

**A COMPARATIVE STUDY ON FINANCIAL PERFORMANCE OF
PRIVATE AND GOVERNMENT OWNED COMMERCIAL BANKS
(With Reference to Everest Bank and Rastriya Banijya Bank Limited)**

Submitted By:

Anju Dhungana

Patan Multiple Campus

Campus Roll No: 78/064

T.U. Regd. No. 7-2-505-6-2003

Exam Roll No: 220022/066

A Thesis Submitted To:

Office of the Dean

Faculty of Management

Tribhuvan University

In partial fulfillment of the requirement for the
Degree of Master's Business Studies (M.B.S)

Kathmandu, Nepal
February, 2014

RECOMMENDATION

This is to certify that the thesis

Submitted by

Anju Dhungana

Entitled

**A COMPRATIVE STUDY ON FINANCIAL PERFORMANCE OF
PRIVATE AND GOVERNMENT OWNED COMMERCIAL BANKS
(With Reference to Everest Bank and Rastriya Banijya Bank Limited)**

has been prepared as approved by this department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

.....

(Bidur Nepal)
Thesis Supervisor

.....

(Dinesh Man Malego)
Coordinator, MBS Program

.....

()
Campus Chief

Date:

VIVA VOCE SHEET

We have conducted the viva-voce examination of the thesis presented by

Anju Dhungana

Entitled

A COMPRATIVE STUDY ON FINANCIAL PERFORMANCE OF PRIVATE AND GOVERNMENT OWNED COMMERCIAL BANKS (With Reference to Everest Bank and Rastriya Banijya Bank Limited)

and found the thesis to be the original work of the student written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements for Master's Degree in Business Studies (M.B.S.)

Viva-Voce Committee

Head, Research Department:

Member (Thesis Supervisor)

Member (External Expert)

Date:

DECLARATION

I hereby declare that the work reported in this thesis entitled **A Comparative Study On Financial Performance Of Private And Government Owned Commercial Bank (With Reference to Everest and Rastriya Banijya Bank Limited)** submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master of Business Studies under the supervision of Mr. Bidur Nepal of Patan Multiple Campus.

February, 2014

.....

Anju Dhungana

Patan Multiple Campus

Campus Roll No: 78/064

T.U. Regd. No. 7-2-505-6-2003

Exam Roll No: 220022/066

ACKNOWLEDGEMENTS

This study on **A Comparative Study On Financial Performance Of Private And Government Owned Commercial Bank (With Reference to Everest and Rastriya Banijya Bank Limited)** has prepared as a partial fulfillment of Master's Degree in Business Studies (MBS) Program.

I would like to express my heartiest gratitude and sincere thanks to my thesis supervisor Mr. Bidur Nepal, who encouraged me from the initiation to completion of this task with his scholar guidance and profound comments and suggestion.

I am thankful to my friends, for their insightful comments and suggestions. I would like to convey my sincere thanks to the staff of EBL and RBB, Research Department of NRB, Individual Investors and Experts for providing all necessary data and required information for this study. Similarly, I like to thank librarians of Patan Multiple Campus, Tribhuvan University for providing various books, reports, journals and other publications.

Lastly, my heartfelt thanks goes to my family members along with classmates who have supported me by providing consistent help and encouragement.

Thank You.

Anju Dhungana

TABLE OF CONTENTS

RECOMMENDATION
VIVA-VOCE SHEET
DECLARATION
ACKNOWLEDGEMENTS
TABLE OF CONTENTS
LIST OF TABLES
LIST OF FIGURES
ABBREVIATIONS

	Page No.
CHAPTER – I	
INTRODUCTION	1-11
1.1 Background of the Study	1
1.1.1 Concept of Commercial Banks	4
1.1.2 Profile of Sample Bank	6
1.2 Focus of the Study	8
1.3 Statement of the Problem	9
1.4 Objectives of the Study	10
1.5 Significance of the Study	10
1.6 Limitations of the Study	10
1.7 Organizations of the Study	11
CHAPTER – II	
REVIEW OF LITERATURE	12-38
2.1 Conceptual Review	12
2.1.1 Bank	12
2.1.2 Concept of Commercial Bank	12
2.1.3 Financial Statements	13
2.1.4 Financial Performance Analysis	14
2.1.5 Objectives of Financial Performance Analysis	17
2.1.6 Need of Financial Performance Analysis/ Financial Statement Analysis	17
2.1.7 Significance of Financial Analysis	18
2.1.8 Process of Financial Performances Analysis	20
2.1.9 Types of Financial Performance Analysis	20
2.1.10 Techniques of Financial (Statement) Analysis	21
2.1.11 Limitations of Financial Performance Analysis	27
2.2 Review of Related and Articles	29
2.3 Review of Thesis	30
2.3 Concluding Remarks	37

CHAPTER – III

RESEARCH METHODOLOGY	39-49
3.1 Introduction	39
3.2 Research Design	39
3.3 Populations and Sample	40
3.4 Nature and Sources of Data	40
3.5 Data Collecting Procedures	40
3.6 Tools and Techniques Used	41
3.6.1 Financial Tools	41
3.6.2 Statistical Tools	47

CHAPTER – IV

PRESENTATION AND ANALYSIS OF DATA	50-84
4.1 Financial Analysis	50
4.1.1 Ratio Analysis	50
4.2 Statistical Analysis	73
4.2.1 Coefficient of Correlation Analysis	73
4.3 Major Findings of the Study	80

CHAPTER – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	85-91
5.1 Summary	85
5.2 Conclusion	88
5.3 Recommendations	90

BIBLIOGRAPHY

APPENDIX

LIST OF TABLES

Table No.		Page No.
4.1	Current Assets to Current Liability	51
4.2	Cash and Bank Balance to Total Deposit Ratio	52
4.3	Cash and Bank Balance to Current Asset Ratio	53
4.4	Investment on Government Securities to Current Assets Ratio	55
4.5	Loan and Advance to Total Deposit Ratio	56
4.6	Total Investment to Total Deposit Ratio	58
4.7	Loan and Advances to Total Assets Ratio	59
4.8	Investment on Government Securities to Total Assets ratio	60
4.9	Return on Loan and advances	62
4.10	Return on Total Assets Ratio	63
4.11	Return on Equity Ratio	64
4.12	Total Interest Earned to Total Assets Ratio	65
4.13	Interest Earned to Operating Income Ratio	66
4.14	Interest Paid to Total Assets Ratio	67
4.15	Credit Risk Ratio	68
4.16	Liquidity Risk Ratio	70
4.17	Earning Per Share	71
4.18	Correlation between Deposit and Loan and Advance	74
4.19	Correlation between Deposit and Total Investment	75
4.20	Correlation between Loan and Advance and Net profit	76
4.21	Correlation between Total Investment and Net Profit	77
4.22	Correlation between Total Deposit	78
4.23	Correlation between Total Investment	78
4.24	Correlation between Loan and Advances	79
4.25	Correlation between Net Profit	79

LIST OF FIGURES

Figure No.		Page No.
4.1	Current Assets to Current Liability	51
4.2	Cash and Bank Balance to Total Deposit Ratio	52
4.3	Cash and Bank Balance to Current Asset Ratio	54
4.4	Investment on Government Securities to Current Assets Ratio	55
4.5	Loan and Advance to Total Deposit Ratio	57
4.6	Total Investment to Total Deposit Ratio	58
4.7	Loan and Advances to Total Assets Ratio	59
4.8	Investment on Government Securities to Total Assets ratio	60
4.9	Return on Loan and advances	62
4.10	Return on Total Assets Ratio	63
4.11	Return on Equity Ratio	64
4.12	Total Interest Earned to Total Assets Ratio	65
4.13	Interest Earned to Operating Income Ratio	66
4.14	Interest Paid to Total Assets Ratio	67
4.15	Credit Risk Ratio	69
4.16	Liquidity Risk Ratio	70
4.17	Earning Per Share	71

ABBREVIATIONS

AGM	Annual General Meeting
BPS	Book-value Per Share
CEO	Chief Executives Officer
CV	Coefficient of Variation
DPS	Dividend per Share
EBL	Everest Bank Limited
EPS	Earning Per Share
G/N	Government of Nepal
GDP	Gross Domestic Product
IMF	International Monetary Fund
JVBs	Joint Venture Banks
MPS	Market Price of Share
NBL	Nepal Bank Limited
NEPSE	Nepal Stock Exchange
NPV	Net Present Value
NRB	Nepal Rastra Bank
PE	Price Earnings
RBB	Rastriya Banijya Bank
SEBO/N	Security Board of Nepal

CHAPTER – I

INTRODUCTION

1.1 Background of the Study

Financial Performance of the commercial banks has been the crucial issue in the financial literature. The financial performance may depend on the loan and advance and their interest rate. Financial sector is the backbone of economy of a country .It works as a facilitator for achieving sustained economic growth through providing efficient monetary intermediation. A strong financial system promotes investment by financing productive business opportunities, mobilizing savings, efficiently allocating resources and makes easy the trade of goods and services. Several studies (McKinnon, 1973; Levine, 1997) have reported that the efficacy of a financial system to reduce information and transaction costs plays an important role in determining the rate of savings, investment decisions, technological innovations and hence the rate of economic growth.

Banking has become an important feature, which renders service to the people in financial matters, and its magnitude of action is extending day by day. It is a major financial institutional system in Nepal, which accounted for more than 70% (Poudel, 2005) of the total assets of all the financial institutions. A profitable and sound banking sector is at a better point to endure adverse upsets and adds performance in the financial system (Athanasoglou et al., 2008).

A competitive banking system promotes the efficiency and therefore important for growth, but market power is necessary for stability in the banking system (Northcott, 2004). Commercial bank holds a large share of economic activities of a country. The function of the commercial banks has been enhanced in Nepal to sustain the *Increasing need of the service sector and the economy in general (Economic Survey, 2008).*

Stock market has been dominated by the commercial banks since a decade. Not only the stock market, but the commercial banks have also been major contributors to the revenue of the country. They have been paying a large amount of tax every year.

Performance evaluation is the important approach for enterprises to give incentive and restraint to their operators and it is an important channel for enterprise stakeholders to get the performance information (Sun, 2011). The performance evaluation of a commercial bank is usually related to how well the bank can use its assets, shareholders' equities and liabilities, revenues and expenses. The performance evaluation of banks is important for all parties including depositors, investors, bank managers and regulators.

The evaluation of a firm's performance usually employs the financial ratio method, because it provides a simple description about the firm's financial performance in comparison with previous periods and helps to improve its performance of management (Lin et al., 2005).

Moreover, the ratio analysis assists in determining the financial position of the bank compared to other banks. Financial ratios based on CAMEL Framework are related to capital, assets, management, earnings and liquidity considerations.

Different ratios including return on assets (ROA), return on equity (ROE), capital adequacy ratio (CAR), nonperforming loan ratio (NPL), interest expense to total loans (IETTL), net interest margin (NIM), credit to deposit ratio (CDR), were evaluated to analyze the financial data of selected Nepalese commercial banks for the period 2008 to 2011. These ratios would help to indicate the condition of capital, assets quality, management and earning and liquidity position of different types of banks.

Financial ratio analysis is also used to quantitatively examine the differences in performance among public sector banks (PVB), joint venture banks (JVB) and domestic private banks (DPB) in Nepal, and the banks are ranked based on their financial measures and performance for each bank as a guideline for the future trend of financial position of the banks in Nepal.

Therefore, the aim of this study is to measure the best performance among the commercial banks and to find out the relationship between bank specific factors (Ratios) on the banks' performance. Based on the objectives, the present study seeks to test the following hypothesis:

H1: There is a significant relationship between capitals adequacy ratios and performance of the banks.

H2: There is a significant relationship between assets quality ratios and performance of the banks.

H3: There is a significant relationship between Management efficiency ratios and performance of the banks.

H4: There is a significant relationship between earnings ratios and performance of the banks.

H5: There is a significant relationship between liquidity ratios and performance of the banks.

The factors considered for analysis include ROA and ROE (profitability ratio) as dependent variables, which each examines separately with same explanatory variables that is, CAR, NPL, IETTL, NIM, CDR.

The remainder of the paper is organized as follows: subsequently, the study presents the literature review. Next, it describes the banking sector in Nepal. Thereafter, it presents the methodology of the study followed by details of the results and analysis of the available data and finally, the study was concluded. Therefore, the aim of this study is to measure the best performance among the private and government owned commercial banks and to find out the relationship between bank specific factors (Ratios) on the banks' performance.

1.1.1 Concept of Commercial Banks

The Nepal Commercial Bank Act, 2031 states, “a commercial bank is one which exchanges money, deposits money, accepts deposits, grants loans, and performs commercial banking functions and which is not a bank meant for co-operatives, agriculture, industries or for such specific purpose.”

According to the World Bank, “commercial banks are the financial institutions which engage only in deposit taking and short-term loans and medium-term lending.” The legal definitions of banking, and the permitted activities of banks, vary across countries. Nevertheless, the essential characteristics of banks are the same. They issue liquid, nominally valued liabilities, many of which are payable on demand at par, and they mainly acquire assets that are illiquid, relatively difficult to value, and of longer maturity than their liabilities.

When two or more independent firms mutually decide to participate in a business venture, contribute to the total equity or more or less capital and establish a new organization, it is known as a joint venture. (Jauch & Glueck; 1998:232).

A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out a specific operation (Industrial or commercial investment, production and trade) (Gupta; 1984:15).

Joint Venture Bank is combination of Joint Venture Company and commercial bank. So it can be said JVBs are commercial banks in which foreign institution along with local financial institution and general public of the country makes investment. These banks primarily play a role in accumulation and mobilization of funds in a national level.

From the establishment of first commercial bank in Nepal in 1994 BS, the banking sector has grown significantly. Nepal has witnessed a phenomenal growth in the last two decades. In 1980 AD, the government introduced 'Financial Sector Reforms' and Nepal allowed the entry of foreign banks as joint ventures with up to a maximum of 50% equity participation. A meaningful step towards financial liberalization was undertaken in the year 1987/88 AD, with the objective of expediting the process of economic development under structural adjustments program and major reforms including liberalization of interest rate, strengthening of banking operation from direct to indirect monetary control instruments. There are 31 commercial banks in the country.

While the role of banking in the economy is declining in some industrial countries, banks continue to dominate the financial systems of most developing and transition countries. A sound banking system is important because of the key role it plays in the economy: intermediation, maturity transformation, facilitating payments flows, credit allocation, and maintaining financial discipline among borrowers. Banks provide important positive externalities as gatherers of savings, assigners of resources, and providers of liquidity and payments services. In developing economies with less developed financial markets, banks typically are the only institutions producing the information necessary for intermediation, providing the portfolio diversification required for maturity transformation and risk reduction, and helping monitor corporate governance. Even in economies with highly developed financial markets, banks remain at the center of economic and financial activity

and stand apart from other institutions as primary providers of payments services and as a fulcrum for monetary policy implementation. (Lindgren; 1996:28).

The two essential functions of commercial banks may best be summarized as the borrowing and lending of money. They borrow money by taking all kinds of deposits – deposits may be received on current, savings or fixed account in fixed account, the banker incurs the obligation of paying legal tender after the expiry of a fixed period with pre-defined interest rate. In saving account, the banker undertakes to pay the customer an agreed rate of interest on it, in return for the right to demand from him an agreed period of notice for withdrawals. Thus, a commercial banker, whether through current account or fixed deposit account, mobilizes the savings of the society. Then it lends it to those who are in need of it by granting overdrafts or term loans or by discounting bills of exchange or promissory notes. By discharging these functions efficiently, a commercial banker renders very valuable service to the community by increasing the productive capacity of the country and thereby accelerating the pace of economic development. It gathers small savings from general public, thus reducing idle money to the lowest limit. It combines small amount held by general public to make larger amount to be employed profitably in those enterprises where it is most called for and most needed. It makes idle fund effective and provides industry with capital. For instance, the practice of discounting bills can be taken. Commercial banks bridge the time element between the sale and actual payment of money by converting future claims into present money. This enables the seller to carry on his business without hindrance and the buyer will get enough time to realize the money. Thus, we have seen that bank receive deposits, which it has to repay to the depositor according to pre-defined terms and condition, and make them available to those people who are really in need of them. It actually distributes deposits to the borrower as well as its own vault, which is the most delicate function of a commercial bank.

Commercial banks are the heart of the financial system. It holds deposits of many persons, government establishment and business units. It makes funds available through lending and investing activities to borrowers be it individuals or business firms. It also offers financial services to the government. It acts as medium of exchange and it is the medium through which monetary policy is implemented. These facts show that the commercial banking system of the nation is important to the functioning of the economy. Banks provide opportunity to people for participation in the development process of the country via issuing

shares to be owned by them and accepting deposits from them. Then, banks mobilize and invest such accumulated resources in the field of agriculture, trade, commerce, industry, tourism, hydro-electricity projects etc.

1.1.2 Profile of Sample Banks

Everest Bank Limited (EBL)

Everest Bank Limited (EBL) started its operations in 1994 with a view and objective of extending professionalized and efficient banking services to various segments of the society. 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. 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 conglomerates, 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.

Rastriya Banijya Bank Limited (RBB)

Rastriya Banijya Bank (RBB) is fully government owned, and the largest commercial bank in Nepal. RBB was established on January 23, 1966 (2022 Magh 10 BS) under the RBB Act. Now, the bank is running under bank and financial institute act 2063. RBB has been contributing to socio economic development of the country for the last four and half decades. The Bank has currently entered into 48 years of service. RBB provides various banking

services to a wide range of customers they include elite to poor individuals, institutional customers, and the customers from industry / business communities.

RBB has Nepal's most extensive banking network with over 128 branches (1120 ABBS Branches). Through its widest branch and ABBS network RBB has been catering modern Banking services to millions of customers.

The Bank was transformed in company in 2063 1-6 B.S. Following this historical transformation the bank has successfully completed its first ever general assembly on 2067-05-31 BS.

RBB has many correspondent arrangements with major international banks all over the world that facilitate trade finance, bank-originated personal funds transfers and interbank funds transfer via SWIFT. In a bid to promote remittance business, RBB works with Western Union and International Money Express, two leading person-to-person funds transfer networks.

The bank has played crucial role for the development of financial sector i.e. bank, insurance companies through its promoter's role. As a second commercial bank of the country, the bank has been contributing in the trade, industry and agricultural sector of the country. The bank has also contributed in the hydropower sector. Health and Education sector are also benefitted through its disbursement. As a government owned bank the bank is also contributing towards achieving national goals as per the government directives. The bank has made significant contribution in the development of private sector either by loan disbursement or by active participation in the fairs organized by industrial and business communities. The bank is also in the frontline towards fulfilling corporate social responsibility. The bank has been working as a development partner by acting as a fund administrator of Poverty Alleviation Fund (PAF).

1.2 Focus of the Study

Nepal's entry into privately and publicly owned commercial/joint venture banks is relatively new compared to other countries. It can be said that the poor performance of Nepalese commercial banks as well as the national bank owes to the lack of effective policies and measures taken by the government towards the collective improvement of the Nepalese banking sector. This study focuses on the financial performance of two commercial banks,

viz., EBL and RBB. Ratio analysis has been used to assess the financial strengths and weakness of these banks.

1.3. Statement of the Problem

Banking institutions are inevitable for the resource mobilization and all-round development of the country. It is the resource for economic development; it maintains economic confidence of various segments and extends credit to people. In Nepal, the profitability rate, operating expenses, dividend distribution among the shareholders etc. have been found to be inconsistent. The problem of the study will ultimately find out the reason behind the differences in their financial performance.

The tendency to concentrate JVBs only in urban areas like Katmandu, Biratnagar and Pokhara etc. has raised the certain questions. This state of affairs cannot contribute much to the socio-economic development of the country where more than 80% of the population lives in the rural areas and more than 70% of population depends upon agriculture. These JVBs are reluctant to extend their operation in rural areas. Despite the circular of NRB, the central bank of the country, regarding compulsory investment of 10% of their total investment in the rural areas, these banks are inclines to pay fines rather than direct their resources to such less profitable sector. This problem needs to be solved, so that even the small investors in the rural areas can benefit from the services of such banks. Moreover, even the existing branches of the commercial banks in the rural areas do not seem to have been able to mobilize the local resources effectively.

The mushrooming of banking, finance companies, rural banks, and co-operative societies in a short span of time has brewed new competitive scenario and has passed a challenge to the big banks like EBL and RBB. In the changed scenario, these banks need to explore their strengths and weaknesses, and improve their performance because their success depends upon their ability to boost their productivity and financial performance. The present study seeks to explore the efficiency and weakness of EBL and RBB with the help of ratio analysis.

Thus, this study attempts to answer the following research questions:

- What is the existing financial position of EBL and RBB?
- What is the relationship between net profit and total investment of sample banks?

- Is there any difference in profitability position between EBL and RBB?

1.4 Objectives of the Study

The overriding objective of this dissertation is to study the financial performance of EBL and RBB. To be more specific, this proposed study keeps the following objectives;

- To analyze the existing financial position of EBL and RBB.
- To assess the relationship between net profit and total investment of sample banks.
- To point out the comparative profitability position of sample banks.

1.5 Significance of the Study

The significance of the study can be highlighted through the following points;

- The study provides to the shareholders about the status of both banks. This allows them to have a comparative retrospect whether their fund was better utilized or not.
- The study also compels the management of respective banks for self-assessment of what they have done in the past and guides them in their plans and programs.
- Policy makers at the macro level, i.e. the government and NRB will also benefit regarding the formulation of further policies concerning economic development through banking institutions.

1.6 Limitation of the Study

The time was the major limitation of the study as a partial fulfillment for the degree of Masters of Business Studies.

- The scope of the study is limited within the framework of ratio analysis and correlation analysis.
- Since the study is fully based on the secondary data collected from various sources, their relevancy will depend upon the authenticity of the publishers.
- The study is only about five fiscal years 2007/08 to 2011/12.

1.7 Organizations of the Study

This study has been organized into five chapters. Chapter one consists of introductory part of the study. The chapter consists of background, statement of problem, objective of the study, significance of the study, limitation of study and organization of study. Chapter two includes

the brief review of available literature on related topic. It includes a discussion on the conceptual frame work and review of major studies. Chapter three includes the research methodology employed in the study. This chapter deals with the nature and serious of data research design, population and sample, data collection procedure and method of analysis. Chapter four deals with the presentation and analysis of relevant data, with the help of various financial, statistical tools, techniques and major findings. Finally, chapter five incorporates summary, conclusion & recommendations of the study which are the important aspects to solve the problems associated to the present analysis and offers recommendation for the improvement in future.

CHAPTER - II

REVIEW OF LITERATURE

The authors and researchers had already explained the review of literature highlights the existing literature and research work related to the present research being conducted with the view of finding out what and how the current research adds further benefits to the field of research. This review of literature has been classified into four subgroups as follow: Conceptual Review, Review of related studies, Reviews of journal and articles, Review of Thesis.

2.1 Conceptual Review

2.1.1 Bank

Banking, transactions carried on by any individual or firm engaged in providing financial services to consumers, businesses, or government enterprises. In the broadest sense, banking consists of safeguarding and transfer of funds, lending or facilitating loans, guaranteeing creditworthiness, and exchange of money. Such institutions as commercial banks, savings banks, trust companies, finance companies, provide these services and merchant banks or other institutions engaged in investment banking. A narrower and more common definition of banking is the acceptance, transfer, and, most important, creation of deposits. This includes such depository institutions as commercial banks, savings and loan associations (more common in the United States), building societies, and mutual savings banks. All countries subject banking to government regulation and supervision, normally implemented by central banking authorities. For further information on central banks and investment banking, see the relevant articles.

2.1.2 Concept of Commercial Bank

Commercial banks are the heart of the financial system. They hold the deposits of many persons, government establishment and business units. They make fund available through their lending and investing activities to borrowers, individual business firms and services from the producers to customers and the financial activities of the government. They provide a large portion of the medium of exchange and they are media through monetary policy is affected. These facts show that the commercial banking system of the nations is important for the functioning of the economy.

Banks are business firm; like Frisbee Manufacturer, fast food chains and textbook publishers, bankers buy inputs, message them a bit, burn a little incense, say the magic words, and out pop some output from the oven. If there lick holds, they sell the finished product for more than its cost to buy the raw materials in the first place. For bankers, the raw materials are money.

Evaluation of financial performance is a study of overall financial position of any organization. It is closely related to the decision making. In the modern context, it gives vital support for the investment decisions, financing decisions and dividend decisions. Financial performance analysis is undergone with the help of periodically made financial statements of the firm.

2.1.3 Financial Statements

“The Financial Statements are the means of presentation of a firm's financial condition and basically consist of two types of statements - The Balance Sheet & Income Statement. These are prepared to report the overall business activities as well as financial status of the firm for a specified period to its stakeholders. These contain summary of information regarding financial affairs that is organized systematically. The top management is responsible for preparing these statements.

The basic objective of financial statements is to assist in decision-making. The analysis and interpretation of financial statements depend on the nature and type of information available there in” (Panday; 2004: 31).

Hence, financial statement refers to any formal and original statement that discloses the financial information related to any business concern during a period. The income statements and balance sheet usually prepared at the end of each financial year show the firm’s position.

A) Balance Sheet

Balance sheet is one of the basic financial statements of an enterprise. It is also called the fundamental accounting report. As the name suggests, the balance sheet provide information about financial standing or a position of a firm at a particular point of time usually end of the financial year. It can be visualized as a snapshot of the financial status of a company (Khan and Jain; 1993:13).

Balance sheet summarizes the assets, liabilities and owner's equity of a business at a moment of time, usually at the end of the financial year. Balance sheet is a financial statement, which contains information regarding different capital expenditures made on purchase of assets on particular date and information regarding various sources of funds acquired by the business concern to finance these assets and also the different sources of capital and liabilities at that particular point of time.

B) Income Statement

"Income statement is designed to show the performance of the business firm for specific period of time i.e. for a year or month or quarter. The business revenues and expenses resulting from the accomplishment of the firm's operation are shown in the income statements. It is the "Scoreboard" of the firm's performance during particular period of time. It shows the summary of revenues, expenses and net income or loss of a firm for a particular period of time. Income statement also serves as a true measure of the firm's profitability".

2.1.4 Financial Performance Analysis

Financial Analysis is the process of determining financial strengths and weaknesses of a company by establishing strategic relationship between the components of a balance sheet and profit and loss statement and other operative data (Pandey; 1999:96).

Financial Statement Analysis involves the use of various financial statements. These statements perform several things. First, the balance sheet summarizes the assets, liabilities and owner's equity of a business at a moment in time, usually the end of a year or a quarter. Next, the income statement summarizes the revenues and expenses of the firm over a particular period, again usually a year or quarter. While the balance sheet represents a snapshot of the firm's financial position at a moment in time, the income statement depicts a summary of the firm's profitability over time. From these two statements, certain derivative statements can be produced, such as statement of retained earnings, a sources and uses of funds statements and a statement of cash flows etc (Van Horne; 1998:56).

Financial Analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account (Pandey/2004/560). Analyzing financial statements is a process of

evaluating relationship between component parts of financial statements to obtain a better understanding of a firm's position and performance (Metcalf; 1976:157).

Financial Statement Analysis allows managers, investors and creditors as well as potential investors and creditors to reach conclusion about the recent and current status of a corporation” The checking of financial performance in a business deserves much attention in carrying out the financial position. It also requires to retrospective analysis for evaluating the wisdom and efficiency of financial planning. Analyzing of what has happened should be of great value in improving the standards, techniques and procedures of financial control involved in carrying out finance function (Kuchhal; 1982).

The four basic statements contained in the annual report are the balance sheet, the income statement the statement of the retained earnings and the statement of cash flows. Investors use the information contained in these statements to form expectations about the future levels of earnings and dividends and about the risks of these expected values. Financial statement analysis generally begins with the calculation of a set of a financial ratios designed to reveal the relative strength and weakness of a company as compared to other companies in the same industry, and to show whether the firm's position has been improving or deteriorating over time. (Weston/1996:306). Financial analysis is that sort of calculation, which is done with the help of annual report. Moreover, the annual report would contain the essentials for such analysis. Therefore, the data retrieved from the annual report is indispensable for the financial analysis. Both an analytical and judgmental process helps answer questions that have been properly posed. Therefore, it is means to end. Apart from the specific analytical answer, the solutions to financial problems and issues depend significantly on the views of the parties involved, the related importance of the issue and on the nature and reliability of the information available (Helfert, 1992:2).

Financial appraisal is a scientific evaluation of profitability and financial strength of any business concern. Financial appraisal is the process of scientifically making a proper, critical and comparative evaluation of the profitability and financial health of a given concern through the application of the techniques of financial statement analysis. A complete financial analysis and interpretation of financial statement involves the assessment of past business performance, an evaluation of the present condition of the business and the predictions about the future potential for achieving expected or desired results (Jain;1996:36-37).

Financial statement analysis involves a comparison of firm's performance with that of other firms in the same line of business which often is identified by the firm's industry classification. Generally speaking, the analysis is used to determine the firm's financial position in order to identify its current strengths and weakness and to suggest actions that might enable the firm to take advantage of the strengths and correct its weaknesses (Fred; 1996:78).

Financial Performance Analysis is used primarily to gain insight into operating and financial problems confronting the firms with respect to these problems. We must be careful to distinguish between the cause of problem and symptom of it. It is thus an attempt to direct the financial statements into their components based on purpose in the one hand and establish relationships between these components and between individual components and totals of these items on the other. Along with this, a study of various important factors over the past several years is also undertaken to have clear understanding of changing profitability and financial condition of the business organization (Hampton; 1998:99).

Much can be learnt about business performance and financial position through appraisal of financial statements, the appraisal or analysis of financial statements spotlights the significant facts and relationship concerning managerial performance, corporate efficiency, financial strength, weakness and credit worthiness that would have otherwise been buried in a maze of details (Jain ; 1996:37).

2.1.5 Objectives of Financial Performance Analysis

Financial Analysis enables us to explore various facts related to the past performance of business and predicts about the potential for achieving expected results. Major objectives of analysis of financial statement are to assess various factors in relation to the business firm as presented below.

- 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 or departments.
- The short-term and long-term solvency of the concern.
- The comparative study regarding to one firm with another firm.

- The possibility of developments in the future making future forecasts and preparing budgets.
- The financial stability of business concern,
- The real meaning and significance of financial data,
- The long-term liquidity of its fund.

2.1.6 Need of Financial Performance Analysis/ Financial Statement Analysis

The need for the Analysis of financial statement arises in order to address the following questions (Pradhan Radhe Shayam/ “Management of Working Capital”2000: 47-48).

- How was the firm doing in the past? Was there any problem? If so, in what Area?
- How it is doing at present? Is it doing better compared to the past performance, competitors and industry average? Is there any problem at present? If so, in what areas?
- What about the future? Is there any likely problem on the way in the future? What will its position be in the future?
- What corrective actions can be taken now to solve the problems and improve the performance? How will the recommendation of any course of actions or changes in the policy or practice help solve problems and improve the company's position?
- What are the expected results of recommendations? Are there any improvements?

2.1.7 Significance of Financial Analysis

Significance of Analysis lies on the objectives of financial analysis of any firm. Different groups associated with the concern perceive the facts discovered by the analysis differently. The facts and the relationships concerning managerial performance, corporate efficiency, financial strengths and weaknesses and credit worthiness are interpreted based on objectives in the hand. Such Analysis leads management of an enterprise to take crucial decisions regarding operative policies, investment value of the firm, internal financial control system and bargaining strategy for funds from external sources (Agrawal Govinda Ram/1993:582). The parties that are benefited by the results or conclusion drawn from the analysis of financial performance can be numerated as (Srivastava/ 1993:58-59)

- Top Management
- Creditors
- Shareholders
- Economists

- Labor Unions

A) Top Management

The responsibility of the top management is to evaluate:

- Are the resources of the firm has been used effectively and efficiently?
- Is the financial condition of the firm sound enough?

Based on past facts, firms can anticipate their future. Hence, top management can measure the success or failure of a company's operations, determine the relative efficiency of various departments, process and products appraise the individual's performance and evaluate the system of internal audit.

B) Creditors

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

C) Shareholders

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

D) Economists

To diagnose the prevailing status of business and economy, economists analyze the financial statements (of any firm). The government agencies analyze them for the purpose of price regulation; rate setting and similar other purposes.

E) Labor Unions

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

2.1.8 Process of Financial Performances Analysis

Financial Analysis is a technique of answering various questions regarding the performance of a firm in the past, present and the future based on past performance. The analysis recommends the steps to be taken by financial managers while undergoing the assessment of financial position.

The questions, that as elucidated above create the need to follow certain steps such as first identification and analysis of problem in order to come up with appropriate recommendations, and then to project the expected results and examine them if there are improvements before implementing such recommendations. The following chart presents the process to be followed in the analysis of financial statements.

2.1.9 Types of Financial Performance Analysis

The nature of financial Analysis differs according to the purpose of the analyst. A distinction may be drawn between various types of financial analysis either on the basis of material used for the same or according to the modus operandi of the analysis (Man Mohan;1997:356).

A) According to material used

1. External Analysis

Those who do not have access to the detailed records of the company make it. This group, which has to depend almost entirely on published financial statements, includes investors, credit agencies and governmental agencies regulating a business in a nominal way.

2. Internal Analysis

Those who have access to the books of accounts accomplish the internal analysis and all other information related to the business. While conducting this analysis, the analyst is a part of the enterprise he is analyzing. Analysis for managerial purpose is the internal type of

analysis, is conducted by executives and employee of the enterprise as well as governmental, and court agencies, which may have major regulatory and other jurisdiction over the business.

B) According to Modus Operandi Analysis

1. Horizontal Analysis

When Financial Statements for a number of years are reviewed and analyzed, the analysis is called horizontal analysis. As it is based on data from year to year, rather than on one date or period as a whole, this is also known as dynamic analysis.

2. Vertical Analysis

It is frequently used for referring to ratios developed for one date or for one accounting period. It is also called static analysis.

Besides, the types of financial analysis based on material used and modus operandi, S.P Jain and K.L. Narang have categorized based on objective of the study.

C) According to Objective

1. Long Term Analysis

This is made in order to study the long-term financial stability, solvency and liquidity as well as profitability and earning capacity of a business concern. For the long run success of a business concern, this analysis helps in the long term financial planning.

2. Short Term-Analysis

This is made to determine the short-term solvency, stability and liquidity as well as earning capacity of the business. This analysis is helpful for short term financial planning.

2.1.10 Techniques of Financial (Statement) Analysis

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

The widely used techniques are as follows:

a. Ratio Analysis

b. Du-Pont System of Financial Statement Analysis

- c. Common Size Analysis
- d. Funds Flow Analysis
- e. Cash Flow Analysis

a. Ratio Analysis

Ratio Analysis has been used as a major tool in the interpretation and evaluation of financial analysis. The term ratio refers to the numerical quantitative relationship between the two items/variables. A ratio is calculated by dividing one item of the relationship with the other base. In financial analysis, a ratio is used as a yardstick for the evaluation of financial performance of the firm. "The analysis of financial ratio involves two types of comparison. First, the present ratio may be compared with the past and expected future ratios for the same company and second, the method of comparison involves comparing the ratios of one firm with those of similar firm or with industry averages at the same point, in time. Such comparison gives insight into the financial performance of the firm." Ratio analysis is widely in use. It may not give the entire picture of an enterprise. Ratios themselves are not conclusion. They are only the means. The Ratios are calculated from data available in the financial statement of an enterprise. The Ratio completed from the available data are numerical, there should not be the tendency to regard them as a precise portrayals of a firm true financial status. For some firms, accounting data may closely approximate economic reality, for others, it is necessary to go beyond the figures in order to obtain their financial condition of performance.

Types of Ratios

Different Ratios can be calculated from the available data in the financial statement. Broadly, Ratios are classified in four groups. They are:

- i) Liquidity ratios
- ii) Capital structure/leverage ratiosVF
- iii) Activity (assets management) ratios
- iv) Profitability ratios

i) Liquidity Ratio

Liquidity refers to the ability of enterprises to pay its current liabilities. Liquidity implies the utilization of such funds of the firm which are idle or in very little amount. A proper balance between the two contradictory requirements i.e. liquidity and profitability are required for the

efficient financial management. The more current assets associated with high liquidity and low profitability and vice versa. The less current Ratio and quick Ratio are the most widely used ratios for the general purpose to measure the liquidity position of an enterprise.

ii) Capital Structure/Leverage Ratios

The Capital Structure/Leverage Ratio is associated with the long -term solvency of an enterprise. The long -term creditors would judge the soundness of a firm based on long-term financial strength measured in terms its ability to pay the interest regularly as well as repay the installment of principal due to dates or in one lump sum at the time of maturity. Leverage Ratios show how much of an enterprise's fund are financed by debt & equity. These Ratios also show the prospects for future financing.

The Capital Structure Ratio indicates the soundness of capital structure of an enterprise. It can be calculated on two ways. The first approach is to examine what proportion of borrowed capital occupies the capital structure i.e. calculated the Debt to Total Capital Ratio. The second approach is to examine the number of times the interest earned covered by earnings and to calculate the fixed charges covered by earnings.

iii) Activity Ratio

An Activity Ratio may be defined as the test of relationship between sales and various types of Activity Ratios. Activity Ratios are employed to evaluate the efficiencies with which the firm manages and utilizes its assets. These Ratios are also called Turnover Ratios because they indicate the speed with which the assets are being covered or turned over into sales. So Activity Ratios presume that there exists an appropriate relationship between sales and various assets. The more important Activity Ratios for general -purpose analysis are Inventory Turnover Ratio, Total Assets Turnover Ratio, Fixed Assets Turnover Ratio, Capital Employed Turnover Ratio etc.

iv) Profitability Ratio

Profitability is very important aspect of management of any enterprise. It shows the overall performance of an enterprise. The Profitability Ratios are calculated to measure the operative effectiveness of an enterprise. Besides management of the company, creditors and owners are interested in the Profitability Ratios of the firm. Profitability Ratios can be calculated based on either sales or investment. The important Profitability Ratios, calculated in relation to

sales are Net Profit Margin, Gross Profit Margin, and Operating Expenses Ratio etc. Similarly, the important Profitability Ratios, calculated in relation to investment are Return on Shareholders' Equity, Return on Capital Employed, and Return on Fixed Assets etc. Together these Ratios indicate the firm's efficiency of operation (Panday/1998: 133).

b. Du-Pont System of Financial Statement Analysis

The Du Pont system is designed to show how the profit margin on sales, the assets turnover ratio and the use of debt interact to determine the rate of return on equity (Weston/1996-307)

The financial experts of the Du Pont Company develop the Du Pont system of financial statement analysis by putting together the effects of profitability, investment and the equity ratios. The approach is based on the relationship among the three basic areas of the firm such as (i) cost controlling area (ii) Assets management area and (iii) Financial leverage area. The directed to address the concern of the shareholders; hence its main focus is on the return on equity (ROE).The ROE is analyzed in terms of the factors that directly affect the ROE. The factors such as costs, assets utilization and leverage ratio are the grounds on which several test are made to see how the ROE is affected by such factors. The following modified Du Pont Chart presents the relationship among these factors and ROE.

For a business firm, the return on assets (ROA) is the rate of return on the total investment that includes both equity and debt capital. The ROA does not reflect the actual rate of return to equity holders. What reflects the return for stock holders is the return on their money (i.e. ROE), which is generally higher than the ROA. Thus, ROA is an overall measure and reflects the overall performance of the company. The Du Pont system addresses the concerns of stockholder and focuses on ROE.

Du Pont equation defines ROE as a product of ROA and equity multiplier and ROA as a product of profit margin and total assets turnover.

The Du Pont equation is as follows:

$$\begin{aligned} \text{ROE} &= \text{ROA} \times \text{equity multiplier} \\ &= \text{profit margin} \times \text{total assets turnover} \times \text{equity multiplier} \\ &= \text{Net profit/sales} \times \text{sales/total assets} \times \text{total assets/ equity} \end{aligned}$$

c. Common Size Analysis

The common size analysis is another technique of analyzing the items of financial statement

on relative terms. Under this method, the percentage of every item in the income statements and balance sheets is carried out for past several years to determine the performance trend of each item during the period under analysis. After analyzing the rising, falling or constant trend of efficiency in the business operation one can make comparison with the industry average or competitors.

The common size analysis is carried out for a period of one or more. The income statement items are divided by sales and expressed as a percentage of sales. The balance sheets items are divided by total assets and expressed as percentage of total assets. These percentages for a company are compared with the standard measures such as percentages calculated in the same manner industry and the competitors. Thus, the comparison shows the company's performance relative to competitors as well as compared to its own past record.

d. Funds Flow Analysis

Funds flow Analysis is the statement of changes in financial position of any organization that determines only the sources and used of fund between two dates of balance sheet. It is prepared to uncover the information that financial statements fail to describe clearly. It describes the sources from which funds were derived and used to which these funds were put.

The statement is prepared to summarize the changes in assets and liabilities resulting from financial and investment transactions during the period as well as those changes occurred due to the changes in owner's equity. It also uncovers the way of using financial resources during the period by the firm.

Method of preparing funds flow statement depends essentially upon the sense in which the term 'fund' is used. There are three concept of fund: cash concept, total resources concept and working capital concept. According to cash concept, the word fund is synonymous with cash. Total resources concept refers total assets and resources as fund. The term 'fund' represents only to working capital on the stated last concept However, working capital concept of fund has gained wide acceptance as compared to the other concepts. Therefore, any transaction that increases the amount of working capital is taken as source of fund while conducting funds flow analysis. Any transaction that decreases working capital is treated as application. But, any transaction that affects current liabilities or current assets without resulting any changes in working capital is not taken as sources or use.

e. Cash Flow Analysis

This statement is carried out to know clearly the various items of inflow outflow of cash. It is different from funds flow analysis in the sense, the analysis relates to the movement of cash rather than the inflow and outflow of working capital.

It deals the causes of changes in cash position for the period of two balance sheets date in brief. At the time of preparing cash flow statement, only cash receipt from debtors against credit deals are considered as the source of cash. Similarly, cash purchases and cash payments to suppliers for credit purpose are regarded as the uses of cash. The same holds true for expenses and incomes outstanding and prepaid expenses are not to be considered under this analysis.

2.1.11 Limitations of Financial Performance Analysis

Financial Performance Analysis is of great significance for investor, creditor, management, economist, and other parties having interest in business. It helps management to evaluate its efficiency in past performance and takes decision relating to the future. (Jain, 1989:33) However, it is not free from drawbacks. Its limitations are listed below.

(a) Historical nature of financial statements

The basic nature of statements is historical. Past can never be a precise and can never be perfectly helpful for the future forecast and planning.

(b) No subject for judgment

Financial analysis is a tool to be used by experts, analysts etc. to evaluate the financial performance of firm. That is why it may lead to faulty conclusion if used by unskilled analyst.

(c) Reliability of figures

Reliability of Analysis depends on reliability of the figures of the financial statements under scrutiny. The entire working of analysis will be vitiated by manipulation in the income statement, window dressing in the balance sheet, questionable procedures adopted by the accountant for the valuation of fixed assets and such other facts.

(d) Single year analysis is not much valuable

The analysis of these statements relating to single year only will have limited use and value. From this, one cannot draw meaningful conclusion.

(e) Result may have different interpretation: Different users may differently interpret the result derived from the analysis. For example, a high current ratio may suit the banker but it may be the cause of inefficiency of the management due to under-utilization of fund.

(f) Change in accounting methods:- Analysis will be effective if the figures derived from the financial statements are comparable. Due to change in accounting methods, the figures of current period may have no comparable base, and then the whole exercise of analysis will become futile.

(g) Pitfall in inter-firm comparison

When different firms are adopting different procedures, records, objectives, policies and different items under similar heading, comparison will be more difficult. If done, it will not provide reliable basis to assess the performance, efficiency, profitability and financial condition of the firm as compared to the whole industry.

(h) Price level change reduces the validity of analysis

The continuous and rapid changes in the value of money, in the present day, economically also reduces the validity. Acquisition of assets at different level of prices make comparison useless as no meaningful conclusion can be drawn from a comparative analysis of such items relating to several accounting periods.

(i) Selection of appropriate tool

There are different tools of analysis available to the analyst. The tools to be used in a particular situation depend on skill, training, intelligence and expertise of the analyst. If wrong tool is used, it may lead to wrong conclusion. This may be harmful to the interest of business. (Orne and Walchowicz, 1997:120)

2.2 Review of Related Articles

Under this heading, reviews of research papers of researchers had analyzed to find out the investment policies of commercial banks.

Thapa, (2005) expresses his views in his research paper *Financial System of Nepal* that the commercial banks including foreign joint venture banks seem to be doing pretty well in mobilizing deposits. Likewise, loans and advances of these banks are also increasing. But compared to high credit needs particularly by newly emerging industries, the bank still seems to lack adequate funds. The banks are increasing their lending to non-traditional sectors along with the traditional sectors. Out of all commercial banks, Nepal Bank Ltd., Rastriya Banijya Bank and Agriculture Development Bank Nepal are operating with a sound profit. Because of growing competition and limitation of investment sectors, the spread between interest income and interest expenses is declining. These banks have not been able to increase their income from commission and discount. On the contrary, they have heavy burden of personal and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit position of these banks has been seriously affected. On the other hand, the foreign joint venture banks have been functioning in an efficient way. They are making profit year after year and have been distributing bonus to their employees and dividends to their shareholders.

He concludes that by its very nature of the public sector, these two domestic banks couldn't compete with the private sector banks, so only remedy to the problems of these banks, as the government decided, is to hand over the ownership as well as the management of these banks to the private hands (Thapa,2005:29-37).

Pradhan, (2009) in his research paper *Role of Saving, Investment and Capital formation in Economic Development, A case of Nepal*, has studied about the strong role and impact of saving, investment and capital formation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, investment, capital formation and gross domestic product has been collected for the period of 2003/04 to 2010/11. The role and impact of saving, investment and capital formation on economic development were analyzed by using various regression models. The regression equations used in this study have been estimated at current prices as well as in real terms with the entire study period divided into different sub periods.

The results presented in this paper suggest that in all cases, GDP is significantly associated with saving, investment and capital formation both at current prices and in real terms. The results of the empirical analysis led to three important conclusions: First, saving, investment and capital formation have positive impact on economic development. Second, the current values and past values of saving, investment and capital formation have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving and capital formation on economic development while weak role-played by investment (Pradhan, 2009:123-133).

2.3 Review of Thesis

Kapadi, (2008) has conducted research on *A Comparative Study on Performance of NABIL Bank Ltd and Standard Chartered Bank Limited*. The study of this thesis is the descriptive analytical method. The core objective of this thesis is to analyze the financial performance of NABIL bank and SCBNL this includes the examining of liquidity capital structure and activity and profitability ratios of the ratio joint venture sample banks.

The specific objectives of his research are:

1. To examine the trend of deposits and loan and advances of NABIL bank and SCBNL.
2. To study the liquidity profitability capital structure activity and capital adequacy position of NABIL bank and SCBNL.
3. To suggest and recommended some measures by evaluating and finding financial performance of NABIL bank SCBNL on the basis of finding.

From the detail analysis, the research finds the following findings of the study.

He found that most of the capital structure ratios show that the capital structure of both the banks is highly leveraged.

- Total debt to equity ratio of both the banks reveals that the claims of the outsider exceeds more than that of the owner's over the bank asset. However NABIL bank seems to be more leveraged than SCBNL.
- Total debt to total assets ratio of both the banks has always been over 88, which indicates the excessively geared capital structure. Comparatively NABIL bank has used a little more debt financial than SCBNL. Long-term debt to total assets ratio of NABIL bank is seems to be greater as per mean, which shows more use of long-term debt by NABIL bank than by SCBNL.

- Long-term debt to net worth ratio of both the banks is following the fluctuating trend. The mean proportion of outsiders fund and owners fund employed in the total capitalization of NABIL bank is higher than that of SCBNL. This implies that it is following an aggressive strategy of higher risk higher return policy.
- The fixed asset to net worth ratio of NABIL bank is higher than that of SCBNL as per mean ratio. But the investment of owners' equity in fixed assets for both the banks are minimum as is commonly seen in various financial institutions.

Shrestha, (2009) in his thesis *Financial performance analysis of Nepal Bangladesh bank ltd.* In this study, various financial research and statistical tools have been used to achieve the objective of the study. The analysis of data will be done according to the pattern of data available. Likewise, some financial tools such as ratio analysis and trend analysis have also been used for financial analysis.

The specific objectives of his research are:

1. To analyze the functions, objectives procedure and activities of the NB bank
2. To analyze the lending practices and resources utilizations of NB bank.
3. To determine the impact of growth in deposit on liquidity and lending practices.
4. To examine the lending efficiency and its contribution to profit.
5. To make suitable suggestions based on the findings of this study. The financial and statistical tools are used.

The researcher found that NB bank has sufficient liquidity. It shows that bank has not got investment sectors to utilize their liquid money. Now, in Nepal many banks and other financial institution are functioning to collect deposits and invest money somewhere in the investable sectors. Therefore, miniaturization has been increased since liberalization policy taken by the government. Heavy remittance has also helps to increase the amount of deposits in bank. On the other hand, due to political crisis, economic sectors have been fully damaged.

The research findings of the study are summarized as:

- NB bank has utilized most funds in the form of credit and advances. More than 75% of total deposits of the bank have been forwarded to customers as a credit and advances.

- The major part of utilizing deposits and income generating sectors. If the bank has high deposits, bank can provide money to its customers as credit and advances. Therefore, there is highly positive correlation between total deposits and credit and advances of NB bank
- Bank is providing different schemes to attract good customers. After attracting deposits from the customers, bank has issued the deposits to the needy area to make profit for the bank.

Gautam, (2010) has conduct research on *A Comparative study on financial performance of Standard Chartered Bank Limited and Nepal Bangladesh bank Limited*. Financial performance is analyzed with two important tools. The first most important tools are the financial tools, which includes ratio analysis and other is a statistical tools, which is bankruptcy score.

The objectives of his research are:

1. To study the existing capital structure of financial position of selected joint venture commercial banks and to analyze its impact on the profitability.
2. To access the debt servicing of the joint venture commercial bank.
3. To examine the correlation and the signification of their relationship between different ratios related to capital structure.
4. To provide suggestions and recommendations for the optimal capital structure of the joint venture commercial bank.
5. To obtained the objectives, some financial, statistical and accounting tools.

He has found his study were the joint venture banks are operating in Nepal as commercial merchant banks. The growth is still going on as so many new banks are coming into existence after this study. Therefore, JVB's are operating with higher technology and new efficient methods in banking sector. However, this study has been undertaking only three JVB's viz. SCBNL and NBBL to examine and evaluation the financial data.

The research findings of the study are as follows:

- The research sample JVB's have used high percentage of total debt in raising the assets. The higher ratio constitutes that the outsider's claim in total assets of the bank is owner's claim.

- The on an average, NBBL bank constitutes 16.27 times of P/E ratio, which should be reduce as quickly as possible.
- The financial risk of the banks NBBL average degree of finance leverage constitutes 3.73 times which indicates the higher degree of financial risks 3.73 times which indicates the higher degree of financial risks.
- The average ROE of JVB's i.e. SCBL and NBBL area 37.36% and 21.75% respectively.

Now, in Nepal many banks and other financial institution are functioning to collect deposits and invest money somewhere in the investable sectors. Therefore, efficiency has been increased since liberalization policy taken by the government. Heavy remittance has also helps to increase the amount of deposits in bank.

Gupta, (2011) conducted a research study entitled *Comparative Analysis of Financial Performance of Commercial Banks in Nepal*. The researcher had taken Everest Bank Limited, Bank of Kathmandu and Nepal Standard Chartered Bank Limited as sample. The major objective of the study was

- To evaluate Liquidity Ratio, Activity Ratio, Profitability Ratio and other market related ratios of these sample banks.
- To study the liquidity profitability capital structure activity and capital adequacy position of EBL, BOK and SCBNL.
- To suggest and recommended some measures by evaluating and finding financial performance of EBL, BOK and SCBNL Banks on the basis of finding

The researcher had used descriptive and analytical research design in writing the research study. The research had also used F-Test in testing the hypothesis. The researcher study concluded that among three sample bank BOK maintained the highest liquidity position during the research period in comparisons to other two banks. The study further added that SCBNL had the excellent assets utilization in order achieve the goal of maximizing the shareholder's wealth. In the same way SCBNL generated the highest net profit and paid the highest dividend per share to shareholders.

The study further stated that there is no significance difference among the commercial banks in terms of net profit of total assets ratio, and dividend payout ratio. The review of above relevant thesis has not doubt enhanced the fundamental understanding and foundation knowledge base, which is prerequisite to make this study meaningful and purposive.

Shrestha, (2011), *Credit risk management of Nabil Bank Limited and Nepal Investment Bank Limited in Nepal*. The main objective of the study is to evaluate the credit risk management. In order to achieve this, the following specific objectives have been formulated.

- To evaluate the status of the loan portfolio of the banks.
- To evaluate problems and weakness in credit risk management.
- To review the prevailing laws rules and regulation enforced by Nepal Rastra Bank and assess its impact on profitability and liquidity of bank.
- To offer suitable suggestions based on findings of this study.

The liquidity position of NIB is comparatively better than NABIL. Commercial banks have to maintain more liquid assets but the current ratios of some banks are below the standard of 1:1. The mean current ratio of NABIL is 1.89 and NIB is 1.99 the current ratio of NIB is little higher than NABIL. Cash and bank balance to total deposit ratio of NIB has higher than NABIL.

The loan & advances to total deposit ratio of NABIL is lower than NIB. The total investment to total deposit of NABIL is higher than NIB i.e. 34.40% > 27.45%. It shows the NABIL is mobilizing its funds on investment in various securities efficiently. The loan & advances to total assets ratio of NIB is greater than NABIL. Investment on government securities to total assets ratio of NABIL is higher than NIB. This indicates that NABIL has invested more portions of total assets on government securities. So an asset management aspect of NABIL is better than NIB.

The profitability position of NABIL and NIB are Return on loan & advances ratio of NABIL is higher than that of NIB i.e. 4.64% > 2.46%. Return on total assets ratio of NABIL is slightly higher than NIB i.e. 2.61% > 1.79%. However, NABIL seems successful in managing and utilizing the available assets in order to generate revenue.

The credit risk ratio shows the proportion of no-performing loan in total Loan & Advances. Average credit risk ratio of NIB is higher than NABIL. These Ratios indicate the more efficient operating of credit management of both banks according to NRB directives because according to NRB directives NPL ratio must be less than 5%. The liquidity risk of the bank defines its liquidity need for deposit. The average mean ratio of NIB is greater than that of NABIL. The analysis shows that both banks have the Asset Risk Ratio in fluctuating trend.

Niroula, (2012) in her thesis *The Comparative Study on Portfolio Management of Nepal Industrial and Commercial bank and Everest bank ltd.* Has precise about portfolio management and its implication. The main objectives of the study are as follow:

- To compare the liquidity management, asset management efficiency, profitability position, risk position, investment practices of before said Banks.
- To find out the relationship between deposit and total investment, deposit and loans and advances and net profit.
- To analyze the risk return ratios of investment the banks.
- To evaluate the portfolio management of the banks.
- To provide suggestion through finding.

The main goal of the bank as a commercial organization is to maximize the surplus by the efficient use of its funds and resources. In spite of being a commercial institution, it too have a responsibility (obligation) to provide social service oriented contribution for the social economic upliftment to the country by providing specially considered loans and advances towards less privileged sectors.

On the basis of study following finding has been drawn:

- The current ratio of NIC is higher than EBL. The current ratio of NIC is 1.89 and EBL is 1.14. Cash and bank balance to total deposit ratio of EBL has higher than NIC i.e. 10.7% >9.24% which indicates that the bank has higher liquidity of EBL as compare to NIC.
- In case of Asset Management Ratio, the loan & advances to total deposit ratio of NIC is higher than similarly The loan & advances to total assets ratio of NIC is greater than EBL.
- In Profitability Ratio, Return on loan & advances ratio of EBL is higher than that of NIC Return on total assets ratio of EBL is slightly higher than NIC i.e. 1.50% >

1.31%. EBL seems successful in managing and utilizing the available assets in order to generate revenue. Similarly, Return on equity of EBL is higher than NIC.

- For the perspective of risk and other ratio, the credit risk ratio shows the proportion of no-performing loan in total Loan & Advances. EBL has efficient operating of credit management than that of NIC from the mean point of view. The average mean ratio of EBL is greater than that of NIC.
- On the basis of time series analysis, NIC and EBL have increasing trend in collecting deposit the rate of increment of total deposit for EBL seems to be higher than that of NIC.
- The trend line of loan & advances for both banks is upward slopping. It refers that both the banks are increasing in disbursement of loan & advances.

2.3 Concluding Remarks

There are many and different types of research have been conducted by different persons and produced different findings. All the researchers have been conducted their research only based on different kinds of joint venture banks and private commercial banks, but nobody carried out their research based on government financed banks like NBL, RBB and ADBL. So this study obviously will help to the concern body to prepare and implement different kinds of policies.

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make this study meaningful and purposeful. There are various researchers conducted on lending practice, credit policy, financial performance and credit management of various commercial banks. Some of the researchers have done the financial performance between two or three different commercial bank. In order to perform those analysis researchers have used various ratio analysis. The past researches in measuring financial performance of bank have been focused on the limited ratios, which are incapable of solving the problems. In this research various ratio are systematically analyzed and generalized. Past Researchers are not properly analyzed about banking performance and its impact on the profitability. The ratios are not categorized according to nature. Here in this research all ratios are categorized according to their area and nature.

In this research, comprehensive study of financial performance of EBL and RBB is measuring by various ratios, trend analysis and various statistical tools as well and financial tools are used for analyzing survey data. Since the researcher have used data only five fiscal year but all the data are current and fact. Clearly these are the issue in Nepalese commercial bank the previous scholar could not the present facts. This study tries to show financial performance by applying and analyzing various financial tools like liquidity ratio, activity ratio, profitability ratio and, lending efficiency ratio as well as different statistical tools like average mean, standard deviation coefficient of correlation and trend analysis. Probably this will be the appropriate research in the area of financial performance of Bank and financial institutions.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Introduction

Research is a systematic inquiry for seeking facts and methodology means the analysis of specific topic by using proper method. In other words, Research methodology is the way to solve systematically the research problem (Kothari, 1999: 61).

Thus, Research is a systematic inquiry seeking facts through objectives verifiable methods in order to discover the relationship among them and to deduce from them broad principles or laws. It is really a method of critical thinking by defining and redefining problems, formulating hypothesis or suggested solution, collecting, organizing and evaluating data, making decisions and making conclusions to determine whether they fit the formulated hypothesis.

The main objective of this topic is to analyze, examine, highlight and complete the financial performances of EBL and RBB and recommend suggestions for improvements. This chapter looks into the research designs, nature and sources of data, data collection, procedures and tools and techniques of analysis.

3.2 Research Design

A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combined relevance to the research purpose with economic in procedure (Kothari, 1989:59).

Research is a theory building activity. Research design is the plan, structure and strategy of investigations conceived so as to obtain answer to research questions and to control variances. Since the main objectives of this study is to analyse financial performance of the banks, all the indicators that shows the financial performance of the banks were calculated using data obtained from the five year end internally generated accounting records maintained by sampled Banks. The study depends on the secondary data. Various financial parameters and effective research techniques are employed to evaluate the financial performance of the banks. Furthermore, various descriptive as well as analytical techniques

are used. The study is designed as to give a clear picture of the Bank's financial circumstances with the help of available data with useful suggestions and recommendation.

3.3 Population and Sample

There are 32 Commercial banks operating in Nepal. Among them there are three government banks Nepal Bank Limited, Agriculture Development Bank Limited and Rastriya Banijya Bank Limited and remaining 29 are private commercial banks. The three government banks and 29 private commercial banks are taken as population. Among the three government banks RBB have been selected and among the 29 private banks EBL have been selected as sample for the present study.

3.4 Nature and Sources of Data

The study is mainly conducted on secondary data relating to the study of financial performance of samples Banks, as they are available at concerned Banks. For the purpose of the study, various related books, booklets, magazine, journals, newspaper and thesis made in this field have been referred. Besides these, necessary suggestions and feedbacks are taken from various experts both inside and outside the bank whenever required.

3.5 Data Collecting Procedures

The annual reports of the concerned banks were obtained from their head office and their websites. NRB publication, such as Banking and Financial Statistics Economic Reports, Annual Reports of NRB etc .has been collected from the personal visit of concerned corporate office of NRB at Singhadurbar plaza. Besides, a details review materials are collected from the library of Nepal Commerce Campus, Shankar Dev Campus and central library of T.U.

3.6 Tools and Techniques Used

The analysis of data consists of organizing, tabulating, and performing statistical analysis (Wolf and Pant, 2009: 127)

In this study, various financial and statistical tools have been used to achieve the objective of the study. According to the pattern of data available, the analysis of data will be done. The various tools applied in this study have been briefly presented as under:

3.6.1 Financial Tools

Financial performance is analyzed through the use of two important tools. The financial tool is one of the most important tool, which includes ratio analysis and the other one financial statement analysis have been used in this study. Financial tools are used to examine the financial strength and weakness of bank. Although there are many financial ratios, only selected ratios are used in this study.

3.6.1.1 Analysis of Financial Ratios

The techniques of ratio analysis in of considerable significance in studying the financial stability, liquidity, profitability and the quality of management of the business and industrial concerns, the important ratios that are studied for this purpose are given below.

A. Liquidity Ratio

Liquidity ratio measures the ability of the firm to meet its current obligations. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community. Liquidity provides honor strength health and prosperity to an organization. It is extremely essential for an organization to meet its obligations as they become due. A firm should ensure that it has not lack of liquidity and also that it is not too much highly liquid.

The following ratios are evaluated and interpreted under liquidity ratios:

i) Current Ratio

Current ratio indicates whether the concern has instant ability to payout the current liabilities as they mature. The ratio is the yardstick to judge the soundness of the short term financial position of the business unit or industry. Standard of current ratio is 2:1.

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

Where, current assets = cash in hand, cash at bank, bills receivable, sundry debtors or account receivable, short term loan & advances, inventories , prepaid expenses etc.

Current Liabilities = Bills Payable, Sundry Creditor, Accrued expenses, Bank overdraft, short term loan, provision for taxation, etc.

ii) Cash and Bank balance to Current Assets Ratio

Cash and Bank balance to current assets ratio reveals the position of cash and bank into cash and bank balance in total of current assets.

$$\text{Cash and Bank balance to Current Asset Ratio} = \frac{\text{Cash and Bank balance}}{\text{Current Asset}}$$

In the present study cash and bank balances includes cash on hand including foreign cheques other cash item and balance with domestic banks and abroad. Cash and bank balances are highly liquid assets than other current assets. So this ratio scans higher liquidity position than current ratio.

iii) Investment of Government Securities to Current Assets Ratio

Government securities are slightly liquid assets as well as confidential investment until the state is living. So it is also a very important and very near cash item of current assets. Investments on Government securities to current assets ratio visualize the proportion of investment on government securities to current assets.

Investment of Government Securities to Current

$$\text{Assets Ratio} = \frac{\text{Investment on Government Security}}{\text{Current Asset}}$$

iv) Loan and Advances to Current Assets Ratio

Loan and advances to current assets ratio reflects the capability of bank discounting and purchasing the bill, loans and overdraft facilities to the customer to make a profit, mobilization of its fund in the best way. A commercial bank should not keep its all collected funds as cash and bank balance but they should be invested as loan and advances to the customers.

$$\text{Loan and Advance to Current Asset Ratio} = \frac{\text{Loan and Advance}}{\text{Current Asset}}$$

v) Cash and Bank Balance to Total Deposit Ratio

Cash and Bank Balance is said to be the first defense of every banks. The ratio between the cash & bank balance and total deposit measure the ability of the bank to meet the unanticipated cash and all type of deposit.

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

B. Activity Ratio

Activity or turnover ratio measures the efficiency of the bank to manage its assets in profitable and satisfactory manner. These ratios are employed to evaluate the efficiency with which the firm manages and utilize its assets.

A commercial bank must manage its assets properly to earn high profit.

Under this chapter following ratios are studied.

i) Loan and Advance to Total Deposit Ratio

This ratio measure the extent to which the banks are successful to mobilize their total deposit on loan and advances.

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

ii) Total Investment to Total Deposit Ratio.

This ratio measures the extent to which the banks are able to mobilize their deposit on investment on various securities. A high ratio indicates the success in mobilizing deposits in securities and vice versa.

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

iii) Loan and Advances to working Fund Ratio

This ratio reflects the extent to which the commercial banks are success in the mobilizing their assets as loan and advances for the purpose of income generation. A high ratio indicates better mobilization of fund as loan and advances and vice versa.

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

Total working fund is the total assets. It is composed of current assets, fixed assets, miscellaneous assets, investment, loan for development bank etc.

C. Profitability Ratio

Profitability ratio indicates degree of success in achieving desired profit level. Profitability ratio, which measures management overall effectiveness, are shown by the returns generated on sale and investment. A bank should be able to earn profit to survive and grow over a long period of time. Profit is the indicator of effective operation of a bank. The banks acquire profit by providing different services to its customer or by making investment of different kind.

Profitability ratio measures the efficiency of bank. Higher profit ratio shows higher efficiency of the bank. The following profitability ratios are related to study in this heading.

i) Return on Equity (ROE)

If banks can mobilize its equity capital properly, they can earn high profit. The return on equity capital measures the extent to which a bank is successful to mobilize its equity.

$$\text{Return on Equity} = \frac{\text{Net Profit}}{\text{Total Equity Capitals}}$$

Equity Capital includes paid up equity, Profit & Loss Account, Various Reserve, General loan, loss provision etc.

ii) Interest Earned to Working Fund Ratio

This ratio reflects the extent to which the banks are successful in mobilizing their total assets to generate high income as interest. A high ratio is indicator for high earning power of the bank on its total working fund and vice versa.

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

iii) Interest Paid to Total Assets Ratio

This ratio measure the percentage of total interest paid against the total Assets. A high ratio indicates the higher interest expenses on total working fund and vice versa.

$$\text{Interest Paid to Total Assets Ratio} = \frac{\text{Interest Paid}}{\text{Total Asset}}$$

iv) Interest Earned to Operating Income Ratio

This ratio reflects the extent to which the banks have successfully mobilized its fund in interest bearing assets. It measures the magnitude of interest income in total income.

$$\text{Interest Earned to Operating Income Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Operating Income}}$$

Where, Total operating income includes the interest income, commission & discount, income from dividend, foreign exchange income and others

v) Return on Total Assets Ratio

Its measures the profit earning capacity by utilizing available resources i.e. total assets. Return will be higher if the banks working fund is well managed and efficiently utilized. Where, Net profit includes the profit that is left to the internal equities after all costs, charges and expenses.

$$\text{Return on working Fund} = \frac{\text{Net Profit}}{\text{Total Asset}}$$

vi) Return on Loan and Advances Ratio

Its measures the earning capacity of commercial banks on its total deposits mobilized on loan and advances.

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

vii) Earnings per Share (EPS)

EPS measures the profitability of common shareholder. The earning may be on a per share basis.

$$\text{Earning Per Share} = \frac{\text{Net Income Available to the common stockholders}}{\text{Total No. of Common stock outstanding}}$$

D. Lending efficiency Ratio

This ratio is concerned with measuring the efficiency of bank. This ratio also shows the utility of available fund. Following are the various types of lending efficiency ratio.

i) Loan Loss Provision to Total Loan and Advances ratio

Loan loss provision to total loan and advances describes the quality assets that a bank holding. The provision for loan loss reflects the increasing probability of non-performing loan. The provision of loan mean the net profit of the banks will come down by such amount. Increase in loan loss provision decreases in profit result to decreases in dividends but its positive impact is that strengthens financial conditions of the bank by controlling the credit risk and reduced the risks related deposits. So, it can said that loan suffer it only for short term while the good financial conditions and safety of loans will make banks prosperity regulating increasing profits for long term.

The low ratio indicates the good quality of assets in total volume of loan and advances. High ratio indicates more risky assets in total volume of loan advances.

$$\text{Loan loss provision to total loan and advances} = \frac{\text{Loan loss provision}}{\text{Total loan and advances}}$$

ii) Non-Performing Loan to Total Loan and Advances

This ratio shows the relationship of Non-Performing loan and total loan and advances and is to determine how efficiently the total loan and advances have been used by management. Higher ratio shows the low efficient operating of the management and lower ratio shows the more efficient operating of credit management.

$$\text{Non - performing loan to total loan and advance Ratio} = \frac{\text{Non - performing loan}}{\text{Total Loan and Advances}}$$

iii) Interest Expenses to Total Deposit Ratio

This ratio measures the percentage of total interest paid against total deposit. A high ratio indicates higher interest expenses on total deposit. Commercial banks are dependent upon its ability to generate cheaper fund. The cheaper fund has more the probability of generating loans, advances, and vice versa.

$$\text{Interest Expenses to Total Deposit Ratio} = \frac{\text{Interest Expenses}}{\text{Total Deposit Ratio}}$$

3.6.2 Statistical Tools

Under this heading some statistical tool such as coefficient of correlation analysis between different variables, trend analysis of deposit, loan and advances, net profit and EPS are used to achieve the objective of the study.

A. Average Mean

An average is a single value related from a group of values to represent them in some way, a value, which is supposed to stand for whole group of which it is a part, as typical of all the values in the group. There are various types of averages. Arithmetic mean (AM, Simple & Weighted), median, mode, geometric mean, harmonic mean are the major types of averages.

Mathematically:

Arithmetic Mean (AM) is given by,

$$\bar{X} = \frac{\sum X}{n}$$

Where, \bar{X} = Arithmetic mean

$\sum x$ = Sum of all the values of the variable X

n = Number of observations

B. Standard Deviation

The standard deviation measures the absolute dispersion. It is said that higher value of standard deviation the higher the variability and vice versa.

Karl Pearson introduced the concept of standard deviation in 1823 A. D. and this is denoted by the small Greek letter (pronounced sigma) the formula to calculate the standard deviation is given below:

$$\sigma = \sqrt{\frac{\sum x^2}{N}} \quad \text{Where, } x = (X - \bar{X})$$

C. Coefficient of Variation

The coefficient of variation reflects the relation between standard deviation and mean. The relative measure of dispersion based on the standard deviations known as coefficient of variation. The coefficient of dispersion based on standard deviation multiplied by 100 is

known as the CV. It is used for comparing variability of two distributions; the CV is defined as,

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

Greater the CV, the more variable or conversely less consistent, less uniform, less stainable and homogenous than the consistent more uniform, more stable and homogenous. This nature of CV uses that actual size of working capital.

D. Coefficient of Correlation (r)

Correlation analysis is the statistical tools that we can use to describe the degree to which one variable is linear related to another. Coefficient of correlation is the measurement of the degree of relationship between two casually related sets of figure whether positive or negative. Its values lie somewhere ranging between - 1 to +1. If the both variables are constantly changing in the similar direction, the value of coefficient will be +1, two variables take place in opposite defection. The correlation is said to be perfect negative. In this study, simple correlation is use to examine the relationship of different factors with working capital and other variable.

$$\text{Coefficient of correlation (} r_{xy} \text{)} = \frac{n\sum xy - (\sum x) (\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

Where,

r=Karl Pearson's coefficient of correlation

n=number of observation in series X and series Y

$\sum X$ =Sum of observations in series X

$\sum Y$ = Sum of observations in series Y

$\sum X^2$ =Sum of square of observation in series X

$\sum Y^2$ = Sum of square of observation in series Y

$\sum XY$ =Sum of product of observations in series X and series Y

Deposit have played a very important role in performance of commercial banks and similarly loan & advances are important to mobile the collected deposits. Coefficient of Correlation between deposit and loan & advances measures the degree of relationship between the two variables. In this analysis, deposit is independent variable (X) and loan & advances is dependent variables(Y). The main objectives of computing 'r' between these two variables are to justify whether deposits are significantly used on loan & advances in a proper way or not.

CHAPTER – IV

PRESENTATION AND ANALYSIS OF DATA

Introduction, review of literature and research methodology presented in the previous chapters provides the basic inputs to analyze and interpret the data. Presentation and analysis of data is the main body of the study. In this chapter, data collected are analyzed and interpreted as per the stated methodology in the previous chapter. The main sources of data are secondary data. In this chapter, researcher has analyzed and diagnosed financial performance of Everest Bank Limited (EBL) and Rastriya Banijya Bank Limited (RBB) are shown in different tables and diagrams to make the analysis simple and understandable. All the financial positions of both the banks are analyzed by calculating following ratio.

4.1 Financial Analysis

Here financials ratios related to the financial performance are presented to evaluate and analyze the performance of commercial Banks i.e. EBL and RBB. Some important financial ratios are calculated in the point of view of financial performance. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical procedure that shows the relationship where one item is divided by another.

4.1.1 Ratio Analysis

Ratio analysis shows the mathematical relationship between two accounting figures. It helps to analyze the financial strengths and weaknesses of the banks. It is also inevitable for the quantitative judgment with which the financial performance of banks can be presented properly.

4.1.1.1 Liquidity Ratio

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

A. Analysis of Current Ratio

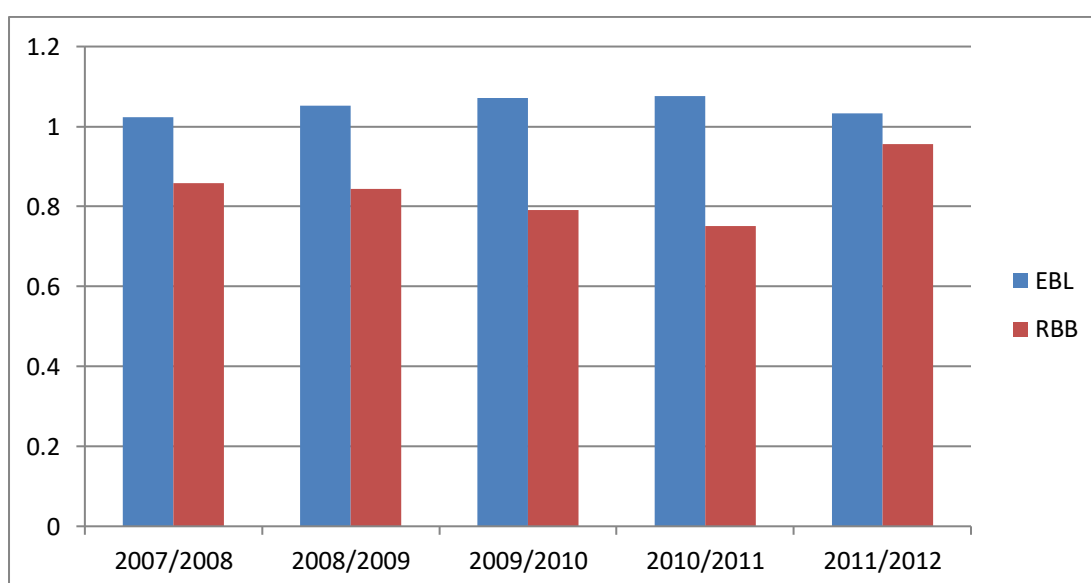
This ratio measures the liquidity position of the commercial banks. It indicates the ability of Banks to meet the current liquidity.

Table No. 4.1
Current Assets to Current Liability (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.(%)
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	1.0235	1.0515	1.0715	1.0764	1.0324	1.0510	0.0208	1.98
RBB	0.8578	0.8438	0.7918	0.7517	0.9562	0.8403	0.06921	8.236

Source: Appendix 1(A, B)

Figure No. 4.1
Current Assets to Current Liability (in times)



Above Table and figure shows the current ratio of selected commercial banks during the study period. The current ratio of EBL and RBB has a fluctuating trend. In general, it can be said that both the banks have sound ability to meet their short- term obligations. The C.R of EBL is higher than RBB. Likewise, S. D. and C.V. of EBL is less than RBB. It can be said that C.R. of EBL is more consistent than that of RBB.

Lastly, from the above analysis it is known that these two banks do not have a good liquidity position because the standard ratio is 1:1. They are not able to meet the standard ratio. Generally, banks require more liquid assets as compared to current liabilities in order to provide better banking service but these two banks have lower liquidity ratio.

B) Cash and Bank Balance to Total Deposit Ratio

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

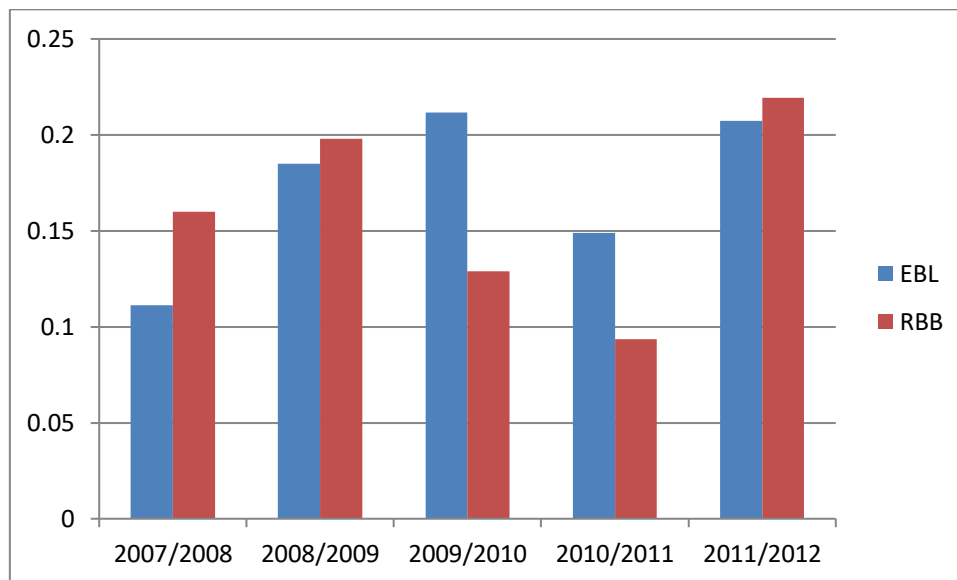
Table No. 4.2
Cash and Bank Balance to Total Deposit Ratio (in times)

Name of Banks	Fiscal Year							
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V. (%)
EBL	0.1113	0.1850	0.2117	0.1489	0.2072	0.173	0.0371	21.45
RBB	0.1598	0.1979	0.1289	0.09343	0.2194	0.3280	0.1713	52.25

Source: Appendix 1(C, F)

Figure No. 4.2

Cash and Bank Balance to Total Deposit Ratio (in times)



Above Table and figure reveals that the Cash and Bank Balance to Total Deposit Ratio of EBL and RBB are in fluctuating trend. The mean ratio of EBL and RBB are 0.17 times and 0.32 times respectively. RBB has higher ratio than the EBL, which shows its greater ability to pay depositors money as they want. Similarly, the coefficient of variation of EBL is 0.21 times and RBB is 0.52 times. S.D. of RBB is higher than the EBL.

The above analysis concludes that the cash and bank balance position of RBB with respect to EBL is better in order to serve its customer's deposits. It implies better liquidity position of RBB from the viewpoint of depositor demand. In contrast a high ratio of cash and bank balance may be undesirable which indicates the bank's inability to invest its funds in income generating areas. Thus RBB should invest in more productive sectors like short-term

marketable securities insuring enough liquidity which will help the bank to improve its profitability.

C) Cash and Bank Balance to Current Assets Ratio

Cash and Bank Balance are the most liquid or quick assets. Cash and bank balance to current assets ratio represents the liquidity capacity of the banks as per cash and bank balance. Higher the ratios, better the ability of the banks to meet the daily cash requirement of their customers.

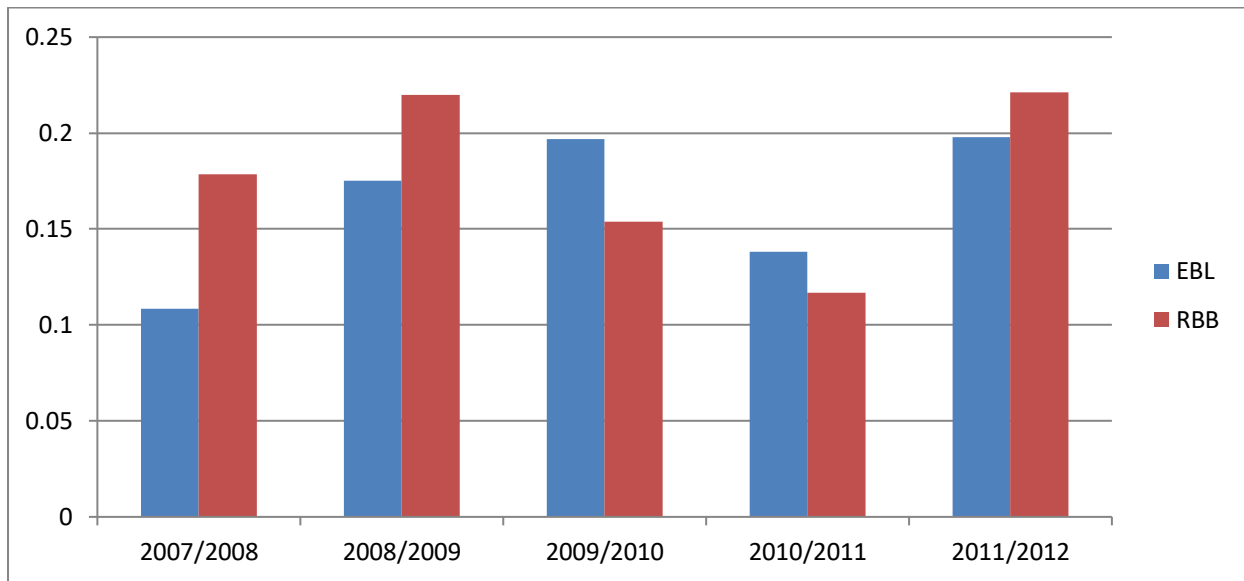
Following the states the cash and bank balance to current assets EBL and RBB during the study period.

Table No. 4.3
Cash and Bank Balance to Current Asset Ratio (in times)

Name of Banks	Fiscal Year							
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V.
EBL	0.1085	0.1751	0.1968	0.1381	0.1980	0.1633	0.0348	0.213
RBB	0.1784	0.22004	0.1538	0.1167	0.2212	0.1782	0.0399	0.224

Source: Appendix 1(A, C)

Figure No. 4.3
Cash and Bank Balance to Current Asset Ratio (in times)



Above Table and figure reveals that cash and bank balance to current assets ratio of both banks is in fluctuating trend. The mean ratio of EBL and RBB is 0.81 times and 0.17 times respectively. The higher mean ratio shows that RBB liquidity position is better than that of EBL. Moreover, the .S.D and C.V. of EBL is lower than RBB. The lower C.V. of EBL indicates that it has more consistency in the ratios as compared to RBB.

D) Investment on Government Securities to Current Assets Ratio

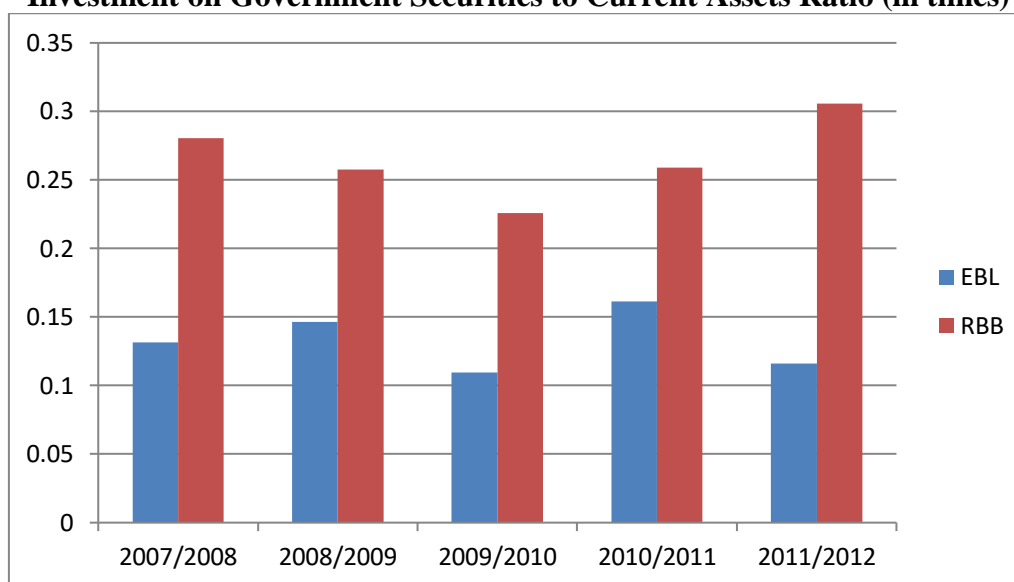
This ratio examines that portion of a commercial bank's current assets, which is invested on different government securities. More or less, each commercial bank is interested to invest their collected funds on different securities issued by government at different times to utilize their excess funds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

Table No. 4.4
Investment on Government Securities to Current Assets Ratio (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	0.1317	0.1462	0.1096	0.1612	0.1160	0.133	0.0190	0.142
RBB	0.2803	0.2576	0.2258	0.2591	0.3056	0.265	0.0264	0.099

Source: Appendix 1(A, D)

Figure No. 4.4
Investment on Government Securities to Current Assets Ratio (in times)



Above Table and figure shows investment on government securities to current assets ratio of EBL and RBB. Both Banks have fluctuating ratios.

The mean ratio of EBL is 0.13 which is lower than the mean ratio of RBB which has 0.26. It means RBB has invested more money in risk free assets than EBL has. In another words RBB has emphasized more on loan and advances and other short term investment than investment in govt. securities. For minimization of investment risk, EBL should divert its investment in govt. securities. Similarly, S.D. is 0.0190 and 0.0264 and C.V is and 0.142 and 0.099 of EBL and RBB respectively. The higher C.V. of EBL shows the more inconsistency in the ratios with compare to RBB.

4.1.1.2 Assets Management Ratio

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

A) Loan and Advance to Total Deposit Ratio

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

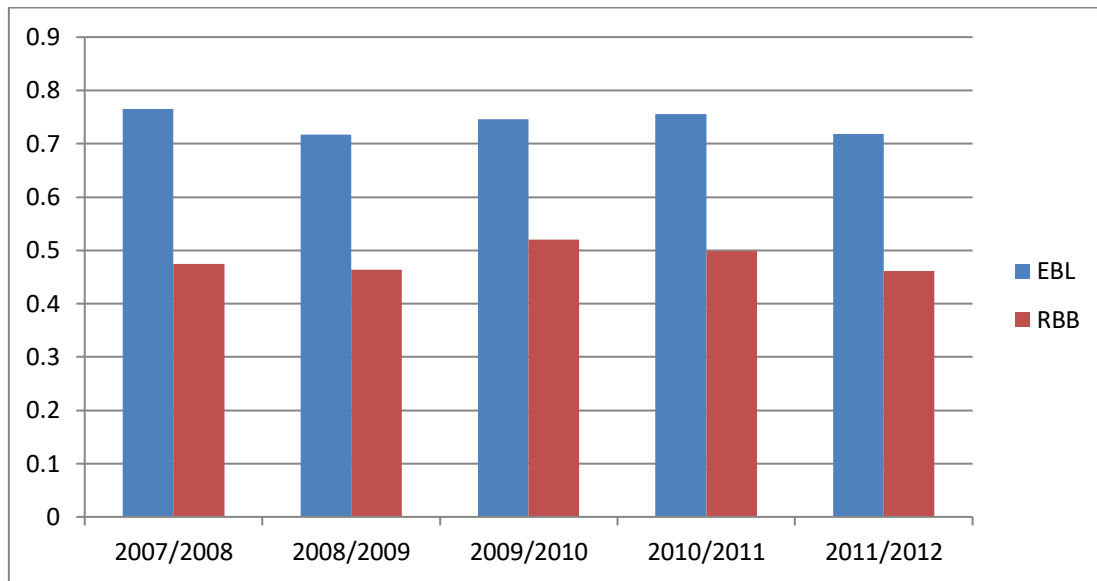
Table No. 4.5
Loan and Advance to Total Deposit Ratio (in times)

Name of Banks	Fiscal Year						Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12				
EBL	0.7648	0.7167	0.7461	0.7551	0.7181	0.74	0.019	0.026	
RBB	0.4748	0.4642	0.5201	0.4987	0.4608	0.48	0.022	0.046	

Source: Appendix 1(E, F)

Figure No. 4.5

Loan and Advance to Total Deposit Ratio (in times)



Above Table and figure shows that the loan and advances to total deposit ratio of EBL and RBB. EBL has higher ratio than that of RBB in each year and mean too. It indicates the better mobilization of deposit by EBL. The mean of EBL and RBB are 0.74 and 0.48 respectively. Therefore, EBL has higher ratio than that of RBB. According to NRB directives less than 80% of loan and advances to total deposit ratio is required to to enable better mobilization of collected deposit.

The mean, S.D. and C.V of EBL is 0.74, 0.019 and 0.026 similarly; RBB has 0.48, 0.02 and 0.046. By the analysis, EBL is more efficient in using the deposit in profit generating sector than RBB but it has crossed the limit of loan to deposit ratio provided by the NRB. It will be harmful to EBL in future.

B) Total Investment to Total Deposit Ratio

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

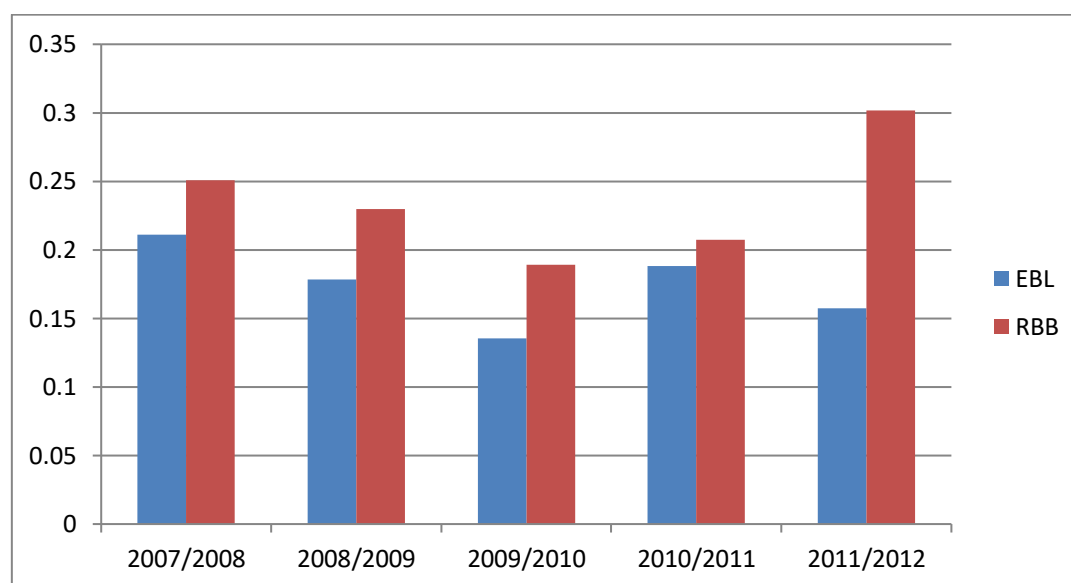
Table No. 4.6
Total Investment to Total Deposit Ratio (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	0.2110	0.1785	0.1356	0.1882	0.1572	0.174	0.025	0.148
RBB	0.2509	0.2297	0.1893	0.2074	0.3019	0.235	0.038	0.165

Source: Appendix 1(F, G)

Figure No. 4.6

Total Investment to Total Deposit Ratio (in times)



Above Table and figure shows that total investment to total deposit ratio of EBL and RBB. Both the banks have fluctuating trend in total investment to total deposit ratio. RBB has higher ratio than that of EBL each year. The mean of the ratio of EBL and RBB are 17.4% and 23% respectively which shows that RBB has a higher ratio. It signifies that RBB has successfully allocated its deposit in investment portfolio. The C.V. of RBB is higher than EBL i.e. $0.16 > 0.14$. RBB thus seems to be more consistent.

C) Loan and Advances to Total Assets Ratio

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

Table No. 4.7

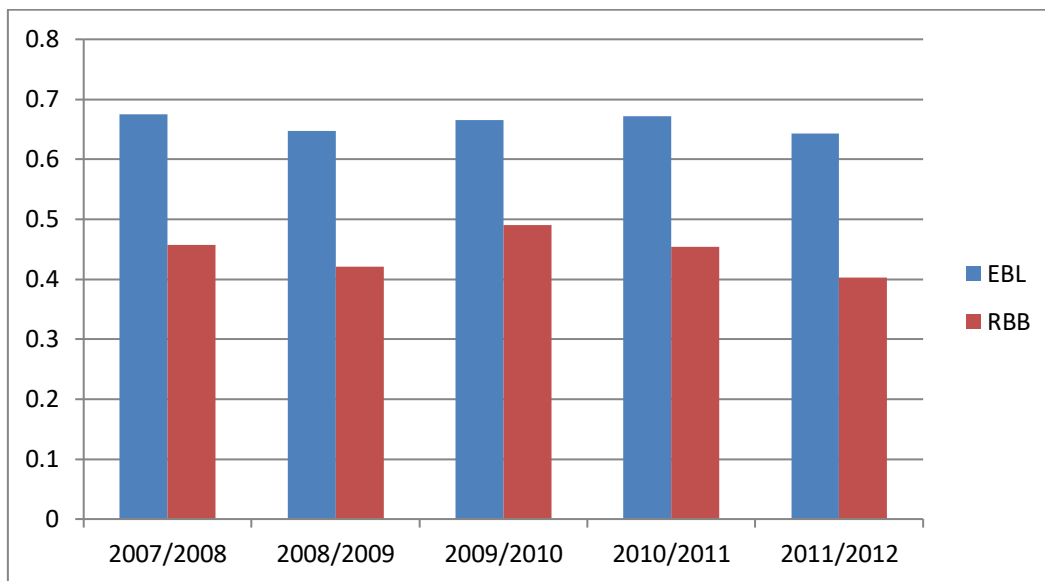
Loan and Advances to Total Assets Ratio (in times)

Name of Banks	Fiscal Year							
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V.
EBL	0.6754	0.6469	0.6658	0.6717	0.6434	0.660	0.013	0.019
RBB	0.4575	0.4212	0.4903	0.4538	0.4022	0.445	0.036	0.068

Source: Appendix1 (E, H)

Figure No. 4.7

Loan and Advances to Total Assets Ratio (in times)



Above Table and figure shows the loan and advances to total assets ratio of EBL and RBB during the study period. Loan and advances to total assets of EBL is higher than RBB. While observing their ratios; EBL is better at mobilizing fund as loan and advances and it seems quite successful in generating higher ratio each year.

The mean of EBL and RBB are 66% and 45% respectively. So EBL has higher ratio than RBB. It reveals that in total assets, EBL has high proportion of loan and advances. EBL has utilized its total assets more efficiently in the form of loan and advances. The lower C.V. of EBL states that it has more uniformity in these ratios throughout the study period than RBB. S.D. and C.V. of EBL have less than the RBB.

D) Investment on Government Securities to Total Assets ratio

It is not possible to convert all collection, deposit and other resources into loan and advances for the banks. Therefore, they arrange their total assets in various sectors. Among all possible

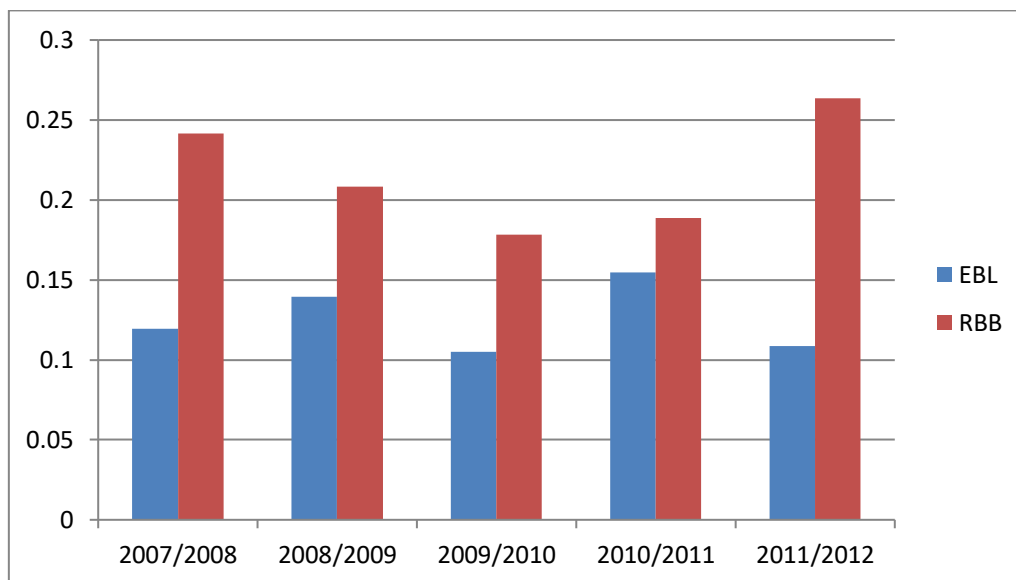
sectors, investment on government securities is a less risky investment. Investment on government securities to total assets ratio measures how successfully selected banks have applied their total assets on various forms of government securities for profit maximization and risk minimization. Higher the ratio, the better the position of fund mobilization into investment on government securities and vice-versa.

Table No. 4.8
Investment on Government Securities to Total Assets ratio (in times)

Name of Banks	Fiscal Year							
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V.
EBL	0.1193	0.1394	0.1052	0.1545	0.1087	0.125	0.0187	0.1496
RBB	0.2417	0.2085	0.1785	0.1888	0.2635	0.216	0.0319	0.1479

Source: Appendix 1(D, H)

Figure No. 4.8
Investment on Government Securities to Total Assets ratio (in times)



Above Table and figure shows that the investment on government treasury bills to Total assets of RBB is in increasing trend and EBL is in fluctuating trend.

From the table we notice that mean ratio of EBL and RBB are 12% and 21% respectively. RBB has higher mean. It means RBB has invested more money in risk free assets than EBL has. In another words RBB has emphasized more on loan and advances and other short-term investment than investment in govt. securities. For minimization of investment risk, EBL should divert its investment in govt. securities.

There is more variability in the ratio of EBL as compare to RBB. It shows that there is more inconsistency in the ratio of EBL during the study period, which is indicated by higher C.V. of EBL which shows inconsistency in its investment.

4.1.1.3 Profitability Ratio

The major performance indicator of any firm is its profit. The objective of investment policy is to earn good return. Any organization has a desire to earn higher profit which would help the firm to survive and it also indicates the efficient operation of the firm. Profit is the essential part of business activities that helps to meet internal obligation, overcome the future contingencies, make a good investment policy, expand the banking transaction etc.

Profitability ratios are the best indicators of overall efficiently. Here, these ratios presented and analyzed that are related with profit as well as fund mobilization. Through the following ratios, effort has been made to measure the profit earning capacity of EBL and RBB.

A) Return on Loan and Advances

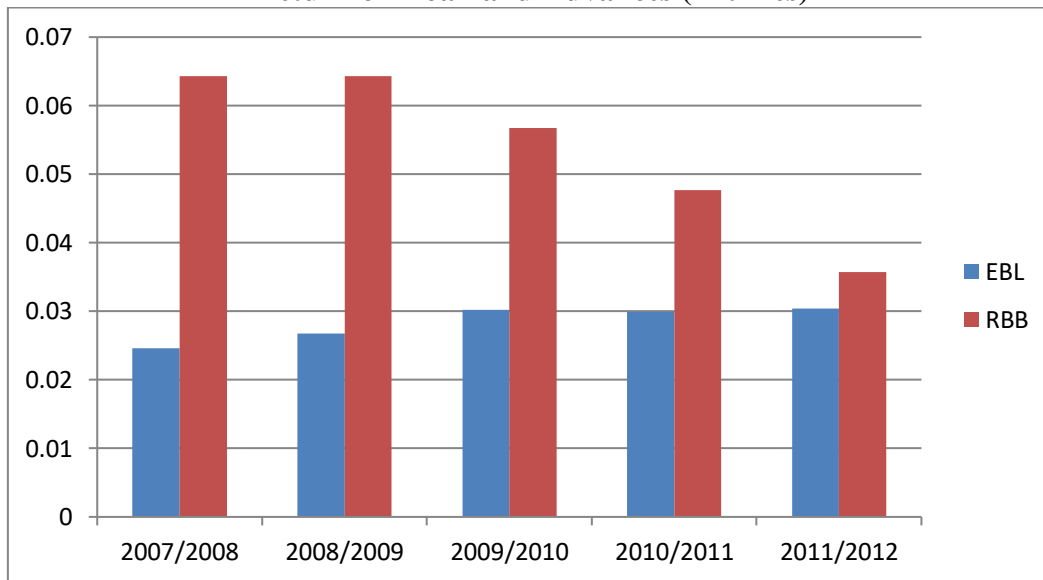
Every financial institution tries to mobilize their deposits on loan and advances properly. So this ratio helps to measure the earning capacity of selected banks. Returns on loan and advances ratio of selected banks are presented as follows.

Table No. 4.9
Return on Loan and Advances (in times)

Name of Banks`	Fiscal Year							
	2007/08	2008/09	2009/10	2010/11	2011/12	Mean	S.D.	C.V.
EBL	0.02460	0.02674	0.03018	0.0299	0.03037	0.028	0.0023	0.081
RBB	0.06430	0.06429	0.05678	0.04771	0.03575	0.053	0.010	0.202

Source: Appendix 1(E, I)

Figure No. 4.9
Return on Loan and Advances (in times)



Above Table and figure shows that return on loan and advances ratio of EBL has increasing trend and that of RBB has been fluctuating. The mean ratio of EBL is 2.84% where RBB has 5.37%. This both banks show the normal earning capacity in loan and advances and same earning capacity in form of loan and advances.

From the table we notice that RBB has higher Ratios in all years. It can be concluded that both banks have utilized the loan and advance for the profit generation but RBB is using its fund in a more productive way than EBL. However, RBB is able to meet the benchmarking ratio in this case the optimum ratio is 5 percent but EBL needs to do more labor to attain such ratio.

B) Return on Total Assets

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

Table No. 4.10
Return on Total Assets Ratio (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	0.0166	0.0173	0.02009	0.02014	0.0195	0.0187	0.0014	0.079
RBB	0.02942	0.02708	0.02785	0.02166	0.01438	0.0241	0.0055	0.228

Source: Appendix 1(H, I)

Figure No. 4.10
Return on Total Assets Ratio (in times)



Above Table and figure shows the Return on Total Assets of EBL and RBB. This table states the net profit to total assets of selected banks during the study period. RBB seems successful in managing and utilizing the available assets in order to generate revenue since its ROA is 2.41% of total assets in an average which is higher than that of EBL which has ROA 1.873%. RBB has also higher ratio than EBL. Whereas C.V. of EBL has higher than RBB, it indicates less uniformity in the ratios.

C) Return on Equity

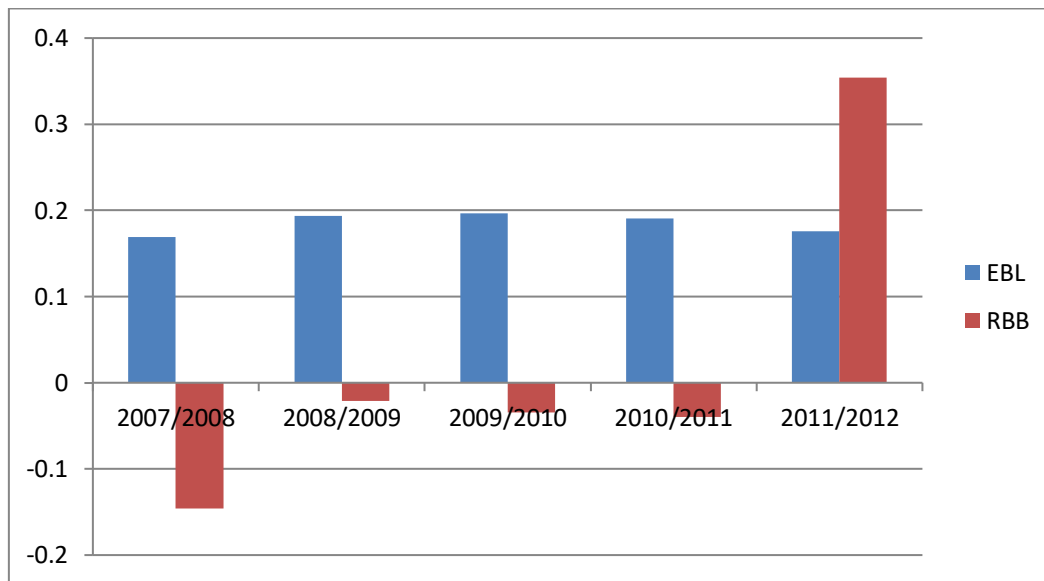
Equity capital of any bank is its owned capital. The prime objective of any bank is wealth maximization or in other words to earn higher profit and thereby, maximizing return on its equity capital. Return on equity measures the profitability of a bank. It reflects the extent to which the bank has been successful to mobilize or utilize its equity capital. A higher ratio indicates higher success in mobilizing its owned capital and vice-versa. Following table shows the return on equity of EBL and RBB during the study period.

Table No. 4.11
Return on Equity Ratio (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	0.1691	0.1939	0.1967	0.1909	0.1759	0.1853	0.010	0.058
RBB	(0.146)	(0.0209)	(0.0343)	(0.0397)	0.35441	0.0225	0.172	7.644

Source: Appendix 1(I, J)

Figure No. 4.11
Return on Equity Ratio (in times)



Above table and figure shows Return on Equity Ratio of EBL and RBB. Above data indicates that the ROE of EBL is the positive but RBB is negative till 2010/11 it means the net-worth of bank is in negative and recovering towards positive. Despite stiff competition and an adverse macroeconomic environment, EBL is currently generating higher ROE in comparison with RBB. In brief, it signifies that the shareholders of EBL are getting higher return but in case of RBB, they are getting lesser. It can be concluded that EBL has better utilized the equity for the profit generation. It proves to be strength for EBL in attracting future investment also while RBB shows its weakness regarding efficient utilization of its owner's equity in comparison to EBL.

D) Total Interest Earned to Total Assets Ratio

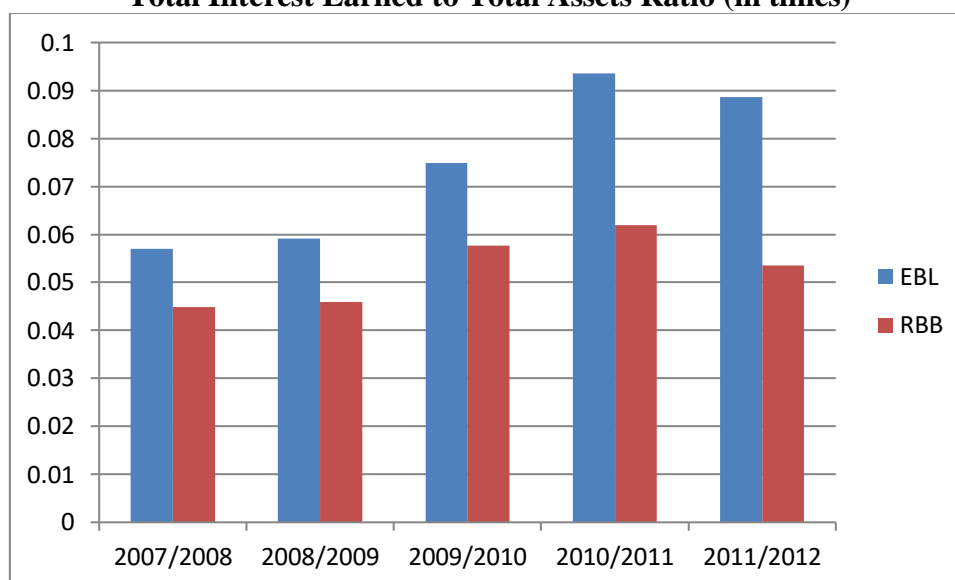
Total interest earned to total assets ratio evaluates how successful the selected banks are at mobilizing their total assets to achieve higher amount of interest. Higher ratio indicates higher interest income of the selected banks. The total interest earned to total assets ratio of EBL and RBB.

Table No. 4.12
Total Interest Earned to Total Assets Ratio (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	0.0570	0.0592	0.0749	0.0936	0.0886	0.074	0.0148	0.019
RBB	0.0449	0.0459	0.0577	0.0619	0.0536	0.052	0.0065	0.124

Source: Appendix1 (H, K)

Figure No. 4.12
Total Interest Earned to Total Assets Ratio (in times)



Above Table and figure, shows that the interest-earning ratio is in growth of RBB on the other hand this ratio are not consistent. The average ratio of EBL and RBB are 0.0746 and 0.0528 respectively. The mean ratio of EBL is more than that of RBB. From the point view of SD the RBB is more consistent but from the point view of CV having lower CV EBL is more consistent.

E) Total interest Earned to Total Operating Income Ratio

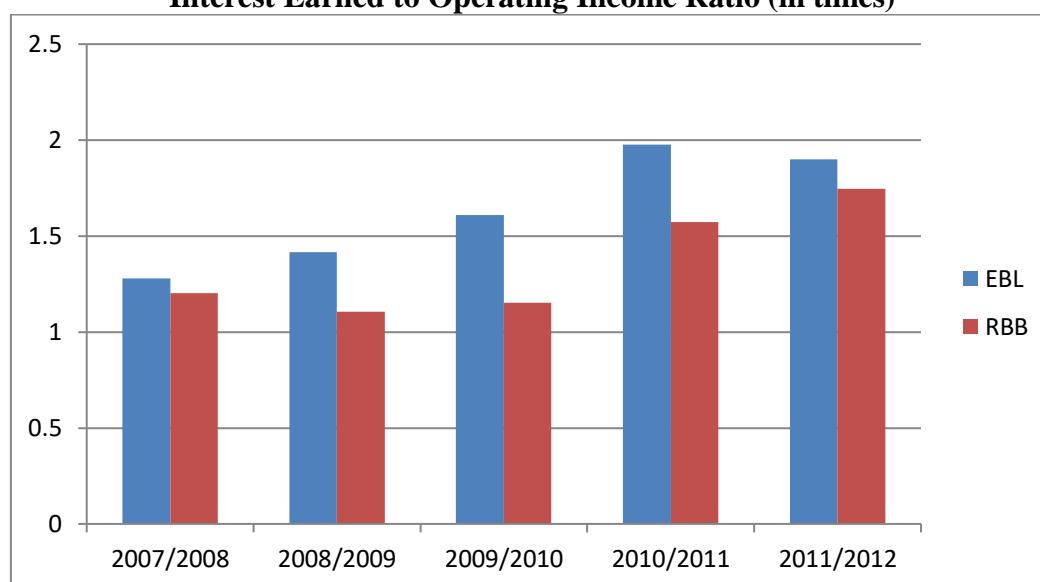
Total interest earned to total operating income ratio reveals that portion of interest income on total operating income of the firms. The major sources of income for the bank are interest income so the banks should mobilize their funds in more interest generating sectors considering the risk and return.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

Table No. 4.13
Interest Earned to Operating Income Ratio (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	1.2801	1.4154	1.6091	1.9749	1.9008	1.6361	0.268	0.164
RBB	1.2012	1.1072	1.1526	1.5717	1.7459	1.3557	0.255	0.188

Source: Appendix 1(K, M)

Figure No. 4.13
Interest Earned to Operating Income Ratio (in times)



Above table and figure shows Interest Earned to Operating Income Ratio of EBL and RBB. Both banks has increasing ratio of study period. The mean ratio of EBL and RBB are 1.6361 times and 1.3557 times respectively. In overall, EBL has managed sound interest earned to operating income ratio. The mean, S.D. and C.V of EBL is 1.6361 , 0.2687 and 0.1642 times similarly RBB have 1.3557,0.255236 and 0.188 times.

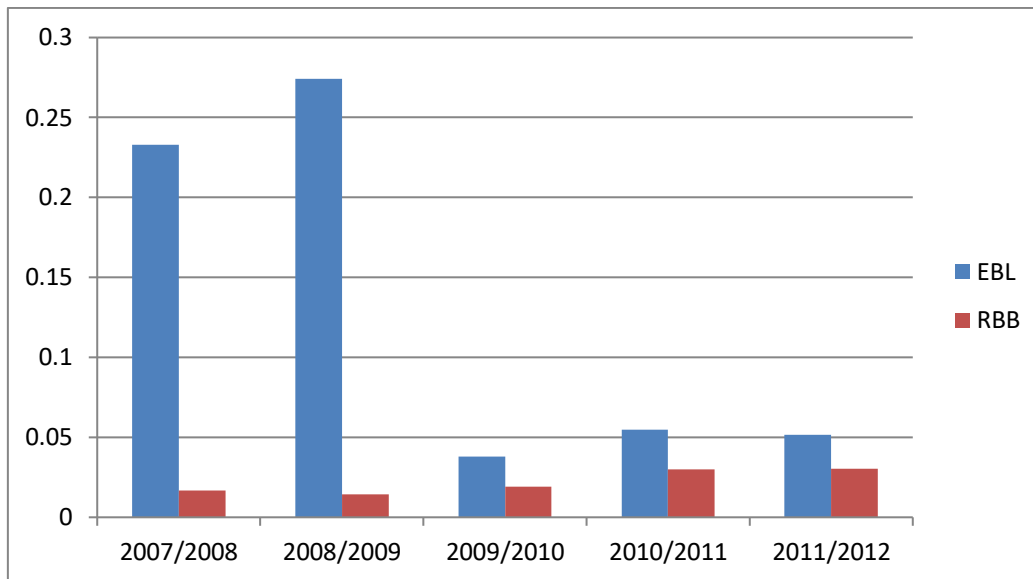
G) Total Interest Paid to Total Assets Ratio

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

Table No. 4.14
Interest Paid to Total Assets Ratio (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	0.2330	0.2743	0.0381	0.0548	0.0515	0.039	0.019	0.507
RBB	0.01694	0.01423	0.01907	0.02984	0.03029	0.022	0.006	0.306

Figure No. 4.14
Interest Paid to Total Assets Ratio (in times)



Due to the higher and inconsistent ratio of EBL, it seems less conscious about borrowing cheaper fund. But in recent year the ratio of EBL is in decreasing trend which means EBL is now becoming conscious about interest. On the other hand the ratio is not consistent. The mean ratio of EBL is more than that of RBB. In comparison, EBL seems ineffective in getting cheaper fund from the mean point of view. However, EBL has been conscious in each year for getting cheaper fund as it has decreased ratio in each year. From the point view of S.D. the RBB is more inconsistent than EBL, on the other hand From the point view of CV the EBL is more inconsistent than RBB.

4.1.1.4 Activity Risk Ratio

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

A) Credit Risk Ratio/Non-Performing Loan to Total Loan Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition, credit risk ratio is expressed as the percentage of non- performing loan to total Loan and Advances.

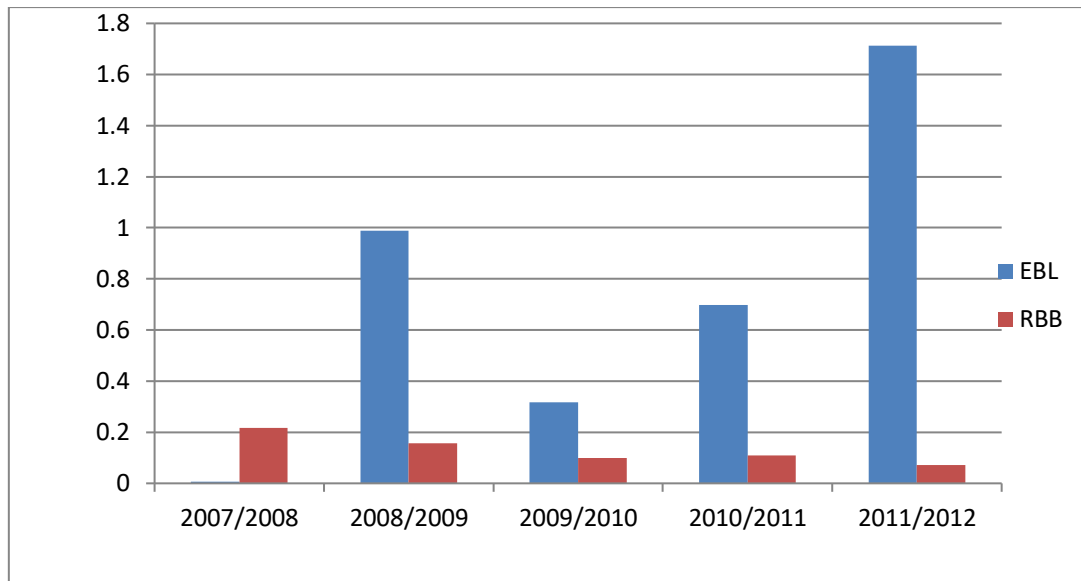
Bank utilizes its collected funds by providing credit to different sections. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. The credit risk ratio shows the proportion of non-performing assets in total Loan and Advances. Higher ratio indicates more risky assets in the volume of Loan and Advances of the bank and vice-versa.

Table 4.15
Credit Risk Ratio (in times)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	0.00694	0.9879	0.3172	0.6988	1.7125	0.882	0.466	0.52
RBB	0.2163	0.1568	0.0980	0.1091	0.0726	0.130	0.050	0.38

Source: Appendix 1(E, O)

Figure No. 4.15
Credit Risk Ratio (in times)



Above table and figure shows that NPL to total loan and advances of EBL are in fluctuating trend and RBB is in decreasing trend. Decreasing trend is the good sign of efficient credit management. From mean point of view, non-performing loan to total loan and advances ratio of EBL and RBB are 88.21 % and 13.06% respectively during the study period. The SD and CV of EBL is lower than RBB which means the NPA is decreasing in a consistent way than RBB.s However, in comparison, EBL is more efficient at operating credit management than RBB. In another words, RBB is less efficient at operating credit management than EBL. However the NPA of both banks are far more than 5 percent of NPA, which is a acceptable NPA for financial institutions.

(B) Liquidity Risk Ratio

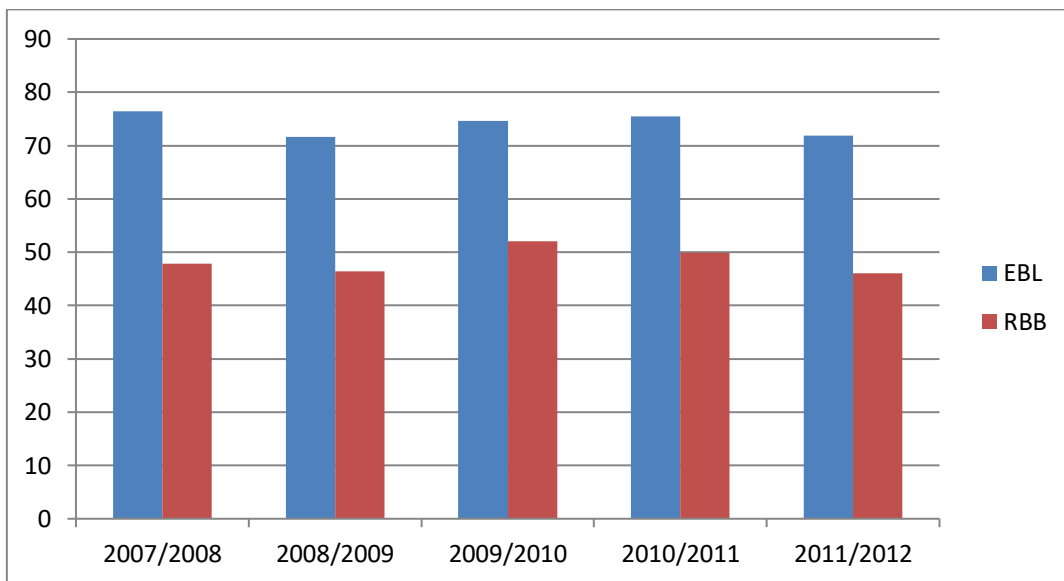
The liquidity risk of the bank defines its liquidity need for deposit. The cash and bank balance are the most liquid assets, they are considered as banks liquidity sources and deposit as the liquidity needs. The ratio of cash and bank balance to total deposit is an indicator of bank's liquidity in need.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

Table: 4.16
Liquidity Risk Ratio (in %)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	76.48	71.67	74.61	75.51	71.81	74.01	1.92	0.026
RBB	47.88	46.42	52.01	49.87	46.08	48.37	2.25	0.0467

Source: Appendix 1(C, F)

Figure No. 4.16
Liquidity Risk Ratio (in %)



Above Table and figure shows, cash and bank balance to total deposits ratio of the EBL and RBB are in fluctuating trend. It signifies that EBL has sound liquid fund to make immediate payment to the depositor's comparison with RBB.

4.1.1.6 Other Ratios

A) Earnings per Share

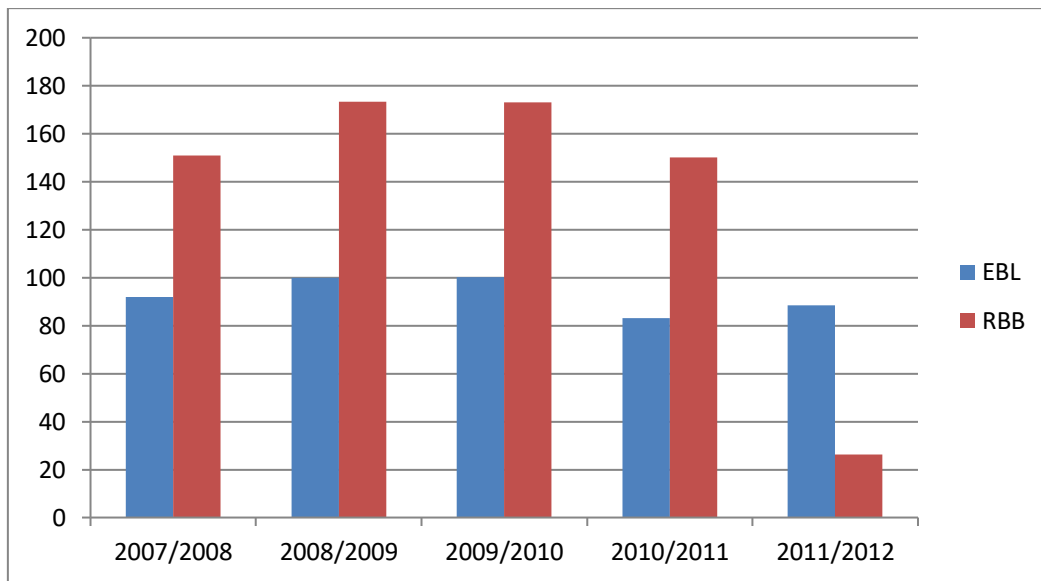
EPS measure the efficiency of a firm in relative terms. It is a widely used ratio, which measures the profit available to the ordinary shareholders on per share basis. Earnings per share calculation made over years indicates whether the bank's earning power on per share basis has changed over that period or not but it does not reflect how much is paid as dividend and how much is retained in the business. Number of shares of RBB is calculated based on par value of Rs100. Following table shows the EPS of related banks during the study period.

Table No. 4.17
Earnings Per Share (in Rs.)

Name of Banks	Fiscal Year					Mean	S.D.	C.V.
	2007/08	2008/09	2009/10	2010/11	2011/12			
EBL	91.82	99.99	100.16	83.18	88.55	92.74	6.594	0.071
RBB	151.0238	173.3788	172.9522	150.085	26.3005	134.74	55.15	0.040

Source: Appendix 1(I, N)

Figure No. 4.17
Earnings per Share (in Rs.)



Above Table and figure shows that earning price per share of EBL and RBB. Both has fluctuating trend of EPS. While observing their ratios in overall; RBB is better mobilizing it resources to get more earning per share (EPS) and it seems quite successful by generating higher EPS and in average too. It is quite satisfying to state that RBB has been able to maximizing shareholder wealth from the view pointy of EPS. The S.D of RBB is higher than EBL in this sense EBL is more consistent but from the point view of C.V.RBB is more consistent than EBL because it has lower CV.

B) Dividend per Share

Shareholders want to receive dividend from their investment. They may have interest to know about the firm's activities, earning, and dividend so; each firm must announce the total dividend and dividend per Share which shows the position of the firm.

A firm wants to distribute dividend to its shareholder if a firm suppose the insufficient investment opportunities and sector. Sometimes, it does not distribute dividend and sometime issues bonus shares. On the other hand, shareholders want to receive dividend from their investment. They may have interest to know about the firm's activities, earning, divisible profit or proposed dividend or declared dividend. So, each firm must announce the total dividend and dividend per share which show the position of the firm.

During the research period, the researcher has found that EBL has been providing healthy amount of dividend to the shareholders whose average mean ratio is 26%. But RBB has not issued its share to public.

C) Market Price per Share

Market price per share is the price at which shares are traded in the stock market. The secondary markets provide liquidity for securities purchased in primary market. Generally, MPS is determined through supply and demand factors.

MPS of EBL as on 2011/2012 was Rs 1033. On the other hand, RBB is fully government bank which is not issued any numbers of shares to the public and not listed in NEPSE.

D) Price Earnings Ratio

This ratio is closely related to the earning per share. It is calculated by dividing the market value per share by EPS. Price earnings ratio indicates investor's judgments or expectation about the firm's performance. This ratio widely used by the security analysis to value the firm's performance. This ratio widely used by the security analysis to value the firm's performance as accepted by investors. Price earnings ratio reflects investor's expectations about the growth in the firm's earning. Price earnings ratio of EBL of 2011 /12 was 11.67 times which less than previous year is. Higher ratio indicates the more value of the stock that is being certified to future earning as opposed to present earning.

4.2 Statistical Analysis

Statistical tool is one of the important tools to analyze the data. There are various tools for the analysis of tabulated data such as, mean, standard deviation, regression analysis, co-relation analysis, trend analysis, various types of tests etc. There is convenient statistical tools are used in this thesis study.

4.2.1 Coefficient of Correlation Analysis

Co-efficient of correlation shows the relationship between two or more than two variables. It measures that the two variables are positively or negatively correlated. For this purpose, Karl Pearson's co-efficient of correlation has been taken and applied to find out and analyze the relationship between deposit and loan and advances, deposit and total investment, total assets and net profit, total investment and net profit and also analyze the correlation of total deposit, total investment, loan and advances and net profit EBL and RBB using Karl Persons coefficient of correlation, value of coefficient of determination (R^2) probable error (P.Er.) and (6 P.Er.) are also calculated and value of them are analyzed.

A) Correlation Coefficient between Deposit and Loan and Advances

Deposit have played very important role in performance of a commercial banks and similarly loan and advances are very important to mobilize the collected deposits. Co-efficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. In this analysis, deposit is independent variable (X) and loan and advances are dependent variable (Y). The main objectives of computing 'r' between these two variables is to justify whether deposit are significantly used as loan and advances in proper way or not.

Table No. 4.18
Correlation between Deposit and Loan and Advances

Name of Banks	Evaluation Criteria				
	R	R^2	P.Er.	6 x P.Er.	Remarks
EBL	0.9949	0.9899	0.003046	0.0183	Significant
RBB	0.936	0.8761	0.03737	0.2242	Significant

Source: Appendix 2 (1,2)

From the above table, it is found that coefficient of correlation between deposits and loan and advances of EBL and RBB is 0.9949 and 0.936. It is shows that both have the positive relationship between these two variables. It refers that deposit and loan and advances of EBL move together very closely but not proportionately on the other hand RBB has made closer relationship between deposit and lending. Moreover, the coefficient of determination of EBL is 0.9899. It means 98 percent of variation in loan and advances has been explained by deposit. Similarly, value of coefficient of determination of RBB is 0.87. It refers that 87 percent variance in loan and advances are affected by total deposit. The correlation coefficient of EBL is significant because $R > 6 P .Er$, where as correlation of RBB is significant because the correlation coefficient is greater than the relative value of 6 P.Er. EBL has more significant relation than RBB.

B) Coefficient of Correlation between Total Deposits and Total Investment

The coefficient of correlation between deposit and investment measures the degree of relationship between these two variables or deposit is significantly utilized or not. In correlation analysis, deposit is independent variable (X) and total investment is dependent variable (Y).

The following Table No. 4.19 shows the coefficient correlation between deposits and total investments i.e. r, P. Er., 6 P. Er. And coefficient of determination (R^2) of EBL and RBB during the study period.

Table No. 4.19
Correlation between Deposit and Total Investment

Name of Banks	Evaluation Criterions				
	R	R^2	P.Er.	6 x P.Er.	Remarks
EBL	0.8133	0.6615	0.102105	0.6126	Significant
RBB	0.8496	0.721820	0.08391	0.5035	Significant

Source: Appendix 2 (3,4)

From the above Table, the researcher found that the coefficient of correlation between total deposit and total investment of EBL is 0.8133. It shows the high degree of positive correlation. In addition, coefficient of determination of EBL is 0.6615. It means 66 percent of total investment is explained by total deposit. The correlation coefficient is significant

because the correlation coefficient is greater than 6 P.Er. It refers that there is significant relationship between total deposit and total investment of EBL.

Similarly, there is high degree of positive correlation coefficient between total deposit and total investment of RBB. The value of coefficient of determination is found 0.72182 this refers that 72 percent of the variation in total investment is explained by total deposit. The correlation coefficient is significant because the correlation coefficient is greater than 6 P.Er. It refers that RBB has more significant relationship between total deposit and total investment of RBB than EBL.

From the above analysis, the conclusion can be drawn both EBL and RBB that EBL has high degree positive correlation. This indicates that RBB is successful to mobilize its deposit in proper way in comparison to EBL.

C) Co-efficient of Correlation between Loan and Advance and Net Profit

Co-efficient of correlation between total assets and net profit is used to measure the degree of relationship between two variable i.e. Loan and advance and net profit of EBL and RBB during the study period. Where Loan and advance is independent variable (X) and net profit is dependent variable (Y). The main objective of calculating this ratio is to determine the degree of relationship whether there the net profit is significantly correlated or not and the variation of net profit to loan and advance through the coefficient of determination. The following table shows the ‘r’, R², P.Er. and 6 P. Er. between those variables of EBL and RBB for the study period.

**Table No. 4.20
Correlation between Loan and Advance and Net profit**

Name of Banks	Evaluation Criteria				
	R	R ²	P.Er.	6 P.Er.	Remarks
EBL	0.9959	0.9918	0.001236	0.007420	Significant
RBB	(0.4969)	0.2469	0.2272	1.362	Insignificant

Source: Appendix 2 (5,6)

Above Table shows correlation coefficient between, Loan and advance and net profit is 0.99 of EBL. It refers that there is high degree of positive correlation between these two variables. Here, 99 percent of net profit is contribute by Loan and advance as its coefficient of determination of 0.9919 shows. Moreover, this relationship is significant because the

coefficient of correlation is more than 6 P.Er. On the other hand RBB low degree of negative correlation i.e. -0.49 between Loan and advance and net profit. The coefficient of determination R^2 is 0.24 which indicates that 24 percent variability in net profit is explained by Loan and advance. Moreover, lower correlation coefficient than 6P.Er. Shows that relationship between Loan and advance and net profit is in insignificant for RBB. Thus it can be concluded that degree of relationship between total loan and advance of RBB is poorer than EBL.

D) Coefficient of Correlation between Total Investment and Net Profit

Coefficient of correlation between total investment and net profit measures the degree of their relationship. In the, correlation analysis, investment is independent variable and net profit is dependent variable. The following Table shows the coefficient of correlation coefficient of determination, probable error and six times of P.Er. During the fiscal year 2007/08 to 2011/12.

Table No. 4.21
Correlation between Total Investment and Net Profit

Name of Banks	Evaluation Criteria				
	R	R^2	P.Er.	6 P.Er.	Remarks
EBL	0.78058	0.6093	0.1178	0.7071	Significant
RBB	(0.8515)	0.7250	0.08295	0.4977	Insignificant

Source: Appendix 2(7, 8)

Above Table shows, correlation coefficient between total investment and net profit of EBL is 0.78 which implies there is high degree of positive correlation between total investment and net profit. In addition, coefficient of determination of EBL is 0.60. It means 60 percent of Profit is contributed by total investment. Moreover, this correlation is significant because correlation coefficient more than 6 P.Error. On the other hand RBB has high degree of negative correlation between total investment and net profit i.e. -0.85. The coefficient of determination of RBB is 0.7 It means 72 percent of Profit is contribute by total investment and this relationship is insignificant as its correlation coefficient is less than 6 P.Er. i.e. 0.49. Thus it can be concluded that the degree of relationship between total investment and net profit of RBB is little poorer than the EBL.

E) Coefficient of Correlation of Total Deposit between EBL and RBB

Coefficient of correlation of total deposit between EBL and RBB and shows their linear relationship.

Table No. 4.22
Correlation between Total Deposit of EBL and RBB

Evaluation Criterions				
R	R ²	P.Er.	6 P.Er.	Remarks
0.9882	0.9647	0.01065	0.06388	Significant

Source: Appendix 2, 9

This Table shows how the total deposit of EBL and RBB is related 0.98 of correlation coefficient shows that there is high degree of positive correlation between this two banks in this regard. But this correlation coefficient is significant because the correlation coefficient is greater than 6 P.Er. As the 0.96 of coefficient of determination, this shows the 96 percent of the degree of relationship. The degree of relationship between these two banks is also high.

F) Coefficient of Correlation of Total Investment between EBL and RBB

The coefficient of correlation of total investment between selected commercial banks is shown as follow:

Table No. 4.23
Correlation between Total Investment of EBL and RBB

Evaluation Criterions				
R	R ²	P.Er.	6 P.Er.	Remarks
0.6977	0.4868	0.1548	0.9288	Insignificant

Source: Appendix 2, 10

The above table reveals that there is moderate degree of positive correlation between EBL and RBB in case of total investment i.e. 0.69. It implies that the total investment of EBL and RBB move in the same direction. Here $R < P.Er.$ Therefore, correlation coefficient is insignificant. This can be said that both EBL and RBB increase its total investment as same direction. The coefficient of determination is 0.48, which shows the 48 percent of the degree of relationship.

G) Coefficient of Correlation of Loan and Advances between EBL and RBB.

The coefficient of correlation of loan and advances between EBL and RBB has been given below.

Table No. 4.24
Correlation between Loan and Advances of EBL and RBB

Evaluation Criterions				
R	R ²	P.Er.	6 P.Er.	Remarks
0.992181	0.9844	0.004706	0.02823	Significant

Source: Appendix 2, 11

Above Table show that there is high degree of positive correlation between the loan and advances of EBL and RBB. The correlation coefficient between two banks is 0.99. It means loan and advances of these two banks moves in the same direction in high proportion. This correlation coefficient is significant in order to show the relationship between loan and advances of these two banks because correlation coefficient is greater than 6 P.Er. The coefficient of determination is 0.98 which shows the 98 percent of the degree of relationship.

H) Coefficient of Correlation of Net Profit between EBL and RBB.

The coefficient of net profit between the selected commercial banks shows the relationship between the banks.

Table No. 4.25
Correlation between Net Profit of EBL and RBB

Evaluation Criterions				
R	R ²	P.Er.	6 P.Er.	Remarks
(0.5289)	0.2797	0.2173	1.3036	Insignificant

Source: Appendix 2, 12

Above statistics shows that there is a moderate degree of correlation between profits of EBL and RBB which is indicated by correlation coefficient of -0.52 this relationship is insignificant because its correlation coefficient is less than 6 P.Er. The coefficient of determination is 0.27 which shows the 27 percent of the degree of relationship.

4.3 Major Findings of the Study

From the above research study, following findings are drawn on the financial performance of the selected commercial banks.

1. Generally banks have to maintain more liquid assets but the current ratios of all banks are below the standard of 1:1. The mean current ratio of EBL is 1.05 and RBB is 0.84 both banks have unhealthy current ratio. The current ratio of EBL is better than RBB.

2. Cash and bank balance to total deposit ratio of RBB is higher than EBL i.e. $32 > 17\%$ which indicates that the RBB has higher liquidity than EBL. A high ratio of cash and bank balance may be undesirable as it indicates inability to invest in more productive sectors like short-term marketable securities insuring enough liquidity, which will help the bank to improve its profitability. Liquidity position however is good.
3. Cash and bank balance to current assets ratio of RBB is higher than EBL i.e. $17\% > 16\%$
4. Investment on government securities to current assets of RBB is higher than EBL i.e. $26\% > 13\%$. It shows EBL has invested more funds in government securities. RBB has invested little portion of their funds in purchasing government securities.
5. Above findings, shows that liquidity position of both banks are equal in the point of view of liquidity. In the term of current ratio, EBL is better. In the point view of cash and bank balance to deposit RBB is better. From the point view of cash to current assets, RBB is better. Finally, from the point view of investment to government securities to current assets RBB is better. So RBB gets higher point than EBL.
6. The loan and advances to total deposit ratio of RBB is lower than EBL $48\% < 74\%$. It indicates the better mobilization of deposit by EBL. So, EBL is more efficient at utilizing the outsiders' funds in extending credit for profit generating sectors.
7. The total investment to total deposit of RBB is higher than EBL i.e. $23\% > 17\%$. It shows the RBB is mobilizing its funds on investment in various securities efficiently. It can be said that RBB is more successful in utilizing its total deposit by investing in marketable securities.
8. The loan and advances to total assets ratio of EBL is greater than RBB i.e. $66\% > 44\%$. It refers that EBL has utilized its total assets more efficiently in the form of loan and advances with more risk because it has greater variability in the ratio.
9. Investment on government securities to total assets ratio of RBB is higher than EBL i.e. $21\% > 12\%$. This indicates that RBB has invested more portions of total assets on government securities. The higher ratio of RBB shows better fund mobilization.
10. Return on total assets ratio of RBB is slightly higher than EBL i.e. $2.41\% > 1.873\%$.
11. Return on loan and advance ratio of RBB is higher than EBL i.e. $5.3\% > 2.8\%$
12. Return on equity of EBL is higher than RBB in fact RBB has negative ROE i.e. $18.53\% > 2.25\%$ which shows that EBL is more successful at earn higher profit through efficient utilization of its equity capital. RBB is in the condition of negative net-worth.

13. Total interest earned to total assets ratio of RBB is relatively lower than that of EBL i.e. $5.28\% < 7.46\%$. It indicates that EBL has efficiently used its total assets to earn higher interest income in comparison to RBB and it is also stable in terms of interest earning.
14. Total interest earned to total operating income ratio of EBL is higher than RBB i.e. $1.63 < 1.35$ times. It means the greater portion of total operating income is occupied by total interest for EBL. It reveals EBL is successful in mobilizing their funds in interest generating assets.
15. Total interest paid to total assets ratio of EBL is higher than RBB i.e. $3.902\% > 2.207\%$. It shows EBL has higher interest expenditure to total assets. It supports EBL to increase its interest paid to operating income.
16. The credit risk ratio shows the proportion of no-performing loan in total Loan and Advances. Average credit risk ratio of RBB is lower than EBL i.e. $13.06 < 88.218$. RBB has efficiently used its total loan and advances than EBL has. Higher ratio indicates more risky assets in the volume of Loan and Advances of the bank and vice-versa.
17. The liquidity risk of the bank defines its liquidity need for deposit. The average mean ratio of EBL is greater than that of RBB (i.e. $74.01\% > 48.37\%$). It signifies that EBL has more liquid fund to make immediate payment to the depositors
18. Average earning per share of RBB is greater than that of EBL i.e. $\text{Rs. } 134.748 > \text{Rs. } 92.74$. But RBB has more consistent earning per share as suggested by its lower coefficient of variation.
19. Average dividend per share of EBL was $\text{Rs. } 20$. On the other hand, RBB is fully government bank and is not listed in NEPSE so the researcher got that there is no any practice of paying dividend to the shareholders.
20. The researcher has previously said that RBB were not listed in NEPSE so market price is not available. But EBL was listed in NEPSE so average MPS is 1868.8 during the study period.
21. The mean price-earnings ratio of EBL is 19.19 times whereas price-earnings ratio of RBB was not available during the study period.
22. Both EBL and RBB have positive co-relation between total deposit and loan and advances because of EBL and RBB have 0.99 and 0.93 of co-relation coefficient between deposit and loan and advances. Among these relationships, correlation

- between loan and advance of both bank is significant. But EBL has more significant relationship between total deposit and loan and advances than that of RBB.
23. There is positive correlation between total deposit and total investment of EBL and RBB i.e. 0.81 and 0.84 respectively. This indicates that RBB is successful to mobilize its deposit in order to make good investment in comparison with EBL.
 24. There is positive correlation between Loan and advance and net profit of EBL but RBB has negative correlation between Loan and advance and net profit. Correlation between Loan and advance and net profit of EBL is 0.99 and RBB is -0.49. The relationship between Loan and advance and net profit of EBL is significant but RBB has insignificant relationship. In calculation, RBB has poor relationship between Loan and advance and net profit than that of EBL.
 25. The degree of relationship between total investment and net profit of RBB is lower than EBL i.e. correlation coefficient between total investment and net profit of EBL and RBB is 0.78 and -0.85 respectively. It refers that EBL is comparatively successful to generate net profit through the total investment with the comparison to RBB.
 26. Correlation coefficient of total deposit between EBL and RBB shows high positive correlation i.e. 0.9822 .The correlation coefficient shows that It refers that total deposit of both banks move in the same direction in this regard. Correlation coefficient is not significant because the correlation coefficient is higher than 6P Er i.e.0.063.
 27. The correlation of total investment between EBL and RBB is moderate degree of correlation i.e. 0.6977. It implies that the total investment of both banks move in the same direction. correlation coefficient of bank is insignificant.
 28. The degree of relationship of loan and advances between the EBL and RBB is high because correlation coefficient between loan and advances of these two banks is 0.9921. It means loan and advances of these two banks moves in the same direction in high. Correlation coefficient is also significant
 29. The correlation of net profit between EBL and RBB is moderate. The relationship is low because correlation coefficient between net profit of these two banks is -0.5289. The relationship between two banks is not significant because its correlation coefficient is lower than 6 P.Er.
 30. EBL and RBB have increasing trend in collecting deposit but the rate of increment of total deposit of RBB seems to be more higher than that of EBL. Here RBB is in better position in collecting deposit than EBL.

31. Both of the banks have maintained their ratio pretty well. Profit earning, deposit, lending and other indicator of both banks are in increasing trend. Being oldest banks with the comparison of other private commercial banks EBL and RBB are not in a healthy banking condition. The EBL is suffering from its huge number of NPA on the other hand; RBB is suffering from its huge volume of negative net-worth. Both of the banks had a bitter past from different way like political crises, unwanted political interference and internal war but nowadays both of the banks are recovering from their dark and wounded past. Both of the banks are under financial sector reform program from different donors and the result is positive. To survive in today's cutthroat competition both of the giant banks must be ready to compete with other private technologically strong banks. For this both of the banks must change their self according to the time.

CHAPTER – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The researcher has identified that research problem and set objectives to solve research problems about financial performance of Everest Bank and Rastriya Banijya Bank limited. To make this study more effective, related literatures have been reviewed. The review of literature provides the foundation of knowledge in order to undertake this research more precisely.

Research methodology has been described in third chapter, which is a way to solve the research problems with the help of various tools and techniques. This chapter includes the various financial as well as statistical tools to analyze the data in order to come to the decisions. This chapter includes the research design, population and sample data collection procedure, data period covered and methods of analysis. These studies is mainly conducted on the basis of secondary data collected from annual reports of concern bank, official report, economic journal, financial statement etc. and authorize web site of Nepal stock exchange and security board of Nepal.

The presentation and analysis of data has been made comparative analytical and their interpretation has done in chapter four by applying the wide varieties of methodology as stated in chapter three. It includes the various financial and statistical tools. In case of financial tools, ratio analysis is done which consists current ratio, liquidity ratio, assets management ratio, profitability ratio, risk ratio and other ratios. Other ratio includes EPS, MPS and P.E. ratio. Various statistical tools such as arithmetic mean, standard deviation, coefficient of correlation, regression analysis and trend analysis, have been applied to fulfill the objective of this study. The analysis has been done mainly through secondary. The major findings of the study are also included in the final section of the presentation and analysis chapter.

Financial Performance Analysis is used primarily to gain insight into operating and financial problems confronting the firms with respect to these problems. We must be careful to distinguish between the cause of problem and symptom of it. It is thus an attempt to direct the

financial statements into their components on the basis of purpose in the one hand and establish relationships between these components and between individual components and totals of these items on the other. Along with this, a study of various important factors over the past several years is also undertaken to have clear understanding of changing profitability and financial condition of the business organization.

Financial Statement Analysis involves the use of various financial statements. These statements perform several things. First, the balance sheet summarizes the assets, liabilities and owner's equity of a business at a moment in time, usually the end of a year or a quarter. Next, the income statement summarizes the revenues and expenses of the firm over a particular period of time, again usually a year or quarter. While the balance sheet represents a snapshot of the firm's financial position at a moment in time, the income statement depicts a summary of the firm's profitability over time. From these two statements certain derivate statements can be produced, such as statement of retained earnings, a sources and uses of funds statements and a statement of cash flows etc.

Financial Analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account. Analyzing financial statements is a process of evaluating relationship between component parts of financial statements to obtain a better understanding of a firm's position and performance.

Financial Statement Analysis allows managers, investors and creditors as well as potential investors and creditors to reach conclusion about the recent and current status of a corporation. The checking of financial performance in a business deserves much attention in carrying out the financial position. It also requires to retrospective analysis for the purpose of evaluating the wisdom and efficiency of financial planning. Analyzing of what has happened should be of great value in improving the standards, techniques and procedures of financial control involved in carrying out finance function.

The four basic statements contained in the annual report are the balance sheet, the income statement the statement of the retained earnings and the statement of cash flows. Investors use the information contained in these statements to form expectations about the future levels of earnings and dividends and about the risks of these expected values. Financial statement

analysis generally begins with the calculation of a set of a financial ratios designed to reveal the relative strength and weakness of a company as compared to other companies in the same industry, and to show whether the firm's position has been improving or deteriorating over time. Financial analysis is that sort of calculation, which is done with the help of annual report. And the annual report would contain the essentials for such analysis. Therefore, the data retrieved from the annual report is indispensable for the financial analysis.

5.2 Conclusion

The overall aspect of liquidity position of RBB is comparatively better than EBL. EBL is better in current ratio and liquidity ratio than RBB. RBB is better than EBL in cash and bank balance to current ratio and Investment in Government Securities to Current Assets Ratio. From the point of view of liquidity position RBB gets high marks.

EBL and RBB are similar in their asset management as EBL has higher ratios in Loan and Advance to Total Deposit Ratio and Loans and Advances to Total Assets Ratio while RBB has higher ratios in Investment to Total Deposit Ratio and Investment on Government Securities to Total Assets ratio.

Overall profitability ratios show that EBL has earned higher profit in relation to many aspects of the bank than RBB. In overall performance RBB is gets some more points in profitability ratio. EBL faces higher Credit Risk as compared to RBB it means the NPA of EBL is more than that of RBB. Earnings per share of RBB are more than EBL. Both commercial banks EBL and RBB have positive correlation between deposit and loan and advances, deposit and total investment, total assets and net profit, total investment and net profit. Comparatively both banks have strong relationship between these variables. It is also found that there is positive correlation between total deposit of EBL and RBB, between loan and advances of both banks and between net profits of both banks Total Investment, loan and advances, net profit of EBL and RBB are in increasing trend. Its show positive trend of both banks.

Both EBL and RBB have positive co-relation between total deposit and loan and advances, total deposit and total investment .Correlation analysis between Loans and Advances and Net Profit, Investment and Net profit of EBL has a positive relationship whereas RBB has negative correlation. Both the banks have positive correlation between Total Deposits and

Total Investment and Loan and advances. But correlation coefficient of Net Profit between EBL and RBB has moderate degree of negative correlation.

Correlation coefficient of total deposit, total investment, loan and advances between EBL and RBB shows positive correlation, but net profit between EBL and RBB has negative correlation. It refers that all the variable of both bank moves in the same direction some are closely in the same direction and some are less proportionately.

EBL and RBB have increasing trend in collecting deposit the rate of increment of total deposit for RBB seems to be higher than that of EBL. RBB has better position in collecting deposit than EBL.

The trend line of loan and advances trend line for both banks is equally upward slopping. It refers that both the banks are increasing equally in disbursement of loan and advances.

The trend line of Net profit for both of banks is upward slopping. Profit generating rate of both banks is good. But according to the profit trend line, the position of RBB is better up to year 2009/10 after that EBL will be earning more profit than RBB.

The trend analysis reveals that both the banks have maintained their ratio pretty well. Both banks have an increasing trend in most of the sectors.

From the entire research study, overall all financial performance of RBB is little better than EBL. But EBL is operating smoothly and success in becoming the pillar of economic system of the country.

The profile of financial executives and customers reveals that more Nepalese investors do not have knowledge about investment practice adopted by commercial banks. Commercial banks have not provided investment priority to the rural sectors but being a it is very necessary to give investment priority to the rural area as Nepal is a developing country and investment in such sector would definitely help in the development of the priority sectors that would boost up the overall economy of the country. Therefore, the banks should formulate sound investment policies. Good investment practices ensures maximum amount of investment to all sectors with proper utilization.

5.3 Recommendations

Based on the analysis and finding of the study, the following recommendations can be made as suggestions to make the investment practices of EBL and RBB effective and efficient. This would help to draw some outline and make reforms in the respective banks

- Generally, banks have to maintained liquid assets. The current ratio of the two banks is not considerable. The liquidity position affects external and internal factors such as prevalent investment situations, central bank requirements and so on. Considering the growth position of financial market, the lending policy management capabilities, strategic planning and fund flow situation, bank should maintain enough liquid assets to pay short-term obligations. So, it is recommended to maintain sound liquidity position to EBL and RBB.
- Government securities such as Treasury bills, Development bonds, saving certificates etc. are risk less investment alternatives because they are free of default risk as well as liquidity risk and can be easily sold in the market. In this research study, it has found that both banks, EBL and RBB have made some amount of fund in Government securities. But both of banks are recommended to invest more funds in Government securities instead of keeping them idle.
- To get success in competitive banking environment, deposit must be utilized as loan and advances. The largest item of bank assets side is loan and advances. It has been found that loan and advances to total deposit ratio of RBB is lower than that of EBL. It means RBB has not properly used their existing fund as loan and advances. So RBB is recommended to follow liberal lending policy and to invest more deposit in loan and advances.
- EBL and RBB have a possible risk because there is large amount of doubtful loan and advances and risky investment. The bigger size of NPA should be a problem for them. So it is recommended to evaluate the investment opportunities and alternatives using statistical, capital budgeting and other financial tools to avoid large amount of doubtful debt and risk.
- EPS and DPS play a vital role to determine the market price of the share and indicate the financial performance of banks. Higher EPS and DPS indicate the banks' sound financial position that would help them satisfy their stakeholders. In this concern special suggestion to EBL to increase its EPS and DPS.

- Both the banks are recommended to formulate and implement the sound and effective investment policy to increase volume of total investment, loan, and advances that helps to meet required level of profitability as well as social responsibility. The banks should consider rural areas in making investment policy.
- Political instability directly affected the economic sector such as hotel and tourism, manufacturing and trading sector. Bank loan and advances are decreasing in this sector. So banks should give priority to these sectors as well as create new investing sector like hydro-power to mobilize deposit.
- Banks should develop an innovative approach to marketing and formulate new strategies of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices. Banks are also required to explore new market areas. For this purpose, it is recommended to form a strong market department in its central level, which deals with the banking products, places, price and promotion.
- In conclusion, the RBB has better performance than EBL. RBB needs to retain back its consistency as there are many banks sprouting up in the Nepalese-banking scenario and if it continues losing its consistency, it might be too late for them to rise up. EBL however has been showing significant improvement, it should keep up with its growth trend to give strong competition to all the banks in the industry. In the light of growing competition in the banking sector, both bank EBL and RBB should be customer oriented. It should strengthen and activate its marketing function, as it is an effective tool to attract and retain the customers.

BIBLIOGRAPHY

- American Institute of Banking. (1972). *Principles of Banking Operation*. U.S.A.
- Athanasoglou PP, Brissimis SN, Delis MD (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Int. Finan. Mark. Inst. Money*, 18: 121-136.
- Bajracharya, B. B. (1990). *Monetary Policy and Deposit Mobilization in Nepal: Rajat Jayanti Smarika RBB*. Kathmandu.
- Baxley, J. B. (1987). *Banking Management*. New Delhi: Sujeet Publication.
- Bista, B. (1991). *Nepal Ma Adhunik Banking Byabastha*. Kathmandu: Indu Chhapakhana.
- Economic Survey (2008). Ministry of Finance, Government of Nepal
- Frank and Reilly. (1990). *Investment*. The Dryden Press. Tokyo: CBS Publishing Japan Ltd.
- Gautam, K. R. (2010). *Investment Analysis of Financial Companies in Context of Nepal*. An Unpublished Master's Thesis. Kathmandu: Submitted to Central Department of Management, T.U.
- Gitman, L. J. and Joehank (1999). *Fundamentals of Investing*. London: Harper and Row Publishers
- Grolier Incorporate (1984). *Encyclopedia: The World Book*. U.S.A.: Grolier Incorporate.
- Gupta, D.P. (1994). *The Banking System: It's Role in Export Development*. The Financing of Exports from Developing Countries. Geneva: International Trade Center, UNCTAD/GATT.
- Gupta, G. D. (2011). *Comparative Analysis of Financial Performance of Commercial Banks in Nepal*. An Unpublished Master's Thesis. Kathmandu: Submitted to Central Department of Management, T.U.
- Kapadi, R. R. (2008). *A Study on Investment Policy of NABIL in Comparison to Other Joint Venture Banks of Nepal*. An Unpublished Master's Thesis. Kathmandu: Submitted to Central Department of Management, T.U.
- Kishi, D. L. (1996). *The Changing Fact to the Banking Sector and the HMG/N Recent Budgetary Policy*. Nepal Bank Limited Patrika, Nepal Bank Limited, Vol. 25.
- Kolb, R.W. and Rodriguez, R. J. (1996). *Financial Institution and Markets*. Massachusetts: Blackwell Publishers Inc.
- Kothari, C.R. (1990). *Quantitative Techiniques*. New Delhi:Vikash Publishing House Pvt. Ltd.

- Lin WC, Li CF, Chu CW (2005). Performance efficiency evaluation of the Taiwan's shipping industry: an application of data envelopment analysis. In: proceedings of the Eastern Asia Society for Transportation Studies, 5: 467-476
- McKinnon RI (1973). Money and capital in economic development. Washington, DC: The Brookings Institution
- Morris, F. (1990). *Latin America's Banking System in 1980*. The World Bank:World Bank's Discussion Paper 81.
- Niroula, S. K. (2012). *The Comparative Study on Portfolio Management of Nepal Industrial and Commercial bank and Everest bank ltd*. An Unpublished Master's Thesis. Kathmandu: Submitted to Central Department of Managerment, T.U.
- Northcott C (2004). Competition in banking: a review of the literature. Bank of Canada Working Papers, pp. 4-24.
- Poudel NP (2005). Financial system and economic development. Nepal Rastra bank in 50 years. Kathamndu: Nepal Rastra Bank.
- Pyakuryal, B. (1987). *Workshop on Banking and National Development*. Paper Presentation. Kathmandu:Nepal Bank Limited.
- Rana, S. (2002). *Corporate Financial Management*. Kathmandu:Ratna Pustak Bhandar.
- Shahi, P. B. (1999). *Investment Policy of the Commercial Banks*. An Unpublished Master's Thesis. Kathmandu: Submitted to Central Department of Managerment, T.U.
- Sharma, B. (2000). *Banking the Future of Competition*. Kathmandu: New Business Age. October.
- Sharpe, F. W. and Gordon, J. A. (1999). *Investment*. New Delhi:Printice Hall of India Pvt. Ltd.
- Shrestha, S. (1998). *Lending Operation of Commercial Banks of Nepal and Its Impact on GDP*. T.U. Kathmandu:The Business Voice of Nepal.
- Shrestha, S. and Silwal, D. P. (2002). *Statistical Methods in Management*. Kathmandu:Taleju Prakashan.
- Shrestha, S. R. (1998). *Portfolio Management in Commercial Bank*. Theory and Practice. Kathmandu:Nepal Bank Patrika. Baishakh.
- Shrestha, S. (2011) *Credit Risk management of Nabil Bank Limited and Nepal Investment Bank Limited in Nepal*. An Unpublished Master's Thesis. Kathmandu: Submitted to Central Department of Managerment, T.U.
- Shrestha, B. (2009) *Financial Performance Analysis of Nepal Bangladesh Bank ltd*. An Unpublished Master's Thesis. Kathmandu: Submitted to Central Department of Managerment, T.U.
- Singh, P. (1992). *Investment Management*. Bombay: Himalayan Publishing House.

Singh, S.P. and Singh, S. (1983). *Financial Analysis for Credit Management in Banks*. New Delhi: Vikash Publishing House Ltd.

Sun CC (2011). Assessing Taiwan financial holdings companies' performance using window analysis and Malmquist productivity index. *Afr. J. Bus. Manag.*, 5(26): 10508-10523.

Thapa, G. B. (2005). *Financial System of Nepal*. Development Vision. Lalitpur: Patan Multiple Campus.

Wolf, H. K. and Pant, P. R. (2009). *A Hand Book for Social Science Research and Thesis Writiing*. Kathamndu: Buddha Academy Publisher's and Distributors Pvt. Ltd.

Websites:

www.everestbankltd.com

www.nrb.org.np

www.nepalstock.com.np

www.rbb.com.np

APPENDICES

Appendix -1

Arrangement and Tabulation of Available Financial Data of Sample Bank

A. Current Assets

(Rs. in crore)

FY	EBL	RBB
2007/2008	2459.101	5188.7
2008/2009	3519.5	6073.3
2009/2010	3972.945	5753.5
2010/2011	4432.532	5918.9
2010/2012	5234.288	8672.5
Total	19618.366	31606.9

B. Current Liabilities

(Rs. in crore)

FY	EBL	RBB
2007/2008	2402.572	6048.8
2008/2009	3347.154	7197.6
2009/2010	3707.781	7266.6
2010/2011	4117.76	7873.7
2010/2012	5069.85	9069.8
Total	18645.117	37456.5

C. Cash and Bank Balance

(Rs. in crore)

FY	EBL	RBB
2007/2008	266.791	926.9
2008/2009	616.43	1348.3
2009/2010	781.88	885.2
2010/2011	612.27	690.7
2010/2012	1036.31	1926.3
Total	3313.681	5777.4

D. Investment on Government Securities

(Rs. in crore)

FY	EBL	RBB
2007/2008	323.797	1454.3

2008/2009	514.6	1564.3
2009/2010	435.435	1299
2010/2011	714.5018	1533.3
2010/2012	606.8876	2650.1
Total	2595.2214	8501

E. Total Loan and Advance

(Rs. in crore)

FY	EBL	RBB
2007/2008	1833.91	2752.5
2008/2009	2388.467	3160.7
2009/2010	2755.635	3569.3
2010/2011	3105.76	3686.6
2010/2012	3591.09	4044.9
Total	13674.862	17214

F. Total Deposit

(Rs. in crore)

FY	EBL	RBB
2007/2008	2397.63	5797.1
2008/2009	3332.294	6809.6
2009/2010	3693.231	6862.6
2010/2011	4112.79	7392.4
2010/2012	5000.61	8777.5
Total	18536.555	35639.2

G. Total Investment

(Rs. in crore)

FY	EBL	RBB
2007/2008	506.116	1454.3
2008/2009	594.848	1564.3
2009/2010	500.83	1299
2010/2011	774.392	1533.3
2010/2012	786.362	2650.1
Total	3162.548	8501

H. Total Assets

(Rs. in crore)

FY	EBL	RBB
2007/2008	2714.934	6016.4
2008/2009	3691.684	7504.2
2009/2010	4138.27	7279.3
2010/2011	4623.621	8122.3
2010/2012	5581.312	10056
Total	20749.821	38978.2

I. Net Profit

(Rs. in crore)

FY	EBL	RBB
2007/2008	45.122	177
2008/2009	63.873	203.2
2009/2010	83.176	202.7
2010/2011	93.13	175.9
2010/2012	109.056	144.6
Total	394.357	903.4

J. Total Equity Capital

(Rs. in crore)

FY	EBL	RBB
2007/2008	266.882	-1205.5
2008/2009	329.355	-9684
2009/2010	422.959	-5898
2010/2011	487.66	-4420
2010/2012	619.916	408
Total	2126.772	-20799.5

K. Total Interest Earned

(Rs. in crore)

FY	EBL	RBB
2007/2008	154.865	270.4
2008/2009	218.68	344.8

2009/2010	310.245	420.5
2010/2011	433.1	502.8
2010/2012	495.99	540
Total	1612.88	2078.5

L. Total Interest Paid

(Rs. in crore)

FY	EBL	RBB
2007/2008	63.261	101.9
2008/2009	101.28	106.8
2009/2010	157.279	138.8
2010/2011	253.59	242.4
2010/2012	287.33	304.6
Total	862.74	894.5

M. Total Operating Income

(Rs. in crore)

FY	EBL	RBB
2007/2008	120.98	225.1
2008/2009	154.496	311.4
2009/2010	192.797	364.8
2010/2011	219.3	319.9
2010/2012	260.97	309.3
Total	948.543	1530.5

N. Total number of common stock outstanding

(Rs. in crore)

FY	EBL	RBB
2007/2008	4914000	11720000
2008/2009	6388210	11720000
2009/2010	8304673	11720000
2010/2011	11196095	11720000
2010/2012	12316357	59480000
Total	43119335	106360000

O. Non Performing Loan

(Rs. in crore)

FY	EBL	RBB
2007/2008	12.731	595.365
2008/2009	23.597	495.597
2009/2010	8.7411	350.148
2010/2011	21.7025	402.576
2010/2012	61.4985	294.064
Total	128.2701	2137.75

Appendix-2

1. Calculation of correlation coefficient between deposit and loan and advance of EBL.

(Rs. in crore)

FY	Deposit (X)	loan and advances (Y)	X ²	Y ²	XY
2007/2008	2397.63	1833.91	5748629.617	3363225.888	4397037.633
2008/2009	3332.294	2388.467	11104183.3	5704774.61	7959074.253
2009/2010	3693.231	2755.635	13639955.22	7593524.253	10177196.61
2010/2011	4112.79	3105.76	16915041.58	9645745.178	12773338.67
2010/2012	5000.61	3591.09	25006100.37	12895927.39	17957640.56
Total	18536.555	13674.862	72413910.09	39203197.32	53264287.73

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 53264287.73 - 18536.555 \times 13674.862}{\sqrt{5 \times 72413910.09 - (18536.555)^2} \sqrt{5 \times 39203197.32 - (13674.862)^2}}$$

$$r_{xy} = 0.994959846$$

Coefficient of determination (r^2) = 0.9899

We know, Probable Error (P.E.) of correlation coefficient $P.E.(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745 \times \frac{1-0.0041697}{\sqrt{5}}$$

$$= 0.003046$$

$$6 \times P.E.(r) = 0.0183$$

2. Calculation of correlation coefficient between deposit and loan and advance of RBB.

Y	Deposit (X)	loan and advances (Y)	X ²	Y ²	XY
2007/2008	5797.1	2752.5	33606368.41	7576256.25	15956517.75
2008/2009	6809.6	3160.7	46370652.16	9990024.49	21523102.72
2009/2010	6862.6	3569.3	47095278.76	12739902.49	24494678.18
2010/2011	7392.4	3686.6	54647577.76	13591019.56	27252821.84
2010/2012	8777.5	4044.9	77044506.25	16361216.01	35504109.75
Total	35369.2	17214	258764383.3	60258418.8	124731230.2

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 124731230.2 - 35369.2 \times 17214}{\sqrt{5 \times 258764383.3 - (35369.2)^2} \sqrt{5 \times 60258418.8 - (17214)^2}}$$

$$r_{xy} = 0.936992318$$

Coefficient of determination (r^2) = 0.8761

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745x \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745x \frac{1-0.8761}{\sqrt{5}}$$

$$= 0.03737$$

$$6 \times P.E(r) = 0.2242$$

3. Calculation of correlation coefficient between deposit and total investment of EBL

(Rs. in crore)

FY	Deposit (X)	Total investment (Y)	X ²	Y ²	XY
2007/2008	2397.63	506.116	5748629.62	256153.40	1213478.905
2008/2009	3332.294	594.848	11104183.3	353844.14	1982208.421
2009/2010	3693.231	500.83	13639955.2	250830.68	1849680.882
2010/2011	4112.79	774.392	16915041.6	599682.96	3184911.674
2010/2012	5000.61	786.362	25006100.4	618365.19	3932289.681
Total	18536.555	3162.548	72413910.1	2078876.40	12162569.56

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 12162569.56 - 18536.555 \times 3162.548}{\sqrt{5 \times 72413910.09 - (18536.555)^2} \sqrt{5 \times 2078876.402 - (3162.548)^2}}$$

$$r_{xy} = 0.813330046$$

Coefficient of determination (r^2) = 0.6615

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745x \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745x \frac{1-0.6615}{\sqrt{5}}$$

$$= 0.102105$$

$$6 \times P.E(r) = 0.6126$$

4. Calculation of correlation coefficient between deposit and total investment of RBB

(Rs. in crore)

FY	Deposit (X)	Total investment (Y)	X ²	Y ²	XY
2007/2008	5797.1	1454.3	33606368.41	2114988.49	8430722.53
2008/2009	6809.6	1564.3	46370652.16	2447034.49	10652257.28
2009/2010	6862.6	1299	47095278.76	1687401	8914517.4
2010/2011	7392.4	1533.3	54647577.76	2351008.89	11334766.92
2010/2012	8777.5	2650.1	77044506.25	7023030.01	23261252.75
Total	35639.2	8501	258764383.3	15623462.88	62593516.88

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 62593516.88 - 35639.2 \times 8501}{\sqrt{5 \times 258764383.3 - (35639.2)^2} \sqrt{5 \times 15623462.88 - (8501)^2}}$$

$$r_{xy} = 0.849694605$$

Coefficient of determination (r^2) = 0.721820

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745 \times \frac{1-0.721820}{\sqrt{5}}$$

$$= 0.08391$$

$$6 \times P.E(r) = 0.5035$$

5. Calculation of correlation coefficient between loan and advance and Net profit of EBL

(Rs. in crore)

FY	Loan and advance(X)	Net profit(Y)	X ²	Y ²	XY
2007/2008	1833.91	45.122	3363225.888	2035.994884	82749.68702
2008/2009	2388.467	63.873	5704774.61	4079.760129	152558.5527
2009/2010	2755.635	83.176	7593524.253	6918.246976	229202.6968
2010/2011	3105.76	93.13	9645745.178	8673.1969	289239.4288
2010/2012	3591.09	109.056	12895927.39	11893.21114	391629.911
Total	13674.862	394.357	39203197.32	33600.41003	1145380.276

$$\text{Now, } r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 1145380.276 - 13674.862 \times 394.357}{\sqrt{5 \times 39203197.32 - (13674.862)^2} \sqrt{5 \times 33600.41003 - (394.357)^2}}$$

$$r_{xy} = 0.995996853$$

Coefficient of determination (r^2) = 0.9918

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745 \times \frac{1-0.001834}{\sqrt{5}}$$

$$= 0.001236$$

$$6 \times \text{P.E.}(r) = 0.007420$$

6. Calculation of correlation coefficient between loan and advance and Net profit of RBB.

(Rs. in crore)					
FY	Loan and advance(X)	Net profit(Y)	X ²	Y ²	XY
2007/2008	2752.5	177	7576256.25	31329	487192.5
2008/2009	3160.7	203.2	9990024.49	41290.24	642254.24
2009/2010	3569.3	202.7	12739902.49	41087.29	723497.11
2010/2011	3686.6	175.9	13591019.56	30940.81	648472.94
2010/2012	4044.9	144.6	16361216.01	20909.16	584892.54
Total	17214	903.4	60258418.8	165556.5	3086309.33

$$\text{Now, } r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 3086309.33 - 17214 \times 903.4}{\sqrt{5 \times 60258418.8 - (17214)^2} \sqrt{5 \times 165556.5 - (903.4)^2}}$$

$$r_{xy} = -0.496924378$$

Coefficient of determination (r^2) = 0.2469

We know, Probable Error (P.E) of correlation coefficient $\text{P.E.}(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745 \times \frac{1-0.3368}{\sqrt{5}}$$

$$= 0.2272$$

$$6 \times \text{P.E.}(r) = 1.362$$

7. Calculation of correlation coefficient between Investment and Net profit of EBL

(Rs. in crore)

FY	Investment(X)	Net profit(Y)	X ²	Y ²	XY
2007/2008	506.116	45.122	256153.4055	2035.994884	22836.96615
2008/2009	594.848	63.873	353844.1431	4079.760129	37994.7263
2009/2010	500.83	83.176	250830.6889	6918.246976	41657.03608
2010/2011	774.392	93.13	599682.9697	8673.1969	72119.12696
2010/2012	786.362	109.056	618365.195	11893.21114	85757.49427
Total	3162.548	394.357	2078876.402	33600.41003	260365.3498

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 260365.3498 - 3162.548 \times 394.357}{\sqrt{5 \times 2078876.402 - (3162.548)^2} \sqrt{5 \times 33600.41003 - (394.357)^2}}$$

$$r_{xy} = 0.780580923$$

Coefficient of determination (r^2) = 0.6093

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745 \times \frac{1-0.6093}{\sqrt{5}}$$

$$= 0.1178$$

$$6 \times P.E(r) = 0.7071$$

8. Calculation of correlation coefficient between Investment and Net profit of RBB

(Rs. in crore)

FY	Investment(X)	Net profit(Y)	X ²	Y ²	XY
2007/2008	1454.3	177	2114988.49	31329	257411.1
2008/2009	1564.3	203.2	2447034.49	41290.24	317865.76
2009/2010	1299	202.7	1687401	41087.29	263307.3
2010/2011	1533.3	175.9	2351008.89	30940.81	269707.47
2010/2012	2650.1	144.6	7023030.01	20909.16	383204.46
Total	8501	903.4	15623462.88	165556.5	1491496.09

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 1491496.09 - 8501 \times 903.4}{\sqrt{5 \times 15623462.88 - (8501)^2} \sqrt{5 \times 165556.5 - (903.4)^2}}$$

$$r_{xy} = -0.851558028$$

Coefficient of determination (r^2) = 0.7250

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745 \times \frac{1-0.12298}{\sqrt{5}}$$

$$= 0.08295$$

$$6 \times P.E(r) = 0.4977$$

9. Calculation of correlation coefficient between total deposit of EBL and RBB

(Rs. in crore)

FY	Deposit of EBL	Deposit of RBB	X ²	Y ²	XY
2007/2008	2397.63	5797.1	5748629.617	33606368.41	13899300.87
2008/2009	3332.294	6809.6	11104183.3	46370652.16	22691589.22
2009/2010	3693.231	6862.6	13639955.22	47095278.76	25345167.06
2010/2011	4112.79	7392.4	16915041.58	54647577.76	30403388.8
2010/2012	5000.61	8777.5	25006100.37	77044506.25	43892854.28
Total	18536.555	35639.2	72413910.09	258764383.3	136232300.2

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 136232300.2 - 18536.555 \times 35639.2}{\sqrt{5 \times 72413910.09 - (18536.555)^2} \sqrt{5 \times 258764383.3 - (35639.2)^2}}$$

$$r_{xy} = 0.982171844$$

Coefficient of determination (r^2) = 0.9647

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745x \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745x \frac{1-0.9647}{\sqrt{5}}$$

$$= 0.01065$$

$$6 \times P.E(r) = 0.06388$$

10. Calculation of correlation coefficient between total investment of EBL and RBB

(Rs. in crore)

FY	Investment of EBL	Investment of RBB	X ²	Y ²	XY
2007/2008	506.116	1454.3	256153.4055	2114988.49	736044.4988
2008/2009	594.848	1564.3	353844.1431	2447034.49	930520.7264
2009/2010	500.83	1299	250830.6889	1687401	650578.17
2010/2011	774.392	1533.3	599682.9697	2351008.89	1187375.254
2010/2012	786.362	2650.1	618365.195	7023030.01	2083937.936

Total	3162.548	8501	2078876.402	15623462.88	5588456.585
--------------	-----------------	-------------	--------------------	--------------------	--------------------

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 5588456.585 - 3162.548 \times 8501}{\sqrt{5 \times 2078876.402 - (3162.548)^2} \sqrt{5 \times 15623462.88 - (8501)^2}}$$

$$r_{xy} = 0.697686475$$

Coefficient of determination (r^2) = 0.4868

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745x \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745x \frac{1-0.2295}{\sqrt{5}}$$

$$= 0.1548$$

$$6 \times P.E(r) = 0.9288$$

11. Calculation of correlation coefficient between loan and advance of EBL and RBB

(Rs. in crore)

FY	loan and advance	loan and advance	X²	Y²	XY
2007/2008	1833.91	2752.5	3363225.888	7576256.25	5047837.275
2008/2009	2388.467	3160.7	5704774.61	9990024.49	7549227.647
2009/2010	2755.635	3569.3	7593524.253	12739902.49	9835688.006
2010/2011	3105.76	3686.6	9645745.178	13591019.56	11449694.82
2010/2012	3591.09	4044.9	12895927.39	16361216.01	14525599.94
Total	13674.862	17214	39203197.32	60258418.8	48408047.68

$$\text{Now, } r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 48408047.68 - 13674.862 \times 17214}{\sqrt{5 \times 39203197.32 - (13674.862)^2} \sqrt{5 \times 60258418.8 - (17214)^2}}$$

$$r_{xy} = 0.992181073$$

Coefficient of determination (r^2) = 0.9844

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745x \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\text{Now, P.E. (r)} = 0.6745x \frac{1-0.006976}{\sqrt{5}}$$

$$= 0.004706$$

$$6 \times P.E(r) = 0.02823$$

12. Calculation of correlation coefficient between Net Profit of EBL and RBB

(Rs. in crore)

FY	Net Profit of EBL	Net Profit of RBB	X ²	Y ²	XY
2007/2008	45.122	177	2035.994884	31329	7986.594
2008/2009	63.873	203.2	4079.760129	41290.24	12978.9936
2009/2010	83.176	202.7	6918.246976	41087.29	16859.7752
2010/2011	93.13	175.9	8673.1969	30940.81	16381.567
2010/2012	109.056	144.6	11893.21114	20909.16	15769.4976
Total	394.357	903.4	33600.41003	165556.5	69976.4274

$$\text{Now, } r_{xy} = \frac{n \sum xy - (\sum x) (\sum y)}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

$$r_{xy} = \frac{5 \times 69976.4274 - 394.357 \times 903.4}{\sqrt{5 \times 33600.41003 - (394.357)^2} \sqrt{5 \times 165556.5 - (903.4)^2}}$$

$$r_{xy} = -0.528994534$$

Coefficient of determination (r^2) = 0.2797

We know, Probable Error (P.E) of correlation coefficient $P.E(r) = 0.6745x \frac{1-r^2}{\sqrt{n}}$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard Error of the coefficient of correlation

$$\begin{aligned}\text{Now, P.E. (r)} &= 0.6745 \times \frac{1-0.3221}{\sqrt{5}} \\ &= 0.2173\end{aligned}$$

$$6 \times \text{P.E.}(r) = 1.3036$$

APPENDIX – 3

A Sample Calculation of Straight Line Trend

Let straight line trend between dependent variables (total deposit) y and independent variable (time) x be;

$$y = a + bx$$

For finding the value of a & b we have

$$a = \frac{\sum y}{n} \text{ and } b = \frac{\sum xy}{\sum x^2} \quad \text{it is only when } \sum x = 0$$

Deviations are taken from the middle of the years.

Trend Line by Least Square Method

A. Calculation of Total Deposit of Everest Bank Limited

Year(x)	Total deposit in Crore (Y)	X = x - 2009/10	X ²	XY	Trend Value
2007/08	2397.63	-2	4	-4795.26	2510.031
2008/09	3332.294	-1	1	-3332.294	3108.671
2009/10	3693.231	0	0	0	3707.311
2010/11	4112.79	1	1	4112.79	4305.951
2011/12	5000.61	2	4	10001.22	4904.591
Tot n= 5	ΣY =18536.555	ΣX =0	Σ X² = 10	ΣXY =5986.456	

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum x^2}$$

Here, EBL

$$a = 3707.311$$

$$b = 598.64$$

$$Y_c = 3707.311 + 598.64 X \text{ of EBL}$$

B. Calculation of Total Deposit of RBB

Year(x)	Total deposit in Crore (Y)	X = x - 2009/10	X ²	XY	Trend Value
2007/08	5797.1	-2	4	-11594.2	5819.12
2008/09	6809.6	-1	1	-6809.6	6473.48
2009/10	6862.6	0	0	0	7127.84
2010/11	7392.4	1	1	7392.4	7782.2
2011/12	8777.5	2	4	17555	8436.56
Tot n= 5	∑Y =35639.2	∑X = 0	∑ X ² = 10	∑XY = 6543.6	

$$Y = a + bx$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where $x = X - \text{Middle year}$

Here,

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum x^2}$$

RBB

$$a = 7127.84$$

$$b = 654.36$$

Where as

$$Y_c = 7127.84 + 654.36 X \text{ RBB}$$

C. Calculation of Loan and advances of EBL

Year(x)	Loan and advances In Crore (Y)	X = x - 2009/10	X ²	XY	Trend Value
2007/08	1833.91	-2	4	-3667.82	1888.6418
2008/09	2388.467	-1	1	-2388.467	2311.8071
2009/10	2755.635	0	0	0	2734.9724
2010/11	3105.76	1	1	3105.76	3158.1377
2011/12	3591.09	2	4	7182.18	3581.303
Tot n= 5	∑Y =13674.862	∑X = 0	∑X ² = 10	∑XY=4231.653	

$$Y = a + bx$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

Here,

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum x^2}$$

EBL

$$a = 2734.9724$$

$$b = 423.1653$$

$$Y_c = 2734.9724 + 423.1653X \text{ EBL}$$

D. Calculation of Loan and advances of RBB.

Year(x)	Loan and advances In Crore (Y)	X = x - 2009/10	X ²	XY	Trend Value
2007/08	2752.5	-2	4	-5505	2820.66
2008/09	3160.7	-1	1	-3160.7	3131.73
2009/10	3569.3	0	0	0	3442.8
2010/11	3686.6	1	1	3686.6	3753.87
2011/12	4044.9	2	4	8089.8	4064.94
Tot n= 5	$\sum Y = 17214$	$\sum X = 0$	$\sum X^2 = 10$	$\sum XY = 3110.7$	

$$Y = a + bx$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots \dots \dots (I)$$

Where x = X - Middle year

Here,

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum x^2}$$

RBB

$$a = 3442.8$$

$$b = 311.07$$

Where as

$$Y_c = 3442.8 + 311.07 \times \text{RBB}$$

E. Calculation of Total Investment of Everest Bank Limited

Year(x)	Total Investment in crore (Y)	X = x - 2009/10	x ²	XY	Trend Value
2007/08	506.116	-2	4	-1012.232	484.5024
2008/09	594.848	-1	1	-594.848	558.506
2009/10	500.83	0	0	0	632.5096
2010/11	774.392	1	1	774.392	706.5132
2011/12	786.362	2	4	1572.724	780.5132
Tot n= 5	$\sum Y = 3162.548$	$\sum X = 0$	$\sum X^2 = 10$	$\sum XY = 740.036$	

$$Y = a + bx$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where $x = X - \text{Middle year}$

Here,

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum x^2}$$

EBL

$$a = 632.5096$$

$$b = 74.0036$$

$$Y_c = 632.5096 + 74.0036 X \text{ EBL}$$

F. Calculation of Total Investment of Rastriya Banijya Bank Ltd.

Year(x)	Total Investment in crore(Y)	X = x - 2009/10	X ²	XY	Trend Value
2007/08	1454.3	-2	4	-2908.6	1228.08
2008/09	1564.3	-1	1	-1564.3	1464.14
2009/10	1299.0	0	0	0	1700.2
2010/11	1533.3	1	1	1533.3	1936.26
2011/12	2650.1	2	4	5300.2	2172.32
Tot n= 5	∑Y = 8501	∑X = 0	∑X ² = 10	∑XY = 2360.6	

$$Y = a + bx$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

Here,

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum x^2}$$

RBB

$a = 1700.2$

$b = 236.06$

Where as

$Y_c = 1700.2 + 236.06 \times RBB$

G. Calculation of Net Profit of EBL

Year(x)	Net profit in Crore (Y)	X = x - 2009/10	x ²	XY	Trend Value
2007/08	45.122	-2	4	-90.244	47.4464
2008/09	63.873	-1	1	-63.873	63.1589
2009/10	83.176	0	0	0	78.8714
2010/11	93.13	1	1	93.13	94.5839
2011/12	109.056	2	4	218.112	110.2964
Tot n = 5	$\sum Y = 394.357$	$\sum X = 0$	$\sum X^2 = 10$	$\sum XY = 157.125$	

$Y = a + bx$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$Y = a + b x \dots\dots\dots (I)$

Where $x = X - \text{Middle year}$

Here,

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum x^2}$$

EBL

$$a = 78.8714$$

$$b = 1.7125$$

$$Y_c = 78.8714 + 1.7125 \times \text{EBL}$$

H. Calculation of Net Profit of Rastriya Banijya Bank Ltd.

Year(x)	Net profit in Crore (Y)	X = x - 2009/10	x ²	XY	Trend Value
2007/08	177	-2	4	-354	199.1
2008/09	203.2	-1	1	-203.2	189.89
2009/10	202.7	0	0	0	180.68
2010/11	175.9	1	1	175.9	171.47
2011/12	144.6	2	4	289.	162.26
Tot n= 5	∑Y = 903.4	∑X = 0	∑X ² = 10	∑XY = -92.1	

$$Y = a + bx$$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where $x = X - \text{Middle year}$

Here,

$$a = \frac{\sum y}{n}$$

$$b = \frac{\sum xy}{\sum x^2}$$

RBB

$$a = 180.68$$

$$b = -9.21$$

Where as

$$Y_c = 180.68 + (-9.21) X \text{ RBB.}$$