

CHAPTER I

INTRODUCTION

1.1 General Background

1.1.1 Background of the study

The role of money in an economy is very important. Proper and well-planned management of money directs, determines and enhances the health and productivity of total financial sector and the performance of financial sector affect the growth of economy. The economy of a country indicates the development of the country. The financial sector plays an important role in the development of the country and mobilization of financial resources. Hence, money is a subject to manage, and banks are the manager. Therefore, banks as manager collects disperse and control the flow of money. Banks collects the fund from financial sector, organizes the scattered domestic financial resources and invests them in different sectors. Economic development depends upon various factors however, the majors are capital formation and proper utilization of the capital. The organized financial sector collects the fund, mobilizes and invests the fund in the best possible manner.

Banks play an important role in the economic growth of a country. Banking, when properly organized, aids and facilitates the growth of trade and industry. The issue of development always rests upon the mobilization of resources. Banks function of lending ensures required volume of capital to resources mobilization. In the modern economy, banks are to be considered not as dealers in money but as the leaders of development. “Banks are not just the storehouse of the country’s wealth but are the reservoirs of resources necessary for economic development. Bank renders valuable services to trade and industry. The economic growth of a country depends on the growth and development of trade and industry, Industrial development can take place only if sufficient money is invested in industries. Banks undertake the stupendous task by mobilizing the savings of the people and lending the same to the trades and industrialists. The banks help in the uniform development of the different regions in the country. Therefore, a bank is an institution that deals with money by accepting various types of deposits, disbursing loan and rendering other financial services. Since banks are rendering a wide range of services to the people from different walk of life, they have become an essential part of modern society. In other words, bank

is an institution that accepts the deposits from people and in turn advance loan by creating credit. In this process, they earn interest and commission, out of which they pay interest to the depositors i.e. People who deposits funds with them. Banks have opened their branches in towns and villages offering different types of services to the different level of people. Banks' debt- usually referred as 'Bank Deposit' that is commonly accepted in final settlement of debt of other people. It is different from other financial institution in the sense that they cannot create credit though they may be accepting deposits and making advances. Thus, bank's business was basically to buy and sale of credit. Credit instruments are kept on stock-in-trade also on the basis of its own credit and banks create money transferred by credit instruments. They must gain the confidence and trust of the people to create credits. It is said that the flow of credit is very much important like the circulation of blood in human life. If the circulation of blood is not smooth it will do irreparable harm to the body. Similarly, unsteady and unevenly flow of credit harms the economy. Bank came in existence mainly with the objectives of collecting the idle funds, mobilizing them into productive sectors and causing an overall economic development. That mobilized deposits contribute to the development of economic infrastructure of the nation. Banks are not just storehouses of the wealth but are reservoir of resources. The contribution of the bank has been very substantial in increasing production and employment by motivating people to save and in collecting the scattered saving in the form of deposits. The bankers have the responsibility of safeguarding the interest of the depositors, the shareholders and the society they are serving.

1.1.2 Evolution of Banking

Economists do not have exact records about the origin of the word "Banking". The term bank is derived from the Latin word "Bancus" which refers to the bench on which the banker would keep his money and records. Some Economists says its origin to the French word" Banque" and the Italian word "Banco" which means a bench for keeping, lending and exchanging of money or coins in the market place by money lenders. The invention of money was a milestone in the history of economy and developing the banking as a habit people. It has made economic and business activity more precise and efficient. This gave the emergence of non-institutional banking activities. Merchants, Money Lender and Goldsmith were the ancestors of modern bankers. During the early periods, although the banking business was mostly done by private individuals, many countries established public banks either for the purpose of facilitating,

commerce or to serve the government. The Bank of Venice established in 1157, is supposed to be the most ancient bank. Originally, it was not a bank in modern sense being simply an office for the transfer of public debt.

During 1401, a public bank was established in Barcelona. It used to exchange money, receive deposits and discount bill of Exchange, both for the citizen and foreigners. During 1407, the Bank of Geneva was established. In 1609, The Bank of Amsterdam was established. It was established to meet the needs of merchants of the city. The Bank also adopted a plan by which depositors receive a kind of certificate entitling them to withdraw his deposit within six months. The most of European banks now in existence were found on the model of Bank of Amsterdam.

1.1.3 Development of Banking in Nepal

The development of banking is relatively recent in Nepal. In case of Nepal too there were merchants, goldsmiths and moneylenders working as ancestors of modern banking. In Nepal, the origination of banks started through Sahu (Goldsmith). Even though the specific date of the beginning of money and banking deal in Nepal is not obvious, it is speculated that during the Lichhavi period, King Guna kam dev had borrowed money from the rich people to build the city. The historical record shows that Guna kama dev, the king of Kathmandu, borrowed money to rebuild his kingdom in 723AD. Some fifty-seven years thereafter, a merchant 'Shankhadhar' introduced 'Nepal Sambat' by clearing all the indebtedness of the people in 880AD. This clearly proved that money-lending practices were prevalent at that time. Later, during the regime of Mallas, money-lending business became more penetrating and popular. Towards the end of the 14th century, Jayasthiti Mallas, the ruler of Kathmandu, divided the people in sixty-four classes on the basis of their occupation. Among them one was Tankadhari and the people belonging to this class were engaged in money lending business. It is believed that the money lending business became quite popular in the reign of Mallas, particularly in financing the trade with Tibet and India. Thus, the role of Tankadhari was a kin to that of a banking agent. However, these moneylenders advanced loan against personal security of land, building etc. As they were free to charge any amount as interest and other charges on the loan advances. Naturally, the interest rate was higher, discriminatory and unfair. Of course, this gave birth to malpractices, frauds and exploitation in the whole Nepalese society. Even today, such practices are prevalent

in Nepalese village, which are beyond the purview of modern banking system. Thus, it was the duty of government to control the malpractices of the moneylenders and to set up a financial institution to make easy credit facilities for the general people. As a result, with growing consciousness and awareness of this, 'Tejarath Adda' had been established as an institution, during the period of Rana, under the Prime Minister of Ranodip Singh in 1933 B.S.

As a result, with growing consciousness and awareness of this, during the time of the Prime Minister Ranodip Singh in 1933 B.S an institution called "Tejarath Adda" was established for simple banking against the security of gold, silver and ornaments. However, it accepted no deposit from public. For the development of commercial sector "Tejarath Adda" was converted into Nepal Bank Ltd. in 1994 B.S.

Modern banking started with the inception of NBL under the Nepal Bank Act 1936 in 1994 B.S. NBL had Herculean responsibilities of attracting people towards the banking system from predominant moneylenders and to expand banking services. Being a first Commercial Bank it was natural that NBL paid more attention to profit generating business and opened branches at urban centers. So, the establishment of central bank had become immensely an urgent task. The Government however, has onus of stretching banking services to the nook of the country and also managing financial system in a proper way. Thus, Nepal Rastra Bank (NRB) was set up in 14th Baishakh 2012 B.S. as a central bank with an authorized capital of Rs 10 million fully subscribed by the HMG under Nepal Rastra Bank Act 2012 B.S. It has been functioning as the government's bank and has contributed to the growth of financial sector. The major challenge of Nepal Rastra bank today is to ensure the robust health of financial institutions. Nepal Rastra Bank, the central bank of Nepal regulates, inspects, supervise and monitor the whole functions of bank and financial companies of Nepal. The second commercial bank Rastriya Banijya Bank was established in 2022 B.S. The two commercial banks extended their operation extensively throughout the country.

Nepal Industrial Development Corporation (NIDC) and Agriculture Development Bank (ADB) were established to facilitate development activities by providing loans and equity capital. The former Industrial Development Center was established in 2013 B.S. and was converted into

NIDC in 2016 B.S. to finance equity and loan capital to industries that are going to be established in the country. Agricultural Development Bank was established to finance agricultural sector as well as agro-based industries within the country.

In modern times , commercial banks , which are facilitated, regulated and supervised by the Central bank, confined them and concentrated in their activities of fulfilling the financial needs of their customers. With the opening of NABIL bank in 1985 A.D. the door of opening commercial banks were opened to the private sector. As the commercial banks grew they stopped entertaining small projects. Thus a scope for opening finance companies emerged. In 2042 B.S., finance company Act was passed; but private sector kept stony silence till 2049 B.S. The first break came in the month of Shrawan of that year, when the first company Nepal Housing and Finance Company came. The second came in the Poush of the same year, Nepal Finance and Saving Company. Now there are altogether 79 finance companies operating in Nepal.

After the financial liberation in the 1980's the reform measure were undertaken .Such measures include deregulation in interest rate determination, portfolio management, market-based tenders for government securities sales, non-subsidized credits etc. the market would determine the cost of funds and rate of lending .Better use funds, easy availability of funds to the entrepreneurs, better returns to the depositors, professional approach towards customer satisfaction.

For any sector to function smoothly a well-defined law governing the organization in that sector should be there. But there are many flaws in these laws giving opportunity for manipulation. All banks basically function the same functions without regards their names, like-Business banks, Retail banks, clearing banks, Joint Venture banks, merchant Banks etc. Obviously, like other business organizations the sole objective of the banking industries is the profit maximization as well as wealth maximization.

Altogether there are 32 Commercial Banks , 88 Development Banks, 69 Finance Companies and 24 microfinance and cooperatives. They all have got their own rules and regulations and own vision but ultimately they are serving the nation to build a huge financial resource and mobilize

in the best possible way. The banking Sector remained still for a long period of time but as the time passed on, many developments occurred. In the present scenario, Nepalese banking system is evolving itself as a powerful instrument of planning and economic growth of all the developed and underdeveloped sectors. The scope and scale of banking too have undergone substantial change in response to the saving and credit needs of people.

Nepal's financial institutions and commercial banks are listed below:

Table 1.1: List of Financial Institutions in Nepal

S.N	List of Financial Institutions	Numbers
1	Commercial Bank	32
2	Development Bank	88
3	Finance companies	69
4	Micro- finance Institutions	24
5	Co-operatives (License by NRB)	16
6	NGO(License by NRB)	36
7	Employee Provident Fund	1
8	Citizen Investment Trust	1
Total		264

Source: Website of Nepal Rastra bank

Table 1.2: List of Commercial Banks in Nepal

S.N	Banks	Operation Year in A.D
1	Nepal Bank Ltd.	1937
2	Rastriya Banijya Bank.	1966
3	Agriculture Development Bank Ltd.	1968
4	Nabil Bank Ltd	1984
5	Nepal Investment Bank Ltd.	1986
6	Standard Chartered Bank Ltd.	1987
7	Himalayan Bank Ltd.	1993
8	Nepal SBI Bank Ltd.	1993

9	Nepal Bangladesh Bank Ltd.	1993
10	Everest Bank Ltd	1994
11	Bank of Kathmandu Ltd.	1994
12	Nepal Credit & Commercial Bank Ltd.	1996
13	Lumbini Bank Ltd	1998
14	Nepal Industrial and Commercial Bank Ltd.	1998
15	Machhapuchhre Bank Ltd.	2000
16	Kumari Bank Ltd	2001
17	Laxmi Bank Ltd	2002
18	Siddhartha Bank Ltd.	2007
19	Global bank Ltd.	2007
20	Citizen Bank Ltd.	2007
21	Prime Commercial Bank Ltd.	2007
22	Bank f Asia Nepal Ltd.	2007
23	Sunrise Bank Ltd.	2007
24	NMB Bank Ltd.	2008
25	Development Credit Bank	2008
26	Kist Bank	2009
27	Janata Bank Limited	2010
28	Mega Bank Limited	2010
29	Commerce & Trust Bank Nepal Ltd.	2010
30	Civil Bank limited	2010
31	Century Commercial Bank Limited	2011
32	Sanima Bank	2011

Source: Website of Nepal Rastra bank

1.1.4 Role of Commercial Banks in the National Economy

Commercial banks are the major component in the financial system. They work as the intermediary between depositors and lenders and facilitate in overall development of the economy, with major thrust in industrial development. So, commercial banks are those that accept deposits and finance to the business and project. They provide short term and long- term finance. As per Commercial Bank Act 2031 B.S, “*A commercial Bank means the bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transactions.*”

Commercial Banks play the role of financial intermediary collecting the fund from surplus unit and supplying to deficit units (investors). Commercial banks help the process of saving and of the holding of saving in a socially describe form. Through their advances, bank also help the creation of the incomes which will increase further saving by the community and further growth potentials emerge for the good of economy. In a planned economy, bank emerges for the good economy and makes the entire planned productive process possible by providing funds for all types of production incorporated in the plan, regardless of whether the production is in the public sector or whether the production is undertaken by one type of organization or another. All employment income distribution and other objectives of plan are as far as possible subsumed into production plan which banks finance. The importance of commercial banks is directing the economic activities in the system is indeed overwhelming with the establishment of commercial banks, the flood gates of development promising great hopes for people in the life open.

However, poor economy may be there will be needed for institution, which allows such saving as are currently forthcoming to be invested conveniently and safely and which ensure that they are channeled into the most useful purpose. Therefore, the tasks of commercial banks in underdeveloped countries are almost self-evident. Their purpose is to provide a collecting point for saving of a relatively small average amount from a large number of individual sources so long as the means to utilize saving safely and profitably are not available within an economy, funds will either to be directed aboard, sterilized in useless hoards of cash or precious metals or more likely still will not accumulated all.

1.2 Introduction – Rastriya Banijya Bank

Rastriya Banijya Bank (RBB) is one of the oldest financial institutions of the Nepal. Rastriya Banijya Bank is fully government owned, and is 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 as bank has entered into 46 years of service. RBB provides various banking services to the wide range of customers they include elite to poor individuals, institutional customer, and the customer from industry and business communities. RBB facilitate various services to its customer by providing various types of accounts according to their customer's needs and wants.

Rastriya Banijya Bank has Nepal's most extensive Banking networks with over 133 branches and Any Branch Banking System (ABBS) network to provide maximum service to its customers around all over Nepal boundary and RBB is one of the most successful banks with its branches from rural to urban places of Nepal. RBB has one of the most populated customers from all over the country. Through its widest branches and ABBS networks RBB has been catering modern Banking services to millions of customer throughout the Nepal. Many millions of the customers are enjoying the various services provided by the banks through its 131 ABBS branches.

Rastriya Banijya Bank was transformed in company in 6 - 1 – 2063 B.S. Following this historical transformation the Bank has successfully completed its first ever general assembly on date 31-5-2067 B.S.

Rastriya Banijya Bank has many correspondent arrangements with International Banks all over the world that facilitate trade, finance, bank originated personnel funds transfer and interbank funds transfer via SWIFT. In a bid to promote Remittance Business, RBB works with Western Union and International Money Express (IME), two leading person-to person funds transfer networks which are the most popular with many branches all over the world.

Rastriya Banijya Bank has played crucial role for the development of the financial sectors i.e. Banks, Insurance companies, through its promoters roles. RBB is the second commercial bank of

the country. As the second bank of the country, RBB has been contributing in the trade, industry and even in the agriculture sector of the country. RBB has also contributed in the hydropower sector lately which may have essential outcome in the near future. Among many other sectors, Health and Education sectors are also benefitted through its disbursement.

As Rastriya Baniya Bank is owned by the government, the RBB is also contributing towards achieving national goals as per the Government directives. After fulfilling the national duties the RBB has made significant contribution in the development of the private sector either by loan disbursements or by active participation in the fairs organized by industrial and business communities of the country. The RBB also provides various facilities to the industry or an organization for the easy availability of loans with minimum interest rate and various services for their customers to gain their trust and loyalty.

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). Similarly, the bank has been working as a chief administrator in the Educational Assistance Project (run with the assistance of World Bank) aimed at assisting poor and diligent students learning at higher secondary and bachelor level.

1.3 Statement of Problem

Financial Performance Analysis is the main indicator of the success or failure of any financial institution and commercial banks. Financial condition of the business firm should be sound from the viewpoint of shareholders, debenture holders, financial institution and nation as a whole. The survival of the existing commercial bank and other financial institutions depend upon how they manage their assets and liabilities to maximize their profits with the minimum exposure of assets to risk, and are guided by three important conflicting criteria of solvency, liquidity and profitability. Commercial banks deal with other people's deposits, adequate cash flow, liquidity, and better utilization of assets.

Joint venture Banks and Nepalese Promoters bank are being increased in response to the economic liberalization policies of government. Besides joint venture banks, Nepalese promoters

are also registering numbers of commercial banks. Other institutes offering similar services are finance company, saving & co-operative societies and development banks. These institutions have the tendency to centralize in major cities focusing the activities among the industrialists, traders & entrepreneurs. Because of number of banks & financial institutions that come into existence, in the recent years that creates intense competition in the banking sectors. Banks have been facing the considerable pressure to lower the lending rates, which has been adversely affecting the profitability of banks. The commercial banks are competing with limited opportunity, narrow clientele base and barring investment in the economic activities in the country, the demand for credit has not picked up. Besides, competition in the banking sectors has turned intense and lending opportunity in the good projects is very limited. Government policies on economic liberalization have further intensified the competition. Every banks shows their huge amount of profit & high technology, however, the profit is not the instrument to measure good health of that institution. There should also be the proper examination of their performance in term of overall management of the banks. Financial plans may take many forms, but any good plan must be related to the firms exciting strength & weakness. The strength must be understood if they are to be used to proper advantage & the weakness must be recognized if effective action is to be taken.

Saving mobilization and effective credit management system is must for economic development especially for a country like Nepal where the economic growth rate is very low. In this regard, the good banking system can play a vital role in accelerating the pace of economic development through the mobilization of scattered savings and channeling it in the productive sector of the economy. The adaptation of open and free marker economic and financial policies is believed to generate more savings as well as improve investment opportunities. Adequate infrastructure development in saving mobilization and investment is therefore the demand of the day. Therefore the bank can contribute a lot by savings and investing it in the productive and development sector of the economy of Nepal through bringing in appropriate and new innovative banking technologies. Keeping in pace with the development in the banking industry, the leading commercial banks have been regularly coming up with new and innovative service to attract customers as well as doing its level best to satisfy the existing customers. They have been able to

maintain the position as the market leaders in the banking industry. In compare to other commercial banks, they are getting success in terms of recognize and profitability.

Nepal has become 147 the member of World Trade Organization (WTO). In general, there is much curiosity in people about the opportunities and threats after the accession of membership of WTO. Many questions may arise at once. It is crystal clear that Nepal has to face various challenges in different aspects in coming days. Liberalization in services sector is inevitable. We cannot escape from the ground reality of globalization, widespread acceptance of WTO and necessity of membership in this international trade institution. It should not be opposed to hide our inefficiencies or governance problems. Rather it is right time to find out the impacts, continue and finish the reform process making the service sector really competitive. Otherwise, we will lose the opportunities. Transparency and disclosure practices are must for the sustainable liberalization process and for the growth and development of financial services sector especially commercial banks. In short, SWOT analysis is necessary in this sector.

There are altogether 32 commercial banks among them two banks are state owned and remaining 28 are in private sectors. Recently, Civil Bank, Century Bank and Sanima Bank are operated in the country. They had used customers' oriented marketing concepts as well as modern technology as required by the present competitive environments. The problem of the study on the issues related to the strength & weaknesses of Rastriya Banijya Bank Ltd. Thus, this study is strived to find the answer of the following question:

- What is the position of the Banks in term of liquidity, profitability, turnover, leverage and capital adequacy?
- What is the relation between the major financial indicators and the future trend of the bank?
- How sound the operational result in relation their profitability?
- What was all the overall financial status of the Bank running their business?

1.4 Objectives of the study

The basic objectives of this study is to analyze, examine, compare and interpret the financial performance of Rastriya Baniyya Bank using financial & statistical tools, and to recommend the suitable suggestion for improvement of the bank to management team owners.

Besides this, the following objectives of the study have enlightened the progress and efficiency of the bank:

- To determine the liquidity, profitability, leverage, efficiency of capital adequacy position of the Bank.
- To analyze the financial position of the bank.
- To examine the trend of financial performance of the bank.

1.5 Limitations of the Study

The study has been conducted for the requirement of the master degree in business administration and it has been limited in terms of period of study as well as source & nature of data. Every study has its own limitations. This study is also not an exception. Thus, the limitations of this study are:

- The study covers the period of five years starting from FY 2008/09 to 2012/13 of the bank. Hence conclusions drawn are confined only the above period.
- The study is mainly focused on the financial performance of the bank. It does not cover the other areas of the banks.
- Many financial & statistical tools are used to study the financial performance. But this study has used limited tools.
- The study is carried out on based of secondary data from the annual report of the banks. Similarly, the study focused on Balance Sheet & Profit And Loss A/C maintained by banks & published in annual reports.

1.6 Organization of the Study

The study has been divided into five sequential Chapters and at the end bibliography & appendixes have been maintained.

Chapter One:- deals with Introductory aspects like general background of the study, introduction of a bank, statement of problems, objective of study, and limitation of the study and organization of the study.

Chapter Second:- presents the Review of Literature which contains conceptual review/ review of related books, journals & articles, and past research works.

Chapter Third:- contains Research Methodology which includes research design, population & sample, nature & source of data, data processing procedure, tools & techniques for analysis, period covered and diagram & graphical representation.

Chapter Fourth:- deals with presentation, analysis and interpretation of data which attempt to analysis and evaluate the data with the help of analytical tools, i.e. ratio analysis, correlation analysis and trend analysis and interpretation of the results obtained. Finally,

Chapter Fifth:- contains summary, conclusion and recommendation which includes summary of whole study, main conclusion that flow from the study, and offers suggestions & recommendations for the improvement in future.

CHAPTER II

REVIEW OF LITERATURE

Review of literature means reviewing research studies and other relevant propositions in the related area of the study so that all the past studies, their conclusions and deficiencies may be known and further research can be conducted. (Joshi, 2001)

Review of literature is the review of concepts as well as review of past researches in the related field of study. The purpose of review of research is to know the outcomes of the past research in the proposed areas of studies where similar concept and methodology had been used successfully. Review of literature will help researcher to formulate satisfactory structure of the report. It also helps to familiarize with concepts, characteristics, interpretation and terminology used in the report. (Joshi, 2001) Before doing analysis, it will be better to find out what research studies have been conducted in one's chosen field of study and to receive some ideas for developing a research design. So, here it is attempted to review some fundamental aspects of relevant literature as well as findings of the related previous studies because they provide the foundation to the present study.

The study aims to analyze the financial performance of Rastriya Banijya Bank. For this purpose, it needs to review literatures on the concern area. There are several studies that have been already done, from which the researcher can make clear ideas and concepts. What is others opinion and concepts? What is the outcome of others researches? What has done and written? These all and other related questions are reviewed in this chapter, which is the guideline and inputs of the study. This chapter has been organized into three headings i.e. conceptual framework, review of related articles and review of different master's thesis.

2.1 Conceptual Framework

The concepts derived from the review of text books have presented in this section. It gives an overview of the concept of joint venture banks and commercial bank. In addition, concept of financial analysis & its methods and steps have been described in this section.

Banks are a financial institution that plays a significant role in the development of country. Bank is an intermediary of lender and borrower. It collects funds from surplus unit of the society and provides to deficit unit. A bank is a business organization that receives and holds deposits of funds from others makes loans or intends credit and transfers fund by written orders of deposit.

Traditionally, banks act as financial intermediaries to channel funds from surplus units to deficits units. Unlike other non-banking financial companies, commercial banks do not produce loans and financial innovations to facilitate trade transactions, because of especial role they play in the economy concerned authorities have regulate them. Analysis of banks' financial statement is different from threat of other companies due to especial nature of assets and liabilities.

2.1.1 Concept of Joint Venture Banks

Joint venture means two or more persons or parties or organization carried out their business or work for specific objectives. They use and do work by using each other's resources, technologies or services etc. Joint venture is a single deal, which is jointly undertaken by two or more person to fulfill their objectives such as profit or wealth maximization by optimum use of resources etc. It takes place at that time when they have exceptional profit or advantages in relation to business deal.

Joint venture is a general model for direct foreign investment. A joint venture bank is the joining of forces between for the purpose of carrying out a specific operation. Joint venture is a new organization of two or more independent firms that mutually decide to participate in a business by contributing their resources and capital.

Their objectives is fulfilling the shortage of funds required to invest in development works and to make competence in the field of resources, they share new methods, new technology and services of management and get advantages from foreign investors.

To establish a new bank requires capital, technology, experience and new market etc. For the purpose, a new bank and an established bank enters into technical services agreement in which

old bank provides channel of global network disputes its experts to help the new bank in technical aspects. Sometimes old bank provides management services and investment also.

The joint venture banks are playing, increasing dynamic and vital role in the economic development of the country that will undoubtedly increase with time.

2.1.2 Concept of Commercial Banks

Commercial banks are those financial institutions that accept the deposits from saver and provide short term and long-term loan to productive sector or different forms. They purchase and discount the bills for exchange, promissory notes, exchange foreign currency, issue bank guarantee, bills of exchange, sales and purchase of shares etc. Commercial bank obtain deposit from the customers as saving and distributes it to trade industry and agriculture a need of short-term finance. Principally commercial banks accept deposits and provide loans, primary to business firms, there by facilitating the transfer of funds in the economy.

Commercial bank is a corporation, which accepts demand deposits subjects to check and make short-term loan to business entreaties regardless of the scope of its other services (American Institute of Banking).

Unlike the past where major activities of banks were confined to accepting deposits and providing loans banks today offers a wide range of products and services to its clients like trade finance, remittances, and export credit, tele-banking, ATM debit card, Credit card etc. Banks have made significant stride in the use of modern technology to provide improved services to its clients. Highly qualified, experienced and energetic management team manages banking operations including day-to-day operations and risk management.

Primary functions:

- Collect deposits in various types of accounts.
- Provide credit in the form of various loans, overdraft, and co-financing to industry, commerce, agriculture, export and service.
- Remit funds.

Secondary functions:

- Invest in government securities, treasury bills, etc.
- Deal in foreign exchange.
- Provide agency functions such as collection of cheques, bills, promissory notes, etc.
- Execute standing instructions such as payment of rent, insurance premium, income tax, etc, on behalf of their customers.
- Involve in collection of dividends and interest on shares and debentures.
- Purchase or sale of securities.
- Act as a trustee when so nominated.
- Act as a customer's correspondent or representative in dealing with other banks.
- Underwrite shares floated by government bodies and public bodies.
- Supply trade information and statistical data.
- Involve in LC and guarantee issuance, purchase or sale of TC and circular notes, etc.
- Act as a referee with regard to the financial status of customers.

(Financial Market and Institutions, 2011:32)

2.1.3 Meaning of Financial Statements

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

Financial statements and reports provide information regarding the operating performance, financial health and the direction chosen by the firm to the different users of information.

(Accounting for financial analysis and planning – revised edition)

2.1.4 Concept of Financial Performance

Financial analysis is concerned with analyzing the financial statement of an organization in difference aspect. The term indicates the real picture of an organization by interpreting

financial ratios and analysis, which enables to evaluate and disclose the conditions of an organization. Every stakeholder such as share holders, Trade creditors, long term investors or debtor, customers, employees, tax authorities, managements etc. wants to know about the position or condition of an organization before or after their involvement to the organization. By financial statement analysis they are able to take corrective actions to introduce new policies or to correct their old policies, to know about their strength weakness etc.

An act of assessing financial strengths and weaknesses of an organization through the meaningful search of information contained in financial statements is known as financial statement analysis. In other words, it is an act of interpreting financial statement with specific tool and purpose. In a single sentence, financial statement analysis is an act of selecting, relating and interpreting the information contained in the financial statements with specific purpose and tool. - (Accounting for financial analysis and planning – revised edition)

“It is the process of determining the significant operating and financial statements. The goal of such analysis is to determine the efficiency and performance of the firm’s management reflected in the financial records and reports” - (Hampton, J.J.).

“Financial statement analysis involves a comparison of a 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 weakness”

- (Weston J.F. Besley S. and Bringham, (1996:78).

“Financial performance as a part of financial management is the main indicator of the success or failure of the enterprises. Financial performance analysis can be considered as a heart of the financial decisions”- (Clark John, Chicago)

The main function of financial strength and weakness of a business undertaking by regrouping and analysis of figures contained in financial statements by making comparison

of various components and by examining their content. This can be used to financial managers as basic to plan future financial requirements by means of forecasting and budgeting procedures.

2.1.5 Method of Financial Performance Analysis

An enterprise communicates financial information to users through financial statement and reports. Financial statements are summarized information of the firm's financial affairs, organized systematically. They are the means to present the firm's financial situation to owners, creditors and general public. The preparation of financial statement is the responsibility of top management. Investor and financial analyst also use these statements to examine the firm's performance in order to make investment decisions. So, concerned authority should prepare it very carefully and provide as much as information as possible. The two basic financial statements are prepared for the purpose of external reporting to owner, investor and creditors are:

1. Balance Sheet (*or Statement of Financial Position*)
2. Profit and Loss Account (*or, Income Statement*)

For internal management purpose i.e. for the planning and controlling, much information than contained in published financial statement is needed. The accountant or account officer prepares these financial statements at the end of firm's income year. Balance sheet and income statement undoubtedly provides useful financial data regarding the operation of an enterprise but they fail to present all the useful financial data required for major investing and financial decision by the management. Therefore, another financial statement fund flow statement is also in use. It summarizes the source from which funds have been applied. It is prepared to show additional useful information not covered by the traditional statements.

2.1.6 Limitations of Financial Performance Analysis

From the above discussion, it has been evident that financial performance analysis is of great significance for investor, creditors, management, economist and other parties having interest in business. It helps management to evaluate its efficiency in past performance and take decisions relating to future. 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 infallible index of the future and can never be perfectly helpful for the future forecast and planning.

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.

b) No Substitute for Judgment: - Analysis of financial analysis is a tool to be used by expert analyst to evaluate the financial performance of a firm. That's why; it may lead to faulty conclusion if used by unskilled analyst.

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 index of sufficiency of the management due to under-utilization of fund.

f) Changes 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.

c) Reliability of Figures: - Reliability of analysis depends on reliability of 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 producers adopted by the accountant for the valuation of fixed assets and such other facts.

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 firm as compared to whole industry.

h) Price level change reduces the validity of analysis: - The continuous and rapid changes in value of money, in the present day, economically also reduces the validity of the analysis. Acquisition of assets at different levels of prices makes comparison useless as no meaningful conclusion can be drawn from a comparative analysis of such items relating to several accounting period.

2.2 Review of Related Articles

Some of the journals and articles published by management experts in financial aspects have been reviewed in this section:

Mr. Poudel N.P, in the journal entitled, "*Financial statement Analysis: An Approach to Evaluate bank's Performance*" which was published in RBB Souvenir, 2067 is reviewed as follows:

According to Mr. Poudel, Balance sheet, profit and loss a/c and the accompanying notes are the most useful aspects of the banks. It needs to understand the major characteristics of bank's balance sheet and profit and loss a/c. The bank's balance sheet is composed of financial claims as liabilities in the form of deposits and as assets in the form of loans. Fixed assets accounts form a small portion of the total assets. Financial innovations, which are generally contingent in nature, are considered as off-balance sheet item.

According to Mr. Poudel the principle objectives of analyzing financial statement are to identify: Liquidity, Profitability and solvency. Most of users of the financial statements are interest in assessing the bank's overall performance which is affected by the following factors:

- The structure of Balance sheet and profit and Loss account
- Operating efficiency and internal management system
- Managerial decision taken by top management regarding interest rate, exchange rate, lending policies etc.
- Environmental changes (Technology, Government, Competition and economy).

The other factors to be considered in analyzing the financial statement of bank are to assess the capital adequacy ratio and liquidity position. in the line of adequacy of bank is assessed on the basis of risk weighted assets. In indicates a bank's strength and solvency. Bank facing with

capital adequacy problem may increase capital or reduce assets or reallocate the existing assets structure in order to maintain the desired level of capital base.

Thapa Bahadur Govinda in his articles "*Nepal banking system: can on the mess be managed*" stated that the joint venture banks have been earning a huge profit not from fund based lending but from investing outsidess. That is why, there banks have been less interested to lending aggressively in the domestic market. Economics activities have slowed down in Nepal for several years; however commercial banks have not lowered their lending rate to revitalize the economy. On the contrary, the commercial banks have been discouraging the deposit to get rid of excess liquidity. And new avenue that is investing aboard has been opened for the commercial banks to earn profit rather then motivating then to invest locally.

The above journals & articles focus in the various aspects of the bank's economic environment. What over aspects of the bank the above journals target, they all have to be combinable assessed and kept in strict consideration for effective & efficient financial performance of the banks in the Nepalese economy. -RBB Souvenir, 2067

2.3 Review of Previous Thesis

Various studies have been conducted on the financial performance of commercial banks of Nepal. Many of them are concentrated to Nepalese commercial banks and only few are focused on joint venture bank. In this chapter, different previous studies have been reviewed so that the chances of duplication will be avoided from the present study and some newness can be created in this field of study.

Mr. Paneru Arjun (2010) conducted a thesis on a topic "*Credit Management of Rastriya Banijya Bank Limited*". This thesis tried to provide a clear picture of the RBB before and after new management and financial position, changes in credit management and loan portfolio during the last five fiscal year. This study also helped to know the lending procedures and their settlement process of the bank. It helps to know the rules and regulation regarding the credit management. It also helps to find out the method and mechanism used by the bank while appraisal their credit proposal.

The specific objectives of his research are:

- To analyze the financial performance of the RBB on the basis of liquidity, profitability and assets management.
- To analyze the performing and non performing loan of RBB.
- To analyze the impact of Loan and advances on Net Profit of RBB.
- To assess the credit efficiency of RBB on the basis of interest expenses to total deposit.
- To give suitable recommendation and suggestions for improvement of present performance conditions and solution of different problems.

In this study, the major findings of his study are:

- During the study period, the bank registered a significant increase in deposits, loans and advances and profitability. As compared of the total deposits in the FY 2007/08 was Rs 50464 million which is 9% more than last FY 2006/07. The growth% of the deposit during the study period was 1.85, 1.72, 5.26, 7.39 and 9.25 % respectively. The growth rate of the loan and advances of the bank was -2%, -6%, 8%, -14% and 7% was observed during the study period.
- The net profit of the bank over the study period was observed in decreasing trends. The growth rate of the net profit is increased by 121.49%, 78.50%, 27.22%, 20.33% and 5.65 % over the study period. The bank was in loss and shown in very critical situation before taking the NMT. After took over the NMT the bank was turned into profit oriented bank. The NPL of the bank was reached to more than 60 % before the NMT. After restructuring the bank is succeeded to turn into positive earning than loss and reducing the NPA to the below 30 % during the study period and the data shows that the NPA of the bank is in reducing trends
- The average interest income to loan and advances of the bank is 0.105, seeing the scenario of the commercial bank it is satisfactory level of the income
- Average loan and advances to total assets of the bank during the study period is observed 0.57 and it can be concluded that the ratio is above 50% indicates the good lending performance. Here the bank should focus to increase loan and advances to total asset ratio to increase lending performance. From the mean point of view, it can be concluded that

the higher mean ratio indicates the good short term lending performance.

- Increased ratio indicates the increased volume of non-performing loans and vice versa. Loan loss provision of RBB is decreasing trend, so the decreasing loan loss ratio indicates efficient credit policy and gradual increment on the performance of the bank.
- Correlation Coefficient between the loan and advances to net profit of the bank is 0.450. It indicates high degree of positive relation between loan and net profit. Loans have high influence on net profit of the bank. Effective loans management directly affects to net profit of the bank.
- Correlation coefficient between non-performing loan and loans of RBB is 0.663; it indicates that non-performing loans and loans were positively related with each other. Coefficient of determination was found 0.44 which indicates that 44% of total change in loans management has been negatively determined by non-performing loans. Loan management has been negatively influenced by non-performing loans. But it is improving in lending procedures of the bank seems will be good hereafter of the study period.
- Coefficient of determination of the bank is 0.2025 which indicates that 20.25% of the total variation in the dependent variable net profit has been explained by the independent variable loans. Thus, it can be concluded that loans is a strong determinant of net profit. Therefore management should take seriously to loan to achieve objective of the bank.

The recommendations of this study are:

- The bank should try to increase the loan and advances to deposit; High ratio shows the capability of bank on mobilizing its total deposit as loan and advances.
- Banking sector is seriously affected by the non-performing loans. All banks are not far from this above fact. If non-per forming loan increases, the overall banking business will be affected.
- Banks could do better by offering modern banking facilities and new product for the development of banking industry.
- Provision on Bad loan should be maintained as per the directives of Nepal Rastra bank.
- Borrowers do not pay the bank loan in due date is the major problem of the bank. Since the bank is not the charitable institution to donate funds to the borrowers, it should improve in the recovery of loan by restructuring and rescheduling the loan and reinvesting

the resource which will generate the income of borrower and ultimately increases in paying capacity of the bank loan.

Manandhar Leena (2011) conducted a thesis on a topic “Loan Management in Rastriya Banijya Bank”. This thesis tried to identify the productivity of their funds in the RBB. The study also helps the management of the bank to analyze the effectiveness of its loan management and policies of the bank in comparison to competitors. The study will also be equally significant to the central bank to formulate the new credit policy, as there are certain loopholes as a result of which the non-performing assets has been regarded as the main problem of the commercial banks in these days.

The main objective of this study is to analyze, examine and interpret the loan management of RBB. The other specific objectives of the study are as follows;

- To evaluate loan investment and loan recovery in relation to loan outstanding
- To measure the growth rate of loan outstanding, loan recovery and loan investment.
- To analyze the non performing loan of the banks and the provision made for default loan.
- To measure the deposit mobilization rate on loan and advances and the relationship of loan and advances with net profit.
- To estimate the value of loan and advances for the next four year periods

The major findings that have been drawn from this study are as follows:

- The statistical analysis revealed that there existed insignificant relationship between net profit and loan and advances, between loan and advances and total deposit, between loan and advances and total investment, and between non performing loan and loan and advances.
- Almost two third of the deposit had been mobilized in granting loan and advances. The deposit mobilization rate of RBB on loan was 61.83% in average.
- Since the loan investment per year represented only 12.79% of the total loan outstanding in average, it can be said that RBB necessitates strong recovery policy to decrease the outstanding amount.
- The average collection for the ten year was 6.04% of the total loan outstanding. It

also indicates that RBB needs strong recovery policy.

- The non performing loan covered 41.05% of the total loan in average. This coverage indicated that the loan on RBB was much risky. Further, RBB made 36.68% of the total loan as loan loss provision in average.

On the basis of major findings drawn, the following recommendations have been provided for the enhancement of loan management of RBB

- Short term loan must be largely distributed. This will help to utilize small and local resources.
- Actual loan investment and collection is always lower than the targeted investment. Therefore, the bank should maintain the investment and collection according to the target, so if necessary, it should restructure in loan investment, outstanding and collection as well as all aspect of these three purposes.
- Supervision and inspection related to loan must be unbiased, strict and efficient.
- Non-performing loan of RBB must be at least on marginal level. Similarly, RBB must segregate more proportion of loan to its commercial banking sector by dropping unnecessary program and project.
- The heavy reliance on collateral imposes high costs on borrowers and lenders. Therefore, for collateral to work properly, RBB must be able to perfect the collateral and to dispose of quickly.
- RBB is government-owned banks. As a result, the credibility of this bank on the comparison of private banks is more on customers. It would be better if the bank recognizes this strength and perform effectively to have better prospect in the future.
- In case of borrowers, who are able but do not repay their due loans, the bank should examine the borrowers past repayment record and corrective action must be taken immediately. In the case of borrowers, who are really unable to repay their loans, repayment schedule must be rearranged after scrutinizing the exact cause of inability.

2.4 Research Gap

Rastriya Banijya Bank is the second commercial bank of Nepal and thus has significant contribution to increase the revenue of the government and to buttress the national economy. As a result, the smooth operation of RBB is crucial. For such, RBB should have sound earning capacity. Since, interest income from loan is the major source of income of each commercial bank, a bank should be perfect in managing loan. The bank should also manage its portfolio of investment properly to earn maximum profit.

Investment in different sectors is made on the basis of the directives and circulars of Nepal Rastra Bank as well as the investment guidelines and policy of the concerned commercial bank. The directives of NRB change over time. NRB makes necessary amendments in prevailing directives and circulars and communicates to commercial banks. Commercial banks should follow these directives and circulars. Furthermore, their own investment guidelines and policies should be in line with NRB directives and circulars. So, the up to dated study over the change of time frame is major concern for the researcher and concerned organization as well as industry as a whole. This study covers the more recent financial data, NRB circulars and guidelines than that of studies previously conducted.

The review of relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make the study meaningful and purposive. Various researches have been conducted on portfolio analysis, lending practice and credit management commercial banks. Most of the researches are conducted relating to lending only. By covering the area of investment as well as financial performance analysis, this research hopes to fulfill this gap.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Introduction

Research Methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it, the various sequential steps that are generally adopted by the researcher, studying his research problem among with certain objectives in view are studied. A research methodology helps us to find out accuracy, validity and suitability. Research is a systematic inquiry of any particular topic and methodology is the method of doing research in a well manner. Hence research methodology is the systematic study of research problem that solves them with some logical evidence. The research methodology adopted in the present study as discussed as below:

3.2 Research Design

Research design is the specification of methods and procedures for acquiring the information needed. It is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. According to C.R. Kothari, “Research design is a plan, structure and strategy of investing conceived so as obtain answer to research question and to control variances”. Research design refers to the framework of the study. It is the blue print for any kinds of studies.

Research design is plan for collection and analysis of data. The purpose of design is to provide answer to research questions and control variance. Some financial & statistical tools will be used to examine the facts and descriptive techniques to evaluate the financial performance of the bank. This study aims to find out the financial performance of Rastriya Banijya bank. The research design used for is basically a historical, empirical, descriptive-cum-analytical research methodology.

3.3 Population and Sample

Currently, there are 32 commercial banks in Nepal. So this study chooses the Rastriya Banijya bank as sample for study. The financial statements of latest five years (i.e. from 2008/09 to

2012/13) have been taken as sample data for analyzing the financial performance. This bank is chosen because as it account for the considerable market share of banking sector.

3.4. Nature and Sources of Data

The study is mainly based on secondary data. Data relating to financial performance of this bank is directly obtained from concerned bank. The supplementary data were obtained from unpublished official records of a bank, bank's staff, booklets, journals and other sources viz. Security Exchange Center and Nepal Rastra Bank.

3.5 Tools and Techniques of Analysis

The data collected from different sources are recorded systematically and identified. The available information is grouped as per the need of the research work in order to meet research objectives. The collected data are presented in appropriate forms of table and charts. For analysis purpose different kinds of appropriate mathematical, statistical and financial tools have been applied. Further to represent the data in simple form diagrams and graphs have also been used.

3.5.1. Financial Tools

Financial tools are those, which are used for the analysis and interpretation of financial data. These tools can be used to get the prescribe knowledge of business which in turn are fruitful in exploring the strength and weakness of the financial policies and strategies. In order to meet the purpose of study, following financial tools have been used.

3.5.1.1. Ratio Analysis

Ratio Analysis is the widely used tool of financial analysis. A ratio is simply one number expressed in terms of another and as such it expresses the numerical or quantitative relationship between two variables. Ratio analysis reflects the relative strengths and weakness of any organization and also indicates the operating and financial growth of the organization. "Ratios help to summarize large quantities of financial data and to make quantitative judgment about the firm's financial performance. The relationship between two accounting figures expressed mathematically is known as financial ratios" Even though there are many ratios, only those ratios

have been calculated which are related to the subject matter. Following ratios have been computed and analyzed in this study.

3.5.1.1.1. Liquidity Ratios

The liquidity refers the liquid assets of a firm or those types of assets, which can be converted into cash easily. And liquidity ratio measures the ability of a firm to meet its short-term obligations. The ratio reflects its short-term solvency capacity. It shows the capacity of a firm to pay interest and principal to suppliers of short-term credit and trade creditors. It is extremely essential for a firm to be able to meet its current obligations as they become due.

Depending on the special nature of current assets and current liabilities of the bank the following ratios are calculated.

a) Current Ratio

Current ratio is also known as Working capital ratio. The ratio is to evaluate or to indicate the current solvency position of the organization. The current ratio (CR) represents a margin of safety for creditors at bad situation. It is the ratio of total current assets to current liabilities. Financial norms say that 2:1 is the optimal position of liquidity and profitability point of view. If the current ratio of the firm is less than 2:1 the solvency position of the firm is not good. The cash may not be available to pay current liabilities. If the ratio of the firm is under financial standard, the firm's liquidity position is measured as better. Higher ratio of the firm is measured as higher liquidity, i.e. meant the firm has excessive investment in current assets that do not produce a return so more than financial standard is poor utilization of assets. It is calculated by dividing current assets by current liabilities, which is expressed as follows:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

In which current assets represents those assets which can be converted into cash within an accounting period such as cash balance, balance with NRB, bank balance, investment non banking assets, other assets. Current liabilities refers to short term maturing obligation such as borrowings, deposits, bills payable, proposed and dividend payable, income tax liabilities, and other liabilities.

b) Quick Ratio

Quick ratio established a relationship between quick asset and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonable soon without a loss of value cash is the most liquid asset. Other assets which are considered to be relatively liquid are included in quick assets are book debts and marketable securities. This quick ratio can be calculated by dividing the total of quick assets by total current liabilities.

$$\text{Quick Ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}}$$

Here, Quick assets include all current assets except prepaid and stock.

c) Cash and Bank Balance to Current Assets Ratio

This ratio is used to find out the ability of banks to pay total call made on current deposit. Cash and Bank Balance is highly liquid assets than others in current assets proportions. Higher ratio indicates the bank's ability to meet the daily cash requirement of their customer deposit and vice versa. But higher ratio is not preferred as the bank has to pay more interest in deposit and will increase the cost of fund. Lower ratio is also very risky as the bank may not be able to make the payment against the cheque presented by the clients. So, the bank must maintain such ratio in such way that it should have sufficient cash for the clients demand against deposits when required and less interest is required to pay against the cash deposit. These ratios not only analyzed the use of total resources of the firm but also the use of resources component of total assets. The formula to obtain this ratio is;

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

Cash and Bank balance includes cash in hand, foreign cash in hand, clearing cheque and other cash items, balance with NRB current account, other domestic bank current account and balance held in foreign banks.

d) Cash and Bank Balance to Total Deposits Ratio

The ratio is employed to measure whether cash & bank balance is sufficient to cover its current call margin including deposits. It shows the proportion of total deposits held as most liquid

assets. High ratio shows the strong liquidity position of the bank. But too high ratio is not favorable for the bank because it produces adverse effect on profitability due to idleness of high-interest bearing fund. The ratio is calculated using following formula;

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

Total deposit consists of both interest bearing deposits & non-interest bearing deposits i.e. current deposits, saving deposit, fixed deposit, money at call and short notice and other deposits.

3.5.1.1.2 Efficiency /Activity / Turnover Ratios

The fund of creditors and owners are invested in various assets to generate income and profit. Better the management of assets, the larger the amount of income. Activity ratio measures the degree of effectiveness in use of resources of fund by an entrepreneur. This ratio is also called turnover ratio because they indicate the number of times the assets are being converted or turnover into income. In other words, turnover ratios, also known as utilization ratios or activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. They measure how effectively the firm uses investment and economic resources at its command. High ratio depicts the managerial efficiency in utilizing the resources. They show the sound profitability position of the bank. Low ratio is the result of insufficient utilization of resources. However, too high ratio is also not good enough as it may be due to the sufficient liquidity. Depending upon special nature of assets and sales of the banks, following ratios are tested.

a) Loans and Advances to Total Deposit Ratio

This ratio indicates the proportion of total deposits invested in loans and advances. It is calculated to find out how the banks are successfully utilizing their total deposits for profit generating purpose on loan and advances. High ratio means the greater use of deposit for investing in loans and advances. In other words, Greater the ratio implies the better utilization of outsiders fund (Total Deposits). But very high ratio shows poor liquidity position and risk in loans. On the contrary, too low ratio may be the cause of idle cash or use of fund in less productive sector. The ratio is computed by dividing total loans and advances by total deposit liabilities.

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

Loan and advanced consist of loans, advances, cash credit, overdrafts, and foreign bills purchased and discounted.

b) Loans and Advances to saving Deposit Ratio

The ratio indicates how many times the short-term interest bearing deposits are utilized for generating the income. Saving deposits are the short-term interest bearing liabilities. Loans and advances are the major sources of investment to generate income in commercial banks. Loans and advances to saving deposits ratio is measured to find out how many time of fund is used in loan and advances against saving deposit. High ratio indicates greater utilization of the saving deposits in advancing loans. The ratio is calculated dividing the amount of loan and advances by total deposit in saving account. The following formula is used to calculate this ratio as:

$$\text{Loans and Advances to Saving Deposit Ratio} = \frac{\text{Loans \& Advances}}{\text{Saving deposits}}$$

c) Loans and Advances to Fixed Deposits Ratio

The ratio indicates what proportion of fixed deposits has been used for loans and advances. Loans and advances are the major sources of investment to generate income by the commercial banks. Fixed deposits are long-term interest-bearing obligation. It carries high rate of interest. Funds collected are needed to invest in such sectors, which yield at least sufficient return to meet the obligations. The ratio measures the extent to which the fixed deposits are utilized for the income generating purpose. High ratio means utilization of fixed deposit in form of loans. The ratio is calculated by dividing loans and advances by fixed deposits.

$$\text{Loans and Advances to Fixed Deposits Ratio} = \frac{\text{Loans \& Advances}}{\text{Fixed deposits}}$$

3.5.1.1.3 Profitability Ratios

A company should earn profits to survive & grow over a long period of time. It is a fact that sufficient profit must be earned to sustain the operations of the business; to be able to obtain funds from investors for expansion and growth; and to contribute towards the social overheads for the welfare of society. The profitability ratios are calculated to measure the operating

efficiency of the company. Management of the company, creditors and owners are interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a reasonable return from their investment. Profitability ratios are calculated to measure the operating efficiency of the company. Various profitability ratios are calculated to measure operating efficiency of business enterprises. Though profitability ratios the lender & investors want to decide whether to invest in particular business or not. To meet the objective of the study, following ratios are calculated in this group.

a) Return on Total Asset

The ratio is measuring the profitability of funds invested in the bank's assets. In other words, it measures the efficiency of bank in utilization of the overall assets. High ratio indicates the success of management in overall working fund i.e. total assets. It is also called net profit or loss to working fund i.e. total assets ratio or simply called ROA. The firm has to earn satisfactory return on assets or working funds otherwise its survival is threatened. High ratio indicates the success of management in overall operation. Lower ratio means insufficient operation of the bank. It is calculated by dividing net profit after tax (NPAT) by total assets of the bank

$$\text{Return on Assets} = \frac{\text{Net Profit After tax (NPAT)}}{\text{Total Assets}}$$

Net profit refers to the profit after deduction of interest and tax. Total assets mean the assets that appear in asset side of balance sheet.

b) Return on Net Worth

The ratio is tested to see the profitability of the owner's investment. It reflects the extent to which the objective of business is accomplished. All commercial banks have its main objective to earn the maximum profit, so that they can run smoothly and get the fame. For that they must mobilize resources and its equity capital properly. Equity capital is owned capital of banks. The ratio is also called net profit (or loss) to net worth or net profit (or loss) to shareholder's equity or return on shareholder's equity or simply called ROSE. The ratio is of great interest to present as well as prospective shareholders and also of great significance to management, which has the

responsibility of maximizing the owner's welfare. So, higher ratio is desirable. It is computed by dividing net profit after tax by net worth.

$$\text{Return on Net Worth} = \frac{\text{Net Profit After tax (NPAT)}}{\text{Net Worth}}$$

Net worth refers the owner's claim on banks. It can be find out subtracting the total liabilities from total assets. It includes shareholder's reserve and share capital.

3.5.1.1.4 Capital Structure/Leverage/Solvency Ratios

Short-term financial positions refer to the liquidity position of the firm. Long-term financial position refers to the capital structure or financial leverage. Long-term financial position of the firm is judged by the capital structure ratio or leverage ratio or structure ratio. The leverage ratio or structural ratio is calculated to measure the financial risk and the firm's ability of the using for debt the benefit for the shareholders. Leverage refers to the ratio of debt to equity in the equity in the capital structure of the firm. Debt & equity are long-term obligation and remaining parts in the ability side of the balance sheet are termed as short –term obligation. Both types of obligations are required in forming the capital structure of the firm. The long-term financial position of the firm is determined by leverage or capital structure. Debt is more risky from the form the firm's point of view. The firm has legal obligation to pay interest to debt holders irrespective of the profit made or losses incurred by the firm. But use of debt is advantageous to shareholders in two ways:

- They can retain control on the firm with a limited stake.
- Their earning is magnified when rate of return of the firm on total capital is higher than the cost of debt.

Following ratios are calculated to test the optimality of capital structure.

a) Debt-Equity Ratio

This ratio is calculated to find out the proportion of the outsider's fund to owner's fund to finance the total assets. It is also called the proportion of outsider's claim and insider's claim on total assets of the banks. It is also called debt to net worth ratio. The ratio shows the mix of debt and equity in capital. It measures creditors' claims against owners'. High ratio shows that the

creditors' claims are greater than those of owners. Such a situation introduces inflexibility in the firm's operation due to the increasing interference and pressures from creditors. Low ratio implies a greater than claim of owners than creditors. In such a situation, shareholders are less benefited if economic activities are good enough. Therefore, the ratio should neither be too high nor too low. The ratio is calculated by dividing total debt by shareholder's equity.

$$\text{Debt-Equity Ratio} = \frac{\text{Total Debt}}{\text{Shareholder's Equity}}$$

Total debt consists of all interest-bearing long-term debts. These include loans and short-term debts. These include loans advances taken from other financial institutions, deposits carrying interest etc. Shareholder's equity includes paid-up capital, reserves and surplus and undistributed profit.

b) Debt- Assets Ratio

This ratio shows the contribution of creditors in financing the assets of the bank. It is the proportion of debt on the total capital or proportion of outsider's claim on total assets. Greater proportion of the banks assets has been financing through outsider's funds. High ratio indicates that the greater portion of the bank's assets has been financed through outsider's fund. The ratio should neither be too high per too low. The ratio can be calculated by dividing total debt by total assets.

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

c) Interest Coverage Ratio

This ratio is calculated to find out the banks ability to meet interest obligation. The ratio also known as times interest-earned ratio is used to test the debt servicing capacity of the bank. It shows the number of times the interest charges are covered by funds that are ordinarily available for their payment. It indicates the extent to which the earning may fail without causing any embarrassment to the firm regarding the payment of interest. Higher ratio is desirable, but too high a ratio indicates the firm is very conservative in using debt. A lower ratio indicates

excessive use of debt or insufficient operation. The ratio calculated by dividing net profit before deduction of interest and tax by interest charges.

$$\text{Interest Coverage Ratio} = \frac{\text{Earning Before Interest \& Tax(EBIT)}}{\text{Interest Charged}}$$

EBIT or Earning Before Interest and Tax Net Profit Before Interest and Tax (NPBIT) is amount of operating profit before deduction of the amount of interest and tax.

3.5.1.1.5 Capital Adequacy Ratio

Capital adequacy ratio measures whether the firm has maintained sufficient capital or not. In other words, it helps to decide whether the existing capital is adequacy or there is the not need of reforms. The ratio is tested to ensure the safety and stability of the firm in long run. Over capitalization and under capitalization both have adverse effect on profitability of the firm. If the capital is excess, it remains idle. If the capital is insufficient, the firm may not be able to grasp the opportunity from potential profitable sectors. Therefore, the commercial banks have been directed to retain sufficient ratio by the central bank. Here, capital fund refers to the core capital and supplementary capital. Commercial banks cannot declare and distribute dividend until they meet capital adequacy ratio. Under this group, following ratios are tested.

a) Net Worth to Total Deposit Ratio

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

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

b) Net Worth to Total Assets Ratio

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

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

3.5.1.1.6 Assets Quality Ratios

As explained earlier, turnover ratios measure the turnover of economic resource in terms of quality. Only the investment is not of great significance, but the return from them with minimum default in payment by debtors is significant. A firm may be in a state of enough profit and through unable to meet liabilities. Therefore, asset quality ratios are intended to measure the quality of assets contained by the bank. Following ratios are dealt in this group.

a) Loan Loss Provision to Total Income Ratio

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

$$\text{Loan Loss Provision to Total Income Ratio} = \frac{\text{Loan Loss Pr ovision}}{\text{Total Income}}$$

b) Loan Loss Provision to Total Deposit Ratio

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

$$\text{Loan Loss Provision to Total Deposit Ratio} = \frac{\text{Loan Loss Pr ovision}}{\text{Total Deposits}}$$

3.5.1.1.7 Others Indicators

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

a) Earning Per Share (EPS)

Earning Per Share refers to the income available to the common shareholders on per share basis. It enables us to compare whether the earning based on per share basis has changed over past period or not. The investors favor high EPS. It reflects the sound profitability position of the bank. It is obtained by dividing earning available to common shareholders by number of equity shares outstanding.

$$\text{Earning Per Share} = \frac{\text{Earning Available Common Shareholder (EAC)}}{\text{No of Equity Share Outstanding}}$$

Earning available to common shareholders is the amount of that profit which can be found after deducting the amount of interest to the outsiders' fund, dividend to the preferred shareholders and income tax to the government. For this purpose, it is net profit after tax.

3.5.2 Statistical Tools

Statistical tools are the mathematical techniques used to facilitate the analysis and interpretation of numerical data. "Statistical Analysis is one particular language, which describes the data and makes possible to talk about the relations and the difference of the variables" (Gupta, 1997: 21). Following statistical tools have been used in this study.

3.5.2.1 Measures of Central Tendency

Measures of central value are simple statistical treatments of distribution that attempts to find the single figure to describe the entire distribution. It is the best possible value of a group of variables that singly represents to whole group. In the statistical analysis the central value falls with in the approximately middle value of the whole data. Among the several tools of measuring central value, the mean has been used in this analysis where and when necessary. The mean is the arithmetic average of a variable. Arithmetic Mean of a series is given by

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N}$$

Where, n = number of observation.

3.5.2.2 Standard Deviation

Standard deviation (S.D.) is the most popular and the most useful measure of dispersion. It indicates the ranges and size of deviance from the middle or mean. It measures the absolute dispersion. Higher the value of standard deviation higher is the variability and vice versa. It is the positive square root of average sum of squares of deviations of observations from the arithmetic mean of the distribution. It can be calculated as follows:

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}}$$

Where, n= number of observation in series X

3.5.2.3 Coefficient of Variation

The percentage measure of coefficient of standard deviation is called coefficient of variation. The less is the C.V the more is the uniformity and consistency and vice versa. Standard deviation gives an absolute measure of dispersion. Hence where the mean value of the variable is not equal it is not appropriate to compare two pairs of variables based in S.D. only. The coefficient of variation measures the relative measures of dispersion, hence capable to compare two variables independently in terms of their variability.

$$\text{Coefficient of Variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100$$

3.5.2.4 Correlation Coefficient (r)

Correlation refers to the degree of relationship between two variables. Correlation coefficient determines the association between the dependent variable and independent variable. If between the variables, increase or decrease in one cause increase or decrease in another, then such variables are correlated variables. “Correlation may be defined as the degree of linear relationship existing between two or more variables. Two variables are said to be correlated when the change in the value of one is accompanied by the change of another variable” (Sthapit, et al., 2003: 362) There are different techniques of calculating correlation coefficient. Among various techniques we have used Karl Pearson coefficient of correlation. It is calculated as follows:

$$\text{Correlation Coefficient (r)} = \frac{\sum xy}{N\sigma_x\sigma_y}$$

Where,

$$x = X - \bar{X} \quad y = Y - \bar{Y}$$

σ_x = Standard Deviation of Series X

σ_y = Standard Deviation of Series Y

N = No. of pairs of observation

On simplification of the equation of r, we obtain the following formula for computing r.

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}}$$

The Karl Pearson Coefficient of correlation always falls between -1 to $+1$. The value of correlation in minus signifies, the negative correlation and in plus signifies the positive correlation. If,

$r = 0$, There is no relationship between the variables

$r < 0$, There is negative relationship between the variables

$r > 0$, There is positive relationship between the variables

$r = +1$, The relationship is perfectly positive.

$r = -1$, The relationship is perfectly negative.

The reliability of the correlation coefficient is judged with the help of probable error (P.E). It is calculated as follows:

$$\text{Probable Error (P.E.)} = \frac{0.6745(1-r^2)}{\sqrt{N}}$$

Where, r = correlation coefficient

N= No. of pairs of observation.

If $r > 6 \text{ P.E}$, then the correlation coefficient is significant and reliable.

If $r < \text{P.E}$, then the correlation coefficient is insignificant and there is no evidence of correlation.

In this study, following relationship is calculated;

- Total Deposits and Loan and Advances
- Total Deposits and Net Profit
- Loan and Advances and Net Profit
- Performing Assets and Net Profit
- EPS and MVPS

3.5.2.5 Trend Analysis

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

The straight-line trend implies that irrespective or decrease by absolute amount per unit of time. The linear trend values form a series in arithmetic progression.

The tools that are used to show gradually increase or a decrease of variable over a period of time is known as trend analysis. With the help of trend analysis the tendency of variables over the period can be seen clearly.

Mathematically, $Y = a + bx$

Where,

Y = the value of dependent variable

a = Y-intercept, b = slope of the trend line

X = value of the independent variable i.e. time = Year-2010/11 (with regard to the data used in the study)

Normal equations fitting above equation are;

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

$$\Sigma XY = a\Sigma X + b\Sigma X^2 \quad \text{Since } \Sigma X = 0 \quad a = \frac{\Sigma Y}{N}, b = \frac{\Sigma XY}{\Sigma X^2}$$

For this study, the following variables are used:

- Total Deposits
- Loan and Advances
- Net Profit
- Investment

3.5.2.6 Diagrammatic & Graphical Representation

Diagrams and graphs are visual aids that give a bird's eye view of a given set numerical data. They present the data in simple and readily comprehensive form. Diagrams are primarily used for comparative studies and can't be used to study the relationship between the variables under study. This is done through graphs.

3.6 Data Processing Procedure

The data analysis tools are applied as simple as possible. Data obtained from the various sources cannot directly be used in their original form. They need to further verified and simplified for the purpose of analysis. Data, information, figures and facts so obtained need to be checked, rechecked, edited and tabulated for computation. According to the nature of data, they have been inserted in meaningful Tables, which have been shown in appendices. Homogeneous data have been sorted in one Table and similarly various Tables have been prepared in understandable manner, odd data are excluded from the Table. Data have been analyzed and interpreted using financial and statical tools. The detail calculations that cannot be shown in the body part of the report are presented in appendices at the end of the report.

3.7 Period Covered

This study covers a period of five years from FY 2008/09 to 20012/13 of the three commercial banks. The analysis is done on the basis of data covering five years.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

This Chapter deals with the analysis and interpretation of data following the research methodology dealt in the third chapter. In course of analysis, data gathered from the various sources have been inserted in the tabular form according to their homogeneous nature. The various tables prepared for the analysis purpose have been shown in annexes. Using financial and statistical tools, the data have been analyzed. The result of the analysis has been interpreted keeping in mind the conventional standard with respect to ratio analysis, directives of NRB and other factors while using other tools. Moreover, financial performance of the sampled bank (RBB) has especially been analyzed in cross sectional manner. Specially, the chapter includes interpretation of the ratio Analysis, Correlation Analysis and Trend Analysis.

4.1 Ratio Analysis

Financial tools are an instrument that helps to analyze and interpret the financial performance of an organization. In other words, financial tools help to analyze the strength and weakness of a firm. Ratio analysis is a most important part of financial analysis, which is used in this study that gives us financial performance of the bank. It helps to show the quantities relationship between two numbers. It may be expressed in terms of proportion, rates and times or in percentage. It is used to compare a firm's financial performance and status with other firms. The following ratios have been used, which helps to analyze, interpret and find out the actual financial performance of any organization.

- i) Liquidity Ratios
- ii) Efficiency/Activity/Turnover Ratios
- iii) Profitability Ratios
- iv) Capital Structure/ Leverage/ Solvency Ratios
- v) Capital Adequacy Ratios
- vi) Assets Quality Ratios
- vii) Other indicators

4.1.1 Liquidity Ratios

Liquidity ratios have been employed to test the ability of the banks to pay immediate liabilities (i.e. short term liabilities). These include current ratio, quick ratio, cash & bank balance to current assets ratio, cash & bank balance to deposit (except Fixed Deposits) ratio, cash & bank balance to total deposit ratio, NRB balance to current and saving deposit ratio and NRB balance to Fixed deposits ratio.

4.1.1.1 Current Ratio

Table 4.1
Current Ratio (Times)

in Rs

Rastriya Banijya Bank Ltd				
FY	Current Assets	Current Liabilities	Working Capital	Ratio
2008/09	27,805,467,748	58,598,196,137	-30,792,728,389	0.47
2009/10	32,939,808,367	63,359,147,818	-30,419,339,451	0.52
2010/11	38,262,914,717	68,742,430,877	-30,479,516,160	0.56
2011/12	52,822,801,744	80,675,240,365	-27,852,438,621	0.65
2012/13	54,450,343,591	77,867,475,947	-23,417,132,355	0.70
Mean				0.58
SD				0.0841
CV				14.5%

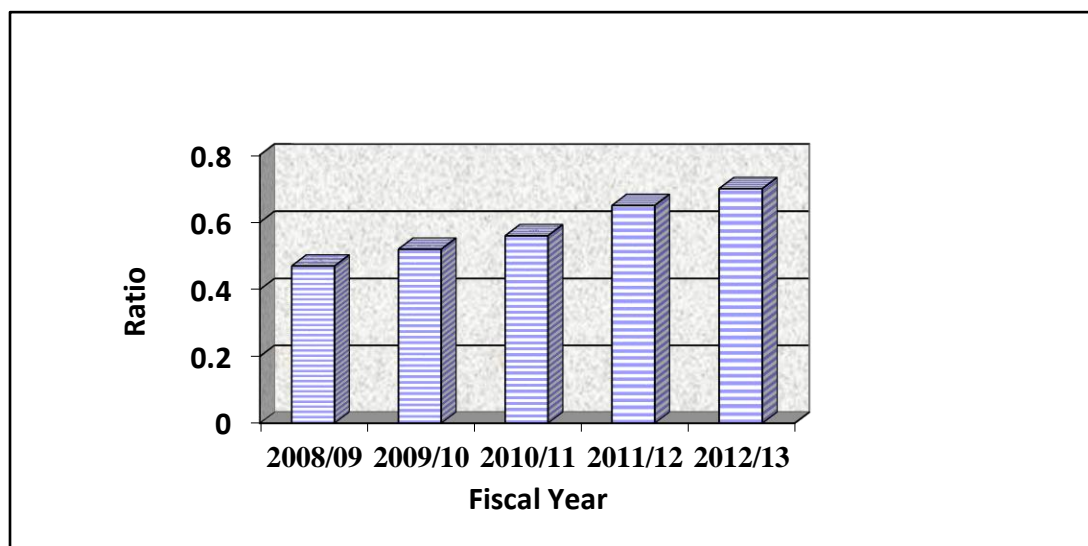
Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

Table 4.1 clearly shows that current ratio of RBB for the study period remained 0.47, 0.52, 0.56, 0.65 & 0.70 times respectively from the FY 2008/09 to FY 2012/13. Mean of the ratios appeared 0.58 times. Standard deviation 0.0841 and CV appeared 14.5%.

It signifies that the bank have poor liquidity position. The bank may face the problem of working capital if it needs to pay the current liabilities at demand. Delay in payment of liabilities may lead the banks to lose their goodwill. It will have the problem in winning the confidence of current depositors and short-term lenders. For commercial banks, it is very important to maintain a good balance between liquidity and profitability. If banks keep large portion of money under its

control it affects in profit because idle money earn nothings but other hand the bank should have enough cash balance with it to fulfill the requirement of short-term liabilities.

Figure 4.1
Current Ratio



Source: Table 4.1

4.1.1.2 Quick Ratio

Table 4.2
Quick Ratio (Times)

in Rs

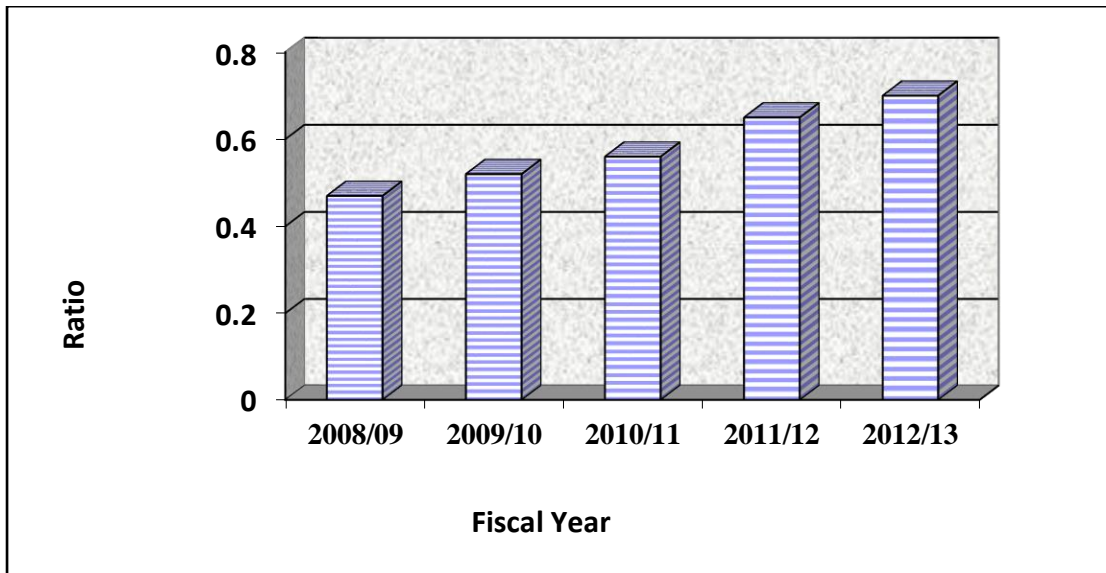
Rastriya Banijya Bank Ltd			
FY	Quick Asset	Current Liabilities	Ratio
2008/09	27,779,864,954	58,598,196,137	0.47
2009/10	32,907,745,922	63,359,147,818	0.52
2010/11	38,234,894,539	68,742,430,877	0.56
2011/12	52,795,623,069	80,675,240,365	0.65
2012/13	54,423,800,068	77,867,475,947	0.70
Mean			0.58
SD			0.0841
CV			14.5

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

Table 4.2 describes that quick ratio of RBB for the study period-remained 0.47, 0.52, 0.56, 0.65 & 0.70 times respectively from the FY 2008/09 to FY 2012/13. Mean, SD & CV were 0.58 times, 0.841 and 14.5% respectively.

The standard quick ratio is 1:1 i.e. quick assets must be equal to current liabilities. The bank showed poor liquidity position because of quick ratios of every year was below than standard form. It indicates that it have very weak position of immediate payment of short-term obligation (i.e. current liabilities) because current liabilities were greater than that of quick assets.

Figure 4.2
Quick Ratio



Source: Table 4.2

4.1.1.3 Cash and Bank Balance to Current Assets Ratio

Table 4.3

Cash & Bank Balance to Current Assets Ratio

in Rs

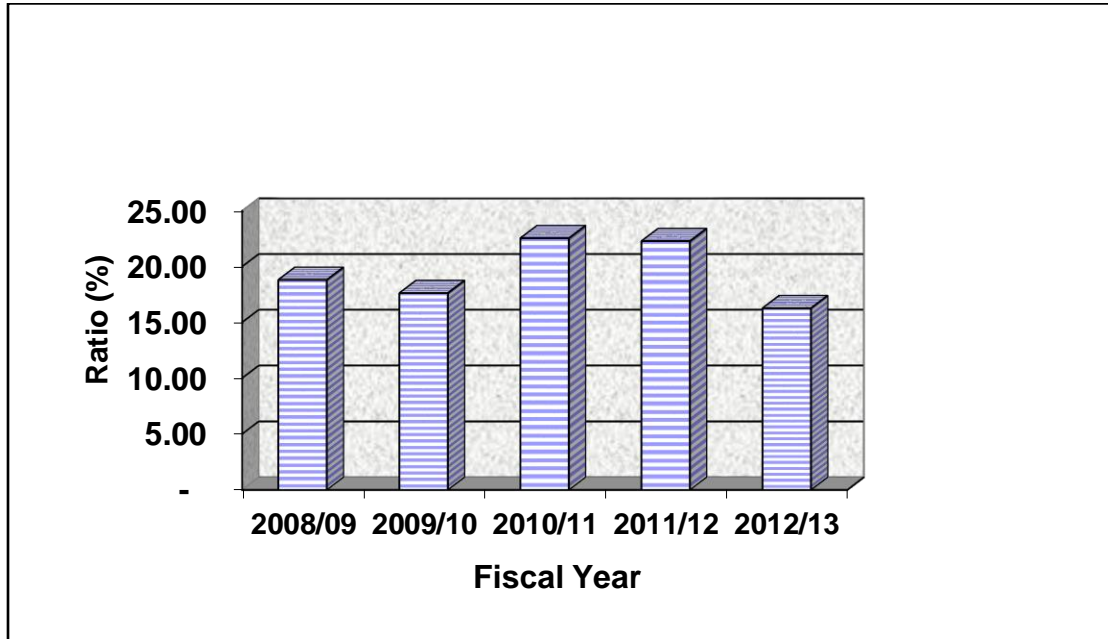
Rastriya Banijya Bank Ltd			
FY	Cash & Bank Balance	Current Assets	Ratio %
2008/09	5,228,822,129	27,805,467,748	18.81
2009/10	5,803,535,438	32,939,808,367	17.62
2010/11	8,627,438,014	38,262,914,717	22.55
2011/12	11,771,296,908	52,822,801,744	22.28
2012/13	8,852,119,936	54,450,343,591	16.26
Mean			19.504
SD			2.51
CV			12.86

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

Table 4.3 indicates that the ratios of RBB show the fluctuating trend. So, highest ratio of RBB was 22.55% appeared in FY 2010/11 and lowest was 16.26% in FY 2012/13.

Figure 4.3

Cash & Bank Balance to Current Asset Ratio



Source: Table 4.3

4.1.1.4 Cash and Bank Balance to Total Deposit Ratio

Table 4.4

Cash and Bank Balance to Total Deposit Ratio

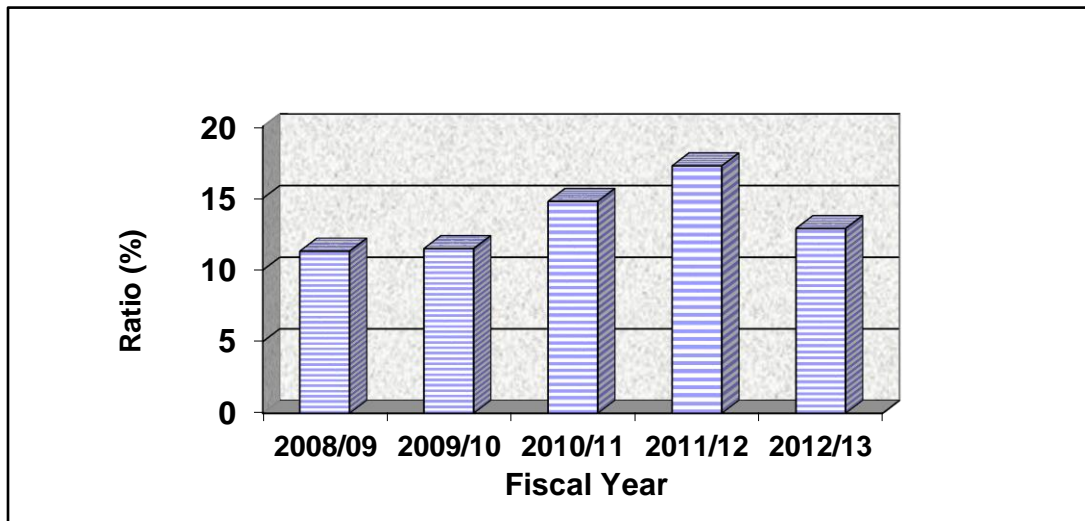
in Rs

Rastriya Banijya Bank Ltd			
FY	Cash & Bank Balance	Total Deposit	Ratio %
2008/09	5,228,822,129	46,195,481,570	11.32
2009/10	5,803,535,438	50,464,128,578	11.50
2010/11	8,627,438,014	58,333,116,174	14.79
2011/12	11,771,296,908	68,160,926,602	17.27
2012/13	8,852,119,936	68,625,869,528	12.90
Mean			13.556
SD			2.23
CV			16.45

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

Table 4.4 explains that the ratios were 11.32, 11.50, 14.79, 17.27 & 12.90 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 13.556%, 2.23 and 16.45% respectively. A high ratio represents the greater ability to meet their all types of deposits. But too high ratio of cash and bank balance to total deposits may be unsuitable and harmful because it affects their profitability position and also low ratio is unfavorable as capital will be tied up and opportunity cost will be higher

Figure 4.4
Cash & Bank Balancer to Total Deposit Ratio



Source: Table 4.4

4.1.2 Efficiency /Activity/ Turnover Ratios

Turnover ratios have been used to evaluate the efficiency with which the bank has managed and utilized their assets. So, it is also called Efficiency ratio. These ratios are also employed to evaluate the speed with which assets are being converted and turnover. These ratios moreover help in measuring the bank's ability to utilize their available resources. In this study these ratios include; loans and advances to total deposit ratio, loans and advances to saving deposit ratio, loans and advances to fixed deposit ratio, investment total deposit ratio and performing assets to total assets ratio.

4.1.2.1 Loans and Advances to Total Deposit Ratio

Table 4.5

Loans and Advances to Total Deposit Ratio

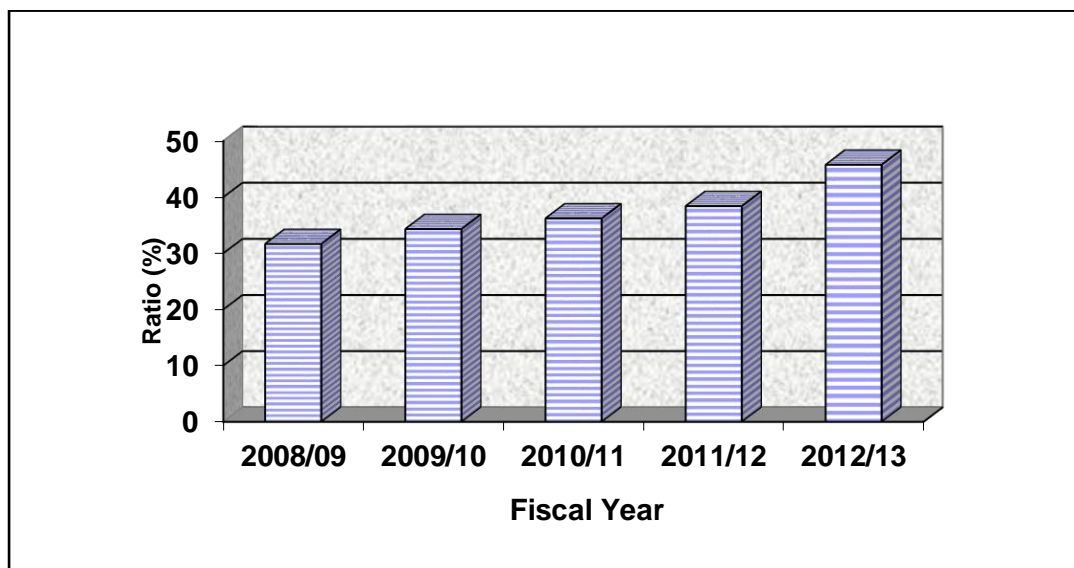
in Rs

Rastriya Banijya Bank Ltd			
FY	Loans & Advances	Total Deposit	Ratio %
2008/09	14,633,545,395	46,195,481,570	31.68
2009/10	17,328,731,275	50,464,128,578	34.34
2010/11	21,136,285,388	58,333,116,174	36.23
2011/12	26,187,930,998	68,160,926,602	38.42
2012/13	31,424,434,511	68,625,869,528	45.79
Mean			37.292
SD			4.792
CV			12.85

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

Table 4.5 explains that the ratios were 31.68, 34.34, 36.23, 38.42 & 45.79 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 37.292%, 4.792 and 12.85% respectively. There is not standard turnover ratio for loan and advances to total deposits. Higher turnover ratio is considered significant as it is indicated that the bank is utilizing its assets in profitable field and vice versa.

Figure 4.5
Loan & Advance to Total Deposit Ratio



Source: Table 4.5

4.1.2.2 Loans and Advances to Saving Deposit Ratio

Table 4.6
Loans and Advances to Saving Deposit Ratio

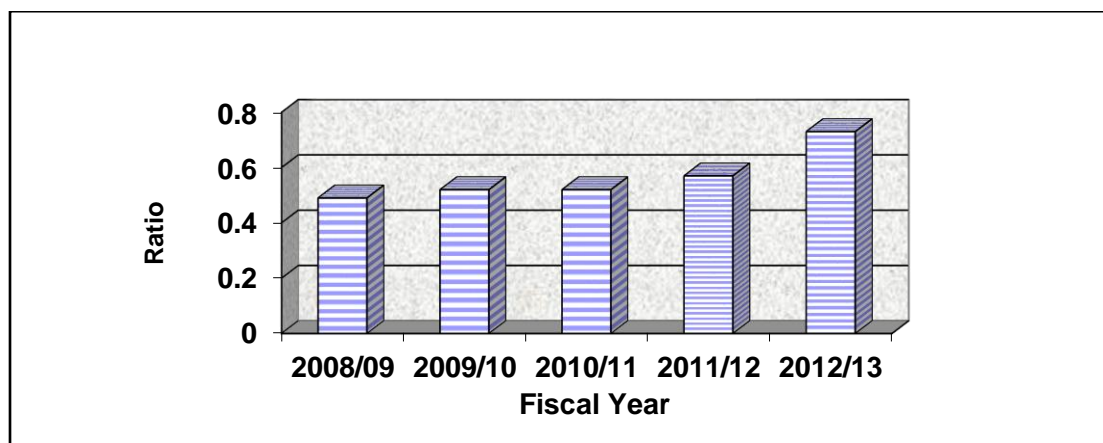
in Rs

Rastriya Banijya Bank Ltd			
FY	Loans & Advance	Saving Deposit	Ratio
2008/09	14,633,545,395	29,746,048,881	0.49
2009/10	17,328,731,275	33,046,062,146	0.52
2010/11	21,136,285,388	40,275,752,012	0.52
2011/12	26,187,930,998	46,164,258,010	0.57
2012/13	31,424,434,511	42,809,489,941	0.73
Mean			0.566
SD			0.0859
CV			15.18

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The ratios of the bank show the increasing trend from FY 2008/09 to FY 2012/13 from above table 4.6. The highest ratio is 0.73 times in FY 2012/13 and lowest ratio is 0.49 in FY 2008/09.

Figure 4.6
Loan & Advance to Saving Deposit Ratio



Source: Table 4.6

4.1.2.3 Loans and Advances to Fixed Deposits Ratio

Table 4.7
Loans and Advances to Fixed Deposit Ratio (Times)

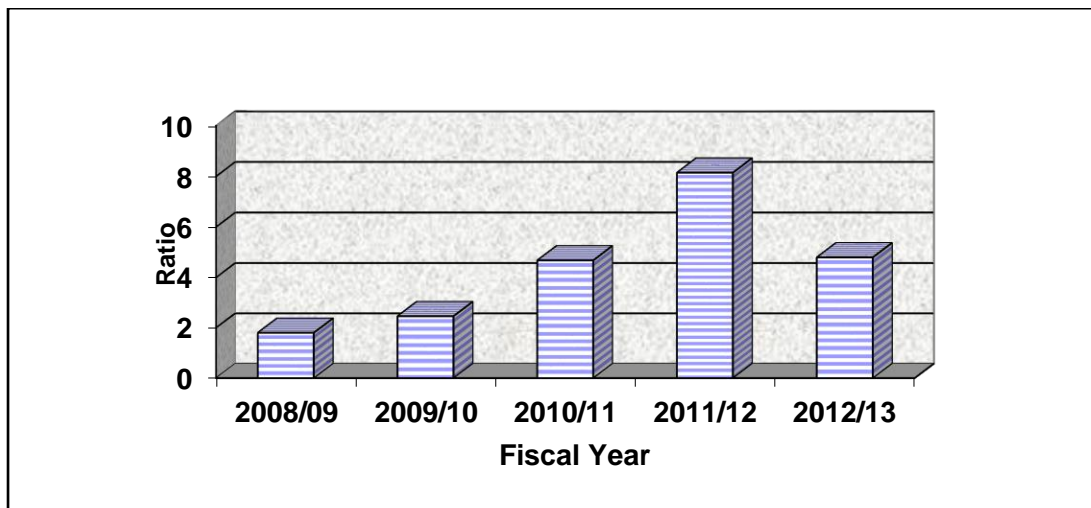
in Rs

Rastriya Banijya Bank Ltd			
FY	Loans & Advance	Fixed Deposit	Ratio
2008/09	14,633,545,395	8,145,822,075	1.80
2009/10	17,328,731,275	7,030,434,173	2.46
2010/11	21,136,285,388	4,511,215,833	4.69
2011/12	26,187,930,998	3,212,406,231	8.15
2012/13	31,424,434,511	6,539,208,199	4.81
Mean			4.382
SD			2.228
CV			50.84

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

Table 4.7 explains that the ratios were 1.80, 2.46, 4.69, 8.15 & 4.81 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 4.382%, 2.228 and 50.84% respectively. It showed fluctuating trend for the period increasing gradually and falling at the end.

Figure 4.7
Loan & Advance to fixed Deposit Ratio



Source: Table 4.7

4.1.3 Profitability Ratios

Profit is an important factor that determines the firm's expansion & diversification. A required level of profit is necessary for the firm's growth and survives in the competitive environment. Profitability ratios have been employed to measure the operating efficiency of the bank. For the purpose, return on assets and return on net worth ratio have been analyzed and interpreted.

4.1.3.1 Return on Assets (ROA)

Table 4.8
Return on Assets (ROA)

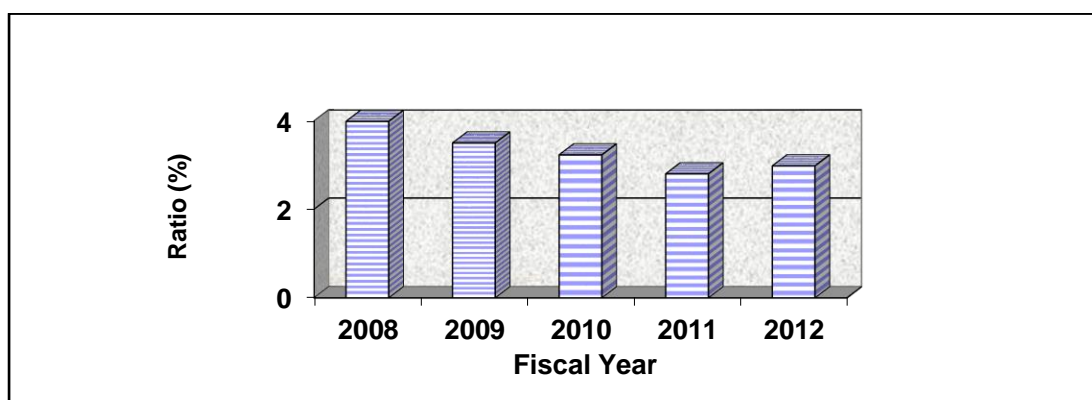
in Rs

Rastriya Banijya Bank Ltd			
FY	Net profit after tax	Total assets	ROA
2008/09	1,591,488,713	39,879,618,788	3.99
2009/10	1,616,910,912	46,139,646,299	3.50
2010/11	1,718,939,269	53,232,461,826	3.23
2011/12	1,923,682,759	68,714,347,154	2.80
2012/13	2,026,975,301	67,910,654,708	2.98
Mean			3.3
SD			0.417
CV			12.66

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.8 explains that the ratios were 3.99, 3.50, 3.23, 2.80 & 2.98 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 3.3%, 0.417 and 12.66% respectively. It denotes that the ratio is in decreasing trend.

Figure 4.8
Return on Assets (ROA)



Source: Table 4.8

4.1.3.2 Return on Net Worth / Shareholders' Equity (ROE)

Table 4.9

Return on Net Worth

in Rs

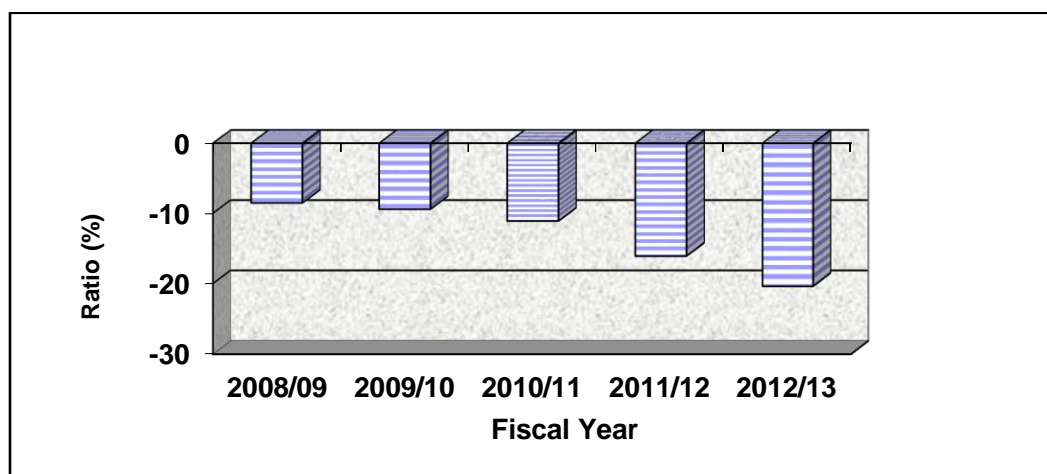
Rastriya Banijya Bank Ltd			
FY	NPAT	Net Worth	Ratio %
2008/09	1,591,488,713	(18,718,577,349)	(8.50)
2009/10	1,616,910,912	(17,219,501,518)	(9.39)
2010/11	1,718,939,269	(15,509,969,051)	(11.08)
2011/12	1,923,682,759	(11,960,893,210)	(16.08)
2012/13	2,026,975,301	(9,956,821,239)	(20.36)
Mean			(13.083)
SD			4.485
CV			(34.28)

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.9 explains that the ratios were negative. It is because net worth was negative and is gradually decreasing. Net worth refers the owner's claim on banks. It can be find out subtracting the total liabilities from total assets. It includes shareholder's reserve and share capital.

Figure 4.9

Return on Net Worth



Source: Table 4.9

4.1.4 Capital Structure/ Leverage/ Solvency Ratios

Leverage refers to the ratio of debt to total equity in the capital structure of the firm. Debt and equity are long- term obligation and remaining part of the liabilities side of Balance Sheet are term as short-term obligation. Therefore a firm has strong short-term liabilities as well as long-term financial position. Long-term financial position of the firm is determined by leverage or capital structure. These include debt-equity ratio, debt-assets ratio, debt to total capital ratio and interest coverage ratio.

4.1.4.1 Debt-Equity Ratio

Table 4.10
Debt- Equity Ratio (Times)

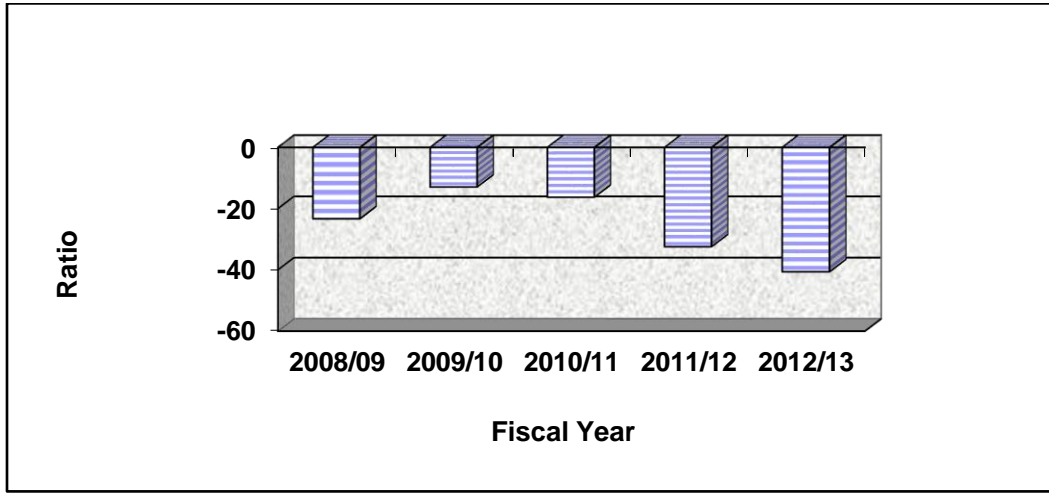
in Rs

Rastriya Banijya Bank Ltd			
FY	Total Debt	Net worth	Ratio
2008/09	4,357,727,154	(18,718,577,349)	(23.28)
2009/10	2,219,603,197	(17,219,501,518)	(12.89)
2010/11	2,516,941,619	(15,509,969,051)	(16.23)
2011/12	3,873,598,452	(11,960,893,210)	(32.39)
2012/13	4,039,791,386	(9,956,821,239)	(40.57)
Mean			(25.36)
SD			4.48
CV			(17.86)

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.10 explains explains that the ratios were negative. It is because net worth was negative. In other words, capital structure of RBB is riskier.

Figure 4.10
Debt Equity Ratio



Source: Table 4.10

4.1.4.2 Debt Assets Ratio

Table 4.11
Debt –Assets Ratio

in Rs

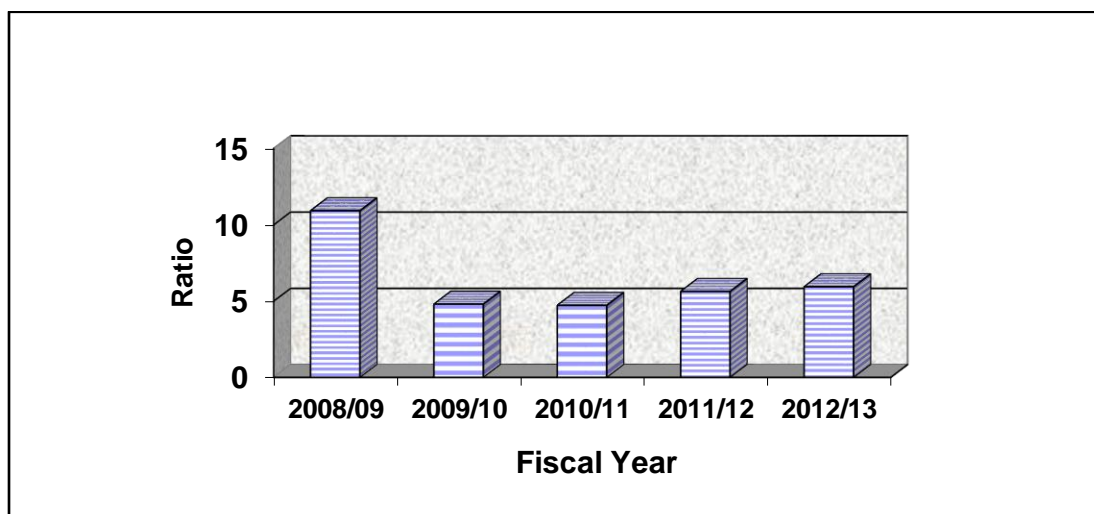
Rastriya Banijya Bank Ltd			
FY	Total Debt	Total Assets	Ratio
2008/09	4,357,727,154	39,879,618,788	10.93
2009/10	2,219,603,197	46,139,646,299	4.81
2010/11	2,516,941,619	53,232,461,826	4.73
2011/12	3,873,598,452	68,714,347,154	5.64
2012/13	4,039,791,386	67,910,654,708	5.95
Mean			6.412
SD			2.3072
CV			35.98

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.11 explains that the ratios were 10.93, 4.81, 4.73, 5.64 & 5.95 respectively for the FY 2008/09 to FY 2012/13 . Mean, SD and CV of the ratios were 6.53%, 2.96 and 45.40%

respectively. Higher ratio indicates that the greater portion of the banks assets has been financed through outsider's fund.

Figure 4.11
Debt Assets Ratio



Source: Table 4.11

4.1.4.3 Interest Coverage Ratio

Table 4.12
Interest Coverage Ratio

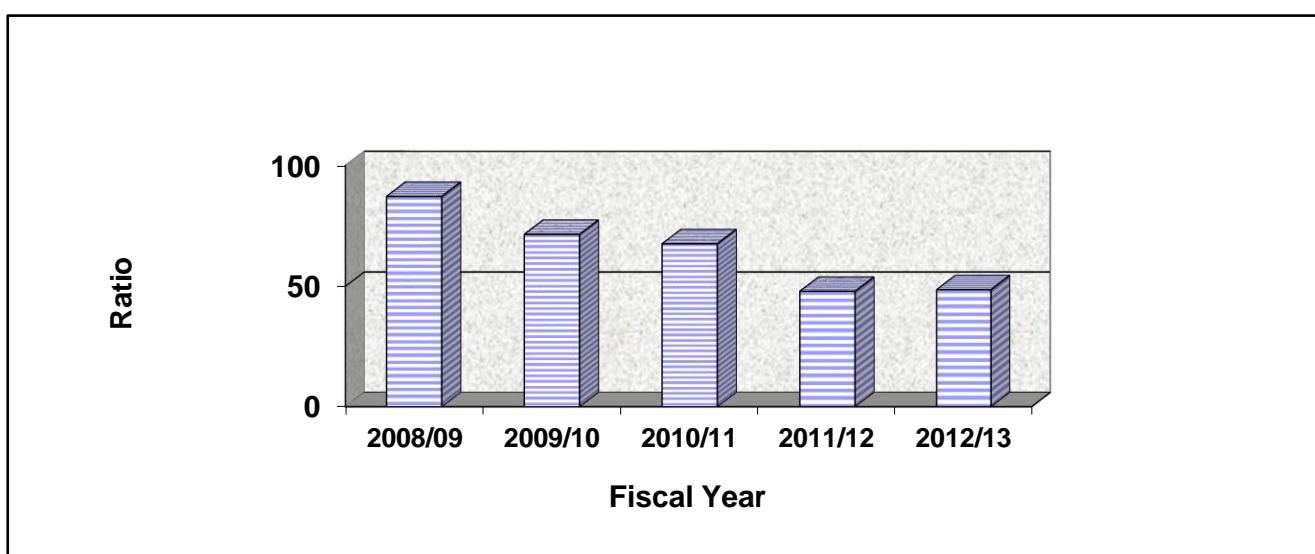
in Rs

Rastriya Banijya Bank Ltd			
FY	EBIT	Int. Charged	Ratio
2008/09	741,352,316	850,136,396	87.20
2009/10	674,159,958	942,750,954	71.51
2010/11	693,353,430	1,025,585,838	67.61
2011/12	511,567,409	1,067,778,639	47.91
2012/13	674,159,958	1,387,703,004	48.58
Mean			64.56
SD			14.8509
CV			23

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.12 explains that the ratios were 87.20, 71.51, 67.61, 47.91 & 45.58 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 64.56%, 14.8509 and 23% respectively. Higher ratio is desirable, but too high a ratio indicates the firm is very conservative in using debt. A lower ratio indicates excessive use of debt or insufficient operation.

Figure 4.12
Interest Coverage Ratio



Source: Table 4.12

4.1.5 Capital Adequacy Ratios

Capital adequacy ratios of the banks have been tested to find whether they are successful to measure the depositors and creditors about their soundness; and also to maintain general confidence in banking system. These include net worth to total deposit ratio, net worth to total assets and net worth to total credit ratio.

4.1.5.1 Net Worth to Total Deposits Ratio

Table 4.13
Net Worth to Total Deposit Ratio

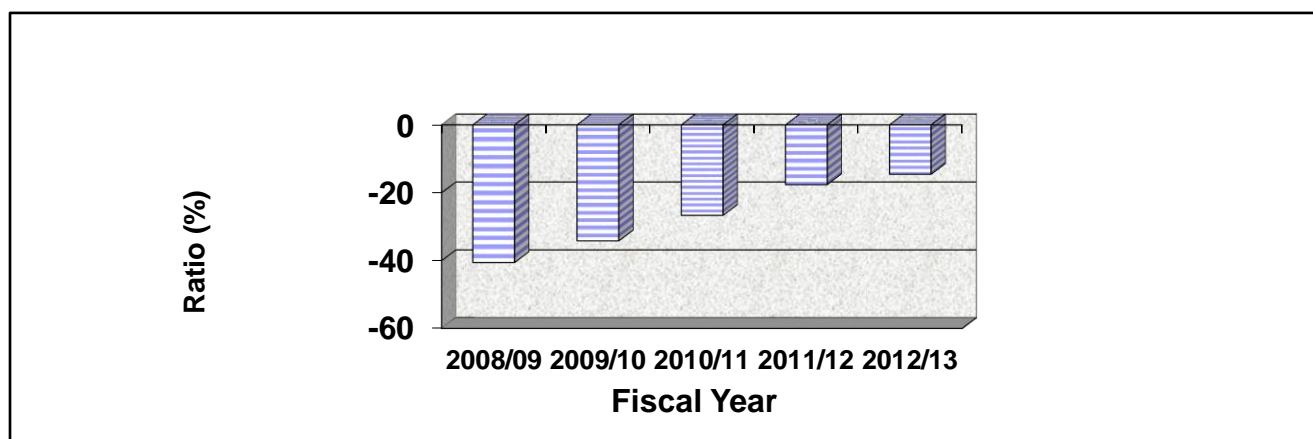
in Rs

Rastriya Banijya Bank Ltd			
FY	Net Worth	Total Deposits	Ratio %
2008/09	(18,718,577,349)	46,195,481,570	(40.52)
2009/10	(17,219,501,518)	50,464,128,578	(34.12)
2010/11	(15,509,969,051)	58,333,116,174	(26.59)
2011/12	(11,960,893,210)	68,160,926,602	(17.55)
2012/13	(9,956,821,239)	68,625,869,528	(14.51)
Mean			(26.658)
SD			9.7813
CV			(36.69)

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.13 explains that the ratios were negative for the FY 2008/09 to FY 2012/13. The ratio is a yardstick to see whether the bank has maintained the capital fund according to the direction of Nepal Rastra Bank

Figure 4.13
Net Worth to Total Deposit Ratio



Source: Table 4.13

4.1.5.2 Net Worth to Total Assets Ratio

Table 4.14

Net Worth to Total Assets Ratio

in Rs

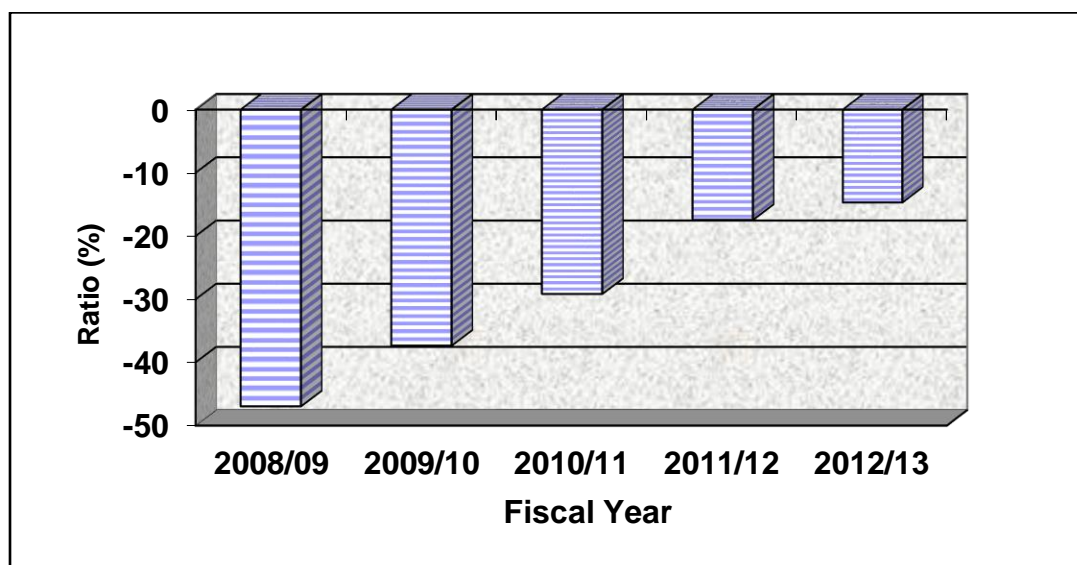
Rastriya Banijya Bank Ltd			
FY	Net Worth	Total Assets	Ratio %
2008/09	(18,718,577,349)	39,879,618,788	(46.94)
2009/10	(17,219,501,518)	46,139,646,299	(37.32)
2010/11	(15,509,969,051)	53,232,461,826	(29.14)
2011/12	(11,960,893,210)	68,714,347,154	(17.41)
2012/13	(9,956,821,239)	67,910,654,708	(14.66)
Mean			(29.094)
SD			12.091
CV			(41.55)

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.14 explains that the ratios were negative for the FY 2008/09 to FY 2012/13. High ratio means greater contribution of investors' fund and strong capital adequacy position

Figure 4.14

Net Worth to Total Assets Ratio



Source: Table 4.14

4.1.6 Assets Quality Ratios

Assets quality ratios intend to measure the quality of assets owned by the banks. These include loan loss provision to total income ratio and loan loss provision to total deposit ratio.

4.1.6.1 Loan Loss Provision to Total Income Ratio

Table 4.15

Loan Loss Provision to Total Income Ratio in Rs

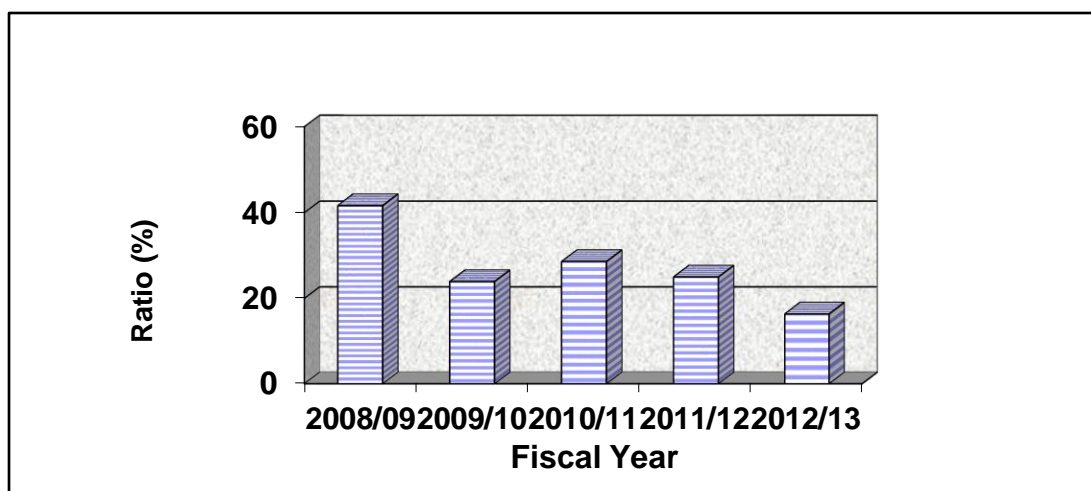
Rastriya Banijya Bank Ltd			
FY	Loan Loss Provision	Total Income	Ratio %
2008/09	662,879,491	1,591,488,713	41.65
2009/10	386,921,733	1,616,910,912	23.93
2010/11	492,242,907	1,718,939,269	28.64
2011/12	481,041,859	1,923,682,759	25.01
2012/13	331,316,468	2,026,975,301	16.35
Mean			27.116
SD			8.2952
CV			30.59

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.15 explains that the ratios were 41.65, 23.93, 28.64, 25.01 & 16.35 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 27.116%, 8.29 and 30.59% respectively. Higher ratio indicates that the greater portion of loan advanced by the bank is inferior in quality. Low ratio means that the bank has provided most of its loans and advances in secured sector.

Figure 4.15

Loan Loss Provision to Total Income Ratio



Source: Table 4.15

4.1.6.2 Loan Loss Provision to Total Deposit Ratio

Table 4.16
Loan Loss Provision to Total Deposits Ratio

in Rs

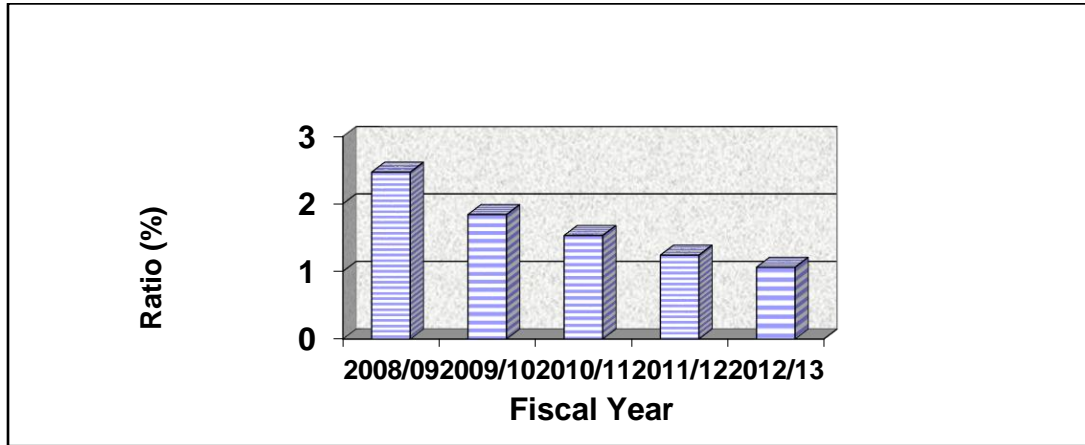
Rastriya Banijya Bank Ltd			
FY	Loan Loss Provision	Total Deposit	Ratio %
2008/09	662,879,491	46,195,481,570	1.43
2009/10	386,921,733	50,464,128,578	0.77
2010/11	492,242,907	58,333,116,174	0.84
2011/12	481,041,859	68,160,926,602	0.71
2012/13	331,316,468	68,625,869,528	0.48
Mean			0.846
SD			0.3160
CV			37.35

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.16 explains that the ratios were 1.43, 0.77, 0.84, 0.71 & 0.48 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 0.846%, 0.3160 and 37.35% respectively. Higher ratio means quality of assets contained by the bank in form of loan is not much satisfactory. Low ratio is the index of utilization of resources in healthy sector.

Figure 4.16

Loan Loss Provision to Total Deposits Ratio



Source: Table 4.16

4.1.7 Other Indicators

Above stated ratio shows light on various aspect of the banks management, investment & creditors can get information regarding their investment. Besides the above-analyzed ratios, some indicators have been tested to have the boarder knowledge of financial performance of the banks. For this, EPS, P/E ratio and MVPS to BVPS have been analyzed.

4.1.7.1 Earning Per Share (EPS)

Table 4.17

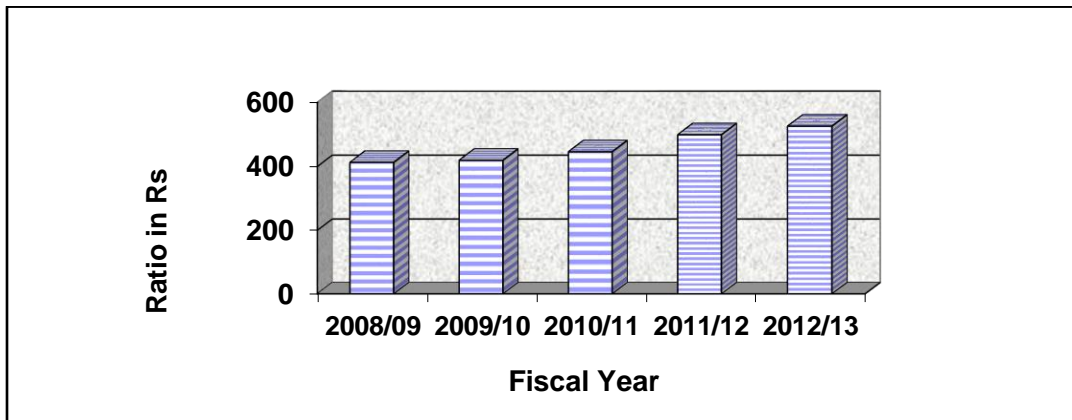
Earning Per Share (EPS)

FY	2008/09	2009/10	2010/11	2011/12	2012/13
EPS	413.05	419.65	446.13	499.27	526.08

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The table 4.17 explains that the eps were 413.05, 419.65, 446.13, 499.27 & 526.48 respectively for the FY 2008/09 to FY 2012/13. The investors favor high EPS. It reflects the sound profitability position of the bank

Figure 4.17
Earning Per Share (EPS)



Source: Table 4.17

4.2 Correlation Analysis

Correlation coefficient is the statistical tools that can be describe to which one variable is linearly related to another the coefficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's Method is applied in the study. It is the most common and useful tool to measure the relationship between two variables in the bank. The correlation coefficient(r) between two variables X and Y can be obtained by using following formula:

$$r = \frac{n \sum XY - \sum X \sum Y}{\sqrt{n \sum X^2 - (\sum X)^2} \sqrt{\sum Y^2 - (\sum Y)^2}}$$

Where,

n = number of observation in series X and Y

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

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

$\sum X^2$ = Sum of squared observations in series X

$\sum Y^2$ = Sum of squared observations in series Y

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

Here,

$r = +1$ implies that two variables are positively and perfectly correlated.

$r = -1$ implies that two variables are negatively perfectly correlated.

$r = 0$, does not necessarily mean that the variables are independent. They may, however be related in some other form such as quadratic, logarithm or exponential.

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

- Total Deposit and Loans and Advances
- Total Investment and Net Profit
- Loans and Advances and Net Profit
- Total deposit and total investment

4.2.1 Correlation Analysis between Total Deposit and Loans and Advances

The correlation coefficient between total deposits and loan and advances to measure the relationship between major financial sources i.e. total deposits and major component of income generating assets i.e. loans and advances. In Correlation Analysis, deposit is the independent variable (Y) and loan and advances is dependent variable (X). The purpose of computing the coefficient of correlation is to justify whether the deposits are significant used in loan and advances or not and whether there is any relationship between these two variables.

Table 4.18

Correlation Coefficient between Total Deposit and Loan & Advances

(Rs. In Million)

Fiscal Year	Total Deposit	Loan & Advances
	X	Y
2008/09	46196	23247
2009/10	50464	24776
2010/11	58333	27571
2011/12	68161	31607
2012/13	68626	35693
Σ	291780	142894
r	0.958	
P.E.	0.0259	
6P.E.	0.1557	

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The above table explains the relationship between total deposit and loan and advances of RBB. The correlation coefficient between total deposits and loan and advances was 0.958. It shows that there was strong positive correlation between the two variables. The value of correlation coefficient was greater than 6PE, so the correlation is said to be significant.

4.2.2 Correlation Analysis between Total Investment and Net Profit

The correlation between total investment and net profit shows the degree of relationship between these two items. It shows how a unit increment in total investment affects the net profit. The total investment is independent variable and the net profit is dependent variable.

Table 4.19
Correlation Coefficient between Total Investment and Net Profit
(Rs. In Million)

Fiscal Year	Total Investment	Net Profit
	X	Y
2008/09	11555	1593
2009/10	12650	1696
2010/11	14446	1719
2011/12	15416	1924
2012/13	12984	2027
Σ	67051	8959
r	0.4892	
P.E.	0.2294	
6P.E.	1.3767	

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The above table explains the relationship between total investment and net profit. Here, the correlation coefficient between total investment and net profit was 0.48. It shows that there was positive correlation between two variables. Comparing r with probable error, it can be said that there was no significant relationship between them because 6PE was greater than correlation coefficient.

4.2.3 Correlation Analysis between Loans and Advances and Net Profit

The basic function of commercial bank is to collect deposits and use these funds on loan and advances to generate higher profit. Large amount of Loan and advances generate higher profit. Correlation coefficient between loans and net profit measures the degree of relationship between loan and advances and net profit. In Correlation Analysis, loans and advances is the independent variable (Y) and net profit is dependent variable (X). The purpose of computing the coefficient of correlation is to justify whether the banks loans and advances are significantly generate profit or not and whether there is any relationship between two variables. To find out the correlation (r) various calculations are done.

Table 4.20
Correlation Coefficient between Total Loan & Advances and Net Profit
(Rs. In Million)

Fiscal Year	Loan & Advances	Net Profit
	X	Y
2008/09	23247	1593
2009/10	24776	1696
2010/11	27571	1719
2011/12	31607	1924
2012/13	35693	2027
Σ	142894	8959
r	0.9849	
P.E.	0.670	
6P.E.	0.4021	

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

Above table explains the relationship between loan and advances and net profit. Here the correlation coefficient between loan and advances and profit was 0.9849. It shows that there was strong positive correlation between the two variables. Comparing r with probable error, it can be said that there was significant relationship between them because correlation coefficient was greater than 6PE.

4.2.4 Correlation between Total Deposit and Total Investment

The correlation between total deposit and total investment shows the degree of relationship between these two items. How a unit increment in total deposit affect the total investment is measured by such correlation. Here, deposit is the independent variable and the investment is the dependent variable.

Table 4.21
Correlation Coefficient between Total Deposit & Total Investment
(Rs. In Million)

Fiscal Year	Total Deposit	Total Investment
	X	Y
2008/09	46196	11555
2009/10	50464	12650
2010/11	58333	14446
2011/12	68161	15416
2012/13	68626	12984
Σ	291780	67051
r	0.7082	
P.E.	0.1503	
6P.E.	0.9018	

Source: Annual Reports of Rastriya Banijya Bank from 2008/09 to 2012/13

The above table explains the relationship between the total deposit and total investment. The correlation coefficient between total deposit and total investment was 0.7082. It shows that there was a positive correlation. The value of 6PE was greater than correlation coefficient, so the correlation is said to be not significant. This may be due to the increasing trend in the part of total deposit but fluctuating trend in part of the investment.

4.3 Trend Analysis

Trend analysis is very useful to predict the future events on the basis of the past tendencies. This method is based on the assumption that past tendency continues in the future. The future trend of any variable is forecasted using the equation,

$$Y_c = a + bX$$

Where,

Y_c = The dependent variable

a = Y-intercept

b = the slope of the trend line

X = Year-2010 (with regard to the data used in the study)

The normal equations on fitting the trend equation are:

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

$$\Sigma XY = a\Sigma X + b\Sigma X^2 \quad \text{Since } \Sigma X = 0 \quad a = \frac{\Sigma X^3}{\Sigma X^2}, b = \frac{\Sigma XY}{\Sigma X^2}$$

With the help of the trend equation, future values of the following variables for coming five years have been predicted:

- Total Deposits
- Loan and Advances
- Net Profit
- Investment

4.3.1 Trend Analysis of Total Deposits

Deposit is one of the major liabilities of commercial banks. It is necessary for commercial banks to collect deposits as much as possible so that it can be utilized to earn profit. The total deposit of RBB for five years from the FY 2008/09 to FY 2012/13 was calculated to forecast the trend values for next five years from the FY 2013/14 to FY 2017/18. The following table shows trend value of deposits for 10 fiscal years.

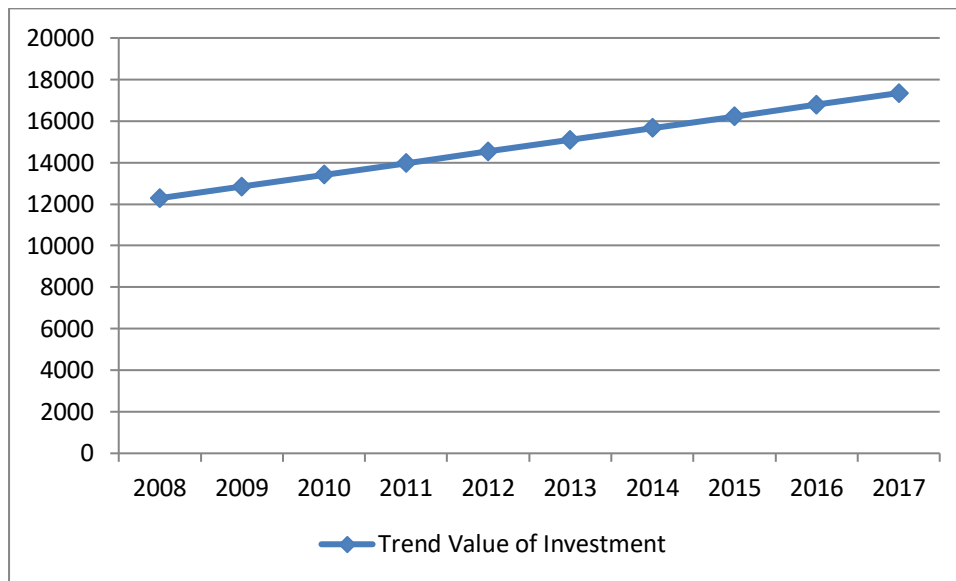
Table 4.22
Trend Value of Total Deposit (Rs. In Million)

Year	Trend Value of Deposit
2008/09	45844.7
2009/10	52100.4
2010/11	58356.1
2011/12	64611.8
2012/13	70867.5
2013/14	77123.2
2014/15	83378.9
2015/16	89634.6
2016/17	95890.3
2017/18	102146

Source : Appendix: 3

The above table shows the trend behavior of total deposit in RBB. It was in increasing trend. Other things remaining the same, the total deposit of RBB in the FY 2017/18 is predicted to be Rs. 102146 million. The calculated value of trend of total deposit is presented in graph in trend line as follows.

Figure 4.18
Trend Value of Deposit



Source: Table 4.23

The figure 4.18 shows the trend value of deposit of RBB. It was in increasing trend during the study period. As per the figure, the trend value of total deposit of bank was Rs. 102146 million in the F.Y. 2017/18. Likewise the trend values of deposits were Rs. 77123.2, Rs. 83378.9, Rs. 89634.6 ,95890.3 and Rs. 102146 million in the F.Y. 2013/14, 2014/15, 2015/16, 2016/17 and 2017/18 respectively.

4.3.2 Trend Analysis of Loans and Advances

Lending is one of the major functions of commercial banks and its trend is determined by various factors. Under this topic, the trend values of loan and advances of RBBL for five years from the F.Y. 2008/09 to FY2012/13 was calculated and forecast for the next five years from the

FY 2013/14 to FY 2017/18 was made. The following table shows the trend values of loan and advances for ten years from the FY 2008/09 to FY 2012/13.

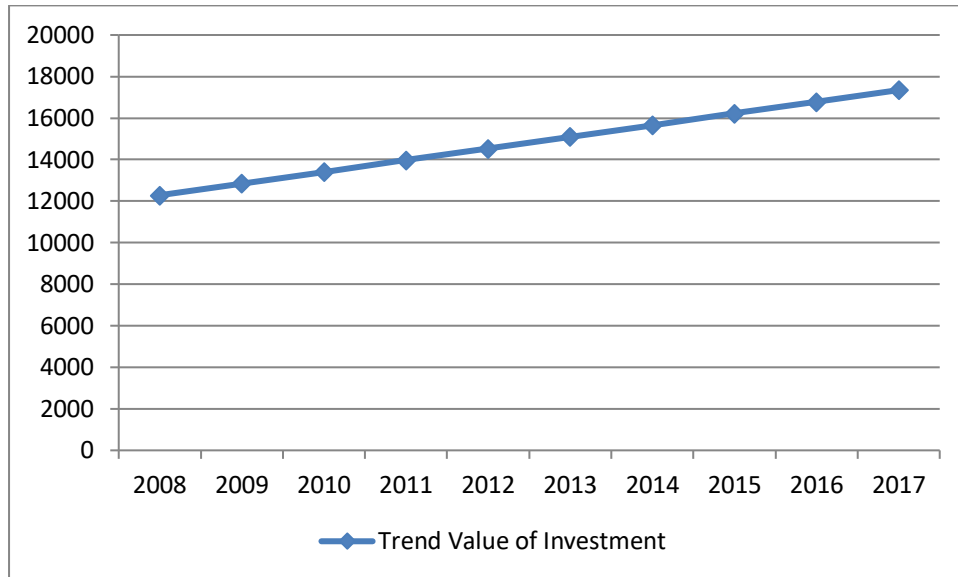
Table 4.23
Trend value of Loan and Advances
(Rs. In Million)

Year	Trend Value of Loan and Advances
2008/09	22234.3
2009/10	25406.6
2010/11	28578.9
2011/12	31751.2
2012/13	34923.5
2013/14	38095.8
2014/15	41268.1
2015/16	44440.4
2016/17	47612.7
2017/18	50785

Source: Appendix 3

The above table shows the trend behavior of loan and advances of RBB, which was in increasing trend. Other things remaining the same, the loan and advances of RBB in the F.Y. 2017/18 was estimated to be Rs. 50785 million, which is the highest amount. The above calculated behavior of trend analysis of loan and advances plotted in the trend line as follows.

Figure 4.19
Trend Values of Loan and Advances



Source: Table 4.24

The figure 4.19 shows the trend values of loan and advances of RBB. It was in increasing trend during the study period. As per the figure, the trend values total loan and advances of bank was Rs. 50785 million in the FY 2017/18. Likewise the trend values of loan and advances were Rs. 38095.8, Rs. 41268.1, Rs. 44440.4, and Rs. 47612.7 million in the F.Y. 2013/14 to 2016/17 respectively, other things remaining the same.

4.3.3 Trend Analysis of net profit

The ultimate goal of any commercial bank is to earn more profit and increase the shareholder's wealth. Here, the net profit of RBB for five years from the FY 2008/09 to FY 2012/13 and forecast for the next five years from the FY 2013/14 to FY 2017/18.

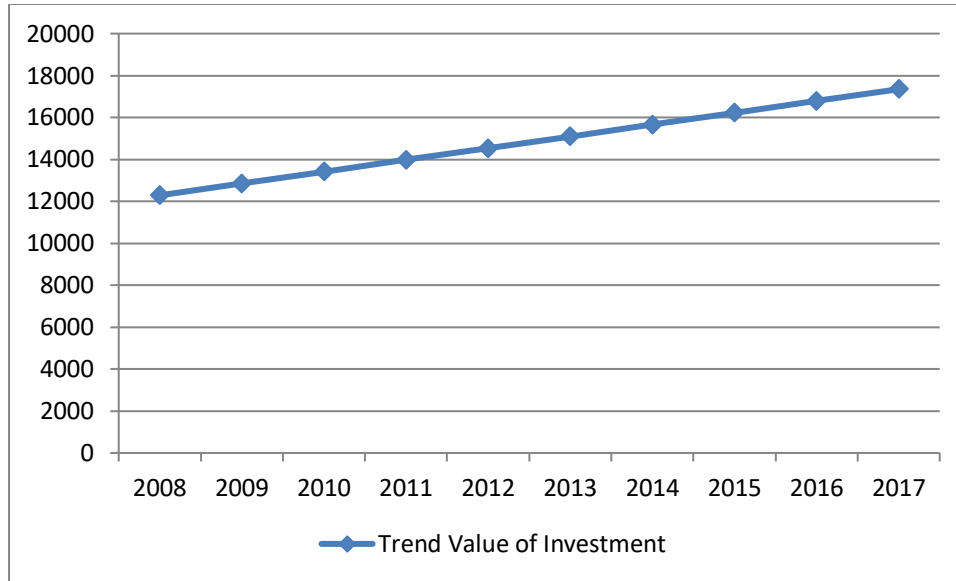
Table 4.24
Trend value of Net Profit
(Rs. In Million)

Years	Trend Value of Net Profit
2008/09	1572.6
2009/10	1682.2
2010/11	1791.8
2011/12	1901.4
2012/13	2011
2013/14	2120.6
2014/15	2230.2
2015/16	2339.8
2016/17	2449.4
2017/18	2559

Source: Appendix 3

The above table shows the trend values of net profit of RBB which was in increasing trend. Other things remaining the same, the net profit of RBB in the F.Y. 2017/18 will be Rs. 2559 million, which was the highest amount. The calculated trend values of net profit predicted in the trend line as follows.

Figure 4.20
Trend Value of Net Profit



Source: Table 4.25

The figure 4.20 shows the trend value of net profit of RBB over the 10-year period. The values were in increasing trend over the study period. The highest trend value of net profit of bank was Rs. 2559 million in F.Y. 2017/18. As per the figure, it can be forecasted that the net profit of bank will be Rs. 2120.6, Rs. 2230.2, Rs. 2339.8 and Rs. 2449.4 millions in the F.Y 2013/14, 2014/15, 2015/16 and 2016/17, other things remaining the same

4.3.4 Trend Analysis of Investment

Commercial banks make investments in government T-bills, saving bonds, shares, debentures and bonds issued by other companies. The amount of investment made by the bank for the 5 years was calculated to predict the trend values for the next five years.

Table 4.25
Trend value of Investment

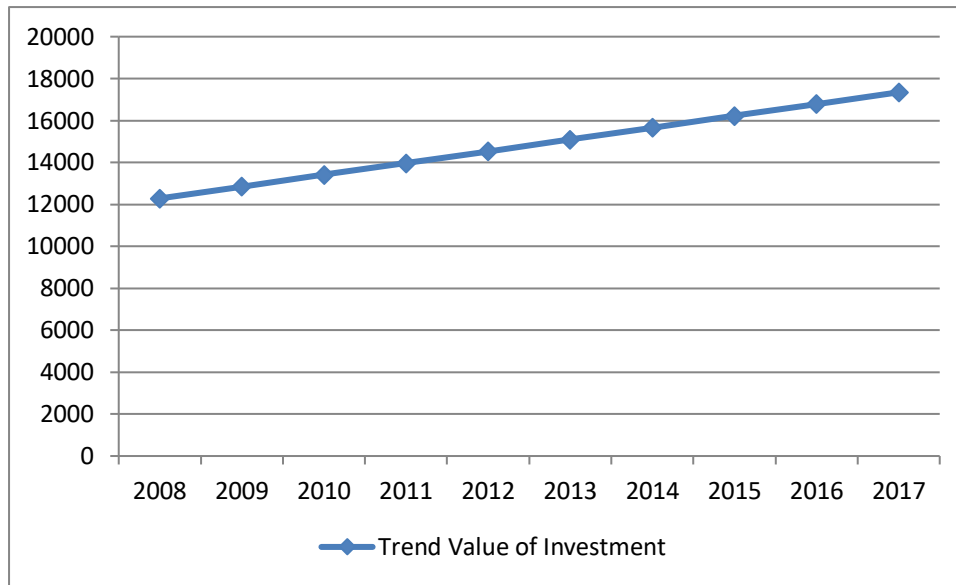
(Rs. In Million)

Years	Trend Value of Investment
2008/09	12285.4
2009/10	12847.8
2010/11	13410.2
2011/12	13972.6
2012/13	14535
2013/14	15097.4
2014/15	15659.8
2015/16	16222.2
2016/17	16784.6
2017/18	17347

Source: Appendix 3

The above table shows the trend behavior of the total investment made by RBB. As we can see in the above figure, the values are in increasing trend. Other things remaining the same, the investment of RBB in the F.Y. 2017/18 will be Rs. 17347 million, which was the highest amount under this study period. The calculated behavior of trend analysis of total investment predicted in the trend line is as follows.

Figure 4.21
Trend Value of Investment



Source: Table 4.26

The figure 4.21 shows the trend value of investment of RBB. As per the figure, the trend values of total investment of bank were Rs. 15097.4, Rs, 15659.8 and Rs. 16222.2 and Rs. 16784.6 million in the F.Y2013/14, 2014/15, 2015/16 and 2016/17, respectively, other things remaining the same

4.4 Major Findings

Major findings of this study during the period of five years in RBB from the analysis are summarizes as:

a) Ratio analysis

Ratio analysis is one of the important financial tools to analyze the financial performance. The study mainly focused on the ratio analysis. For the analysis purpose each ratios are analyzed by calculating means and C.V of the ratio of the sampled bank.

i. Liquidity Position

Current ratio of RBB for the study period remained 0.47, 0.52, 0.56, 0.65 & 0.70 times respectively from the FY 2008/09 to FY 2012/13. Mean of the ratios appeared 0.58 times. Standard deviation 0.0841 and CV appeared 14.5. It signifies that the bank have poor liquidity position. The bank may face the problem of working capital if it needs to pay the current liabilities at demand. The bank showed poor liquidity position because of quick ratios of every year was below than standard form. It indicates that it have very weak position of immediate payment of short-term obligation (i.e. current liabilities) because current liabilities were greater than that of quick assets. Cash and bank balance to current assets ratios & Cash & bank balance to total deposit ratios of RBB show the fluctuating trend. It can be considered good to serve the customers upon demands for withdrawal of their deposits

ii. Activity /Turnover Position

There is not standard turnover ratio for loan and advances to total deposits. Higher turnover ratio is considered significant as it is indicated that the bank is utilizing its assets in profitable field and vice versa. The loan and advances to saving deposit ratios of the bank show the increasing trend from FY 2008/09 to FY 2012/13 from above table 4.6. The highest ratio is 0.73 times in FY 2012/13 and lowest ratio is 0.49 in FY 2008/09. The loan and advances to fixed deposit ratios of the bank were 1.80, 2.46, 4.69, 8.15 & 4.81 respectively for the FY 2008/09 to FY 2012/13. It showed fluctuating trend for the period increasing gradually and falling at the end.

iii. Profitability Position

The Return on Assets ratios were 3.99, 3.50, 3.23, 2.80 & 2.98 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 3.33%, 0.417 and 12.66% respectively. It denotes that the ratio is in decreasing trend. The net worth was negative and is gradually decreasing. So, the ratios were negative.

iv. Capital Structure Position

Debt equity ratios show that the ratios were negative. It is because net worth was negative. In other words, capital structure of RBB is riskier. Debt Assets Ratios explains that the ratios were 10.93, 4.81, 4.73, 5.64 & 5.95 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and

CV of the ratios were 6.412%, 2.307 and 35.98% respectively. Higher ratio indicates that the greater portion of the bank's assets has been financed through outsider's fund. The interest coverage ratios explains that the ratios were 87.20, 71.51, 67.61, 47.91 & 45.58 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 64.56%, 14.85 and 23% respectively. Higher ratio is desirable, but too high a ratio indicates the firm is very conservative in using debt. A lower ratio indicates excessive use of debt or insufficient operation.

v. Capital Adequacy Position

Net worth to total deposit ratios shows that the ratios were negative for the FY 2008/09 to FY 2012/13. The ratio is a yardstick to see whether the bank has maintained the capital fund according to the direction of Nepal Rastra Bank. Net worth to total assets ratios shows that the ratios were negative for the FY 2008/09 to FY 2012/13. High ratio means greater contribution of investors' fund and strong capital adequacy position

vi. Assets Quality Position

Loan loss provision to total income ratios shows that the ratios were 41.65, 23.93, 28.64, 25.01 & 16.35 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 27.116%, 8.2952 and 30.59% respectively. Higher ratio indicates that the greater portion of loan advanced by the bank is inferior in quality. Low ratio means that the bank has provided most of its loans and advances in secured sector. Loan loss provision to total deposits ratios shows 1.43, 0.77, 0.84, 0.71 & 0.48 respectively for the FY 2008/09 to FY 2012/13. Mean, SD and CV of the ratios were 0.846%, 0.316 and 37.35% respectively. Higher ratio means quality of assets contained by the bank in form of loan is not much satisfactory. Low ratio is the index of utilization of resources in healthy sector.

vii. Other Financial Position

The EPS were 413.05, 419.65, 446.13, 499.27 & 526.48 respectively for the FY 2008/09 to FY 2012/13. The investors favor high EPS. It reflects the sound profitability position of the bank. Since it does not have any shares issued thus price earning ratio cannot be calculated

b) Correlation Analysis

Correlation coefficient between loan and advances and profit was 0.9849 showing strong positive correlation and when comparing r with probable error, it was found that there was significant relationship between them. Correlation coefficient between total investment and net profit was 0.48 showing fairly positive correlation but when comparing r with probable error, it was found that there was no significant relationship between the two variables. Correlation coefficient between total deposits and loan and advances was 0.958 showing that there was strong positive correlation and the value of correlation coefficient was greater than 6PE, so the correlation was found to be significant. Correlation coefficient between total deposit and total investment was 0.7082 showing was a positive relationship but the value of 6PE was greater than correlation coefficient, so the correlation was found to be not significant

c) Trend Analysis

Trend behavior of total deposit in RBBL was found to be increasing. Other things remaining the same, the total deposit of RBBL in the FY 2017/18 is predicted to be Rs. 102146 million. Trend behavior of loan and advances of RBBL was found to be increasing trend with the loan and advances predicted to reach Rs. 50785 million in the F.Y. 2017/18, other things remaining the same. The trend values of net profit of RBBL were in increasing trend. Other things remaining the same, the net profit of RBBL in the F.Y. 2017/18 will be Rs. 2559 million. The trend values of the total investment made by RBBL were found to be in increasing trend, with the highest value in the F.Y. 2017/18 of Rs. 17347 million.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

It has identified the problem and set objectives to solve problems about financial performance of sampled commercial bank i.e.RBB. 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 study more precisely.

Research methodology has been described in third chapter, which is a way to solve the 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 method of analysis. The study is mainly conducted on the basis of secondary data collected from annual reports of concern banks, financial statement, etc. and authorized web site of the sampled bank and NRB.

The presentation and analysis of data has been made 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. Ratio analysis includes liquidity, turnover, profitability, solvency, capital adequacy, asset quality & other indicators. Other indicators consist of EPS and PE ratio. Various statistical tools such as arithmetic mean, standard deviation, coefficient of correlation and trend analysis have been applied to fulfill the objectives of this study. The analysis has been done mainly through secondary datas. The major findings of the study are also included in the final section of the presentation and analysis chapter.

The basic task of commercial banks is to deal in exchange currency, accepting deposits, giving loans and doing commercial transaction. So, bank is an institution that deals with money by accepting various types of deposits, disbursing loan and rendering other financial services. Broadly speaking, bank draws money from the people who are not using it at time and lend to those who are in position to use it for productive purposes. Since banks are rendering a wide

range of services to the people from different walk of life, they have become an essential part of modern society. Commercial banks are the real intermediaries who transfer savings to the borrowers so that the money can be used in the productive sector. As a financial intermediary, commercial banks are giving greater contribution to GDP for economic development i.e. 9.9. At present, there are 32 commercial banks operating in the country. They are guided & regulated under Company Act 2053, Commercial Bank Act 2031 & NRB directives.

Every country in the world whether developed or underdeveloped is in pursuit of attaining the goal of rapid economic development in the same way or other depending upon the prevailing prospectus and nature of instrument for economic growth. In this context, commercial banks play the role of financial intermediary collecting the fund from surplus unit (i.e. Investors). The structure of modern economy will be no better than ancient period of better system without financial intermediaries. Therefore, commercial banks play an important role in boosting the national economy. They play the vital role in the affairs of the economy in various ways. Their operations record the economic pulse of the economy. They have played an important role in giving a direction to economy's development over time by financing the requirement of trade and industry in the country. It should not be forgotten that the country can hardly achieve its goal of economic development without strong capital base and commercial banks have pivotal role in forming such base.

Financial performance as part of the financial management in the main indicators of the success or failure of the firm (i.e. Banks) so, the financial performance analysis can be considered as the heart of financial decision the growth and development of the firm is directly influences by the financial policies of their firm. There are different persons / institutions that are affected by the financial decision of the firm, stakeholder such as owners, managers, creditors, tax authorities etc are directly interrelated in the final information analysis of the bank's position.

Financial analysis shows the relationship between the various component from Balance Sheet and Profit & Loss statement. The analyzed statements contain such information which is useful for management, shareholders, creditors, investors, depositors, etc. As in other industries, banking industries also need financial analysis for evaluating a bank's performance as compare to the other and also with own past performance.

Therefore, the study has been conducted to evaluate the financial performance of Rastriya Banijya Bank and to find out their strength and weakness. To fulfill this objective and other specific objectives as described in Chapter one, an appropriate research methodology has been adopted which includes financial tools- ratio analysis, statistical tools-mean, S.D; C.V, correlation coefficient, trend analysis have been used. The major study consists of liquidity, turnover, profitability, capital structure, capital adequacy and assets quality position. Under these main ratios, their mean, Coefficient of Variation are analyzed. In order to test the relationship between various components of financial indicates Karl Person's correlation coefficient 'r' is calculated and analyzed.

The necessary data are derived from the balance sheets and profit and loss accounts of RBB for the period of five years from FY 2008/09 to FY 2012/13. Chapter-V includes the summary of major findings, conclusions and recommendations.

5.2 Conclusions

In order to streamline the financial sector, liberalization started in Nepal in 1990 which encouraged financial institutions to support the national development by gathering small savings spread around the country and disbursing them in various productive fields. After adopting this policy by the nation, foreign investment entered in Nepal by means of joint venture in financial sectors. There are 32 'A' class commercial banks, 88 'B' class development banks, 69 'C' class finance companies, 24 'D' class micro-credit development banks in existence at present. Banks came into existence mainly with the objectives of collecting idle fund, mobilizing them into productive sector for the economic development. These banks have responsibility of safeguarding the interest of depositors, stakeholders and society they are serving. Providing credit and investing is the top most income generating function of the commercial banks but it is equally risky too. In order to cover the risk inherent in the credit and investment portfolio, banks have to make loan loss provision by categorizing the loans into different categories as per the NRB directives. Increasing non-performing loan is a serious problem of Nepalese banking sector. The non-performing loans adversely affect the income of the bank.

Although the RBB has almost high market share of deposit as well as loans and advances, it has been facing serious problem of NPA. The bank has higher percentage of market share in lending too, which are the most income generating assets, but had operated in loss for long time until some time back

Ineffective credit policy, political pressure to lend for non-viable projects, management with vested interest, overvaluation of collateral and without collateral disbursement were the major causes of mounting non-performing assets in government owned bank. In addition, leading factors of accumulating NPAs are poor credit appraisal system, ineffective credit monitoring & supervision system, poor security system, economic recession, willful defaulters, etc. Proper classification and close review of loans enable banks to monitor loan portfolio and take remedial step to safeguard deterioration of its credit quality. Furthermore, establishment of strong recovery cell, hiring assets Management Company, implementation of proper rules and regulations are also essential to solve the problem of NPA. Present NRB directive is more effective than previous as a result proper classification of loans and adequate provisioning for the future loss which reduces profit in the short term but can be use as cushion for future distress situation.

5.3 Recommendations

On the basis of findings of the study, the following recommendations were put forwarded.

- The bank had increased its deposits, loan and advances, and net profit over the study period. With the growing number of financial institutions and competition, the bank is recommended to develop necessary products and services to better serve its customer. The marketing strategy should be innovative that would attract and retain the customers.
- The NPA had consistently decreased over the study period which is a good thing and the bank is recommended to perform similarly over the coming years and meet the NPA level of 5% as per international standard. This will ultimately help uplift the current poor financial position of the bank.
- The liquidity position which has measured the efficiency of the bank was lower than the standard norms during study period. This indicated the emergency status of bank to

fulfill its short term obligation. Thus it is suggested the bank to maintain the proper level of liquidity.

- The loan and investment of the bank is recommended to be diversified in various sectors as much as possible that is both profitable and bearing less risk. As putting all the eggs in one basket is harmful, the bank should maintain the proper diversity in credit and investment.
- To enhance the quality of the manpower who ultimately are the most powerful assets of the bank, should be involved in regular indoor and outdoor training programs, which makes employee efficient, professional and competitive in credit appraisal, monitoring & proper risk management.
- NRB as a central bank, issues various directives and policies from time to time to streamline the financial sector. In this connection, newly circulated directives have given more emphasis on loan classification and provisioning which is stricter than that of previous. For smooth operation of banking industry, only imposing policy would not be sufficient. NRB should play supportive role as well as by credit information bureau so that commercial banks can get required credit information about borrower. The bank should follow the directives issued the by central bank and implement all the necessary steps to safeguard its assets. According to the NRB directives, all the commercial bank should increased their capital up to Rs. 2000 million. The RBB should consider this directive and take necessary steps to do so.
- There should not be any political pressure put from the political parties to pass loan to nonviable projects or those having poor collateral. The Nepal Government should make sure that it operates independently without any interference from the parties leading the government. The bank should also ignore any kind of pressure that is unjustifiable and operate as freely and independently as possible. The bank should be privatized as soon as possible.

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APPENDIX- 1

Loan & Advances to Total Asset Ratio of NBL

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	0.47	-0.11	0.0121
2009	0.52	-0.06	0.0036
2010	0.56	-0.02	0.0004
2011	0.65	0.07	0.0049
2012	0.7	0.12	0.0144
	$\Sigma X = 2.9$		$\Sigma(X - \bar{X})^2 = 0.0354$

$$\text{Mean } (\bar{X}) = \frac{\Sigma X}{N} = \frac{2.9}{5} = 0.58$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\Sigma(X - \bar{X})^2}{N}} = \sqrt{\frac{0.0354}{5}} = 0.0841$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.0841}{0.58} \times 100 = 14.5\%$$

Quick Ratio (Times)

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	0.47	-0.11	0.0121
2009	0.52	-0.06	0.0036
2010	0.56	-0.02	0.0004
2011	0.65	0.07	0.0049
2012	0.7	0.12	0.0144
	$\Sigma X = 2.9$		$\Sigma(X - \bar{X})^2 = 0.0354$

$$\text{Mean } (\bar{X}) = \frac{\Sigma X}{N} = \frac{2.9}{5} = 0.58$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\Sigma(X - \bar{X})^2}{N}} = \sqrt{\frac{0.0354}{5}} = 0.0841$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.0841}{0.58} \times 100 = 14.5\%$$

Cash & Bank Balance to Current Assets Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	18.81	-0.694	0.481636
2009	17.62	-1.884	3.549456
2010	22.55	3.046	9.278116
2011	22.28	2.776	7.706176
2012	16.26	-3.244	10.523536
	$\Sigma X = 97.52$		$\Sigma(X - \bar{X})^2 = 31.53892$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{97.52}{5} = 19.504$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{31.53892}{5}} = 2.51$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{2.51}{19.504} \times 100 = 12.86\%$$

Cash and Bank Balance to Total Deposit Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	11.32	-2.236	4.999696
2009	11.5	-2.056	4.227136
2010	14.79	1.234	1.522756
2011	17.27	3.714	13.793796
2012	12.9	-0.656	0.430336
	$\sum X = 67.78$		$\sum(X - \bar{X})^2 = 24.9739$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{67.78}{5} = 13.556$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{24.9739}{5}} = 2.23$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{2.23}{13.556} \times 100 = 16.45\%$$

Loans and Advances to Total Deposit Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	31.68	-5.612	31.494544
2009	34.34	-2.952	8.714304
2010	36.23	-1.062	1.127844
2011	38.42	1.128	1.272384
2012	45.79	8.498	72.216004
	$\sum X = 186.46$		$\sum(X - \bar{X})^2 = 114.82508$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{186.46}{5} = 37.292$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{114.82508}{5}} = 4.792$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{4.792}{37.292} \times 100 = 12.85\%$$

Loans and Advances to Saving Deposit Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	0.49	-0.076	0.005776
2009	0.52	-0.046	0.002116
2010	0.52	-0.046	0.002116
2011	0.57	0.004	0.000016
2012	0.73	0.164	0.026896
	$\sum X = 2.83$		$\sum (X - \bar{X})^2 = 0.03692$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{2.83}{5} = 0.566$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{N}} = \sqrt{\frac{0.03692}{5}} = 0.0859$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{0.0859}{0.566} \times 100 = 15.18\%$$

Loans and Advances to Fixed Deposit Ratio (Times)

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	1.8	-2.582	6.666724
2009	2.46	-1.922	3.694084
2010	4.69	0.308	0.094864
2011	8.15	3.768	14.197824
2012	4.81	0.428	0.183184
	$\sum X = 21.91$		$\sum (X - \bar{X})^2 = 24.83668$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{21.91}{5} = 4.382$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{N}} = \sqrt{\frac{24.83668}{5}} = 2.228$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{2.228}{4.382} \times 100 = 50.84\%$$

Return on Assets (ROA)

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	3.99	0.69	0.4761
2009	3.5	0.2	0.04
2010	3.23	-0.07	0.0049
2011	2.8	-0.5	0.25
2012	2.98	-0.32	0.1024
	$\sum X = 16.5$		$\sum (X - \bar{X})^2 = 0.8734$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{16.5}{5} = 3.3$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{N}} = \sqrt{\frac{0.8734}{5}} = 0.417$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{X} \times 100 = \frac{0.417}{3.3} \times 100 = 12.66\%$$

Return on Net Worth

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	-8.5	4.582	20.994724
2009	-9.39	3.692	13.630864
2010	-11.08	2.002	4.008004
2011	-16.08	-2.998	8.988004
2012	-20.36	-7.278	52.969284
	$\sum X = -65.41$		$\sum (X - \bar{X})^2 = 100.59088$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{-65.41}{5} = -13.082$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{N}} = \sqrt{\frac{100.59088}{5}} = 4.485$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{X} \times 100 = \frac{4.485}{-13.082} \times 100 = -34.28\%$$

Debt-Equity Ratio (Times)

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	-23.28	1.7971	3.22956841
2009	-12.89	12.1871	148.5254064
2010	-16.23	8.8471	78.27117841
2011	-32.39	-7.3129	53.47850641
2012	-40.57	-15.4929	240.0299504
	$\sum X = -125.36$		$\sum (X - \bar{X})^2 = 523.5346101$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{-125.36}{5} = -25.072$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (X - \bar{X})^2}{N}} = \sqrt{\frac{523.5346101}{5}} = 10.215$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{X} \times 100 = \frac{10.215}{-25.072} \times 100 = -40.74\%$$

Debt-Assets Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	10.93	4.518	20.412324
2009	4.81	-1.602	2.566404
2010	4.73	-1.682	2.829124
2011	5.64	-0.772	0.595984
2012	5.95	-0.462	0.213444
	$\sum X = 32.06$		$\sum (X - \bar{X})^2 = 26.61728$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{32.06}{5} = 6.412$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{26.61728}{5}} = 2.3072$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{2.3072}{6.412} \times 100 = 35.98\%$$

Interest Coverage Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	87.2	22.638	512.479044
2009	71.51	6.948	48.274704
2010	67.61	3.048	9.290304
2011	47.91	-16.652	277.289104
2012	48.58	-15.982	255.424324
	$\sum X = 322.81$		$\sum(X - \bar{X})^2 = 1102.75748$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{322.81}{5} = 64.56$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{1102.75748}{5}} = 14.8509$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{14.8509}{64.56} \times 100 = 23\%$$

Net Worth to Total Deposit Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	-40.52	-13.862	192.155044
2009	-34.12	-7.462	55.681444
2010	-26.59	0.068	0.004624
2011	-17.55	9.108	82.955664
2012	-14.51	12.148	147.573904
	$\sum X = -133.29$		$\sum(X - \bar{X})^2 = 478.37068$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{-133.29}{5} = -26.658$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{478.37068}{5}} = 9.7813$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{9.7813}{-26.658} \times 100 = -36.69\%$$

Net Worth to Total Assets Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	-46.94	-17.846	318.479716

2009	-37.32	-8.226	67.667076
2010	-29.14	-0.046	0.002116
2011	-17.41	11.684	136.515856
2012	-14.66	14.434	208.340356
	$\sum X = -145.47$		$\sum(X - \bar{X})^2 = 731.00512$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{-145.47}{5} = -29.094$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{731.00512}{5}} = 12.091$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{12.091}{-29.094} \times 100 = -41.55\%$$

Loan Loss Provision to Total Income Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	41.65	14.534	211.237156
2009	23.93	-3.186	10.150596
2010	28.64	1.524	2.322576
2011	25.01	-2.106	4.435236
2012	16.35	-10.766	115.906756
	$\sum X = 135.58$		$\sum(X - \bar{X})^2 = 344.05232$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{135.58}{5} = 27.116$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{344.05232}{5}} = 8.2952$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{\bar{X}} \times 100 = \frac{8.2952}{27.116} \times 100 = 30.59\%$$

Loan Loss Provision to Total Deposits Ratio

Year	X	X - \bar{X}	(X - \bar{X}) ²
2008	1.43	0.584	0.341056
2009	0.77	-0.076	0.005776
2010	0.84	-0.006	0.000036
2011	0.71	-0.136	0.018496
2012	0.48	-0.366	0.133956
	$\sum X = 4.23$		$\sum(X - \bar{X})^2 = 0.49932$

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{4.23}{5} = 0.846$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}} = \sqrt{\frac{0.49932}{5}} = 0.3160$$

$$\text{Coefficient of variation (C.V)} = \frac{\sigma}{X} \times 100 = \frac{0.3160}{0.846} \times 100 = 37.35\%$$

Appendix 2

Correlation Coefficient between Total Deposit and Loan & Advances

(Rs. In Millions)

Years (Mid July)	Total Deposit (X)	Loan & Advances(Y)	$x = \bar{X} - X$	$y = \bar{Y} - Y$	x^2	Y^2	xy
2008	46196	23247	-12160	-5331.8	147865600	28428091.24	64834688
2009	50464	24776	-7892	-3802.8	62283664	14461287.84	30011697.6
2010	58333	27571	-23	-1007.8	529	1015660.84	23179.4
2011	68161	31607	9805	3028.2	96138025	9169995.24	29691501
2012	68626	35693	10270	7114.2	105472900	50611841.64	73062834
N= 5	ΣX= 291780	ΣY= 142894			Σx²= 411760718	Σy²= 103686876.8	ΣXY= 197623900

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{291780}{5} = 58356$$

$$\text{Mean } (\bar{Y}) = \frac{\sum Y}{N} = \frac{142894}{5} = 28578.8$$

We have, Karl Pearson Correlation coefficient,

$$\text{Correlation, } (r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{197623900}{\sqrt{411760718 \times 103686876.8}} = 0.956$$

$$\text{Probable Error (P.E.)} = \frac{0.6745(1-r^2)}{\sqrt{N}} = \frac{0.6745(1-(0.956)^2)}{\sqrt{5}} = 0.0259$$

$$6 \text{ P.E.} = 6 \times 0.0259 = 0.1557$$

Correlation Coefficient between Total Investment and Net Profit

(Rs. In Millions)

Years (Mid July)	Total Investm ent (X)	Net Profit (Y)	$x =$ $(X - \bar{X})$	$y =$ $(Y - \bar{Y})$	x^2	Y^2	xy
2008	11555	1593	-1855.2	-198.8	3441767.04	39521.44	368813.76
2009	12650	1696	-760.2	-95.8	577904.04	9177.64	72827.16
2010	14446	1719	1035.8	-72.8	1072881.64	5299.84	-75406.24
2011	15416	1924	2005.8	132.2	4023233.64	17476.84	265166.76
2012	12984	2027	-426.2	235.2	181646.44	55319.04	-100242.24
N= 5	ΣX= 67051	ΣY= 8959			Σx²= 9297432.8	Σy²= 126794.8	ΣXY= 531159.2

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{67051}{5} = 13410.2$$

$$\text{Mean } (\bar{Y}) = \frac{\sum Y}{N} = \frac{8959}{5} = 1791.8$$

We have, Karl Pearson Correlation coefficient,

$$\text{Correlation, } (r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{531159.2}{\sqrt{9297432.8 \times 126794.8}} = 0.489207$$

$$\text{Probable Error (P.E.)} = \frac{0.6745(1-r^2)}{\sqrt{N}} = \frac{0.6745(1-(0.4892)^2)}{\sqrt{5}} = 0.2294$$

$$6 \text{ P.E.} = 6 \times 0.2294 = 1.376$$

Correlation Coefficient between Total Loan & Advances and Net Profit

(Rs. In Millions)

Years (Mid July)	Loan & Advanc es (X)	Net Profit (Y)	$x = \bar{X} - X$	$y = \bar{Y} - Y$	x^2	Y^2	xy
2008	23247	1593	-5331.8	-198.8	28428091.24	39521.44	1059961.84
2009	24776	1696	-3802.8	-95.8	14461287.84	9177.64	364308.24
2010	27571	1719	-1007.8	-72.8	1015660.84	5299.84	73367.84
2011	31607	1924	3028.2	132.2	9169995.24	17476.84	400328.04
2012	35693	2027	7114.2	235.2	50611841.64	55319.04	1673259.84
N= 5	ΣX= 142894	ΣY= 8959			Σx²= 103686876.8	Σy²= 126794.8	ΣXY= 3571225.8

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{142894}{5} = 28578.8$$

$$\text{Mean } (\bar{Y}) = \frac{\sum Y}{N} = \frac{8959}{5} = 1791.8$$

We have, Karl Pearson Correlation coefficient,

$$\text{Correlation, } (r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{3571225.8}{\sqrt{103686876.8 \times 126794.8}} = 0.984928$$

$$\text{Probable Error (P.E.)} = \frac{0.6745(1-r^2)}{\sqrt{N}} = \frac{0.6745(1-(0.9849)^2)}{\sqrt{5}} = 0.0670$$

$$6 \text{ P.E.} = 6 \times 0.0670 = 0.4021$$

Correlation Coefficient between Total Deposit & Total Investment

(Rs. In Millions)

Years (Mid July)	Total Deposit (X)	Total Investment (Y)	x = (X - \bar{X})	y = (Y - \bar{Y})	x ²	Y ²	xy
2008	46196	11555	-12160	-1855.2	147865600	3441767.04	22559232
2009	50464	12650	-7892	-760.2	62283664	577904.04	5999498.4
2010	58333	14446	-23	1035.8	529	1072881.64	-23823.4
2011	68161	15416	9805	2005.8	96138025	4023233.64	19666869
2012	68626	12984	10270	-426.2	105472900	181646.44	-4377074
N= 5	ΣX= 291780	ΣY= 67051			Σx²= 411760718	Σy²= 9297432.8	ΣXY= 43824702

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N} = \frac{291780}{5} = 58356$$

$$\text{Mean } (\bar{Y}) = \frac{\sum Y}{N} = \frac{67051}{5} = 13410.2$$

We have, Karl Pearson Correlation coefficient,

$$\text{Correlation, } (r) = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}} = \frac{43824702}{\sqrt{411760718 \times 9297432.8}} = 0.708296$$

$$\text{Probable Error (P.E.)} = \frac{0.6745(1-r^2)}{\sqrt{N}} = \frac{0.6745(1-(0.708296)^2)}{\sqrt{5}} = 0.1503$$

$$6 \text{ P.E.} = 6 \times 0.1503 = 0.9019$$

APPENDIX -3

Calculation of Trend Value of Total Deposit

(Rs. In Millions)

Years (Mid July)	Total Deposit (Y)	Deviation from Mid July 2010 (X)	X ²	XY	Y _c = a + bX Y _c = 58356.1+6255.7 x X
2008	45844.7	-2	4	-91689.4	45844.7
2009	52100.4	-1	1	-52100.4	52100.4
2010	58356.1	0	0	0	58356.1
2011	64611.8	1	1	64611.8	64611.8
2012	70867.5	2	4	141735	70867.5
N= 5	ΣY= 291780.5	ΣX=0	Σ X²=10	ΣXY= 62557	

Here,

When, $\Sigma X = 0$, from the two normal equations,

$$a = \frac{\Sigma Y}{N} = \frac{291780.5}{5} = 58356.1$$

$$b = \frac{\Sigma XY}{\Sigma X^2} = \frac{62557}{10} = 6255.7$$

Thus,

Average total deposit (a) = Rs 58356.1

Rate of change of total deposit (b) = Rs 6255.7

Hence, the equation of straight-line trend is

$$Y_c = a + bX$$

$$Y_c = 58356.1 + 6255.7 \times X$$

Expected Trend Values of Loans & Advances (2013-2017)

Years (Mid July)	Deviation from Mid July 2010 (X)	Y _c = a + bX Y _c = 58356.1+6255.7 x X
2013	3	77123.2
2014	4	83378.9
2015	5	89634.6
2016	6	95890.3
2017	7	102146

Calculation of Trend value of Loan and Advances

(Rs. In Millions)

Years (Mid July)	Loan and Advances (Y)	Deviation from Mid July 2010 (X)	X^2	XY	$Y_c = a + bX$ $Y_c = 28578.9 + 3172.3 \times X$
2008	22234.3	-2	4	-44468.6	22234.3
2009	25406.6	-1	1	-25406.6	25406.6
2010	28578.9	0	0	0	28578.9
2011	31751.2	1	1	31751.2	31751.2
2012	34923.5	2	4	69847	34923.5
N= 5	$\Sigma Y =$ 142894.5	$\Sigma X = 0$	$\Sigma X^2 = 10$	$\Sigma XY =$ 31723	

Here,

When, $\Sigma X = 0$, from the two normal equations,

$$a = \frac{\Sigma Y}{N} = \frac{142894.5}{5} = 28578.9$$

$$b = \frac{\Sigma XY}{\Sigma X^2} = \frac{31723}{10} = 3172.3$$

Thus,

Average total deposit (a) = Rs 28578.9

Rate of change of total deposit (b) = Rs 3172.3

Hence, the equation of straight-line trend is

$$Y_c = a + bX$$

$$Y_c = 28578.9 + 3172.3 \times X$$

Expected Trend Values of Loans & Advances (2013-2017)

Years (Mid July)	Deviation from Mid July 2010 (X)	$Y_c = a + Bx$ $Y_c = 28578.9 + 3172.3 \times X$
2013	3	38095.8
2014	4	41268.1
2015	5	44440.4
2016	6	47612.7
2017	7	50785

Calculation of Trend value of Net Profit

(Rs. In Millions)

Years (Mid July)	Net Profit (Y)	Deviation from Mid July 2010 (X)	X ²	XY	Y _c = a + bX Y _c = 1791.8+109.6 x X
2008	1572.6	-2	4	-3145.2	1572.6
2009	1682.2	-1	1	-1682.2	1682.2
2010	1791.8	0	0	0	1791.8
2011	1901.4	1	1	1901.4	1901.4
2012	2011	2	4	4022	2011
N= 5	ΣY= 8959	ΣX=0	Σ X²=10	ΣXY= 1096	

Here,

When, $\Sigma X = 0$, from the two normal equations,

$$a = \frac{\Sigma Y}{N} = \frac{8959}{5} = 1791.8$$

$$b = \frac{\Sigma XY}{\Sigma X^2} = \frac{1096}{10} = 109.6$$

Thus,

Average total deposit (a) = Rs 1791.8

Rate of change of total deposit (b) = Rs 109.6

Hence, the equation of straight-line trend is

$$Y_c = a + bX$$

$$Y_c = 1791.8 + 109.6 x X$$

Expected Trend value of Net Profit (2013-2017)

Years (Mid July)	Deviation from Mid July 2010 (X)	Y _c = a + bX Y _c = 1791.8+109.6 x X
2013	3	2120.6
2014	4	2230.2
2015	5	2339.8
2016	6	2449.4
2017	7	2559

Calculation of Trend value of Investment

(Rs. In Millions)

Years (Mid July)	Investment (Y)	Deviation from Mid July 2010 (X)	X ²	XY	Y _c = a + bX Y _c = 13410.2+562.4 x X
2008	12285.4	-2	4	-24570.8	12285.4
2009	12847.8	-1	1	-12847.8	12847.8
2010	13410.2	0	0	0	13410.2
2011	13972.6	1	1	13972.6	13972.6
2012	14535	2	4	29070	14535
N= 5	ΣY=	ΣX=0	Σ X² =	ΣXY=	

Here,

When, $\Sigma X = 0$, from the two normal equations,

$$a = \frac{\Sigma Y}{N} = \frac{67051}{5} = 13410.2$$

$$b = \frac{\Sigma XY}{\Sigma X^2} = \frac{5624}{10} = 562.4$$

Thus,

Average total deposit (a) = Rs 13410.2

Rate of change of total deposit (b) = Rs 562.4

Hence, the equation of straight-line trend is

$$Y_c = a + bX$$

$$Y_c = 13410.2 + 562.4 \times X$$

Expected Trend Values of Investment (2013-2017)

Years (Mid July)	Deviation from Mid July 2010 (X)	Y _c = a + bX Y _c = 13410.2+562.4 x X
2013	3	15097.4
2014	4	15659.8
2015	5	16222.2
2016	6	16784.6
2017	7	17347