also be used to forecast a firm's capital requirement. Activity ratios enable to analyst to forecast these requirements and to access the firm's ability to acquire the assets needed to sustain the forecasted growth. The activity ratios analyzed in the study are:

i. Loan and Advance to Total Deposit
ii. Total Investment to Total Deposit
iii. Investment on government securities to working fund
iv. Total performing assets to total debt ratio

Loan and Advance to Total Deposit

Loan and advances is the main item of utilization of a bank's collected fund. Accepting deposits and granting of loans are the main business of any commercial and other type of bank. This ratio shows the percentage of total deposit that has been utilized on loan and advances. The collected fund must be mobilized somewhere else in the form of loans and

advances or investment or in any other forms to generate income. The utilization of fund in the form of loan and advances generates income in terms of interest at a fixed rate.

Mobilization of fund in the sector with a fixed rate of interest is always a positive aspect from viewpoint of profitability if there is no risk while recovering them. The Loan & Advances to total deposit ratio can be further explain by the help of the following table.

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

Table No. 15

Loan and Advance to Total Deposit

*in million

F/Y	Loan and advances	Total deposit	Ratio (%)
2006	9801.307676	13802.44499	71.01138736
2007	13664.08166	18186.25354	75.13412058
2008	18339.08556	23976.29854	76.48839347
2009	23884.67362	33322.94625	71.67635611
2010	27556.35603	36932.31001	74.61313962
Average (X)			73.78
Standard Deviation (σ)			2.093

Source: Annual Report EBL from FY 2006-2010 and Appendix-14

Loan and advances consists of loan, advances, bills discounted. The ratio fluctuated throughout the study period. The ratio indicated the proportion of total deposit invested in loans and advances. In a year 2006, 71.01 percentages of total deposit was invested in loans and advances which is lowest of the period in 2008, ratio was 76.48 percentages which is highest of study period. Too low ratio gives a picture of the idle cash in bank. As per banking practice, banks maintain the ratio around 70.75 percentages. It shows bank is successful in utilizing its deposits on loans and advances. The average (X) ratio is 73.78 percentages and standard deviation is 2.093 percentages for the period.

Total Investment to Total Deposit

As stated earlier total deposit is the main source of a bank's fund which is the amount accepted by the bank from its customers under various accounts. The fund so collected should be utilized properly into different sectors of the economy with a view to achieve the objectives of the bank. A wise utilization of such fund results in maximization of profit. By nature, major part of the total deposit of bank's fund, which is invested on the securities, issued by governmental and non-governmental organization and on other various projects. Utilization of fund on investment has possibility of capital gain along with regular risk of not recovering investment from these sectors.

Following table shows the Total Investment to Total Deposit ratio of the bank for five years of study:

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

Table No. 16

Total Investment to Total Deposit

*in million

F/Y	Total investment	Total deposit	Ratio (%)
2006	4200.51522	13802.44499	30.43312416
2007	4984.314586	18186.25354	27.40704442
2008	5059.557544	23976.29854	21.10232961
2009	5948.480273	33322.94625	17.85100342
2010	5008.307589	36932.31001	13.56077534
Average (X)			22.068
Standard Deviation (σ)			6.080

Source: Annual Report EBL from FY 2006-2010 and Appendix-15

The ratio shows decrease pattern during the study period. In a year 2010 was 13.56 percentages which is lowest and in a year 2006 ratios was

30.433 percentages which is highest of the study period. Bank should invest certain percentages of deposit in different sector. If the bank is unable to invest in proper way it increases interest expenses, idle fund do not give any return to bank. The average (X) ratio is 22.068 percentages and standard deviation is 6.080 percentages for the period.

Investment on government securities to working fund

Investment on government securities to working fund ratio indicates how much amount of total investment on government securities mathematically:

$$\text{Investment on Government Securities} = \frac{\text{Investment on Govt. Securities}}{\text{Total Working Fund}}$$

Table No. 17

Investment on government securities to working fund

*in million

F/Y	Total govt. securities	Total working fund	Ratio (%)
2006	3548.616968	15959.28469	22.23543873
2007	4704.632426	21432.5743	21.95085089
2008	4821.604744	27149.34288	17.75956333
2009	5146.045773	36916.84865	13.93955866
2010	4354.353089	41382.76071	10.52214259
Average (X)			17.276
Standard Deviation (σ)			4.548

Source: Annual Report EBL from FY 2006-2010 and Appendix-16

From the above table it shows that the ratio of EBL is in fluctuating trend. Investment on government securities to total working fund ratio over 5 year of study period. In a year 2006 and year 2010 were ratio 22.23 percentages and 10.25percentages respectively which are the highest and lowest over five year of study period. High ratio represents the success in

utilizing the fund. The average (X) ratio is 17.276 percentages and standard deviation is 4.548 percentages for the period.

Total performing assets to total debt ratio

The ratio measure what portion of assets has been funded for income generation. Performing assets includes loan and advances, bills purchased and discounted investment and money at call or short notice. The ratio is calculated by dividing performing assets as follows:

$$\text{Performing Assets to total debt ratio} = \frac{\text{Total performingassets}}{\text{Total debt}}$$

Table No. 18

Total performing assets to total debt ratio

*in million

F/Y	Total performing assets	Total debt	Ratio (%)
2006	14068.7829	12464.86602	112.8675019
2007	18648.39625	16229.41352	114.90493
2008	23744.64311	21110.68624	112.4768889
2009	23884.67362	28126.31512	84.91931315
2010	27556.35603	32213.11884	85.54389337
Average (X)			102.13
Standard Deviation (σ)			13.82

Source: Annual Report EBL from FY 2006-2010 and Appendix-17

Performing assets to total debt ratio fluctuated over the five years of the study period. In a year 2007 and in a year 2009 were ratio 114.90 percentages and 84.91percentages respectively which are the highest and lowest ratio over the five years study period. High ratio represents the success in utilizing the fund, like in 2006, 2007 and 2008 were satisfactory because ratio were more than 100 percentages. The average (X) ratio is 102.13 percentages and standard deviation is 13.82percentages for the period.

4.2 Statistical Tools

In this section some statistical tools such as co-efficient of correlation analysis between different variables, trend analysis of deposits, loan and advances, investment and net profit and EPS are used to achieve the objective of the study.

4.2.1 Coefficient of correlation Analysis

Correlation analysis is the statistical tools generally used to describe the degree to which one variable is related to another. In other words correlation is defined as the relationship between the one dependent variable and one or more independent variables. But it does not tell anything about cause and effect relationship it only shows the relationship between two variables is may be positive or negative. If variable increase and decrease the same direction, than the two variables is positive correlated otherwise negative. Under this chapter Karl Pearson's Coefficient of Correlation is used to find out the relationship between

I. Deposits and profit of EBL
II. Investment and profit of EBL
III. Total deposit and Investment EBL
IV. Determination of coefficient which is square of correlation coefficient. Similarly, probability error of the correlation coefficient is applicable for the measurement of reliability of the computed value of the correlation coefficient, 'r'. The probability error (P.E.) is defined by,

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

Where, r^2 = determination of coefficient, n = Number of observation

The probable error is used to measure the reliability and test of significance of correlation coefficient. P.E is used in interpretation whether the calculated value of r is significant or not.

I. If r < P.E.it is insignificant, i.e. there is no evidence of correlation.
II. If r > 6P.E. it is significant.
III. If P.E <r < 6P.E nothing can be concluded.
IV. By adding and subtracting the value of probable error from the coefficient of correlation we get the upper and lower limits respectively within which correlation coefficient in the population can be expected to lie. Symbolically, correlation in the population=r + P.E, r – P.E.

4.2.1.1. A Coefficient of correlation between total deposit and total profit

Coefficient of correlation ‘r’ between Total deposit and total profit measure the degree of relation between these two variables. Total deposit is independent variable (X) and Total profit is dependent variable (Y). The purpose of computing co-efficient of correlations between total deposit and total profit to find whether deposit is significant used as the profit or not.

Table No. 19

Coefficient of correlation between total deposit and total profit

* In million

Year	Total deposit (X)	Total profit (Y)
2006	13802.44499	237.290936
2007	18186.25354	296.409281
2008	23976.29854	451.218613
2009	33322.94625	638.732757
2010	36932.31001	831.756632
Correlation coefficient (r)	0.9860	
Probable error	0.008386	
6.P.E	0.050316	

(Calculation: appendix 18)

Calculation shows that the coefficient of the correlation between total deposit and net profit of EBL is highly positive. Its correlation coefficient and probable error remained 0.986 and 0.008386 respectively. Correlation coefficient between total deposit and net profit was 0.9860, it means almost range of one, and so it is perfectly positive correlation. Coefficient appeared grater then six times of probable error i.e. 0.9860>0.050316 which means that relationship between total deposit and net profit is significant. This shows the net profit of EBL increase almost to the same degree with in the amount of deposit.

4.2.1.1. B Correlation analysis between investment and profit

Coefficient of correlation ‘r’ between Total investment and total profit measure the degree of relation between these two variables. Total investment is independent variable (X) and Total profit is dependent variable (Y). The purpose of computing co-efficient of correlations between total investment and total profit to find whether investment is significant achieve as the profit or not.

Table No. 20

Correlation analysis between investment and profit

*in million

F/Y	Total investment (X)	Total profit (Y)
2006	4200.51522	237.290936
2007	4984.314586	296.409281
2008	5059.557544	451.218613
2009	5948.480273	638.732757
2010	5008.307589	831.756632
Correlation coefficient (r)	0.57	
Probable error	0.2036	
6 .P.E	1.22	

(Calculation: appendix 19)

Calculation shows that coefficient of correlation between investment and net profit of EBL is positive. Its correlation and probable error remained 0.57and 0.2036 respectively. Correlation coefficient appears less than probable error .i.e. 0.57<1.22, which indicates that the investment and net profit are not highly positive correlated. The ratio shows that EBL is not able to invest its deposit in profitable sectors.

4.2.1.1. C Correlation analysis between Total deposit and Investment EBL

Coefficient of correlation ‘r’ between Total deposit and total investment measure the degree of relation between these two variables. Total deposit is independent variable (X) and Total investment is dependent variable (Y). The purpose of computing co-efficient of correlations between total deposit and total investment to find whether deposit is significant used as the investment or not.

Table No. 21

Correlation analysis between deposit and investment

*in million

F/Y	Total deposit (x)	Total investment (Y)
2006	13802.44499	4200.51522
2007	18186.25354	4984.314586
2008	23976.29854	5059.557544
2009	33322.94625	5948.480273
2010	36932.31001	5008.307589
Correlation coefficient (r)	0.69	
Probable error	0.1580	
6 .P.E	0.9481	

(Calculation: appendix 20)

The calculation shows that coefficient of correlation between deposit and total investment of EBL is positive. Its correlation coefficient and probable error remained 0.69 and 0.1580 respectively. Correlation coefficient appeared less than six times of probable error i.e. 0.69<0.9481 which indicates the deposit and investment are not correlated. The ratio shows that EBL is not able to invest its deposit in profitable sectors.

4.3.1 Trend Analysis and projection for next five years

This measurement used in financial management analysis can be classified into two groups those who measure in the relation among the items. Insight set of statements, and those who measure the analysis in these items in successive statement. The first is a static analysis measuring position at a point of time for a period and the second is a dynamic analysis, measuring changes of position. Both types of analysis are necessary for a comprehensive interpretation, since it is important to know not only the proportion as one certain date but also the trends on the enterprise.

Trend analysis is very useful and commonly applied tool to forecast future event in quantitative term on the basis of tendencies in the dependent variable in the past period. Straight – line trend implies that irrespective of seasonal, cyclic and irregular fluctuation the trend value increase or decrease by absolute amount per unit of time.

Mathematically:

$Y = a + bx$

Where, Y = value of dependent variable

a = Y- Intercept

b = slope of trend line

X = value of dependent variable; i.e. time

Normal equations fitting above are

$\Sigma Y = Na + b\Sigma X$

$\Sigma XY = a\Sigma X + b\Sigma X^2$

Since $\Sigma X = 0$

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

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

Trend analysis is a set of observations taken at specified times usually at equal intervals. Some of the utilities are as follows:

It helps in understanding the past behavior of the variable (or data).

i. It helps to predict or estimate (or forecast) the behavior of the data in future which is very essential for business planning.
ii. It helps to compare changes in the values of different phenomenon at different times or places etc.
iii. It helps to compare the actual current performance of accomplishment with expected ones (on the basis of the past performances) and analysis the causes of such variations.
iv. The segregation and study of various components is of paramount importance to a businessman in the planning of future operation and in the formation of executive and policy decisions.

Here, in this study the trend analysis of the financial condition are presented which is objected to provide the insight of the bank position. In this study, the method of least square is used for the analysis of the EBL total deposit trend, net profit trend.

The projections are based on the following assumptions:

- The main assumption is that other things being will remain constant.
- The bank will run in the present position.
- The economy will remain in the present stage.
- The forecast will be true only when the limitation of lease square method is carried out.
- NRB will not change its guidelines to commercial banks.

4.3.1. A Trend Analysis of Total Deposit

Under this topic, an effort has been made to calculate the trend value of deposit for five years from the year 2006 to 2010and forecast for next five years till next FY 2010 to 2015.

Trend value of Total Deposit of 9 years from 2006 to 2015

Table No. 22

Trend Analysis of Total Deposit

(Rs. In millions)

Fiscal Year	Total deposit	Y=a + bx
2006	13802.44499	12676.77
2007	18186.25354	18960.41
2008	23976.29854	25244.05
2009	33322.94625	31527.69
2010	36932.31001	37811.33
2011		44094.97
2012		50378.61
2013		56662.25
2014		62945.89
2015		69229.53

(The details for the calculation are given in appendix-21)

Above table shows the amount of deposit for five years 2006 to 2010 and forecasted value for next five years (2011 to 2015). Y intercept (a) and slope of trend line (b) of the total deposit appeared to be 25244.05 and 6283.64X.

Comparing to actual deposit and trend value of deposit, trend value of deposit was greater than actual value in year 2007, 2008 and 2010. Appreciation in actual deposit in final year of study indicates bank was successful in collecting deposit.

On the basis of the above trend equation forecasted total deposit for coming five years would be increases. According to the above trend analysis and from growth rate it can be calculated that the EBL deposit collection position is satisfactory. If the bank utilized its increasing deposit its financial position will be better.

4.3.2 Trend Analysis of Net Profit

Under this topic, an effort has been made to calculate the trend value of profit for five years from the year 2006 to 2010and forecast for next five years till next FY 2010 to 2015.

Trend value of Total Deposit of 9 years from 2006 to 2015

Table No. 23

Trend Analysis of Net Profit

(Rs. In millions)

Fiscal Year	Total profit	Y=a + bx
2006	237.290936	184.826
2007	296.409281	337.951
2008	451.218613	491.076
2009	638.732757	644.20
2010	831.756632	797.326
2011		950.451
2012		1103.576
2013		1256.701
2014		1409.826
2015		1562.951

(The details for the calculation are given in appendix-22)

Above table shows the amount of profit of five years (2006 to 2010) and forecasted value for next five years (2011 to 2015). Y intercept (a) and slope of trend line (b) of the total deposit appeared to be 491.076 and 153.125X.

Comparing to total actual profit and trend value of profit in the year 2007, 2008, 2009 and 2010, trend value of profit was higher than actual profit. Actual profit of 2007, 2008, 2009 and 2010 shows the bank was more successful in earning profit.

On the basis of above trend equation forecasted profit for coming five years shows that its profit will increase.

4.4 Major Findings

From the above data analysis based the researcher found that the main findings areas of EBL are as follows:

- EBL didn't meet current ratio 2:1 over the five year of the study. It is a satisfactory comparing to a banking industry.
- Cash and bank balance to current and saving deposit fluctuated over the study period. Final year of study period ratio was 19.41 percentages, which indicates that bank may not able to meet its immediate obligation.
- Loan and advances to current assets ratio was increasing trend during the study period. As per banking practice, bank maintains the ratio 66 percentages. So the ratio is satisfactory.
- Investment to government securities to total assets ratio decreasing rate over the study period. It means bank reduce the investment on government securities.
- Cash and bank balance to total deposit ratio of EBL shows its liquidity position was weak over the five year of study period.
- The ROA (Return on Assets) is in increasing trend, which shows the bank's efficiency in utilizing its assets to able to earn satisfactory income. It is found that the bank is successful running. Return on assets during the study period was less than 2 percentages. This shows that profitability with respect to financial resource investment of bank assets was unsatisfactory.

- Total interest earned to total working fund ratio is decreasing trend expect in year 2010. EBL is not more successful in later years in allocating interest bearing working fund in profitable sectors.
- ROE (Return on Equity) is fluctuated over the five year study period. It is found that the operating efficiency of the bank. Somehow it has increased from 2009 and 2010.
- Return on loan and advances ratio fluctuating over the five years study period. It means bank loan amount is fluctuating in every year.
- Debt to equity ratio is relatively low which means liabilities are high, as various researches has agreed the companies relying on their own equity are doing pretty well and established. The total debt to equity ratio of EBL remains 15.14, 10.27, 8.75, 9.89 and 8.97 times over the five year study period.
- Debt assets ratio of EBL remained 78.104, 75.723, 77.757, 76.188 and 77.8418 percentage over the study period. This ratio shows that bank is following high profit high risk strategy.
- Interest coverage ratio remained 1.86, 1.87, 2.05, 1.90 and 1.75 times over the five years of study period. Highest ratio was in 2008 of 2.05 times. A high ratio is a sign of low burden of borrowing of the bank and lower utilization of borrowing capacity. Lower ratio indicates more use of debt for which interest is paid or insufficient operation.
- Fixed coverage ratio remained 1.80, 1.83, 1.98, 1.87 and 1.75 times over the five years of study period. Highest ratio was in 2008 of 1.98 times. A high ratio is a sign of strong capacity of the bank.
- Loan and Advance to Total Deposit ratio was inconsistent during the study period. As per banking practice, bank maintains the ratio 70-75 percentages. So the ratio is satisfactory.

- Total Investment to Total Deposit decreasing trend over the study period. It was 30.43 percentages in year 2006 which is highest in study period. If the bank is unable to invest in proper way it increases interest expenses, idle fund do not give any return to bank.
- Investment on government securities to working fund ratios over 5 year of study period in a year 2006 and year 2010 were ratio 22.23 percentages and 10.25percentages respectively which are the highest and lowest over five year of study period. High ratio represents the success in utilizing the fund.
- Total performing assets to total debt ratio was high over the study period which shows EBL able to utilize the outsider fund income generation.
- Correlation coefficient of deposit and profit, investment and profit, deposit and investment remained 0.9860, 0.57 and 0.69 respectively. Which indicates highly positive correlated.
- Trend analysis of deposit and profit shows the increasing trend.

CHAPTER –V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Many commercial banks have been competing with each other in their business. Commercial Banks are established to improve people's economic welfare and facility, to provide loan to the agriculture, industry and commerce and to offer banking services to the people and the country. They collect fund from by accepting deposit from the public on the condition that they are repayable on demand or on short notice. The modern banking system that we have today has passed the several stages before reaching the present stage. When the government adopted liberal policy, as a result many commercial banks especially joint venture banks increased rapidly i.e. Everest Bank Limited, Nepal State Bank of India, Nepal Bangladesh Bank Limited, and Standard Chartered Bank and many others. These banks are mainly concentrated themselves on financing foreign trade, commerce and industry and other sectors. Banking is considered as the platform of money market and capital markets, commercial banks basically help to promote the money market by providing qualitative managerial skills, customers' satisfaction objective so using of advance technology.

The basic objectives of JVBS in Nepal are: to welcome foreign investment in the country in the form of JVB's capital, to develop the capital market and Nepalese banking sectors and to mobilize the idle resources into income generating sources.

Everest Bank limited (EBL) was incorporated in 1994 by the distinguished business personalities of Nepal. Punjab Bank Limited, one

of the largest commercial banks of India. Besides commercials activities, the bank also offers industries and merchant banking.

The primary objective of this study is to make analysis of the financial performance of Joint ventures bank i.e. EBL and recommend suggestion for the improvement of state of affairs. To achieve the basic objectives some specific objectives have been set. To examine and analyze the financial performance, financial strength and weakness, to study the comparative financial position, to provide a package of suggestions and possible guidelines to improve the banking business are the main objective of the study.

The study suffers different limitations. It covers the financial data of a period 2006 to 2010. Basically, the data are of secondary nature. Time and resource are other constrains of the study. Therefore, the study may not be generalized in all cases.

In the past financial performance of the bank is remarkably good but in present due to various reasons and factors affecting the bank so it is not able to utilize and mobilize its funds properly. The thesis covers the financial performance analysis of EBL and is prepared with the objective of finding out whether EBL is able to maintain its liquidity position and profitability or not. To fulfill the objective of the research basically secondary data are used in which includes annual report, balance sheet, income statement, NRB report, and articles etc, in the primary data personal meeting with the staff of the EBL has been conducted. To have the study regarding EBL, data have been basically obtained from secondary sources. The main sources are annual report, articles, newspapers, and so on. Only limited primary data were used.

For the procedure of analysis ratio, average and standard deviation of the ratios for the five years period is used in tables used to obtain a clear performance of the bank, the ratios are expressed in percentage and summary are given below.

The average current Ratio of EBL is below the standard. The average CR is 1.06 times which shows that the bank has current assets of Rs. 106 to discharge the current liabilities of Rs.100 for the study period. The standard of CR is 2:1, current assets to current liabilities. The Current ratio of 1.03, 1.33, 0.84, 1.046 and 1.061 seems quite satisfactory.

Cash and Bank balance to Current Asset Ratio has fluctuated over the study period. The highest ratio of all during the study period is 19.41 % in the Year 2010 and lowest is 9.725 in year 2008. The average of the ratio is 13.69%. It can be said that at an average of 13.69 % bank is holding cash and bank balance. To keep more than 13.69% as cash is a positive aspect from view point of liquidity but negative aspects from view point of profitability.

Loans and Advance to Current Assets ratio has a bit fluctuation. The average of the ratio is 66.85 %and the highest ratio is 68.43% in FY 2010. It shows that 68.43% of current assets are given loans and advances.

Investment to government securities to total current assets ratio is in decreasing trend. The highest of all is 23.43 % of total current assets Rs.15147.8599 million in the Year 2006 and the lowest of all is 10.814 % in the Year 2010. The average ratio for the period is 17.84%.It shows that government securities are increasing which shows satisfactory.

The average of Cash and Bank Balance to Total Deposit is 15.034% and the standard deviation is 4.09% which is considered as satisfactory level for liquidity position of bank.

The return on assets increased to 2.00% from 1.486% in the year 2006/2010 which is a good trend. The average 1.65% is considered as satisfactory it should not be zero or negative.

The average total interest paid to total working fund ratio is 2.758% and the standard deviation is 0.53 % for the period of five years.

Return on Equity for the Year 2006 is 28.839% in the year 2007 it decreases to 18.76% .Onwards the year 2007 there is increment in the preceding years 2008, 2009 and 2010 as 18.70%, 22.471% and 23.17% respectively. The average is 22.388% is satisfactory for the shareholders.

As Loan and advances to the customers. The ratio has fluctuated in the year 2006 to 2010 the ratios are 2.42%, 2.16, 2.46%, 2.76% and 3.018% respectively. The average is 2.54% is satisfactory for the shareholders.

Total Debt to Shareholders Equity is not considered as satisfactory because EBL is largely financed by Debt capital. Total debt to Equity ratio is in decreasing trend. The average is 10.6% and the standard deviation is 2.336%. The average shows that only 10.06% is the equity out of 100% debt capital.

The total debt to total assets debt ratio is high in the year 2006 is 78.10% and low in the year is 2007 is 75.72%. The debt ratio is high in the EBL though the ratio has been decreasing to the base year i.e. 2006. The average of the ratio is 77.11% and the standard deviation is 0.967%.

EBL's interest is covered 2.056% in the year 2008 which is also the highest in the study period of five years. The lowest of the ratio is 1.75%

in the year 2010. The average ratio of EBL 1.88 times and the standard deviation is 0.098%. The bank is able to service interest on its debts properly and considered as satisfactory.

Loans and advances to deposit ratio has fluctuated every year comparing to the base year i.e. year 2006(71.011%) the highest ratio in the period of five years is 76.48% which is in the year 2008. the average of the ratio and the standard deviation for the period of five years is 73.78% and 2.093% .

The investment to total deposit for the year 2006, 2007, 2008, 2009 and 2010 is 30.43%, 27.40%, 21.10%, 17.85%, and 13.56% respectively. The ratio for the five year is in decreasing trend. The lowest ratio is in the year 2010 is 13.56% and highest is in the year 2006 is 30.43%.So it is considered as satisfactory.

5.2 Conclusions

The CR of the bank over the five years is 1.0614 times on an average. It indicates that the margin for safety for customers has not been maintained properly. But the average ratio is reached nearly at the standard, so it is in satisfactory position.

The average of the cash and bank balance to current assets ratio is 13.69% which indicates that the cash and bank balance proportion with respect to the current assets is moderate position. It indicates that the bank is holding 13.69% cash and bank balance to idle.

The average ratio for loan & advance to current assets ratio revealed that 66.85% of current assets have been lent to the customers as loan & advances. It indicates that the bank's fund mobilization position is very satisfactory. The result of the analysis indicates that the share of fixed

deposit is high in the total deposit which may be termed as favorable one from viewpoint of liquidity.

The average ratio for investment on government securities to working fund ratio revealed that 17.276% of total current assets are government securities .investment on government securities is increased which indicates the satisfactory.

The average ratio of cash and bank balance to total deposit is 15.034%, which indicates that cash and bank balance has been maintaining properly against anticipated calls of its depositors. Hence in general the liquidity position of the bank is good enough to meet the short term obligations.

ROA ratio have fluctuated leading to the standard deviation is 0.2388% an average of 1.65%.Any organization should try to have positive return on assets which indicates the satisfactory.

ROE ratio have fluctuated dramatically leading to the standard deviation is 3.71%. An average of 22.388%.Any institution should try to have positive return on equity. It analyzed that the bank has not been able to mobilize the deposit to its fullest or generate income from mobilized fund satisfactory.

Total Debt to Shareholders Equity is not considered as satisfactory because EBL is relying mainly on borrowed fund. The average is 10.6% and the standard deviation is 2.366%. The average shows that only 10.06% is the equity out of 100%. The debt ratio is high in EBL and it is difficult to borrow additional funds without raising more equity capital. From the view of various researchers the companies relying on their own equity capital are doing pretty well and established a strong legacy.

The total debt to total assets debt ratio is high in the year 2006 is 78.104% and low in the year is 2007 is 75.72%. The debt ratio is high in the EBL though the ratio has been decreasing to the base year i.e. 2006. The average of the ratio is 77.11% and the standard deviation is 0.967%.The assets of EBL are mostly financed by debt capital and share of equity capital in assets is low so we can say that company is highly levered by debt.

Large amount of average 73.78% loans and advances are given to customers out of total deposits. The ratio has increased in the year 2008 and 2008 to 75.13% and 76.48% respectively. In the year 2010 it decreased more to 74.61%. The average of 73.78% of the total deposit has been mobilized as loans and advances which indicates that to maintain satisfactory level.

The bank is covering its interest changes by a relatively low margin of safety. The bank would face more difficulties; it attempts to borrow additional funds, the TIE ratio of EBL is 1.84 times and standard deviation is 0.077%.

At Last from the analysis of the financial position of the EBL from the fiscal year 2006 to the fiscal year 2010 the collection of deposits and profit are increasing satisfactorily and there are also slightly improvement in the operating profit.

5.3. Recommendation

Every organization needs profit to survive for long period which is the fact. So EBL is also one of them, it also needs profit for different purposes which is only possible when there is effective and efficient management as well as the total team commitment, it would be better for the bank if there is excellent management and the excellent services,

cooperation with all the customers of the bank and excellent team work within the organization which is the key elements for the survival of the bank and as well as for its own goodwill. Besides these there are various factors which EBL needs to be improved. They are mentioned below:

1. The services provided by EBL are similar to those provided by other Commercial Banks. Therefore, it is recommended to EBL to formulate new schemes and techniques in order to attract more and more people towards the bank. The bank needs to provide more facilities like, easy to withdraw, easy to deposit, fast services, cooperation, friendly towards customers.
2. The credit worthiness of debtors must be extensively evaluated before granting them loans.
3. The Bank should diversify the sectors of deposit mobilization because it is not satisfactory in that sector.
4. The Bank should try to collect more non-interest bearing deposits.
5. EBL has invested a maximum amount of its funds on risky assets i.e. loan, thus, the bank is always threatened by the fear of default. It will be better if the bank diverts some amount of its funds from lending and invest it in less Risky investment alternatives which help the bank diversify the risk. EBL should provide the facility
6. To interest rate to borrower who repays the loan before stipulated time; this may help to increase the number of early payers that will reduce default risk.
7. Loan and Advance is the main source of investment of total deposit from which more profit can be earned and it is also risky to cover in time. So, while granting loan and advance to the customers bank must do detail study of purposes of taking loans, sources of payments of loan and fixing the duration of paying loan etc. Before

granting loan bank also needs to take sufficient collateral so that there will be no problem of collecting loan. To take benefit from the interest earned from loan and advance bank should take care of above points and many more to survive in the competitive market for long time.

8. Return on Assets and Return on Equity is relatively low, therefore it is recommended that the bank should increases these ratio as to achieve its targets.
9. There is decreasing trend in EPS, so the bank should use its new strategies to make it increase towards boom. The bank has to try its best to build its good image in its customers. Professionalism and market oriented services should be enhanced in future
10. Expansion of more branches is necessary to collect more deposit. If the services are expanded in most part of the nation, it can collect deposits from different area and can invest the funds in productive sector for generating income. So EBL should also expand its branches in rural and urban areas as it is doing so that it can provide its services to the people of the different part of the country as well as it is benefit for the bank also.

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APPENDICES

Appendix-I

Calculation of Mean and Standard Deviation of CA and CL Ratios

FY	Ratio in times (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	1.03	-0.0314	0.00098596
2007	1.33	0.268	0.0721
2008	0.84	-0.22	0.049
2009	1.046	-0.0154	0.000237
2010	1.061	-0.00014	0.00000016

We know that,

Mean ($\bar{X}$) = $\frac{X}{N}$ = $\frac{5.307}{5}$ = 1.0614 times

Hence, Average current assets to current liabilities ratio = 1.0614 times

Where,

x = Current assets to current liabilities

N = Numbers of Years

x = $\frac{Current\ assets\ in\ a\ years}{Current\ liabilities\ in\ a\ year}$

Standard deviation (∃) = $\sqrt{\frac{(x\ Z\bar{x})^2}{n}}$

$= \sqrt{\frac{0.12213}{5}}$

= 0.1564

= 15.64%

Hence, standard deviation (∃) = 15.64%

Appendix-II

Calculation of Mean and Standard Deviation of Cash and Bank Balance to Current Assets Ratio

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	10.25	-3.44	11.8336
2007	11.80	-1.89	3.5721
2008	9.725	-3.965	15.7212
2009	17.27	3.58	12.8164
2010	19.41	5.72	32.718

We know that,

Mean ($\bar{X}$) = $\frac{X}{N}$ = $\frac{62.455}{5}$ = 13.69 %

Hence, Average cash and bank balance to current assets ratio = 13.69%

Where,

x = Cash and bank balance to current assets ratio

N = Numbers of years

x = $\frac{Cash\ and\ bank\ balance}{Total\ current\ assets}$

Standard deviation (∃) = $\sqrt{\frac{(x\ Z\bar{x})^2}{n}}$

$= \sqrt{\frac{76.66}{5}}$

= 3.91%

Hence, standard deviation (∃) = 3.91%

Appendix-III

Calculation of Mean and Standard Deviation of Loan and Advances and Current Assets Ratio

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	64.70	-2.15	4.6225
2007	65.12	-1.73	2.9929
2008	69.07	2.22	4.9284
2009	66.93	0.08	0.0064
2010	68.43	1.58	2.4964

We know that,

Mean ($\bar{X}$) = $\frac{X}{N}$ = $\frac{334.25}{5}$ = 66.85%

Hence, Average loan and advances to total current assets ratio = 66.85%

Where,

x = Loan and advances to total current assets

N = Numbers of years

x = $\frac{Loan\ and\ advances}{Total\ current\ assets}$

Standard deviation (∃) = $\sqrt{\frac{(x\ Z\bar{x})^2}{n}}$

$= \sqrt{\frac{15.0462}{5}}$

= 1.736%

Hence, standard deviation (∃) = 1.736%

Appendix-IV

Calculation of Mean and Standard Deviation of Investment on Government Securities to Current Assets Ratio

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	23.43	5.582	31.158
2007	22.42	4.572	20.90
2008	18.16	0.312	0.0937
2009	14.42	-3.428	11.751
2010	10.814	-7.034	49.472

We know that,

Mean ($\bar{X}$) = $\frac{X}{N}$ = $\frac{89.244}{5}$ = 17.8488%

Hence, Average investment on government securities and total current assets ratio (x) = 17.848%

Where,

x = Investment to government securities

N = Numbers of years

x = $\frac{Investment\ on\ government\ \text{sec}urities}{Number\ of\ \ years}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \text{Z}\bar{x})^2}{n}}$

$= \sqrt{\frac{113.37}{5}}$

= 4.76%

Hence, standard deviation (∃) = 7.76%

Appendix-V

Calculation of Mean and Standard Deviation of Cash and Bank Balance to Total Deposit Ratio

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	11.25	-3.784	14.31865
2007	13.14	-2.2	4.84
2008	11.12	-3.914	15.319
2009	18.49	3.456	11.943
2010	21.17	6.107	37.283

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{75.17}{5}$ = 15.034%

Hence, Average cash and bank balance to total deposit ratio is 15.034%

Where,

x = Cash and bank balance to total deposit ratio

N = Numbers of years

x = $\frac{Cash\ and\ bank\ balance}{Total\ deposit}$

Standard deviation (∃) = $\sqrt{\frac{(x\ Z\bar{x})^2}{n}}$

$= \sqrt{\frac{83.70}{5}}$

= 4.09%

Hence, standard deviation (∃) = 4.09%

Appendix-VI

Calculation of Mean and Standard Deviation of Return on Assets Ratio

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	1.486	-0.165	0.02725
2007	1.38	-0.27	0.0729
2008	1.66	0.0088	0.000077
2009	1.73	0.08	0.0064
2010	2.00	0.349	0.121

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{8.256}{5}$ = 1.6512%

Hence, Average return on assets ratio = 1.6512%

Where,

x = Return on assets

N = Numbers of years

x = $\frac{Total\ \ net\ \ profit\ \ after\ tax}{Total\ \ assets}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \mathrm{Z}\ \bar{x})^2}{n}}$

= $\sqrt{\frac{0.28527}{5}}$

= 0.2388%

Hence, standard deviation (∃) = 0.2388%

Appendix-VII

Calculation of Mean and Standard Deviation of Total Working Fund Ratio

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	2.51	-0.248	0.0615
2007	2.41	-0.348	0.121
2008	2.33	-0.428	0.183
2009	2.74	-0.018	0.0000324
2010	3.8	1.042	1.085

We know that,

Mean ($\bar{X}$) = $\frac{X}{N}$ = $\frac{13.79}{5}$ = 2.758%

Hence, Average total interest paid to total working fund ratio is 2.758%

Where,

x = Total interest paid to total working fund

N = Numbers of years

x = $\frac{Total\ \text{int}erest\ \ paid}{Total\ \ working\ \ \ fund}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \mathrm{Z}\bar{x})^2}{n}}$

$= \sqrt{\frac{1.45}{5}}$

= 0.53%

Hence, standard deviation (∃) = 0.53%

Appendix-VIII

Calculation of Mean and Standard Deviation of Net Profit After Tax and Total Equity Capital

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	28.839	6.451	41.6154
2007	18.76	3.628	13.162
2008	18.70	-3.688	13.601
2009	22.471	0.083	0.006889
2010	23.17	0.0783	0.611524

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{111.94}{5}$ = 22.388%

Hence, Average total net profit after tax and to total equity capital is 22.388%

Where,

x = Net profit after tax to total equity capital ratio

N = Numbers of years

x = $\frac{Net\ \ profit\ \ after\ \ tax}{Total\ \ equity\ \ capital}$

Standard deviation (∃) = $\sqrt{\frac{(x\ Z\bar{x})^2}{n}}$

$= \sqrt{\frac{68.99}{5}}$

= 3.7146

Hence, standard deviation (∃) = 3.7146%

Appendix-IX

Calculation of Mean and Standard Deviation of Net Profit After Tax and Total Loan and Advances

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	2.42	-0.12	0.0144
2007	2.16	-0.38	0.1444
2008	2.46	-0.08	0.0064
2009	2.67	0.13	0.0169
2010	3.018	0.478	0.2284

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{12.728}{5}$ = 2.54%

Hence, Average loan and advances ratio = 2.54%

Where,

x = Loan and advances to net profit ratio

N = Numbers of years

x = $\frac{Net\ \ profit}{Loan\ \ and\ \ advances}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \mathrm{Z}\ \bar{x})^2}{n}}$

$$= \sqrt{\frac{0.4105}{5}}$$

= 0.286 %

Hence, standard deviation (∃) = 0.286%

Appendix-X

Calculation of Mean and Standard Deviation of Debt to Total Equity Ratio

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	15.14	4.54	20.61
2007	10.27	-0.33	0.1089
2008	8.75	-1.85	3.422
2009	9.89	-0.71	0.5041
2010	8.974	-1.626	2.6438

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{53.03}{5}$ = 10.6%

Hence, Average debt to total equity ratio is 10.6%

Where,

x = Debt equity ratio

N = Numbers of years

x = $\frac{Total\ \ debt}{Total\ \ equity}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \mathrm{Z}\ \bar{x})^2}{n}}$

$= \sqrt{\frac{27.2893}{5}}$

= 2.336 %

Hence, standard deviation (∃) = 2.336%

Appendix-XI

Calculation of Mean and Standard Deviation of Total Debt to Total Assets Ratio

FY	Ratio in % (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	78.1041	0.9941	0.988
2007	75.723	-1.387	1.923
2008	77.75	0.613	0.375
2009	76.18	-0.93	0.86
2010	77.84	0.73	0.5329

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{385.59}{5}$ = 77.11%

Hence, Average debt to total assets ratio is 77.11%

Where,

x = Debt to total assets ratio

N = Numbers of years

x = $\frac{Total\ \ debt}{Total\ \ assets}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \mathrm{Z}\ \bar{x})^2}{n}}$

$= \sqrt{\frac{4.6789}{5}}$

= 0.967%

Hence, standard deviation (∃) = 0.967%

Appendix-XII

Calculation of Mean and Standard Deviation of Net Profit Before Tax and Interest Expenses Ratio

FY	Ratio (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	1.86	-0.02	0.004
2007	1.87	-0.01	0.001
2008	2.056	0.176	0.03097
2009	1.9	0.02	0.0004
2010	1.75	-0.13	0.0169

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{9.436}{5}$ = 1.88%

Hence, Interest coverage ratio is 1.88%

Where,

x = Interest coverage ratio

N = Numbers of years

x = $\frac{Net\ \ profit\ \ before\ \text{interest}\ \ and\ \ taxes}{Interest}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \mathrm{Z}\ \bar{x})^2}{n}}$

$= \sqrt{\frac{0.04877}{5}}$

= 0.098%

Hence, standard deviation (∃) = 0.098%

Appendix-XIII

Calculation of Mean and Standard Deviation of Net Profit Before Interest and Taxes and Fixed Charges

FY	Ratio (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	1.80	-0.04	0.0016
2007	1.83	-0.01	0.0001
2008	1.98	0.14	0.0196
2009	1.87	0.03	0.0009
2010	1.75	-0.09	0.0081

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{9.234}{5}$ = 1.84%

Hence, Fixed charges coverage ratio is 1.84%

Where,

x = Fixed coverage ratio

N = Numbers of years

x = $\frac{Net\ \ profit\ \ before\ \text{interest}\ \ and\ \ taxes}{Fixed\ \ charges}$

Standard deviation (∃) = $\sqrt{\frac{(x\ Z\bar{x})^2}{n}}$

$$= \sqrt{\frac{0.0303}{5}}$$

= 0.077%

Hence, standard deviation (∃) = 0.077%

Appendix-XIV

Calculation of Mean and Standard Deviation of Total Loan and Advances to Total Deposit Ratio

FY	Ratio (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	71.011	-2.769	7.66
2007	75.13	1.35	1.8225
2008	76.48	2.7	7.29
2009	71.67	-2.11	4.4521
2010	74.61	0.83	0.6889

We know that,

Mean ($\bar{X}$) = $\frac{X}{N}$ = $\frac{368.904}{5}$ = 73.78%

Hence, Loan and advances to total deposit ratio is 73.78%

Where,

x = Loan and advances to total deposit ratio

N = Numbers of years

x = $\frac{Loan\ and\ advances}{Total\ deposit}$

Standard deviation (∃) = $\sqrt{\frac{(x\ Z\bar{x})^2}{n}}$

$= \sqrt{\frac{21.9035}{5}}$

= 2.093%

Hence, standard deviation (∃) = 2.093%

Appendix-XV

Calculation of Mean and Standard Deviation of Total Investment to Total Deposit Ratio

FY	Ratio (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	30.43	8.362	69.92
2007	27.40	4.72	22.27
2008	21.10	-1.58	2.4964
2009	17.85	-4.218	17.79
2010	13.56	-8.508	72.38

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{110.34}{5}$ = 22.068%

Hence, Average investment to total deposit ratio is 22.068%

Where,

x = Investment to total deposit ratio

N = Numbers of years

x = $\frac{Total\ \ investment}{Total\ \ deposit\ \ liabilities}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \mathrm{Z}\ \bar{x})^2}{n}}$

$= \sqrt{\frac{184.85}{5}}$

= 6.080%

Hence, standard deviation (∃) = 6.080%

Appendix-XVI

Calculation of Mean and Standard Deviation of Total Investment on Government Securities to Working Fund Ratio

FY	Ratio (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	22.23	4.954	24.54
2007	21.95	4.674	21.84
2008	17.75	0.48	0.2304
2009	13.93	-3.346	11.195
2010	10.52	-6.756	45.64

We know that,

Mean ($\bar{X}$) = $\frac{X}{N}$ = $\frac{86.38}{5}$ = 17.276%

Hence, Average total investment on government securities to working fund ratio is 17.276%

Where,

x = Investment to government securities to working fund

N = Numbers of years

$$x = \frac{Investment\ on\ government\ \text{sec}urities}{Total\ working\ fund}$$

$$\text{Standard deviation } (\exists) = \sqrt{\frac{(x\ Z\bar{x})^2}{n}}$$

$$= \sqrt{\frac{103.44}{5}}$$

= 4.548%

Hence, standard deviation (∃) = 4.548%

Appendix-XVII

Calculation of Mean and Standard Deviation of Total Performing Assets to Total Debt Ratio

FY	Ratio (x)	$(x-\bar{x})$	$(x-\bar{x})^2$
2006	112.86	10.73	115.1329
2007	114.90	12.77	163.072
2008	112.46	10.33	106.708
2009	84.919	-17.211	296.218
2010	85.543	-16.587	275.128

We know that,

Mean ($\overline{X}$) = $\frac{X}{N}$ = $\frac{510.69}{5}$ = 102.13%

Hence, Average total performing assets to total debt ratio is 102.13%

Where,

x = Total performing assets to total debt ratio

N = Numbers of years

x = $\frac{Total\ \ perfor\min g\ \ assets}{Total\ \ debt}$

Standard deviation (∃) = $\sqrt{\frac{(x\ \mathrm{Z}\ \bar{x})^2}{n}}$

$= \sqrt{\frac{956.25}{5}}$

= 13.82%

Hence, standard deviation (∃) = 13.82%

Appendix-XVIII

Correlation between Total Deposit and Net Profit

Year	Deposit (x)	Profit (y)	x^2	y^2	xy
2006	13802.44	237.29	190507350	56306.544	3275180.1
2007	18186.25	296.40	330739689	87852.96	5390404.5
2008	23976.29	451.22	574862482.2	203599.49	10818581.57
2009	33322.94	638.73	1110418330	407976.02	21284361.47
2010	36932.31	831.76	1363995522	691824.70	30718818.17

$\phi x = 126220.23$

$\phi y = 2455.4$

$\phi x^2 = 3570523373$

$\phi y^2 = 1447559.7$

$\phi xy = 71487347$

$$r = \frac{N \quad xy \, Z \quad x. \quad y}{\sqrt{N \quad x^2 \, Z(\quad x)^2}\sqrt{N \quad y^2 \, Z(\quad y)^2}}$$

$$= \frac{5 \mid 71487347 \, Z126220.23 \mid 2455.4}{\sqrt{5 \mid 3570523373 \, Z(126220.23)^2}\sqrt{5 \mid 1447559 \, Z(2455.4)^2}}$$

$$= \frac{47515582.26}{43830.017 \mid 1099.45}$$

= 0.9860

Where,

x = total deposit y = Net profit

N = Number of year PE = Probable error

Hence, the calculation of coefficient to total deposit and net profit (r) = 0.9860, $r \geq 0$, i.e. $0.9860 \geq 0$. The relationship between two variable total deposit and net profit are positive correlated.

Calculation of probable error

P.E. = 0.6745 x SE (r)

$$= 0.6745 \times \frac{1 Z (0.9860)^2}{\sqrt{5}}$$

= 0.008386

Appendix-XIX

Correlation between Investment and Profit

Year	Deposit (x)	Profit (y)	x^2	y^2	xy
2006	4200.515	237.29	17644328.11	56306.544	996744.182
2007	4984.315	296.40	24843391.98	87852.96	1477397.103
2008	5059.558	451.22	25599122.54	203599.49	22828966.537
2009	5948.48	638.73	35384412.56	407976.02	3799489.205
2010	5008.308	831.76	25083144.9	691824.70	12722290.90

$\phi x = 25201.17$

$\phi y = 2455.40812$

$\phi x^2 = 128554405$

$\phi y^2 = 1447562.137$

$\phi xy = 12722290.09$

$$r = \frac{N \quad xy \, Z \quad x. \quad y}{\sqrt{N \quad x^2 \, Z(\quad x)^2}\sqrt{N \quad y^2 \, Z(\quad y)^2}}$$

$$= \frac{5 \mid 12722290.09 \, Z \, 25201.17 \mid 2455.4}{\sqrt{5 \mid 128554405 \, Z(25201.17)^2}\sqrt{5 \mid 1447562.137 \, Z(2455.40)^2}}$$

$$= \frac{1732249.67}{2770.30 \mid 1099.45}$$

Hence, r = 0.568

$r^2 = 0.322$

Where,

x = Total investment y = Total profit

N = Number of year PE = Probable error

Hence, the calculation of coefficient to total investment and net profit (r) = 0.57, $r \geq 0$, i.e. $0.57 \geq 0$. The relationship between two variable total investment and net profit are positively correlated.

Calculation of probable error

P.E. = 0.6745 x SE (r)

$$= 0.6745 \text{ x } \frac{1 \, Z(0.3224)^2}{\sqrt{5}}$$

PE = 0.203

6 PE = 1.221

Appendix-XIX

Correlation between Deposit and Investment

Year	Deposit (x)	Investment (y)	x^2	y^2	xy
2006	4200.515	4200.51	190507487.7	17644328.11	57977380.25
2007	4984.315	4984.31	330739817.8	24843391.89	90646008.76
2008	5059.558	5059.5575	574862892	25599122.54	121309462.2
2009	5948.48	5948.48	1110418747	35384417.56	198220888.4
2010	5008.308	5008.3075	1363995523	128554405	184968368.5

$\phi x = 126220.253$

$\phi y = 25201.1752$

$\phi x^2 = 3570524467$

$\phi y^2 = 128554405$

$\phi xy = 653122108.1$

$$r = \frac{N \quad xy \, Z \quad x. \quad y}{\sqrt{N \quad x^2 \, Z(\quad x)^2}\sqrt{N \quad y^2 \, Z(\quad y)^2}}$$

$$= \frac{5 \mid 653122108.1 \, Z126220.253 \mid 25201.175}{\sqrt{5 \mid 3570524467 \, Z(126220.25)^2}\sqrt{5 \mid 128554405 \, Z(25201.17)^2}}$$

$$= \frac{84711856.1}{43830.021 \mid 2769.98}$$

Hence, r = 0.6977

$r^2 = 0.4867$

Where,

x = Total deposit y = Total investment

N = Number of year PE = Probable error

Hence, the calculation of coefficient to Total deposit and total investment (r) = 0.67, r $\geq$ 0, i.e. 0.67 $\geq$ 0. The relationship between two variable total deposit and total investment are positively correlated.

Calculation of probable error

P.E. = 0.6745 x SE (r)

$= 0.6745 \times \frac{1 Z(0.69)^2}{\sqrt{5}}$

PE = 0.1580

6 PE = 0.9481

Appendix-XXI

Trend value of total deposit by least square method

Let, straight line trend between dependent variables (total deposit) y and independent variable (times) x be:

The equation of straight line trend is:

$Yc = a + bx$

By solving following equations we get the value of (a) and (b)

$\phi y = Na + b\phi x$ ……(i)

$\phi xy = a\phi x + b\phi x^2$ …… (ii)

Calculation of trend line:

FY	Time (t)	x = t-T	Total deposit (y)	x^2	xy	Yc = a + bx = 25244.05 + 6283.64x
2006	1	-2	13082.44	4	-26164.88	2676.77
2007	2	-1	18186.25	1	-18186.25	18960.41
2008	3	0	23976.29	0	0	25244.05
2009	4	1	33322.94	1	33322.94	31527.69
2010	5	2	36932.31	4	73864.62	37811.33
	$\phi t = 15$	$\phi x = 0$	126220.3	$\phi x^2 = 10$	$\phi xy = 62836.43$	

We have,

$T = \frac{t}{N} X \frac{15}{5} = 3$

Putting the value of ϕx, ϕy, ϕx^2 and ϕxy in the equation No. (II) and (III) it will give the value of (a) and (b).

$a = \frac{y}{N} X \frac{126220.3}{5} = 25244.05$

$b = \frac{xy}{x^2} X \frac{62836.43}{10} = 6283.64$

Equation: Yc = a + bx

= 25244.05 + 6283.64x

Fiscal year	Time (t)	x = (t-T)	Yc = a + bx
2011	6	3	44094.97
2012	7	4	50378.61
2013	8	5	56662.25
2014	9	6	62945.89
2015	10	7	69229.53

We have,

$T = \frac{t}{N} X \frac{15}{5} = 3$

Putting the value of ϕx, ϕy, ϕx^2 and ϕxy in the equation No. (II) and (III) it will give the value of (a) and (b).

a = $\frac{y}{N} X \frac{2455.38}{5}$ = 491.076

b = $\frac{xy}{x^2} X \frac{1531.25}{10}$ = 153.125

Equation: Yc = a + bx

= 491.076 + 153.125x

Fiscal year	Time (t)	x = (t-T)	Yc = a + bx
2011	6	3	950.451
2012	7	4	1103.576
2013	8	5	1256.701
2014	9	6	1409.826
2015	10	7	1562.951

Appendix-XXII

Trend value of total profit by least square method

Let, straight line trend between dependent variables (net profit) y and independent variables (time) x be

The equation of straight line trend is,

$Yc = a + bx$

By solving following equations we get the value of (a) and (b)

$\phi y = Na + b\phi x$ ……(i)

$\phi xy = a\phi x + b\phi x^2$ …… (ii)

Calculation of trend line:

FY	Time (t)	x = t-T	Total profit (y)	x^2	xy	Yc = a + bx = 491.076+ 153.125x
2006	1	-2	237.290	4	-474.58	184.826
2007	2	-1	296.40	1	-296.40	337.951
2008	3	0	451.21	0	0	491.076
2009	4	1	638.73	1	638.73	644.20
2010	5	2	831.75	4	1663.5	797.326
	$\phi t = 15$	$\phi x = 0$	2455.38	$\phi x^2 =$ 10	$\phi xy =$ 62836.43	