

# CHAPTER I

## INTRODUCTION

### **1.1 Background of the Study**

Nepal-A blend of ancient history vibrant cultures of scenic grandeur, located between India and China Nepal's main geographical includes snow-capped peaks, lower mountains, mid hills and fertile plains of tropical jungle close to a third of the length of the Himalayas and 8 world's 14 highest peak lie within Nepal.

The landlocked country covers an 147,181 sq. kilometer ranging from 70 m to the highest point at 8848 m above the sea level and its location is 26<sup>o</sup> 22' N to 30<sup>o</sup> 27' North, 80<sup>o</sup> 4' East to 88<sup>o</sup> 12' east. The topography of the country is extremely varied. It is bordered on the north by the Tibet region of China and on the west, south and east by the Indian states of Uttar Pradesh, Bihar and West Bengal. In other words, Nepal can be aptly described as being "India-Locked". The country is divided into 14 zones and 75 districts with the purpose of having coordinated system of administration for development.

Nepal is an interesting country to examine due, in addition to her developing nature, to her unique geographical situation. The geographical situation has affected Nepalese policy with India and is best represented by the 1950 Trade and Transit treaty, which provides for unrestricted labour and capital movements between both countries.

Nepal has high population growth rate 2.21% low per capita income US \$ 473 in 2008 ([www.financialexpress.com](http://www.financialexpress.com)). It has poorest economic status and low rate of capital formation as well as limited resources of the world. The various factors that affected for the development of the nation are landlocked position, rugged terrain, poor resources endowment institution weakness and lack of appropriate economic policies, due to political instability as well as lack of political commitment. The main reason of Nepal's underdeveloped economy is due to improper utilization of the available resources in the efficient manner. Every economy has its own fiscal and monetary policies which stabilize and supervise the economy. The development of any country largely depends upon the economic health and conditions of the country.

The development of any country largely depends upon the economic and health condition of the country. Now day's financial institutions are viewed as catalyst in the process of the economic growth. The mobilization of the domestic resources is one of the key factors in the economic development of the country. The central bank and commercial bank play a significant role in the economic development of the country, as they are main sources of the capital.

The most of the investment they collect immobilized money in the form of deposits from every corner and part of the country whether it is big or small. This will provide capital for the development of the industry, trade and business and other resources deficit sectors. The central bank monitors the spread rates i.e. deposit rate and other bank rate, establishment of branches and many other aspect of financial institution. Central bank almost governs all function of the financial institution. Commercial banks formulate sound investment policies to make it more effective, which eventually contribute to the economic development of the country. The main function of the commercial bank is to mobilize the deposits of the public in the different sector to get the productive use to earn profit. Commercial bank is providing certain interest rate to depositors and certain percent interest is charged on the bank loan facilities, which we call as the spread rate.

Generally, investment means sum of the money is to mobilize in different sectors that obtained a good income. Investment means to mobilize the capital in profitable sectors or to move the scattered savings for future financial gain. Investment involves real assets and financial assets. Real assets means are tangible material things such as buildings, automobiles and textbooks. Financial assets are pieces of paper representing indirect claim on assets hold by someone else. These pieces of paper represent debt or equity commitments in the form of stock.

Investment has to suffering from various types of risk e.g. business risk, possibility of being earning power of investment due to competition, uncontrollable costs, change in demand etc. It depends on market risk, possibility of change in market price and collateral value of securities and real properties. All the investors do not achieve success. Therefore simply making an investment is not sufficient. One should follow sound investment policy.

In other way, there is much competition in banking market but less opportunity of the investment. In this condition, if bank and financial institution can search of new opportunities than they can move in the competitive market and earn profit. Investment is very risky job, so bank mostly follows sound investment and fund mobilizing policy. The sound policies help commercial bank maximized quality and quantity of investment and here by achieve the own objective of profit maximization and social welfare. The banking sector needs to play a vital role to boost the economy by adoption the growth oriented investment policy and building up the financial structure for economic development.

## **1.2 Origin of Banking**

There are different views about the origin of bank. It is difficult to say that where the word 'Bank' came from. According to one view, the word 'Bank' is derived from the Latin Word 'Bancus' which means a bench. In the early days these activities were done by sitting in a bench and thus, that activities were known as banking activities. Similarly others view that the word 'Bank' is derived from the German Word 'Bank' which means a joint fund. Some believe that it was originated French Word 'Banque' or Italian word 'Banca' all of means a bench, where a banker would sit and keep a record of his money and financial transactions. Later when they were unable to meet the obligations, their benches were broken to pieces. Thus, the words Bankruptcy came from those circumstances.

According to some author the word bank is originally derived from the 'Bank' which means joint stock fund. Irrespective of its origin, bank is perhaps the most important institution is dealing with the monetary activities. In the early days, the banking activities were limited up to the acceptance of deposits from the public for the purpose of lending. But with the world wide development of business activities, the banking sector has also become wider up to the performance of agency services to its clients by providing the facilities like bank draft, letter of credit, credit cards etc.

Before the concept of modern banking was developed in Italy in 2000 B.C., banking was already developed by the Babylonians. In ancient Greece and Rome the practice of granting credit was widely prevalent. Hence, whatever be the origin of the word, it has been used from the middle ages in connection with the business of money lending.

### 1.2.1 Development of Banking in Nepal

It is very difficult to find the correct history of development of bank in Nepal. The historical records show that Guna Kama Dev, the king of Kathmandu borrowed money to rebuild his kingdom in 1728AD or 8th century. In 11th century, during Malla regime there was evidence of professional money lenders and bankers. During the regime of Jyasthiti Malla, caste system was introduced based on profession. Tankadari were such caste, which used to provide loans and used to perform exchange trades. It is further being lived that money lending business particularly for financing the foreign trade with Tibet became quite popular during the regin of Mallas. 'Tejarath Adda' was established in 1877 A.D. with fully subscribed by the government of Kathmandu valley 'Tejarath Adda' may be regarded as the father of modern banking institution in Nepal, which play a vital role in the banking system. It helped the public by providing credit facilities at a very low rate of 5%. It provided a credit especially on collateral of gold and silver. It ran successfully for four decades. Hence, the establishment of 'Tejarath Adda' could be regarded as the foundation stone of banking in Nepal. During the Prime Minister ship of Judda Shamsheer, the Tejsrath Adda was replaced by a commercial bank with the establishment of Nepal Bank Ltd. in 1937 A.D. under 'Nepal Bank Act 1937 A.D.It was a new era in the history of modern banking in Nepal.

Similarly, Nepal Rastra bank was established in 14th Baishak 2013 under 'Nepal Rastra bank Act 2012' as a central bank of the country. The main purpose of this bank was to develop banking system in the country in order to promote trade, industry and agriculture as well as to circulate Nepalese currency all over the country. Rastriya Banijya Bank, another commercial bank was established in 2022 B.S with an initial capital of one corer. It is the largest commercial bank and it plays a major role in the economy. It is fully owned by the government. In 2016 B.S. Nepal Industrial Development Bank (NIDC) was established under 'Nepal Industrial Development Corporation Act 2016 ' with an objective to provide loan to industrial personnel invest in share etc. Being agriculture based economy, the government established co-operative banks. it was established in 2024 B.S under 'Agriculture Development bank Act 2024 ' with an objective to develop agriculture sector of Nepal. Later due to funds and activities it was

converted into Agriculture Development Bank (ADB) with an initial capital of five corers. After sometime, the government to operate the open policy with a view to develop the economy of the country, which allowed joint venture banks in Nepal. The first joint venture bank was established as Nepal Arab Bank Limited in 2041 B.S. under the Commercial Bank act 2031 with a paid up capital of Rs 30 Million. It was started with the allocation of 50% shares of Emirates Bank Limited, Dubai 20% share of Nepalese financial institution and 30% share of general public. Nowadays this bank is known as Nabil Bank, which was 'The Bank of the year2004'.It means it comes in first position. The second joint venture commercial bank is Nepal Indosuez Bank, which was established in 1985A.D with 50% share of Indosuez Bank Ltd. of France. Now it is known as Nepal Investment Bank Ltd. The third joint venture commercial bank is Nepal Grind lays Bank Ltd which was established in 1987 A.D. Now it's known as Standard Chartered Bank Nepal Ltd. It was started with the agreement between Nepal Bank Limited and ANZ Grindlays with Rs. 30 million paid up capital. In the starting 15% of share had hold by general public, 35%of share held by Nepal Bank Ltd. and 50% of share hold by grindlays bank London.

The trend of financial sector expansion continued in the current fiscal year as well. As recent financial sector is generally becoming more intensified and consolidated. The number of (A class) commercial banks has reached 25, (B class) development bank 61, (C class) financial companies 78 and (D class) micro finance institutions 13 by mid April 2009. Likewise, the number of authorized cooperatives for operating limited banking activities and non governmental organization has reached 16 and 45 respectively. In addition to banks and financial institution, there are 25 insurance companies, employees provident fund, citizen investment trust and postal saving banks making a total of 266 such institution serving by mid April 2009 (Economic Survey fiscal year 2008/09).

### **1.2.2 Introduction of Rastriya Banijya Bank**

Rastriya Banijya Bank was established on 10th Magh 2022 under special charter 'Rastriya banijya Bank Act2021.It started its banking with authorized share capital Rs. 10 million and paid up capital Rs 25 million. It is fully owned by government. Rastriya banijya Bank started its services with the objective of to fulfill the increasing need of banking services to the people and business in the

country. In the starting the service offered by RBB was deposits and loans. At present, RBB is the largest commercial bank in terms of deposit, loan distribution and wide network. Bank's has contributing significantly for country's economic development through various activities. It has Rs.15576 lacks authorized share capital and Rs. 11723 lacks paid up capital. It has expanded its service by 1 central office, 15 Departments in central office, 4 regional offices and 120 branches in the various places of Nepal. Its objective is also increase, which are to provide banking services to the people and business in the country, to work engine of economic development of the country and to restructure the bank. The major activities of the bank are deposit collection, accumulated largest deposit of rs.41 billion 12 lacks depositors, lending largest lending of Rs. 25 billion facilitating 2 lacks borrowers in all parts of the country. The bank providing different types of loans and advances like funded loan and Non-funded loan, Overdraft loan, Hypothecation loan, Hire purchase loan, loan against Gold and Silver, loan against Share and Bank Guarantee, Import loan, Export loan, Importers loan and Project loan are funded loan and Bank Guarantee, Letter of Credit and Contractor loan are Non-funded loan. The service offered by RBB are Deposit, Loans, Advances Remittances, Tele Banking Services, Bank Draft, T.T, Mail Transfer, Swift, House loan, Vehicle Loan, Education Loan. It's a government bank so this bank involved in government transaction from 65 branch offices. Recently, it has introduced ATM Card and credit card to its customer and some branches of RBB providing 365 day's services. Thus, further prospective of RBB can be expected very bright. So it is expected that the bank will be able to restore its sound financial position with in few years. So let's hope that RBB would be a lending model commercial with sound financial position in Nepalese banking system in the days to come.

### **1.3 Statement of the Problem**

The main objective of the commercial banks is to improve the economic condition of the country. For that they provide facilitate loan and other banking services to upward the economic activities and strength welfare of the general people. Therefore, this study concentrates with the investment policy of the financial institution.

Investment decision is the main instrument of financial institution. If financial institution should adopted good investment policy then they can reach into their target. So investment policy is important assets. Various parts of the country have effect the investment decision of the commercial bank. Commercial banks have played a vital role by accepting deposits and providing various types of loan in different sector. Mostly commercial banks providing loan in agriculture sector, industrial sector but these sector is not satisfactory to meet the present growing need. Nepotism and political pressure also effect the investment decision of the commercial bank. Loan affects the overall development of the country. The problems of lending have become a serious for developing country. Commercial banks give too many loans, advances, over draft and many other facilities to encourage deposit to their customer they spend big amount of deposit as office operation expenses and for staffs.

Most of the financial institutions have followed conservative lending policy, they are found to make loan only on short time basis but they don't invest on long-term projects. So they may not earn sufficient return and most of the financial institution may have to be collapsed due to poor investment policy or lack of investment strategy in future. In banking sector, there is different type of risk like liquidity risk, purchasing power risk, interest rate risk, credit risk, market risk, operational risk, system risk etc. From this type of risk, the commercial banks are unable to invest the deposit collections on profitable sectors and opportunities. They have always feared of high degree of risk and uncertainty.

Commercial banks have lots of deposit but they are not utilizing their deposits due to lack of sound investment policy. There is much competition in banking market but less opportunity of the investment. The opportunity of investment has been found to have lower productivity and uncertainty sector due to the lack of supervision regarding whether there is proper utilization of their investment or not. Therefore, the commercial banks invest their deposit or funds in limited areas to achieve higher amount of profit.

Nepal Rastra Bank is a central bank of our country. It makes rules and regulation as the major tools to supervise and monitor the financial institutions. The commercial Banks have not formulated their investment policy is an organized manner. They totally depend upon the directions and guide lines of central

bank. They always move under the rules and regulation of Nepal Rastra Bank. Profit is important to every commercial banks as well as shareholders and depositors point of view and it is possible when they invest on safe, sound and profitable project. Every bank must have profit to survive in the competitive market where a lot of money and very little investment policy is the basic function of all the commercial banks and other financial institution. The main focus of this study mainly seeks the answer of the following specific problems related to the investment policy of Rastriya Banijya Bank:-

- Ñ Has the bank been able to utilize the available funds effectively?
- Ñ What is the proportion of Non-performing assets on total loan and advances of the bank?
- Ñ What is the relationship between total investment policies of the bank?
- Ñ What steps should be taken to improve the investment policy of the bank?
- Ñ What is the portfolio behavior of the bank?

#### **1.4 Objectives of the Study**

The main objective of the study is to evaluate the investment policy of Rastriya Banijya Bank. However the specific objective of this study is as follows:-

- Ñ To find out the Non-performing asset position of the bank.
- Ñ To evaluate the portfolio management of the bank
- Ñ To find out priority sector of investment of the bank.
- Ñ To analyze deposit utilization and relationship between total investment portfolio and its return.
- Ñ To suggest measure to improve the investment policy of the bank.

#### **1.5 Significance of the Study**

The study mainly fills a research gap on the study of investment policy of Rastriya Banijya Bank. The success and prosperity of the Bank depend upon the successful implementation and investment of collected resources, which develops the economy of the country. Good investment policy of the bank has positive impact on economic development of the country and vice-versa.



- Ñ This study would provide clear picture how bank is investing its collected fund the analysis would proved a useful feedback further improve to the policy maker of the bank.
- Ñ This study also becomes a useful reference for the other commercial banks of Nepal and Central bank for formulation of the appropriate strategies.
- Ñ Depositors can take decision to deposit their surplus money.
- Ñ All stockholders to this bank will be benefited from this research.
- Ñ Moreover it will prove to be an important value for the entire individual interested value for the entire individual interested Commerce & banking fields.

## **1.6 Limitation of the Study**

This study is done for the fulfillment of the degree in management. So it is not a comprehensive study and it focuses to analyze sudden aspect of the study of investment policy of Rastriya Banijya Bank.

- Ñ This study is based on secondary data collected from the bank.
- Ñ Only 5- year's data are used for the study purpose.
- Ñ This study is limited only in the investment policy of RBB.
- Ñ This study data collected from annual reports published by the bank, report published by NRB, Financial statement articles, journals and publications. So, the data may be either actual or estimated.
- Ñ The study focuses an investment aspect of banking performance only.
- Ñ The study is carried out in only one bank.

## **1.7 Organization of the Study**

This study will be organized into five chapters. Each chapter will be concentrated in different aspects of the 'Investment Policy of Rastriya Banijya Bank'. Chapter I deals the introductory part of the study which remains the main frame work and basis of the study. Chapter II covers the review of the literatures Chapter III, research methodology is discussed. The analysis is done in Chapter IV and Chapter V contains summary, findings and recommendation of the study are given. References and Annex are at the end of the study report.

## CHAPTER II

### REVIEW OF LITERATURE

Review of literature means the study of the material available on research topics; It is findings the pertinent fact with the available literature in ones fields of research. In other word, it is an analytical expression on the concerned topic. Review of literature refers to the analyzing, assessing reevaluating and reexamining the previously written works. It not only provides solid information on the topic but also guides the future action.

The main purpose of literature review is to find out what studies have been conducted in one's chosen field of the study and what remains to be done. IT gives the frame work to the researchers on their own field. The other major purpose of review of the literature is to develop some expertise knowledge in one area to see what new contribution can be made, to receive some idea for the development of research design. The research is a continuous process, it never ends. The procedure and the findings may change but research continuous. This chapter has been divided into following two parts.

#### **2.1 Conceptual Review**

Banks are those financial intermediaries who accept deposit and grant loan. In other word banks is an important for under developed economy as they promote capital formation by developing banking habit of people and collection saving. Banks are mobilizing the deposit of the public in different sector to get the productive use. The development of the country highly depends upon its economic condition. In the modern economy banks are considered not as a dealer in money but as the leaders of development. Its industry has acquired a key position in mobilizing resources for finance and social economic development of the country.

Bank plays a vital role in developing the economic of any country. It is a resource mobilizing intuition which accept deposit from various and invests such accumulated resources in the fields of agriculture, trade, commerce, industry, tourism etc.

The banking sector is largely responsible for collecting house hold saving in terms of different types of deposit and regulating it in the society by lending in different sector of economy. By lending their resources in small scale industries under intensive banking program has enabled the banks to share in the economic growth of the economy (Rose, 2002:9).

Resource mobilization is a key factor for Uplifting financial and economic status of the banking industry. Banking industry has acquired a key position in mobilizing resources for finance and social economic development of the country. Bank assists both the follow of goods and services from the products to the consumers and financial activities of the government. banking provides the country with a monetary system of payment and it is important part of financial system, which makes loans maintain and increase the level of consumption and production in the economy (American Intitute of Banking, 1972:162).

A commercial bank is a business organization that receives and holds deposits of funds from others, makes loan and extends credits and transfers funds by written order of deposits (Encyclopedia The word Book, American Grolier Incorporated Vol 3, 1984).

Commercial banks are the vital aspects in accelerating the pace of the economic development of a country. Banking institution is inevitable for the resource mobilization and all round development of the country. It is a resource for economic development; it maintains economic confidence of various segments and extends credit to people (Grywinshki, 1993:87).

Commercial bank is one of which exchange money, deposit money, accepts deposits, grant loans and performs commercial banking functions and which is not a bank meant for cooperative, agriculture, industries or such specific purpose (Commercial Bank Act 2031 B.S).

Investment means spending aside money for future financial gain. It is a commitment of funds made in the expectation of the some positive rate of returns. Investment takes place at present but return can be expected in future. In other words investment can be defined has the management of an investor's wealth which is the sum of current income and invested to increase wealth.

Investment policy is an important factor for every organization. The sound knowledge of investment policy is the most important for the commercial banks and other financial institution. The sound policies help commercial banks to maximized quality and quantity of investment and there by achieve the own objective of profit maximization and social welfare. Formulation of sound investment policies and coordinated and planned efforts pushes forward the forces of economic growth.

Investment is the sacrifice of current dollars for future dollars and time and risk is involved in investment. Sacrifice takes place in the present and is certain. The reward comes later, is at all and the magnitude is generally uncertain. In some case the element of time predominates. In other cases risk is the dominant attribute (Sharpe and Alexander, 1994 : 1).

An investment is a commitment of money that is expected to generate additional money. Every investment entails some degree of risk, it requires a present certain sacrifice for a future uncertain benefit (Francis, 1991:1).

Investment policy fixes responsibilities for the investment deposition of the bank assets in term of allocation fund for investment and loan establishing responsibility for day to day management of those assets (Baxley, 1987:124).

Investment is one of the most important functions of commercial banks and composition of loans and advances directly affects the performance and profitability of the bank. Investment policy is an important for the commercial bank. A good investment policy attracts both buyers and lenders, which increase both the volume and quality of deposits, loan and investment. In the investment procedures and policies, it is always taken in mind, that the greater the credit created by the bank the higher will be the profitability. A sound lending and investment policy is not only prerequisite for banks profitability but also crucially significant for the promotion of commercial saving of developing country like ours. Sound policies helps commercial banks maximize both the quality and quantity of investments and there by achieve their objective of profit maximization and social welfare. Commercial banks should be careful while performing the credit function. Investment policy should ensure minimum and maximum profit for lending.

## 2.2 Functions of the Commercial Bank

Generally, the function of commercial bank is collecting the immobilized money in the form of deposit from every corner and parts of country. Then it is invested in profitable sector. Commercial bank collects money on various kinds of deposits, current saving, and fixed. Under current deposit the banker incurs the obligations of playing legal tender on demand, while on fixed deposits the banker incurs the obligation of playing legal tender after the expiry of a fixed period.

The American Institute of banking has laid down four major functions of commercial banks such as receiving and handling of deposits, handling payments of its clients, making loans and investments and creating money by extension of credit (American Institution of Banking 1971.).

Hence, commercial bank is to mobilize the scattered saving of the public through current, saving and fixed deposit account. Then it provide capital for the development of industry, trade business and other sector by granting overdrafts for fixed loan or by discounting bills of exchange or promissory notes.

The major functions of commercial banks are as follows:

- ) They accept custody of funds with or without interest and open fixed accounts and saving accounts in the name of depositors.
- ) They supply loans (short-term debt as well as long term debts whatever necessary for trade and commerce) or make investment.
- ) They help to issue shares and debentures of any company or any others corporate body, guarantee or underwrite such shares or debentures and undertake any agency business but not become a managing agent.
- ) Conduct transactions in bonds, provisional notes or bills of exchange foreign exchange relating to commerce or cooperative as are redeemable with in the kingdom.
- ) They grant overdraft.
- ) They issue letter of credit, draft and traveler's cheque.
- ) They remit or transit fund to different place with in or outside the kingdom.
- ) They purchase, sell or accept the securities of Nepal's Government.

## **2.3 Features of Investment Policy**

Every commercial bank has own objective. Banks are inspired with the objective of earning more profit. There are many reasons after the goal of gaining profit because it needs a great amount of expenses to run the bank for long-term. To operate the banking daily activities with success for long-term, many employees are appointed. The shareholders are the owner of the bank. The aim of any person or institution to invest the money to bank is to earn more profit only. Without investment, a bank can't gain profit. The bank can't be successful until it gains profit. After the establishments of the banks it collects much deposits, gets the deposits, from the current, saving and fixed deposit account. Commercial banks have a great role to help the economic development of the country and to take the social responsibility. Therefore, to the continuous or successful of the bank, it has needed to earn more profit. The income and profit of a bank largely depends upon its lending procedure policies and investment of its funds in different securities. They should have the ability to use the policy of banking investment and to implement it much more carefully otherwise a bank may be unsuccessful in its goals. Thus, the profit of a bank largely depends upon its investment policy. There is always a positive relation between the credit and the profitability of the bank. The greater the credit created by the bank the higher will be its profitability. A sound lending and investment policy is not only the prerequisite for banks profitability, but also crucial for the promotion of commercial saving of a back ward country like ours. Hence, some the main characteristics of the investment policy are as follows:

### **1. Liquidity:**

Liquidity means banks ability to meet its good financial situation or to satisfy its short term obligations when they become due for payments. The liquid property means cash stock of the commercial banks the amount of short term, current accounts, short term government and business security. Bank collects the money in accounts of current, saving and fixed deposit from different peoples. People deposit money in bank on different accounts with the confidence that it will be able to repay their money when they need. In order to maintain this confidence and loyalty depositors the bank must keep this point in mind while investing its

excess funds in different securities, so that it can meet current or short term obligations when they become due for payments.

Liquidity is the most important for the success of the bank. The commercial banks have liability to the deposits and they immediately should give it in the time when the depositors asked. For this purpose, the bank should keep adequate liquid funds. And also they should gain profit by utilizing the deposits as a loan and advances. If adequate liquid fund is kept, they can return the deposits at will of the depositors but such bank can't run for a longtime. In the someway, if they invest the whole deposit loan and advances, they can't give it at the time of demand by the depositors. So, the commercial banks try to move the liquidity and profit together. It is a great challenge for the managers of the bank. The central bank pays attention to this reality to give direction on liquidity to the commercial banks.

## **2. Safety:**

A bank should always be careful about the safety of its investment while it is following its investment policy. Safety is the important to the bank for the investment. Bank should pay special emphasis on safety. Because, if the invested area is unsafe and it is not good omen for the bank. Bank should always invest its fund in those securities which are volatile i.e. which are subject to too much depreciation and fluctuation because a little different may cause a great loss. It invest in an unsafe sector with the hope of gaining much is to accept the security of low quality. To invest large loan against less securities by receiving commission to invest in new places without care, observation and to follow the long term loan including these all various reasons will make unsafe pf the bank's investment. So, the bank should gravely study whether there is a possibility of good quality. If the asset taken as the securities is low quality or low valued and if there is no possibility of safe of the security the bank suffers from loss. Therefore, bank should always invest its fund in good securities like gold, silver, diamond, company's share certificates, debenture development bond an other. Similar type of securities of immovable property like house, land can't be sold in time.

### **3. Profitability:**

Every organization has own special goal or objectives. The main objective of the commercial bank is to earn mores profit. Profit is an income from an investment. IT is the excess of income over the expenditure during a period of time. TO achieve goal, the bank should adopt the theory of profitability in its investment policy. Profitability is the important for the success of the bank. The bank can maximize its profit through maximization of return on their investment and lending. They must invest their funds in these sectors, which will maximize their profit. The bank can get much profit from the safe and long-term investment. Bank should also invest its fund in risky area because we know where more risk there is much profit is. But sometime it makes create a situation where the bank should face the grate economics loss, by loss of investment in such a risk sector. The profit of commercial banks depend of on interest rate bank charge volume of loan its time period and nature of investment on different sector. In the investment policies and procedure, it is always get kept in mine that greater the credit created by the bank, higher will be the profitability. So the bank should always think to apply and appropriate investment policy in such sector from which can earn much.

### **4. Diversification:**

Diversification means divided one part in to various different parts. In banking sector diversification means bank should invest its fund in different sector not only in one or two sectors. It mean bank should diversify it's invest in various sector. If the bank should adopt theory of diversification certainly its investment policy will be successful. Diversification helps to minimize risk and uncertainties. There is a statement "Do not put the all the eggs in same baskets." It's means diversification of loan help to certain loss according to the law of average. If bank should diversify it's invest in many sector, it become successful to keep it in balance. Therefore will be less profit from investment of some sector and there will be maximum profit form some another sector. There may be loss too if some sector one whole a bank should be able to its safe a component if it happen so the banking transition does not go up and down. The bank should diversifications its investment fund in gold, silver, diamond, development bond, share of company, debenture, goods import and export bills and other



appropriate securities. The bank always gets success in there working capacities from such investment. Hence if the bank should adopt the theory of diversification it will get success.

### **5. Marketability:**

Market is an important for the success of every organization. A bank should follow the policy of marketability in its investment sector. There is most competition in banking market but less opportunities of the investment. The market of Nepal is small in this condition the bank can take limitation inn search of new opportunities. Banks should follow its loan by taking good quality of securities. When the bank should invest its fund in first class securities if the bank cannot receive its fund from customer then it received its amount from the scale of securities in market. So the Bank always thinks about those securities whose its sales easily in market. It means banks should follow the theory of marketability's in its investment policy. Therefore the bank should keep in mind the principle of marketability while it makes investment. Are the goods taken as securities saleable in the market or not? Can the loan be recovered by selling it in the market or not? The bank should adopt the investment policy by paying the attention to the different aspect. It should study the market evaluate of the goods which are taken as securities. The bank should not invest by taking the securities the goods which are not saleable in the market and they are sold but not fetch the reasonable prices and there is no value of such thing. The bank should take as far as possible such goods which keeps may be safety and freshly in the market. The loan will be recovered by gold, silver, diamond, company share, certificate, debenture, development bond and other similar types of securities of immovable property like house, land which cannot be sold in time. Hence the banks should do such things then the bank will get more profit and make the investment policy successful.

### **6. Legality:**

Legality is also one of the features of investment policy of the bank. The bank should invest its fund only in legal activities of business but not in any kinds of illegal activities. It the bank should invest its fund in illegal activities or sector that may hamper of its reputations. Bank also suffers from losses if it invests its fund in illegal securities. In another word illegal securities will bring lots of

problem like market problem, safety problem and profitable problem. If bank should adopt illegal securities then it may be bankrupt. Therefore a commercial bank should must abide by rules and regulation along with different sorts of directives issued by Nepal Rastra Bank, Ministry of finance, Ministry of law and other relevant authorities while mobilizing its fund for its own interest.

## **2.4 Principle of Banking Investment Policy**

The main function of bank is to accept the deposits of public and to earn more profit from advancing loans. In the balance sheet of the banks and financial institutions, the most important things is that in the assets side funding of the loans, advances or use of funds and in the liabilities side, deposit collection policy affects the performance of banks or financial institutions. If the bank can't refund the loan amount in time then it can't able to pay the money to the depositors in time. It affects the believe ness of the bank. So the bank always should provide its fund or utilize its capital in safety areas. It means bank should always concentrate at the time funding loans so that it will collect timely. Loan investment is an important function for the reputation of bank or financial institutions.

Bank should determine every year its investment policy to achieve maximum profit by utilizing its financial resources. Bank always focused on lending loans in the investment program. Bank investment policy means a process to give continuity to investment of bank's amount to earn more profit. The main principle of bank's investment policy is as following:

### **) Principle of security**

Security is an important principle of bank's investment policy. Bank always invest its fund in those sectors where it feels safety and its repayment guarantee. It calls for careful review of economic and industrial trends before choosing any type of investment or the time to invest.

### **) Principle of Liquidity**

Cash and bank balance is a net assets but it can not earn income. So, the bank always invest total fund except the need for daily transactions. Liquidity means to convert the bank's assets into cash without delay at full market value in any

quantity. When the bank converted its assets into cash, then it will not suffer from losses. Therefore, the bank should always invest its fund in those securities which are converted into cash without delay. So, that the bank repayment easily to the depositors.

### ) **Principle of Diversification**

The bank accepts the risk when it provides loan. There is a statement, "Higher the risk, higher the profit". It means lending of loans without risk is not effective for the investors. So bank always think how to minimize its risk. For that, the bank should adopt the principle of diversification. It means bank invest its fund in different sectors or areas not only in one or two sectors. From that the risk may be converted into one area to another area. Thus, the bank always should prepare diversified loan portfolio which helps to minimize the risk.

### ) **Principle of Income Earning**

In the present situation, the main objectives of the bank are to earn more profit and to maximize the value of shareholders. Therefore, the bank always should invest its fund in profitable sector. Without profit the bank cannot achieve success and it cannot run for long-term. To achieve the goal, the bank should adopt the theory of earning income in its investment policy.

### ) **Principle of National Economic Policy**

National economic policy is also effect the investment policy of bank. When the bank prepares its investment policy it always thinks about the national economic policy. A profitable bank helps to develop the financial and social economy of the country.

## **2.5 Review of Books.**

Bank is an institution that keeps money for individuals or company exchange currency makes loan and after financial services. It is a financial organization that offers the widest range of financial services specially credit saving and perform the widest range of financial function of any organisation in the

economy. Bank should properly utilize its funds for various investment avenues with a view to sustain and earn profit.

Investment in its broadest sense means sacrifice of certain present value for (possible uncertain) future value (William F. Sharpened et. al., Investment 5th edition, March 1999).

In the words of Gitman and Jochnk " Investment is a any vehicle in to which funds can be placed with the expectation that will preserve of increase in value and generate positive returns" (L.J Gitman & Jochnk, "Fundamental of Investment" 4th edition) Emphasizing the important of investment policy H.D. Crosse puts his view in the way, "lending is the essence of commercial banking and consequently the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management. Well conceived lending policy and careful lending practices are essential if a bank is to perform its credit function effectively and minimized the risk interest in any extension of credit". (H.D. Crosse "Management Policy for commercial bank, " 2nd edition 1963) James B. Baxley is of view that "investment policy fixes responsibilities for the investment disposition of the bank asset in terms the allocation for investment and loan and establishing responsibility for day to day to management of those assets". (James B. Baxley, "Banking Management " 1987) "The term investing can cover a wide range of act activities. It often refers to investing money in certificates of deposit bond, common stocks or mutual fund. More investors that are knowledgeable would include other financial asset such as warrant puts and call future contract and convertible securities. Investing encompasses very conservative's positions and aggressive speculation". (Charles Parker Jones, "Investment Analysis & Management" 2nd edition 1988) S.P. Singh and S. Singh holds that "the investment ( credit) policies of banks are conditional to grate extent by the national policy frame work every bank of has to apply his own judgment for arriving at a credit decision, keeping of course his bank credit, policy also in mind ". ( S. P. Singh & S. Singh "Financial Analysis For Credit Management in Bank" 1983) Frank K. Rellay has define investment as, "and investment may be defined as the current commitment of funds for a period of time to derive future of funds that will compensate the investing unit for the time of funds are committed for the expected rate inflation and also the

uncertain to involve in the future follow up funds " (Frank K. Relly " Investment" According to L. V. Chandler " A banker seeks optimum combinations of earning liquidity and safety while formality investment policy" (L.V. Chandler " The Economic of Money and Banking " 6th edition 1973 ) "The rate of return on asset is a valuable measure when comparing the profitability of one bank with another or with the commercial banking system. A low rate is the result of conservative lending and investment policy or excessive operating expenses. Bank could of course attempt to offset this by adopting more aggressive lending and investment policies to generate more income"/ (Ibid, p195) Dr. Mrs. Preeti Singh has defined investment as " investment is the employment of funds with the aim of archiving additional income or growth in value, the essential quality of an investment is that it involves ' waiting for a reward." (Preeti Singh "Investment management ") Mr. Charles P. Jhones defines investment as "the commitment of funds to one or more asset that will be held over some future time period.". Investment is the study of the investment process and its concern with the management of an investor wealth. In broad sense, the investment operation of bank includes lending and investment in different types of securities. Lending is the primary investment activity and investment in different types of securities is the secondary investment activity of commercial banks.

## **2.6 Review of Legislative provisions**

In this section, the review of legislative framework (environment) under which the commercial banks are operating has been discussed. This legislative environment has significant impact on the commercial banks' establishment, their mobilization and utilization of resources. All the commercial banks have to confirm to the legislative provisions specified in the Commercial Bank Act 2031 B.S. and the rules regulations formulated to facilitate the smooth running of commercial banks.

The preamble of Nepal Bank Act (1994) clearly the need of commercial bank in Nepal. In the absence of any bank in Nepal the economic progress of the country was being hampered and causing inconvenience to the people and for the betterment of the country, this law is hereby promulgated for the established of

the bank and its operation. As mentioned in this act, Commercial banks will help in banking business by opening its branches in the different parts of the country under the directions of NRB. The main function of Commercial banks established under this act will be exchange of money, to accept deposits and give loan to commercial and business activities.

### **NRB rules regarding fund mobilization of commercial bank**

To mobilize bank's deposit in different sectors of the different parts of the nation to prevent them from the financial problems, central bank (NRB) may establish a legal framework by formulating various rules and regulations (prudential norms). These directive must have direct or indirect impact while making decision to discuss those rules and regulation which are formulated by NRB in terms of investment and credit to priority sector, deprive sector, other institution, single borrower limit, CRR, loan loss provision, capital adequacy relation, interest spread, productive sector investment. A commercial bank is directly related to the fact that how much fund must be collected as paid up capital while being established at a certain place of the nation, how much fund is needed to expand the branch and counters, how much flexible and helpful the NRB rules are also important. But we discuss only those, which are related to investment function of commercial banks. The main provisions, established by NRB in the form of prudential norms in above relevant area are briefly discussed here under.

#### **1. Provision for investment in deprives sector:**

This provision instructed by government (ministered of finance) and NRB. Some rules, which are formulated by NRB, affect the areas of credit and investment extension to the deprived sector by the commercial bank. According to the new provision, with effect from 16 July 2001, investment in shares of rural development banks by commercial banks, which used to be counted for the priority sector lending, only is new to be including under the deprived sector lending.

According to the new provisions NBL, RBB, NABIL, NSCBL, NIBL are required to invest 3%, HBL, NBBL, NSBL, EBL, are required to invest 2% Bank of

Kathmandu Ltd. is required to invest 1.75%, Nepal Credit and Commerce Bank Ltd. is required to invest 0.75% while new commercial banks are required to invest 0.25% of their total loans and advances to the deprived sector.

## **2. Provision for credit to the priority sector**

NRB requires commercial banks to extend loan and advance, amounting at least to 12% of their total outstanding credit to the priority sector. Commercial banks credit to the deprived sector is also a part of priority sector credit. Under priority sector, credit to agriculture, credit to the cottage and small industries and credit to service are counted commercial bank's loan to the cooperatives licensed by the NRB is also to be computed as the priority sector credit from the fiscal year 1995/96 onwards.

## **3. Provision for the investment in productive sector**

Nepal, being a development country needs to develop infrastructure and other primary productive sector like agriculture, industry, etc. For this, NRB has directed commercial banks to extend at least 40% of their credit to the productive sectors. Loans to priority sector, agriculture sector, and industrial sector has to be included in productive sector investment.

## **4. Provision for the single borrower credit limit**

With the objective of lowering the risk of over concentration of bank loans to a few big borrowers and also to increase the access of small and middle size borrower to the bank loans. NRB directed CBs to set an upper limit on the amount of loan financed to an individual, firm company of group of companies. According to this CBs are required not to exceed the single borrower limit of 35% in the case of fund-based credit and 50%, in the case of non-fund based credit such as the letter of credit, guarantee, acceptance letter, commitment has been fixed is a proportion of capital funds of banks.

## **5. Directives to raise capital funds**

The commercial banks are allowed to include paid up capital and reserves for meeting the minimum capital requirement but they have to deduct the net loss from such funds if they are in loss. Similarly, the commercial banks are directed

to maintain the minimum capital found on the basis of their risk. Where, core capital includes paid up capital, share premium non-redeemable preference share, general reserve fund and accumulated loss/profit. Supplementary capital includes general loan loss provision, exchange equalization reserves, asset revaluation reserve, Hybrid capital instrument, subordinated term debt and free reserve.

## **6. Cash reserve requirement (CRR)**

Cash reserve is a nerve centre of the banks, which are transaction, speculative and precaution motives operating impact. To ensure adequate liquidity in the commercial banks, to meet the depositor's demand for cash at any time and to inject the confidence in depositor's regarding the safety of their deposit funds, commercial banks are required to have maximum CRR. In this regard, NRB has directed commercial banks to deposit minimum 8% of current and saving and 6% of deposits in the NRB as primary cash reserve. The commercial banks are further required to have 3 % cash of total deposits in their own bank as secondary reserve.

## **7. Loan classification and loss provision**

With a view to improving the quality of assets of commercial banks NRB has directed commercial banks to classify their out-standing loan and advances, investment and other assets into six categories. The classification is done in two ways. The loans of more than 1 Lakh are to be classified as debt service charge ratio, repayment situation, financial condition of borrower, management efficiency, quality of collateral. The loans of less than 1 Lakh have to be classified as per maturity period. Loan loss provisioning has affected bank's capability to extend loans and made them risk averse in issuing newer loans, particularly to the private sector and priority sector where the loan default is high.

## **8. Directives regarding interest rate spread**

The interest rate spread, the difference between interest charged on loan and advances and the interest paid to the depositors, has widened significantly in the aftermath of deregulation in interest rates. This has caused lower financial intermediation. Therefore, NRB has required commercial banks to limit interest



rate spread between deposit and lending rates to a maximum extent 5% NRB has also provided commercial banks with new calculation method of interest rate spread for a certain period recently.

The review of above relevant literature has no doubt enhanced fundamental understanding and foundation knowledge base, which is prerequisite to make this study meaningful and purposive. Based on feedback divided from the literature review of relevant literature, the choice of research methodology and further analysis in my study would be under better track and to the point to suggest future workable suggestions for commercial banks.

## **2.7 Review of Research Article**

**Shiva Raj Shrestha, (1998)** has given an insight on the, Portfolio management in commercial banks: theory and practice. He has highlighted following issues in the article. The portfolio management is essential both for individuals and for institutional investors. Investors would like to select a best mix of investment assets subject to following aspects;

- ) Good liquidity with adequate safety of investment
- ) Flexible investment
- ) Maximum tax concession
- ) Certain capital gains
- ) Economic, efficient and effective investment mix
- ) Higher return compared with alternative opportunities available according to the risk class of investors.

In view of above aspects, following strategies can be adopted:

- ) Do not hold single security i.e. try to have a portfolio of deference securities.
- ) Do not put all the eggs in one basket i.e. try to have a diversified investment

- ) Choose such a portfolio of securities, which endure maximum return with minimum risk or lower return but with added objective of wealth maximization.

However, Mr. Shrestha has also presented following approach to be adopted for designing a good portfolio and its management:

- ) To identify securities for investment to refuse volatility of return risk.
- ) To find out the inevitable assets (generally securities ) having scope for better returns depending upon individuals characteristics like age, health, need liquidity, tax liability, disposition.
- ) To develop an alternative investment strategy for selecting a better portfolio that will ensure a trade off between risk and return with a view to attach the primary objective of wealth maximization at lower risk.
- ) To find out the risk of the securities depending upon the attitude of investor towards risk.

Mr Shrestha has presented two types of investment analysis techniques i.e. fundamental analysis and technical analysis to consider any securities such as equity, debenture or bonds and other money and capital market instruments. He has suggested that the banks having international network can also offer access to global financial markets. He has suggested that the banks having international network can also offer access to global financial market. He has pointed out requirements of skilled workforce, research and analysis team and proper management information system (MIS) in any commercial bank to get success in portfolio management and customer's confidence.

According to Mr. Shrestha, the portfolio management activities of Nepalese commercial bank at present are in promising stage. However, on the other hand, most of the banks are not doing such activities so far because of the following reason:

- ) Unawareness of the clients about the service available.
- ) Hesitation of taking risk by the clients to use such facilities.

- ) Lack of proper techniques to run such activities in the best and successful manner.
- ) Less developed capital market and availability of fewer financial instruments in the financial markets.

**Radhe S. Pradhan (1994 )**, Financial management and practices in Nepal in 1992, dealt mainly with financial function, sources and types of financing, financing decision involving debt effect of change in taxes on capital structure, financial distress, dealing with banks and dividend policy. The main findings of the study connected with financial management are as follows:

- ) Banks and retained earnings are the two most widely used financing sources.
- ) The enterprises have a definite performance for the bank loans at a lower level of debts.
- ) Generally, there is no definite time to borrow the issues stocks. The majorities of respondents are unable to predict when interest rate will lower or group is unable to predict when the stock will increase or decrease.
- ) Most expertise does not borrow from one bank only and they do switch between banks whichever offer best interest rates.
- ) Most expertise finds that banks are flexible in interest rates and convenient.

Thus, it can be said that, out of numerous studies in the capital market of Nepal, this study has established itself as a milestone.

**Shekhar Bahadur Pradhan (1996)**, has presented a glimpse on investment in different sectors, its problems and prospects through his article, Deposit mobilization, its problem and prospects. On his article, he has expressed that, deposit is the lifeblood of any financial institution, and be it commercial bank, finance company, co-operative or non-government organization. He also added in consideration of 10 commercial banks and nearly three dozens of finance

companies, the latest figure does produce a strong feeling that a serious review must be made of problems and prospects of deposit sector. Except few joint venture banks, other organization heavily on the business deposit receiving and credit disbursement.

In the light of this, Mr. Pradhan has pointed out following problems of deposit mobilization in Nepalese perspective.

1. Due to the lesser office hours of banking system, people prefers for holding the each in the personal possession.
2. Unavailability of the institutional services in the rural areas.
3. No more mobilization and improvement of the employment of deposits in the loan sectors.
4. Due to the lack of education, most Nepalese people do not go for saving in institutional manner.

However, they are very much used to saving, be it in the form of cash, ornaments or kind. Their reluctance to deal with Institutional system are governed by their low level of understanding about financial organization, process requirements, Office hours with drawl system, availability of deposits facilities and so on. Mr. Pradhan mentioned that deposit mobilization carried on effectively is in the interest of the depositor's society, financial sector and the nation. Lower level of deposit rising allows squeezed level of loan delivery leaving more room to informal sector. That is why higher priority to deposit mobilization has all the relevance.

**Sunity Shrestha (1998 )**, in her article, Lending operation of commercial banks of Nepal and it impact on GDP, has presented with the objectives to make an analysis of contribution of commercial bank's lending to the gross domestic product (GDP ) of Nepal. She has set hypothesis that there has been positive impact of lending commercial banks to the GDP. In research methodology, she has contributed GDP as the dependent variables and various sector of lending like agriculture, industry, commerce, service, and general and social sectors as the independent variables. A multiple regression technique has been applies to

analyze the contribution. The multiple regression analysis has shown that all the variables except service sector lending have a positive impact on GDP. Thus, in conclusion she has accepted that there has been positive impact by lending of commercial banks in various sectors economy, except service sector investment.

**Dev Lal Kishi (1996)**, in his article, *The changing face of the banking sector and the HMG/N recent budgetary policy*, concluded that following an introduction of the reform in the banking sector as an integrated part of the liberal economic policy. More banks and finance companies have come up as a welcome measure of competition slowly and steadily, the two government controlled banks, Nepal Bank Ltd. and Rastriya Banijya Bank have also shown an improvement of non-performing loans and are taking steps to adopt improved technology. However, higher economic growth with social justice brings a significant benefit to the poor, are yet to be achieved as envisaged by the government of Nepal.

## **2.8 Review of Previous Research**

Before preparing this thesis, many other theses regarding various aspects of commercial banks such as (financial performance, lending policy, investment policy etc) has been studied. Some of them were relevant for this study while others were not. So, among that relevant theses some of them are presented below:

**Shrijana Shrestha (2004)** conducted a study on, "Nepal Rastra Bank Guidelines on Investment Policy of Commercial Banks in Nepal (A case study of Nepal Investment Bank Ltd.)" with the objectives of

- (a) To highlight the NRB Directives regarding investment policy (loan, advances and investment)
- (b) To analyze the liquidity of NIBL
- (c) To find out the relationship between total deposit and loan and advances, total deposit and total investment.
- (d) To make the trend value analysis of deposit utilization and its projection for next five years.
- (e) To find out whether NRB guidelines are actually being implemented.

The study was conducted on the basis of secondary data.

The main findings of the study are:

- (a) Bank is in good position to meet the daily cash requirement as bank has maintain the average cash and bank balance in respect to total deposit.
- (b) The performance of NIBL regarding deposit collection, granting loan and advances and investment in quite satisfactory but does not seem to follow a definite policy.
- (c) NIBL has not efficiently utilized its equity capital hence return on equity is not satisfactory because of lack of sound investment policy for mobilization of its equity capital.
- (d) Interest earned a total operating income of NIBL is high. However, bank failed to maintain net profit on the study.
- (e) From the analysis of coefficient of correlation, there is positive and significant relation between total deposits and loan and advances and current assets and current liabilities is negative and so significant relationship between outside assets and net profit.
- (f) Trend analysis and projection for next five year of total deposits, loan and advance, investment and net profits are in increasing trend.

**Dharma Raj Khanal (1987)** in his thesis entitled, "Investment in priority sector by commercial banks (A study of commercial banks of Kathmandu Valley)" has pointed out the following objectives:

- (a) To analyze the trend of investment in priority sector.
- (b) To find out the extent of profitability affected in this sector.
- (c) To measure the efficiency of the program in the rural and urban sector.
- (d) To evaluate the banking procedures and services in disbursing loans.
- (e) To explore the reasons for low investment.

The main findings of the research were as followings:

- (a) The investment in priority sector has an increasing trend.
- (b) Banks are giving due consideration to increase investment in the priority sector.
- (c) Due to low interest rate, overhead cost increased in administration and showed low profitability.
- (d) The regression analysis had shown a negative relationship between profit and investment.
- (e) The chi square test has shown that the investment program in rural and semi urban areas is more effective than in urban areas.
- (f) Banking procedure regarding loan disbursement in priority sector is much more complicated.
- (g) There is wide gap between demand and supply of loan.
- (h) Due to security and lack of proper legal documents most loans requested have been rejected and even cancelled some of the projects in different sectors.

**Suushil Chandra Mahat (2004)** conducted a study on "Investment Policy of Nepal Bangladesh Bank limited" with the objective of:

- ) To find out the non-performing assets position of the bank.
- ) To evaluate the portfolio management of the bank.
- ) To find out the bank's investment on priority sector.
- ) To analyze the deposit utilization and its relationship with total investment and net profit of the bank.
- ) To suggest measures to improve the investment policy of the bank.

The study was conducted on the basis of secondary data:

The research findings of the study are:

- (a) The proportion of non-performing assets on total loan and advances of the bank is more than the satisfactory level. It should be less than 5 % to be regarded as internationally A-grade commercial bank. For the Nepalese context, NPA level of the bank is higher than these standards. So, the management of the bank should give its attention in time to manage NPA level with in the satisfactory level.
- (b) The loan and advances portfolio of the bank is not satisfactory. The lending isn't properly diversified. Half of the loan from total portfolio is given to industrial sectors. Bank is unable to explore the new and profitable sectors for the lending purpose: so, the bank has very risky portfolio of loan and advances. If industrial sector will not function properly, its impact to the bank will be huge.
- (c) Bank is not fulfilling is priority sector investment requirement every year, during the study period. In the course of failure to fulfill the directive credit requirement, bank is subject to penalty, which affects the profitability of the bank. The average priority sector lending of the bank is less than required 12% landmark.
- (d) The relation of total deposit is positive to total investment i.e. if total deposit increases, bank's loan and advances, investment on government securities, shares and debentures of other companies also increases. But total profit is irrespective total investment.

**Jyoti Joshi (2005)** conducted a study on "Investment policy of commercial banks in Nepal. A comparative study of Everest Bank Limited with NABIL Bank Limited and Bank of Kathmandu " with the objectives of :

- (a) To discuss fund mobilization and Investment policy of EBL, NABIL and BOK Ltd.
- (b) To evaluate the liquidity, efficiency and profitability and risk position.
- (c) To evaluate the growth rate of loan and advances total investments with other financial variables.



- (d) To analyze the trend of deposits utilization towards total investment and loan advances.
- (e) To conduct hypothetical test to find whether there is significant difference between the various important ratio of EBL, NABIL and BOK.

The study was conducted on the basis of secondary data.

The research findings of the study are:

- (a) The liquidity position of the EBL is comparatively better than NABIL and BOK. EBL has the highest cash and bank balance to current assets ratio. NABIL has the lowest liquidity position than that of other two banks. EBL has good deposit collection and has made enough investment on government securities but it has maintained moderate investment policy on loan and advances.
- (b) From the analysis of assets management ratio or activity ratio, it can be concluded that EBL is comparatively overage or in between successful in compared to NABIL and BOK. The total investment of EBL is in between in compared to other two banks.
- (c) In the study, loan and advances to total deposit is higher in BOK but total investment on shares and debentures to total working fund ratio is higher in BOK. But the coefficient of variation is higher in EBL.
- (d) In analysis of profitability, total interest earned to total assets of EBL is lowest at all. But overall analysis of profitability ratios, EBL is average in comparisons to other compared banks i.e. NABIL and BOK. From the viewpoint of risk ratio, EBL has higher capital risk ratio but average of credit risk ratio in compared to NABIL and BOK.

**Sunity Shrestha (1993)** in her research, "Investment planning of commercial banks in Nepal, has made remarkable efforts to examine the investment planning of commercial banks in Nepal. From the study what she concluded is that bank portfolio (loans and investment) of commercial banks had been influenced by the variable securities rates. Investment planning of commercial banks in Nepal is directly traced to fiscal policy of government and heavy regulatory procedure of

the central bank. As a result, investments are not made in a professional manner. Similarly investment planning and operation of commercial banks in Nepal have been found unsatisfactory in terms of safety, profitability, liquidity, productivity and social responsibility. To overcome this problem she has suggested, "commercial banks should take their investment function with proper business attitude and should perform lending and investment operation effectively and efficiently with proper analysis of the projects."

She has conducted this research with the following objectives:

- (a) To evaluate the financial performance of commercial banks of Nepal.
- (b) To examine the investment of commercial banks of Nepal with reference securities, loans and advances.
- (c) To establish the relationship of bank portfolio variables with the nation income and interest rates.

The research was conducted on the basis of primary and secondary data of commercial banks.

The research findings are summarized below:

- (a) The general tendency of the commercial banks assets holding is growing deposits have been a major source of funds. The excess reserve level of the banks allows idle money and loss of opportunity. Debt equity ratio is very high, greater than 100%.
- (b) The return ratios on average are higher for foreign joint venture banks than for Nepalese banks but return of assets is found to be statically same. Risk taking attitude is higher in foreign JVBs. The total management achievement index is higher in case of foreign banks compared to Nepalese banks.
- (c) The hypothesis that the commercial banks have non professional style of decision making in investment has been accepted. The investment of commercial banks in shares and securities is normal and is not found to have strategic decision towards investment in shares and securities. Yield from the security has been found to be satisfactory.

- (d) Investment in various economic sectors shows that industrial and commercial sector are taking higher share of loan till 1990.
- (e) Investment in various sectors has a positive impact on national income from their respective sectors.
- (f) Lending in priority sector showed that cottage and small industry are sharing higher loans.
- (g) Priority sector lending showed positive impact on the national income.

The secured loan analysis showed commercial loan as being very important followed by social and industrial loans. The loan loss ratio has found to be credit has been affected by the national income and lending and Treasury bill rate. The investment of commercial banks on government securities has been affected by total deposit cash reserve requirements and Treasury bill and lending rates. Interest rates, lending rates, deposit rates were found to constitute a set of significant variable affecting the bank's portfolio composition.

**Puspanjali Khadka (2008)** in her thesis entitled, "A study on Investment policy of Nepal Industrial Development Corporation" has pointed out the following objectives.

- (a) To study and analyze the current investment pattern of NIDC.
- (b) To examine how far NIDC is effective in allocating it's funds in different development regions and industrial industries.
- (c) To highlight the growth of NIDC in the context of industrial development in the country.
- (d) To evaluate the existing problem and suggest the suitable models of investment policy for its effectiveness.

The study was conducted on the basis of both secondary data and Primary data.

The main findings of the study are:

- (a) Adopting New Industry policy 1992, NIDC has made its investment policy more flexible and expanded it to resources mobilizing sector. The

Corporation has been going priority to the project based on indigenous raw materials and man power as well as sought the policy to invest in small hydro electricity projects.

- (b) The study found that the trend of the approval and realization of financial assistance was satisfactory and encouraging. But the major problem was the inconsistency trend of approval and disbursement of financial assistance, the trend of overdue loan is continuously increasing. It indicates that the overall corporation's financial activities have not shown its satisfactory performance in industrial sector.
- (c) It is also found that disbursement of loan was not balanced between five development regions. Huge amount of investment has been made in Central Development Region and less priority has been given to Mid Western Development Region and Far Western Development Region. Similarly the sector wise disbursement pattern also shows that the highest percentage of financial assistance has been provided to Food, Tourism and Textile Allied Industries. Health and Education Allied Industries has got less priority. No investment was made to Cottage and Village Industries during the study period.
- (d) The corporation's portfolio investment policy is not guided by modern model of investment policy because it has not followed the risk and return factor at the time of investment. Financial and investment function of NIDC is not satisfactory because it has not fulfilled all the financial function which is directly related to investment policy of the corporation.
- (e) The present investment policy of the corporation is not suitable for the changing environment. For this there should be held inter-action between the entrepreneurs and the government regarding the policy matter to analyze the various problems faced by the corporation.

## 2.9 Research Gap

The world is marked by rapid changes and new developments, as such researchers conducted a few years back, may not be adequate to explain current phenomenon. There have been several researcher have many useful findings and their own limitations in this topic.

Though many affiliate researchers have been done in this area but there have been some researchers on this subject which is very helpful in different areas. A research by Rajya Laxmi Khadgi (2006-July ) suffer a short coming of having inadequate geographical analysis is also in the same topic but the bank is different the topic is "Investment Policy Of NABIL Bank ". Moreover, there have been some developments in this Bank (Rastriya Banijya Bank) from last two years. The main focus of the researcher will be analysis the performance, growth and downfalls of the bank. This will help to analyze whether the bank is in increasing trend or in decreasing trend. By analyzing these aspects focuses can be set on the weakness turned. So that in future this weakness can be turned into the strength of the investment policy of the bank. To bring the new developments and to bridge the gap between the past research and present situation, I set out to conduct the research in this intriguing topic. I have been through many literature reviews and given my best to fulfill this work.

I also wanted to unevil the reasons behind common people ignorance and lack of participation in this field and their tendency to purse the traditional system of investment. So in my research efforts have been made to understand the "Investment Policy of Rastriya Banijya Bank" and I hope this research will be fulfilling for future researchers for references.

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter highlights the research methodology used in the study for the analysis of investment policy of Rastriya Banijya Bank. And the study will try to come at conclusion regarding what position RBB has got in the commercial banking sector in Nepal. Research means a search or study about a related subject. It means a careful investigation or enquiry especially search for new fact in any branch of knowledge in a scientific manner. It tries to find out the main fact by defining and redefining problems, formulating hypothesis, collecting and evaluating data, making deduction and determine the conclusions.

According to John W. Best, "Research may be defined as the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations of principles or theories resulting in prediction and possibly ultimate control of events."

Methods mean different way to find at the solution of problems. It means methodology refers to the various ways to solve the problems. Research methodology describes the methods and process applied in the entire subject of the related study. Thus, "Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view." It means research methodology is away to solve the research problem systematically and scientifically. Every research should adopt the systematic research methodology to solve the research problem. The research methodology is wider concept. It considers the logic behind the methods used in the context of research study and explains why particular method or technique is used. The main objectives of the research methodology are to analyze examine, highlight and interpret the investment situation of the bank. For that it concerned about various fact like what data have been collected what are the purpose and problem of research, why hypothesis has been formulated etc. Hence, research methodology is a way to analysis for the study, which deals with research design, sources of data, data collection, population and sample, processing and tabulating procedures.

### **3.1 Research Design**

Research design is a plan or way for the study that give a direction for the collection and analysis of data. In other words, research design is the arrangement of collections for collection and analysis of data in a systematic way. It is concerned with various steps to collect the data for analysis and procedures for acquiring the information including from which sources and by what procedure it is obtained. Hence, both analytical and descriptive methods have been used to attain the overall objectives. The main objectives of this study are to analysis the investment policy of the bank. For that it includes all the process of collecting, verifying and evaluating of past evidence systematically and objectively to reach the final conclusion. Various financial tools and effective research techniques are employed to identify the strength and weakness in investment policy of Rastriya Banijya Bank. Thus, research design is a plan structure and strategy of investigation conceived to obtain answers to research question and to control variance. And it gives a clear picture of the bank's investment circumstances with the help of available data and with some useful suggestions and recommendation.

### **3.2 Sources of Data**

A source of data is a step to collect the necessary data and information relevant for the analysis of the study. Simply, there are two sources of data i.e. primary data and secondary data. Primary data are those data that are collected by the researcher from related fields and posse's originality and authenticity. To collect primary data there are various methods like direct personal investigation (observation ), indirect and investigation (personal interviews ), telephone interviews, schedule questionnaire, mailed questionnaire etc. On the other hand, secondary data are those data that are collected by someone else or used already and made available to others in the form of published statistics. This study is mainly based on the secondary data relating to the study of investment analysis of Rastriya Banijya Bank. The data relating to investment e.g. loans and advances, deposits and profit loss are directly obtained from bank's annual reports and financial statements of this bank. Likewise, newspaper, journals, periodicals magazines, reports and unpublished thesis have been taking as other

sources of data during the study. Thus, the primary and secondary data both were helpful obtain the additional information of the related problems.

### **3.3 Population and sample**

The population refers to the total numbers of organizations of the same nature, services and its product. Population is the collection of objects or the set of results of an operation. The objective of population may be finite or infinite in number and hypothetical or existence in character. Sample is a representative part of population for the study. Sample means types of elements that are selected with the intention of findings out something about the population. In other hand, sample is just a portion of the universe understudy. At present there are twenty five commercial banks in Nepal. This is the population of our study. Among the total commercial banks, I have selected only one bank for the purpose of the study as a sample and that is Rastriya Banijya Bank.

### **3.4 Methods of Analysis**

The methods of analysis are the focal part of the study, which give us the real situation of the Rastriya Banijya Bank. Generally, financial and statistical tools are used to analyze the collected data and to achieve the objectives of the study. The studies are primarily analysis and trend analysis. In the same way, some statistical tools such as mean, standard deviation, coefficient of determination is adopted in this study. Hence, methods of analysis are a way to find out the true picture of the bank.

### **3.5 Data Analysis Tools**

Data analysis tools are also a main part of the study. Presentation and analysis of the collected data is the core of research work. It is the study of tabulated material in order to determine the inseparable facts. The collected raw data are first presented in the systematic manner in tabular forms and analyzed by applying different financial and statistical tools to achieve the objectives of the study. In addition to this, some graphs, charts and tables will be presented to analyzed and interpret the findings of the study. The various tools applied are:



### 3.5.1 Financial Tools

Financial tools are an instrument that helps to analyze and interpret the financial performance of a 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 statement of Rastriya Banijya 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.

"Ratio analysis is such a powerful tool of financial analysis that through it, economic and financial position of a business can be fully x-rayed." (C.R. Kothari, 1990:181)

"Ratio Analysis used to compare a firm's financial performance and status to that of other firms or its overtime." (Lawrence, J. Gitman, "Principle of Managerial Finance, " 5th Edition, 1998)

Hence, ratio analysis is a part of financial analysis that evaluates the performance of an organization by creating the ratios from the figure of different accounts consisting in balance sheet, income statement. It is the process of determining and interpreting numerical relationship between the items of financial statements. Although there are various types of ratio to analyze and interpret the financial statement, among those some are relevant for the study which is as follows:

#### **A. Liquidity Ratios:**

Liquidity ratio is a tool of financial analysis which helps to find out the liquidity of an organization. In other words, difference between current assets and current liabilities is known as working capital, which provides the liquidity in business organization. It measures the liquidity position of the firm. Liquidity ratio measures the speed with which banks assets can be converted into cash to meet the deposit withdrawal and other current obligations. It also measures the ability of the firm to meet its short-term obligation; it reflected the short term financial strength and weakness of the firm.

The firm should maintain proper liquidity over the immediate future. Liquidity should be neither too low nor too high. A high degree of liquidity shows inability of proper utilization and a low degree of liquidity shows the poor credit worthiness and less creditor's confidence. Hence, the firm should maintain adequate balance between in adequate liquidity and unnecessary liquidity for the survival and to avoid the risk of insolvency. To measure the liquidity position of banks, the following ratios have been used in the study.

**(i) Current Ratio:-**

Difference between current assets and current liabilities is known as current ratio. It shows the banks short-term solvency. It is also called liquidity solvency ratio and working capital ratio. The main objective of the current ratio is to measures the payment capacity of a firm. Current ratio is calculated by applying following formula.

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

Where, current assets includes cash and near cash assets i.e. marketable accounts receivable, inventories, balance with banks, accrued incomes, prepaid expenses, short-term investments. Current liabilities includes sundry creditors, bills payable, notes payable, bank overdraft, outstanding expenses, income received in advance, provision for taxation, proposed dividend, unclaimed dividend , loan maturing with in a year.

The proportion of current ratio is 2:1 the natural rule is based on the assumption that even if half decrease in current assets, the firm can meet its current obligations.

**(ii) Cash and Bank balance to current assets ratio:-**

Cash and bank balance to current assets ratio refers the portion of cash and bank balance in total of current assets of the bank. It measures the proportion of liquidity assets. It is a highly liquidity assets, so it shows higher banks ability to meet its payment capacity of cash. It represent total of local currency, foreign currencies, cheque in hand and various banks balance in local as well as foreign banks. This ratio can be calculated by using following formulas.

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

Hence, the ratio shows the percentage of current available fund with in the bank.

**(iii) Cash and Bank balance to total deposit ratio:**

Cash and Bank balance to total deposit ratio measures the percentage of liquid fund with the bank to meet immediately payment to the depositors. Higher ratio shows liquidity position and ability to cover the deposits and vice-versa. It is liquid current assets. The ratio computed by dividing the amount of cash and bank balance by the total deposit. This ratio can be calculated by using the following formula.

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

Where cash and bank balance includes cash in hand, cheque and other cash items, balance with domestic and foreign banks. Total deposit includes current deposits, saving deposits and fixed deposits, call deposits and other deposits.

**(iv) Investment on Government Securities on Current Assets Ratio:-**

Investment on government securities of current assets ratio measures the percentage of current assets invested in government securities, treasury bills and development bonds. This ratio can be computed by dividing investment on government securities by current assets. This ratio can be calculated by applying the following formula.

Investment on Government Securities on Current Assets

$$\text{Ratio} = \frac{\text{Investment on Government Securities}}{\text{Total Current Assets}}$$

Investment on government securities includes treasury bills, development bonds, saving bonds, government securities etc.

**(v) Loan and Advances to current Assets Ratio:-**

Loan and advances to current assets ratio shows the banks liquid capacity of discounting and purchasing the bills and loan, cash credit and overdraft facilities to the customers. The ratio can be computed by dividing loan and advances by total current assets.

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

Hence, it shows the percentage of loan and advances in the total current assets. It includes local and foreign bills purchased and discounted and loans, cash credit, and overdraft in local currency as well as inconvertible foreign currencies.

**B. Assets Management Ratio:**

Assets management ratio is also known as activity ratio. It shows the efficiency with of any firm. It is employed to evaluate the efficiency with which the firm manages and utilizes its assets. It measures the proportion of various assets and liabilities in balance sheet. This ratio is used to measure how effectively a firm is managing its assets and the firm's ability to utilize its available resources. The ratio is expressed on percentage. The greater the rate of turnover, the more efficient is the utilization assets.

Assets management ratio measures its efficiency by multiplying various liabilities into performing assets. These ratios are concerned with measuring the efficiency in assets management. If available assets are not utilized efficiently, the investment is not sufficient , then adequate production and revenue can not be made and profitability decreases. So, proper balance between revenue and assets is desired for the reflection of optimum utilization of assets. Here, some of those ratios are computed to assess the banks efficiency in utilization of available assets.

**(i) Loan and Advances to Total Deposit Ratio:-**

This ratio is used to calculate to find out, how successfully the banks are utilizing their total deposits on loan and advances for profit generating purposes. Higher the ratio, the better is the utilization of total deposits. This ratio is computed by dividing the amount of loans and advances by total deposit. This ratio can be calculated by applying formula.

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

Here, loan and Advances includes loan, advances and overdraft and total deposit includes current deposits, saving deposit and fixed deposits, call deposits and other deposits.

**(ii) Total Investment to Total Deposit Ratio:-**

Investment is one of the major forms of credit created by the bank to earn income. It is the use of money for future profit. A firm can earn more profit by investing its fund on government securities, shares and debentures or bonds of other companies. Thus, investment is the utilization of firm's deposit on different securities. This ratio is calculated by applying following formula.

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

Here, total investment includes investment on government securities, debenture and bonds, share in subsidiary companies, share in other companies and other investments.

**(iii) Loan and Advances to working Fund Ratio:-**

Loan and advances is an important part of total working fund. This ratio measures the volumes of loans and advances in the structure of total assets. It indicates the ability of banks to channel its deposits in the form of loan and advances to earn profit. A higher ratio indicates better in mobilization of funds as loans and advances and vice-versa. This ratio is calculated by applying the following formula.

$$\text{Loan and Investment to Working Fund Ratio} = \frac{\text{Loan \& Investment}}{\text{Total Working Fund}}$$

Where, total working fund includes total amount of assets given in balance sheet like current assets, fixed assets, total loans for development banks and other sundry assets except off balance sheet items i.e. letter of credit, letter of guarantee etc.

**(iv) Investment on Government Securities to Total Working Fund Ratio:-**

Investment on government securities to total working fund ratio shows the bank's investment on government securities compared to that of the total working fund. It is calculated by dividing investment on government securities by total working fund.

Investment on Government Securities to Total Working Fund

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

**(v) Investment on Shares and Debentures to Total Working Fund Ratio-**

Investment on shares and debentures to total working fund ratio shows the investment of banks and other financial institution on shares and debenture of the other companies in terms of total working fund. This ratio is compared by dividing shares and debentures by total working fund. This can be shown as:

Investment on Shares and Debenture to Total Working Fund Ratio

$$= \frac{\text{Investment on Shares \& Debenture}}{\text{Total Working Fund}}$$

Here, total investment includes investment on government securities, investment on debentures, bonds and shares of other companies.

**C. Profitability Ratios:**

The main objectives of the commercial bank are to earn more profit. Management, owner and creditors of the bank are expect reasonable and more return from their investment. It measures the overall efficiency of a firm in term of profit and financial performance. It shows the effect of liquidity, assets management and debt management on operating results. It is used to indicates public acceptance of the service of bank and run competitively. Higher the profitability ratio better is the performance of the banks. In this study, the various types of profitability ratios used to compute the profits of the banks to their investment, which are as follows:

**(i) Return on Total Assets Ratio (ROA):-**

Return on total assets ratio is measures the profitability with respect to total assets. It provides an idea of the overall return on investment earned by the firm. The return on total assets ratio is measured the overall profitability of total assets. A higher ratio usually indicates efficiently in utilizing its overall resources and vice-versa. It is calculated by dividing net profit (loss) by total assets. This ratio is calculated by applying following formula.

$$\text{Return on Assets} = \frac{\text{Net Profit(Loss)}}{\text{Total Assets}}$$

**(ii) Return on Loans and Advances ratio:-**

Return on loan and advances ratio shows how efficiently the banks and other financial institution have utilized their resources to earn good return for providing loan and advances. It is computed by dividing net profit/loss by total amount of loan and advances. This ratio is calculated by applying following formula.

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

**(iii) Interest Income to Total Income Ratio:-**

This ratio measures the volume of interest income of the bank. Higher the ratio higher is the contribution made by the lending and investment activities and vice-versa. It is calculated by dividing interest income by total income, which is as follows:

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

**(iv) Interest Expenses to Total Expenses Ratio:-**

It measures the portion of total interest expenses in the volume of total expenses. The high ratio indicates the low operational expenses and vice-versa. It is calculated by dividing interest expenses by total expenses.

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

**(v) Total Interest Earned to total Working Fund Ratio:-**

It is calculated to find out the percentage of interest earned to total assets. Higher the ratio the better is the performance of the banks in terms of interest earning on its total working fund. It is calculated by dividing total interest by total working fund.

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

**(vi) Total Interest paid to Total Working Fund Ratio:-**

It is calculated to find out the percentage of interest paid on liabilities with respect to total working fund. It is calculated by dividing total interest paid by total working fund.

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

**(vii) Total Income to Total Expenses Ratio:-**

The comparison measures the productivity of expenses in generating income. The amount of income that a unit of expenses generates is measured by the ratio of total income to total expenses. The high ratio is the indicator of higher productivity of expenses and vice-versa. It is calculated by dividing total income by total expenses.

$$\text{Total Income to Total Expenses Ratio} = \frac{\text{Total Income}}{\text{Total Expenses}}$$

**(viii) Total Income to Total Working Fund Ratio:-**

It measures how efficiently the assets of a business are utilized to generate income. It also measures the quality of assets in income generation. It is calculated by dividing total income by total working fund.

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



#### **D. Activity or Performing Ratios:-**

Activity Ratio measures the performance efficiency of an organization from various angles of its operation. These indicate the efficiency of activity of an enterprise to utilize available funds, particularly short-term funds. These ratios are used to determine the efficiency, quality and contribution of loans and advances in total profitability. To measure the performance efficiency of the bank to utilize its fund these activity ratios are used.

##### **(i) Loan Loss provision to Total Loans and Advances:-**

The ratio of loan loss provision to total loans and advances describes the quality of assets that a bank is holding. Nepal Rastra Bank has given directives to commercial banks to classify its loans and advances into the category of pass, sub-standard, doubtful and loss on the basis of maturity of principal, to make the provision of 1, 25, 50 and 100 percentage respectively. The provision for loan loss reflects the increasing probability of non-performing loan in the volume of total loan and advances. The ratio is calculated by dividing loan loss provision by total loans and advances.

$$\text{Loan Loss Provision to Total Loans and Advances} = \frac{\text{Loan Loss Provision}}{\text{Total Loans and Advances}}$$

##### **(ii) Non-Performing Loans to Total and Advances Ratio:-**

It measures the proportion of non-performing loans on the total volume of loans and advances. Thus, it reflects the quantity assets that the banks possess. Higher ratio reflects the bad performance of the bank in mobilizing loans and advances and bad recovery rate and vice-versa. It is calculated by dividing the non-performing loans by total loans and advances.

$$\begin{aligned} &\text{Non-performing Loans to Total Loans and Advances Ratio} \\ &= \frac{\text{Non Performing Loans}}{\text{Total Loans and Advances}} \end{aligned}$$

#### **E. Risk Ratios:**

Risk means possibility of increasing loss of misfortune. Risk taking is the prime business of bank's investment management. Higher the risk, higher the profit,

when a firm wants to bear risk and uncertainty the profitability and effective of the firm's increases. These ratios indicate the amount or risk associated with the various banking operations, which ultimately influences the bank's investment policy. To measure the risk ratios, the following ratios has been calculated and analyzed.

**(i) Credit Risk Ratio:-**

Credit risk ratio helps to check the possibility of loan non-repayment or the possibility of loan to go into default. It measures the possibility whether the loan will be repaid or that investment will deteriorate in quality. It is expressed as the percentage of non-performing loan to total loan and advances. The ratio is calculated by dividing total loan and advances by total assets. It can be shown as,

$$\text{Credit Risk Ratio} = \frac{\text{Total Loan \& Advances}}{\text{Total Assets}}$$

**(ii) Capital Risk Ratio:-**

The capital risk of a bank indicates how much assets value may decline before the position of depositors and other creditors are jeopardized. A bank must maintain the adequate capital in relation to the nature and condition of its assets, deposit liabilities and other corporate responsibilities. It measures the bank's ability to attract deposits and inter bank funds. It also determines the level of profit, a bank can earn if a bank chooses to take high capital risk, and its ROE will be higher and vice-versa. This ratio is calculated by applying following formula.

$$\text{Capital Risk Ratio} = \frac{\text{Share Capital}}{\text{Risk weight Assets}}$$

**(F) Growth Ratios:-**

Growth ratio represents how well the banks are maintaining their economic and financial condition. It is related to the fund mobilization and investment management of the bank. The higher ratio represents the superior performance. Thus, in order to examine and analyze the expansion and growth of the banking business, the following growth ratios are calculated.

- (i) Growth Ratio of Total Deposits
- (ii) Growth Ratio of Loans and Advances
- (iii) Growth Ratio of Total Investment
- (iv) Growth Ratio or Net Profit

### 3.5.2 Statistical Tools:

Statistical tools help to analyze the financial position of the bank. Statistical tools are the mathematical techniques used to facilitate the analysis and interpretation of numerical data. It is also helps to analyze the relationship between variables and helps bank to make appropriate investment policy regarding to profit maximization and deposit collection. Statistical tools are used to analyze the objectives of the study with the use of

Statistical tools, it becomes easy to convert abstract problems into figure and complex data in the form of tables. Some of the statistical tools used in the study are as follows:

#### (i) Arithmetic Mean:-

An arithmetic mean is also called as 'the mean', 'average' or 'the arithmetic average'. A mean is the average value or the sum of all observations divided by the number of observations. An arithmetic mean is used in a situation of studying practical problems relating to production, price, income, expenditure, temperatures etc. but it is not useful for qualitative characteristics open-ended classes etc. It is denoted and given by the formula:

$$\text{Mean} = \frac{X}{n}$$

Where,

X = Mean of the values

n = No. of observations

### **(ii) Standard Deviation:-**

Standard deviation measures the absolute dispersion and gives uniform correct and stable results. It is the positive square root of average sum of square of deviation of given observations from the arithmetic mean of the distribution. Higher the value of standard deviation higher will be the variability and vice-versa. A standard deviation is always a positive number and is superior to mean deviation, quartile deviation and the ranges as it is used of the measurement. It is denoted by a small Greek letter **(sigma)**. Standard deviation is calculated by using following formula.

$$\sigma = \sqrt{\sum x^2}$$

### **(iii) Coefficient of Variation:**

Coefficient of variation (C.V.) measures the percentage of coefficient of standard deviation. It is used in such problems where the researcher should to compare the variability of more than two years. It is the most commonly used measure of relative of two or more distributions. Higher the C.V for more variable or conversely less consistent, less uniform or less homogeneous from others. Lowers the C.V, less variable or more consistent, more uniform or more homogeneous. The coefficient of variation (C.V) is given by the following formula:

$$C.V = \sigma^2$$

### **(iv) Co efficient of Correlation:-**

Coefficient of Correlation is the mathematical method of measuring the degree of association between the two variables i.e. one dependent and another is independent. This analysis identifies the relationship between two or more variables. The effect of none variable may have effect on other correlated variable in the case of highly correlated variables. This topic deals with the study to find out relationship between the mentioned variables:

(i) Coefficient of correlation between deposits and loan advances

(ii) Coefficient of correlation between loan and advances and net profit

(iii) Coefficient of correlation between deposits and investments

(iv) Coefficient of correlation between investment and net profit

**(v) Coefficient of determination:-**

Coefficient of determination provides the variation in the dependent variable that is explained by the independent variables. According to the value that is computed from the coefficient of determination, we can conclude that the percentage variation in the dependent variable is due to the variation in the independent variable and the remaining portion of the variation is due to the other factors. It is the square of coefficient of correlation and is stated as (r<sup>2</sup>).

**(v) Trend Analysis:-**

The least square method is mostly used for determining the trend of time series and it is commonly used for the estimation of the future trend values of different variables. Hence, for the estimation of linear trend line, the following formula is used:

$$y_c = a + bx$$

Where,

$y_c$  = Dependent variables

$x$  = Independent variables

$a$  = y intercept

$b$  = slope of the trend line

Hence, using this method, trend analysis of following variables is conducted

- (i) Trend analysis of Total Deposit
- (ii) Trend analysis of Loan and Advances
- (iii) Trend analysis of Investment
- (iv) Trend analysis of Net profit

# CHAPTER IV

## DATA PRESENTATION AND ANALYSIS

This is an analytical chapter which contains data collected from various sources. These are presented and analyzed to measure the various dimension of the problems of the study and measure the findings of the study are presented systematically. These data concerns the measurement of investment management and fund mobilization.

### **4.1 Financial Tools**

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 statement of Rastriya Banijya 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.

#### **A. Liquidity Ratios**

Liquidity ratio is a tool of financial analysis which helps to find the liquidity of an organization. In other words, difference between current assets and current liabilities is known as working capital, which provides the liquidity in business organization. It measures the liquidity position of the firm. Liquidity ratio measures the speed with which banks assets can be converted into cash to meet the deposit withdrawal and other current obligations. It also measures the ability of the firm to meet its short-term obligation; it reflected the short-term financial strength and weakness of the firm.

##### **(i) Current Ratio**

The calculation of current ratios based on a simple comparison between current assets and current liabilities. It shows the bank's short term solvency. It indicates bank's ability to meet its current obligation. It indicates the extent to which

current liabilities are covered by assets expected to be converted to cash in near future. The main objective of the current ratio is to measure the payment capacity of a firm. It is the broad measure of liquidity position of the bank. Thus, the ratio shows the relationship between current assets and current liabilities.

**Table- 4.1**  
**Current Ratio** Rs In Million

Year	Current Assets	Current Liabilities	Ratio(Times)
2004/05	38070.32	51988.24	0.73
2005/06	41547.49	54979.14	0.76
2006/07	48013.05	67726.61	0.71
2007/08	27903.41	50452.71	0.55
2008/09	33278.28	56535.02	0.59
		Mean(x)	0.67
		S.D.( $\sigma$ )	6.43
		C.V	9.59

The above table shows that the current liabilities of RBB have exceeded current assets in average in the study period from 2004/05-2008/09. The highest ratio is 0.76 in 2005/06 while the lowest is 0.55 in 2007/08 with an average ratio of 0.67 during the study period. The ratio shows the fluctuating trend during the period. The coefficient of variation (C.V) between the ratios for the study is 9.59% which shows that current ratio during the study period are not so consistent. In general, the bank is able to meet its short term obligation. Generally, the standard of the current ratio is 2:1 but for the banks and financial institution 1:1 is considered as the standard current ratio. The current ratio of RBB seems to be less than normal level.

**(ii) Cash and Bank Balance to Current Assets Ratio**

Cash and bank balance to current assets ratio refers the portion of cash and bank balance in total of current assets of the bank. It measures the proportion of liquidity assets. This ratio shows the bank's liquidity capacity based on cash and bank balance. Higher ratio indicates the bank's ability to meet the daily cash requirements of their customer deposit and vice-versa. Similarly, lower ratio is

also not appropriate, as the bank may not be able to make payment against cheque presented by the customers. Thus, it should have a proper balance of this ratio so that it has adequate cash to meet.

**Table 4. 2**  
**Cash and Bank Balance to Current Assets Ratio**      Rs. In Million

Year	Cash and Bank Balance	Current Assets	Ratio (%)
2004/05	3736.05	38070.32	9.81
2005/06	7019.09	41547.49	16.89
2006/07	5553.19	48013.05	11.57
2007/08	5228.82	27903.41	18.74
2008/09	6034.40	33278.28	18.13
		Mean ( $\bar{x}$ )	15.03
		S.D.( $\sigma$ )	3.63
		C.V	24.15

The above table shows that the cash and bank balance to current assets ratio of RBB has fluctuating trend. The highest ratio is 18.74% in 2007/08 and the lowest ratio is 9.81% in 2004/05. Similarly, the mean of the ratio for the study period is 15.03% and the C.V. is 24.15%. Based on the C.V., we can conclude that the ratio is less consistent and more variable. The bank can meet its daily requirements to make the payments on customer deposits withdrawals.

### **(iii) Cash and Bank Balance and Total Deposit Ratio**

Cash and bank balance to total deposit ratio measures the percentage of liquid fund with the bank to meet immediately payment to the depositors. This ratio measures the percentage of most liquid fund with the bank to make immediate payment. The ratio is calculated by dividing cash and bank balance by total deposit. a bank should maintain a proper balance of this ratio. If the bank has higher ratio of cash, it has to pay interest on deposits that has been kept idle and the earning will be lost. And if the bank maintains a low ratio of cash, it may fail to make payments for the demands of the depositors. So an appropriate cash reserve should be maintained.



**Table 4.3**  
**Cash and Bank Balance to Total Deposit Ratio** Rs. In Million

Year	Cash and Bank Balance	Total Deposit	Ratio (%)
2004/05	3736.05	39402.27	9.49
2005/06	7019.09	40866.77	17.18
2006/07	5553.19	43016.06	12.91
2007/08	5228.82	46195.48	11.32
2008/09	6034.40	50464.13	11.96
		Mean(x)	12.57
		S.D.( $\sigma$ )	2.57
		C.V	20.45

The above table shows that the ratio of cash and bank balance to total deposit ratio is in fluctuating trends. The highest ratio is 17.18% in 2005/06 while the lowest ratio is 9.49% in 2004/05 with standard deviation of 2.57% and coefficient of variation of 20.45%. According to NRB guidelines, there should be minimum balance of 6% of total deposit liability. The above analysis of cash and bank balance to total deposits shows that RBB is successful in maintaining this balance.

**(iv) Investment on Government Securities to Current Assets Ratio**

Investment on government securities of current assets ratio measures the percentage of current assets invested in government securities, treasury bills and development bonds. It examines the portion of commercial banks current assets invested on different government securities. Though government securities are not as liquid as cash and bank balance, yet they can be easily sold in the market or converted into cash and are risk free.

**Table 4.4****Investment on Government Securities to Current Assets Ratio** Rs. In Million

Year	Investment on Government Securities	Current Assets	Ratio (%)
2004/05	4137.10	38070.32	10.87
2005/06	2918.89	41547.49	7.03
2006/07	6434.03	48013.05	13.40
2007/08	8874.39	27903.41	31.80
2008/09	10023.29	33278.28	30.12
		Mean(x)	18.64
		S.D.( $\sigma$ )	10.28
		C.V	55.15

The above table shows that the investment on government securities to current assets ratio of RBB has fluctuating trend with the highest ratio of 31.80% in 2007/08 and lowest ratio is 7.03% in 2005/06. The mean ratio of the bank is 18.64% and C.V. between them the ratios are inconsistent and volatile.

**(v) Loans and Advances to Current Assets Ratio**

Loan and advances to current assets ratio shows the banks liquid capacity of discounting and purchasing the bills and loan, cash credit and overdraft facilities to the customers. A bank should mobilize its funds in investments as loans and advances in order to earn high profit rather than keeping it as cash and bank balance. The high loans and advances may be harmful to keep the bank in the liquid position because they can only be collected at the time of maturity and the low loans and advances can not pay interest on the deposited funds and may loose its earnings.

**Table 4. 5****Loans and Advances to Current Assets Ratio**

Rs. In Million

Year	Loans and Advances	Current Assets	Ratio (%)
2004/05	11679.49	38070.32	30.68
2005/06	10831.08	41547.49	26.07
2006/07	13430.93	48013.05	27.97
2007/08	14633.54	27903.41	52.44
2008/09	17006.46	33278.28	51.10
		Mean(x)	37.65
		S.D.( $\sigma$ )	11.63
		C.V	30.89

The above table shows that the ratios of the bank are in fluctuating trend. The highest ratio is 52.44% in 2007/08 and the lowest ratio is 26.07% in 2005/06. The mean ratio of the bank is 37.65% and C.V. is 30.89%. Since, the bank is in better position to mobilize its fund as loans and advances with respect to current assets.

**B. Assets Management Ratio**

Assets management ratio is also known as activity ratio. It shows the efficiency with of any firm. It is employed to evaluate the efficiency with which the firm manages and utilizes its assets. It measures the proportion of various assets and liabilities in balance sheet. This ratio is used to measure how effectively a firm is managing its assets and the firm's ability to utilize its available resources. A bank must be able to manage its assets properly in order to earn high profit as well as maintain an appropriate level of liquidity. Thus, it measures the efficiency of the bank to manage its assets in profitable and satisfactory manner.

**(i) Loans and Advances to Total Deposit Ratio**

This ratio is used to calculate to find out, how successfully the banks are utilizing their total deposits on loan and advances for profit generating purpose. Higher the ratio, the better is the utilization of total deposits. This ratio measures the extent to which the bank is successful in mobilizing its deposits on loan and advances for generating income. Higher ratio indicates better mobilization of collected deposits and vice-versa.

**Table 4.6****Loan and Advances to Total Deposit Ratio**

Rs. In Million

Year	Loan and Advances	Total Deposit	Ratio (%)
2004/05	11679.49	39402.27	29.64
2005/06	10831.08	40866.77	26.50
2006/07	13430.93	43016.06	31.22
2007/08	14633.54	46195.48	31.68
2008/09	17006.46	50464.13	33.70
		Mean(x)	30.55
		S.D.( $\sigma$ )	2.38
		C.V	7.79

The above table shows that the loans and advances to total deposit ratio are in fluctuating trend. The lowest ratio is 26.50% in 2005/06 and the highest ratio is 33.70% in 2008/09. The average mean ratio is 30.55% with the standard deviation of 2.38% and coefficient of variation is 7.79%. Higher the ratio shows that the bank is in better position to mobilize its total deposits as loan and advances.

**(ii) Total Investment to Total Deposit Ratio**

Investment is one of the major forms of credit created by the bank to earn income. It is the use of money for future profit. A firm can earn more profit by investing its fund on government securities, shares and debentures or bonds of other companies. This ratio measures the extent to which banks are able to mobilize their deposit on investments in various securities. A high ratio indicates the success in mobilizing deposits in securities and vice-versa. Thus, investment is the utilization of firm's deposit on different securities.

**Table 4. 7****Total Investment to Total Deposit Ratio**

Rs. In Million

Year	Total Investment	Total Deposit	Ratio (%)
2004/05	4623.13	39402.27	11.73
2005/06	3117.03	40866.77	7.63
2006/07	8415.88	43016.06	19.56
2007/08	11555.36	46195.48	25.01
2008/09	12650.15	50464.13	25.07
		Mean(x)	17.8
		S.D.( $\sigma$ )	7.04
		C.V	39.55

In the above table, the ratios of RBB are in fluctuating trend during the study period. The highest ratio is 25.07% in 2008/09 and the lowest ratio is 7.63% in 2005/06 with the mean ratio of 17.8%. The C.V. 39.55% shows that the ratios are less consistent and more variable.

**(iii) Loan and Advances to Total Working Fund Ratio**

Loan and advances is an important part of total working fund. This ratio measures the volumes of loans and advances in the structure of total assets. It indicates the ability of banks to channel its deposits in the form of loan and advances to earn more profit. A higher ratio indicates better in mobilization of funds as loans and advances. And a low ratio indicates low productivity and high degree of safety in liquidity and vice-versa. This ratio also shows the credit risks taken by the bank towards mobilizing its fund into different types of assets. This ratio reflects the extent to which the banks are successful in mobilizing their total assets on loans and advances for generating income.

**Table 4 .8****Loan and Advances to Total Working Fund Ratio**

Rs. In Million

Year	Loan and Advances	Total Working Fund	Ratio (%)
2004/05	11679.49	43172.43	27.05
2005/06	10831.08	45056.32	24.04
2006/07	13430.93	56822.02	23.64
2007/08	14633.54	39879.62	36.69
2008/09	17006.46	46367.93	36.68
		Mean(x)	29.62
		S.D.( $\sigma$ )	5.89
		C.V	19.88

The above table shows that the highest ratio is 36.69% in 2007/08 and lowest ratio is 23.64% in 2006/07. Similarly, the mean ratio is 29.62% and the C.V. is 19.88%, which indicates that the mobilization of total working fund in to loan and advance is in fluctuating condition.

**(iv) Investment on Government Securities to Total Working Fund Ratio**

Investment on government securities to total working fund ratio shows the bank's investment on government securities compared to that of the total working fund. Banks utilize its resources in various ways apart from investing in loans and advances. Though it uses a major portion of funds in loans and advances, it also invests its fund in purchasing different types government securities. Government securities are a safe medium of investment though they are not liquid as cash and bank balance. A high ratio indicates better mobilization of funds as investments on government securities and vice-versa.

**Table 4. 9****Investment on Government Securities to Total Working Fund** Rs. In Million

Year	Investment on Government Securities	Total Working Fund	Ratio (%)
2004/05	4137.10	43172.43	9.58
2005/06	2918.89	45056.32	6.48
2006/07	6434.39	56822.02	11.32
2007/08	8874.03	39879.62	22.25
2008/09	10023.29	46367.93	21.62
		Mean (x)	14.25
		S.D.( $\sigma$ )	6.47
		C.V	45.40

From the above table we can see that the ratio is in fluctuating trend. The lowest ratio is 6.48% in 2005/06 and highest ratio is 22.25% in 2007/08. The mean ratio was found to 14.25% with 6.47% standard deviation and coefficient of variation of 45.40%.

**(v) Investment on Shares and Debentures to Total Working Fund Ratio**

Total investment is divided into two parts: investment on government securities and investment on shares and debentures. Most of the banks, now a days investment on shares and debentures of other different companies. Investment on shares and debenture to total working fund ratio shows the investment of banks and other financial institution on shares and debenture of the other companies in terms of total working fund. This ratio reflects the extent to which banks are successful in mobilizing their total assets on purchase of shares and debentures of other companies to generate income and utilize their excess funds. A high ratio indicates more portion of investment on shares and debentures out of total indicates more portion of investment on shares and debentures out of total working fund and vice-versa.

**Table 4.10****Investment on Shares & Debentures to Total Working Fund** Rs. In Million

Year	Investment on Shares & Debentures	Total Working Fund	Ratio (%)
2004/05	1172.3	43172.43	2.72
2005/06	1172.3	45056.32	2.60
2006/07	1172.3	56822.02	2.06
2007/08	1172.3	39879.62	2.94
2008/09	1172.3	46367.93	2.54
		Mean(x)	2.57
		S.D.( $\sigma$ )	0.31
		C.V	12.06

The above table shows the ratios are in fluctuating trend during the study period. The highest ratio is 2.94% in 2007/08 and the lowest ratio is 2.06% in 2006/07. The mean ratio is found to be 2.57% with 12.06% C.V. between them. Bank shall invest in the shares and securities of organized institutions, which are already listed in stock exchange or arrangement exists for listing with in one year.

### C. Profitability Ratios

The main objectives of the commercial bank are to earn more profit. Management, owner and creditors of the bank are expect reasonable and more return. It measures the overall efficiency of a firm in term of profit and financial performance. It shows the effect of liquidity, assets management and debt management on operating results. It is the indicators of efficient operation of a bank.. It is used to indicates public acceptance of the service of bank and run competitively. Higher the profitability ratio better is the performance of the banks. Higher ratio indicates the higher contribution made by the lending and investing activities and vice-versa.



### (i) Return on Total Assets Ratio (ROA)

Return on total assets ratio is measures the profitability with respect to the total assets. It provides an idea of the overall return on investment earned by the firm. The return on total assets ratio is measured the overall profitability of total assets. A higher ratio usually indicates efficiently in utilizing its overall resources and vice-versa.

**Table 4.11**

#### **Return on Total Assets Ratio**

Rs. In Million

Year	Net Profit (Loss)	Total Assets	Ratio (%)
2004/05	(4839.78)	43172.43	(11.21)
2005/06	1040.10	45056.32	2.31
2006/07	1322.89	56822.02	2.33
2007/08	1591.49	39879.62	3.99
2008/09	1697.09	46367.93	3.66
		Mean(x)	0.22
		S.D.( $\sigma$ )	5.76
		C.V	26.14

The above table shows that RBB had suffered from loss in 2004/05 in high ratio and the bank had gain profit from 2005/06 to 2008/09. The maximum loss is 11.21% in 2004/05 and the maximum profit is 3.99% in 2007/08. We know that RBB had suffered from loss in first year but now there is a new management team who are trying to get success in banking competition market. We can see that the new management team has do better improvement because in one year period the bank has subtract losses into profit from 11.21% loss to 3.99% profit.

### (ii) Return on Loans and Advances ratio

This ratio shows how efficiently the banks have utilized their resources to earn good return for providing loan and advances. It also measures the earning capacity of a commercial bank through its mobilized funds in the form of loans and advances. High ratio indicates greater success to mobilize funds as loans and advances and vice-versa.

**Table 4.12****Return on Loan and Advances**

Rs. In Million

Year	Net Profit (Loss)	Loan and Advances	Ratio (%)
2004/05	(4839.78)	11679.49	(41.44)
2005/06	1040.10	10831.08	9.60
2006/07	1322.89	13430.93	9.85
2007/08	1591.49	14633.54	10.87
2008/09	1697.09	17006.46	9.98
		Mean(x)	(0.23)
		S.D.( $\sigma$ )	20.61
		C.V	(89.61)

The above table shows that the bank's return on loan and advances are in negative position in 2004/05 and in positive position from in 2005/06 to 2008/09. The highest loss ratio is 41.44% in 2004/05. But from 2005/06 the bank has got profit and the return on loan and advances is better. The highest return on loan and advances is 10.87% in 2007/08, which is in improvement condition than before.

**(iii) Interest Income to Total Income Ratio:-**

This ratio measures the volume of interest income in total income of the bank. Higher the ratio higher is the contribution made by the lending and investment activities and vice-versa. The ratio also helps to measure the bank's performance on how well they are mobilizing their funds for the purpose of income generation.

**Table 4.13****Interest Income to Total Income**

Rs. In Million

Year	Interest Income	Total Income	Ratio (%)
2004/05	2050.68	2355.92	87.04
2005/06	2235.88	3764.89	59.39
2006/07	2328.82	3509.96	66.35
2007/08	2282.82	4299.02	53.10
2008/09	2358.34	4240.91	55.61
		Mean(x)	64.30
		S.D.( $\sigma$ )	20.19
		C.V	31.40

The above table shows a fluctuating trend of the ratios during the study period. The highest ratio is 87.04% in 2004/05 and the lowest ratio is 53.10% in 2007/08. The mean ratio is 64.30% and the C.V. is 31.40%. Since the mean ratio is high we can conclude that the contribution made by lending and investing activities is high or on the other hand the contribution by interest income to total income is high. However the C.V. is less which means that the ratios are less variable and more consistent.

#### (iv) Interest Expenses to Total Expenses Ratio

It measures the portion of total interest expenses in the volume of total expenses. The high ratio indicates the low operational expenses and vice-versa.

**Table 4 .14**

**Interest Expense to Total Expenses Ratio**

Rs. In Million

Year	Interest Expenses	Total Expenses	Ratio (%)
2004/05	2108.16	7195.71	29.30
2005/06	1494.84	2724.79	54.86
2006/07	1004.72	2187.07	45.94
2007/08	850.14	2674.14	31.79
2008/09	942.80	2540.05	37.12
		Mean(x)	39.80
		S.D.( $\sigma$ )	9.45
		C.V	23.74

The above table shows that the ratios are in fluctuating trend. The highest ratio is 54.86% in 2005/06 and the lowest ratio is 29.30% in 2004/05. However the ratios seem to be increasing in 2004/05 to 2006/07 but decreasing in 2007/08. The mean ratio for the study period is 39.80% with 23.74% C.V. between them. Based on the C.V. we can conclude that the ratios are inconsistent and variables. When the deposits of different accounts is increasing than the interest expenses is also increasing. It is better for banks because when the deposit is increasing than the bank can mobilize its fund in different sector. In the other hand when the interest expenses are increasing then the total expenses is also increase.

#### (v) Total Interest Earned to total Working Fund Ratio

It is calculated to find out the percentage of interest earned to total assets. This ratio reflects the extent to which banks are successful in mobilizing their total assets to generate high income as interest. Higher the ratio the better is the performance of the banks in terms of interest earning on its total working fund.

**Table 4.15**

#### **Total Interest Income to Total Working Fund Ratio**

Rs. In Million

Year	Total Interest Income	Total Working Fund	Ratio (%)
2004/05	2050.68	43172.43	4.75
2005/06	2235.88	45056.32	4.96
2006/07	2328.82	56822.02	4.09
2007/08	2282.82	39879.62	5.72
2008/09	2358.34	46367.93	5.09
		Mean(x)	4.92
		S.D.( $\sigma$ )	0.54
		C.V	10.97

The above table shows that the ratios are in fluctuating trend. The maximum ratio is 5.72% in 2007/08 and the minimum ratio is 4.09% in 2006/07. The mean ratio is found to be 4.92% and a C.V. of 10.97% between them, which indicates that the ratios are variable and less consistent.

#### (vi) Total Interest paid to Total Working Fund Ratio

It is calculated to find out the percentage of interest paid on liabilities with respect to total working fund. This ratio measures the percentage of total interest paid against the total working fund. High ratio indicates the higher interest expenses on total working fund and vice-versa.

**Table 4.16**  
**Total Interest Paid to Total Working Fund Ratio**      Rs. In Million

Year	Total Interest Paid	Total Working Fund	Ratio (%)
2004/05	2108.16	43172.43	4.88
2005/06	1494.84	45056.32	3.32
2006/07	1004.72	56822.02	1.77
2007/08	850.14	39879.62	2.13
2008/09	942.80	46367.93	2.03
		Mean(x)	2.83
		S.D.( $\sigma$ )	1.15
		C.V	40.64

The above table shows that the ratios are in fluctuating trend. The highest ratio is 4.88% in 2004/05 and the lowest ratio is 1.77% in 2006/07. The mean ratio is 2.83% and the C.V. is 40.64% which is very high. Thus, the ratios are less consistent and more variable. Hence the bank has paid less interest on its total working fund as a whole.

**(vi) Total Income to Total Expenses ratio**

The comparison measures the productivity of expenses in generating income. The amount of income that a unit of expenses generates is measured by the ratio of total income to total expenses. The high ratio is the indicator of higher productivity of expenses and vice-versa.

**Table 4. 17**  
**Total Income to Total Expenses Ratio**      Rs. In Million

Year	Total Income	Total Expenses	Ratio (Times)
2004/05	2355.92	7195.71	0.33
2005/06	3764.89	2724.79	1.38
2006/07	3509.96	2187.07	1.60
2007/08	4299.02	2674.14	1.61
2008/09	4240.91	2540.05	1.67
		Mean(x)	1.32
		S.D.( $\sigma$ )	0.50
		C.V	37.88

In the above table the first year the total expenses is higher than total income because in this period the bank has suffered from losses. And the last two years the total income is higher than total expenses because in this period the bank has get some profit. The highest ratio is 1.67 in 2008/09 and the lowest ratio 0.33 in 2004/05 with the mean ratio of 1.32 times and C.V. of 37.88%. The ratios are in fluctuating trend. Analysis of the C.V. shows that the ratios are consistent and less variable during the study period.

**(vii) Total Income to Total Working Fund Ratio**

It measures how efficiently the assets of a business are utilized to generate income. It also measures the quality of assets in income generation.

**Table 4.18**  
**Total Income to Total Working Fund Ratio**      Rs. In Million

Year	Total Income	Total Working Fund	Ratio (%)
2004/05	2355.92	43172.43	5.46
2005/06	3764.89	45056.32	8.35
2006/07	3509.96	56822.02	6.18
2007/08	4299.02	39879.62	10.78
2008/09	4240.91	46367.93	9.15
		Mean(x)	7.98
		S.D.(σ)	1.96
		C.V	24.56

The above table shows that the ratios are in fluctuating trend. The highest ratio is 10.78% in 2007/08 and the lowest ratio is 5.46% in 2004/05 respectively. Similarly, the mean ratio is 7.98% and C.V. between them is 24.56% which indicates that the ratios are less consistent over the study period.

**D. Activity or Performing Ratios**

Activity ratio measures the performance efficiency of an organization from various angles of its operation. These indicate the efficiency of activity of an

enterprise to utilize available funds, particularly short term funds. These ratios are used to determine the efficiency, quality and the contribution of loans and advances in total profitability. To measure the performance efficiency of the bank to utilize its fund these activity ratios are used.

**(i) Loan Loss Provision to Total Loans and Advances**

The ratio of loan loss provision to total loans and advances describes the quality of assets that a bank is holding. Nepal Rastra Bank has given directives to commercial banks to classify its loans and advances into the category of pass, sub-standard, doubtful and loss on the basis of maturity of principal, to make the provision of 1, 25, 50 and 100 percentage respectively. The provision for loan loss reflects the increasing probability of non-performing loan in the volume of total loan and advances.

**Table- 4.19**

**Loan Loss Provision to Total Loans & Advances**

Rs. In Million

Year	Loan Loss Provision	Total Loans & Advances	Ratio (%)
2004/05	14929.34	11679.49	127.83
2005/06	14274.59	10831.08	131.79
2006/07	13569.99	13430.93	101.03
2007/08	8612.96	14633.54	58.86
2008/09	7864.90	17006.46	46.25
		Mean(x)	93.15
		S.D.( $\sigma$ )	35.03
		C.V.	37.61

The above table shows that loan loss provision to total loans and advances ratio is in fluctuating trend during the study period. The lowest ratio is 46.25% in 2008/09 and highest ratio is 127.82% in 2004 /05. The mean ratio is 93.15% and the C.V. between them is 37.61%. Though the loan loss provision to be increasing trend but from the last three year it is in decreasing trend shows that the bank efficiency in managing the loans and advances and effort of the bank to recover in the loans in time.

## (ii) Non-Performing Loans to Total Loans and Advances Ratios

It measures the proportion of non-performing loans on the total volume of loans and advances. Thus, it reflects the quantity of quality assets that the banks possess. Higher ratio reflects the bad performance of the bank in mobilizing loans and advances and bad recovery rate.

**Table- 4.20**

<b>Non-Performing Loans to Total Loans and Advances Ratio</b>			Rs. In Million
Year	Non-Performing Loans	Total Loans & Advances	Ratio (%)
2004/05	15991.91	11679.49	136.92
2005/06	14460.87	10831.08	133.51
2006/07	13689.47	13430.93	101.92
2007/08	8622.13	14633.54	58.92
2008/09	6876.93	17006.46	40.44
		Mean(x)	94.34
		S.D.( $\sigma$ )	38.90
		C.V.	41.23

From the above analysis we can see that the ratios are fluctuating over the study period. The highest ratios range is 136.92% in 2004/05 and a lowest ratio is 40.44% in 2008/09 with an average of 94.34% during the study period. Similarly, the C.V. is 41.23% which is high as a result the ratios are variable and less consistent. As per the international standard, the non-performing assets for commercial banks should be in single digit i.e. less than 10%. The mean ratio of RBB is very high, so we can conclude that the NPA level of RBB is very bad. But from the last two years the NPA level of the bank is in improvement condition.

## E. Risk Ratios

Risk means possibility of increasing loss or misfortune. Risk taking is the prime business of bank's investment management. Higher the risk, higher the profit, when a firm wants to bear risk and uncertainty the profitability and effectiveness of the firm's increases. These ratios indicate the amount of risk associated with the various banking operations, which ultimately influences the bank's



investment policy. Investment is a risky business and banks have to take great risk to get substantial return on investment.

### (i) Credit Risk Ratio

Credit risk ratio helps to check the possibility of loan non-repayment or the possibility of loan to go into default. It measures the possibility whether the loan will be repaid or that investment will deteriorate in quality. It is expressed as the percentage of non-performing loan to total loan and advances.

**Table 4.21**  
**Credit Risk Ratio** Rs. In Million

Year	Loan and Advances	Total Assets	Ratio (%)
2004/05	11679.49	43172.43	27.05
2005/06	10831.08	45056.32	24.04
2006/07	13430.93	56822.02	23.64
2007/08	14633.54	39879.62	36.69
2008/09	17006.46	46367.93	36.68
		Mean(x)	29.62
		S.D.(σ)	5.89
		C.V	19.88

The above ratio shows that the bank has maintained a highest ratio of 36.69% in 2007/08 a lowest ratio of 23.64% in 2006/07 Similarly, the bank has a mean ratio of 29.53% and C.V. of 19.88 which shows that the ratios are consistent and less variable. Thus, this indicates that the bank has a good credit policy.

### (ii) Capital Risk Ratio

The capital risk of a bank indicates how much assets value may decline before the position of depositors and other creditors are jeopardized. A bank must maintain the adequate capital in relation to the nature and condition of its assets, deposit liabilities and other corporate responsibilities. It measures the bank's ability to attract deposits and inter bank funds. It also determines the level of profit, a bank can earn if a bank chooses to take high capital risk, and its ROE will be higher and vice-versa.

**Table 4.22****Capital Risk Ratio**

Rs. In Million

Year	Share Capital	Total Assets	Ratio (%)
2004/05	1172.3	43172.43	2.72
2005/06	1172.3	45056.32	2.60
2006/07	1172.3	56822.02	2.06
2007/08	1172.3	39879.62	2.94
2008/09	1172.3	46367.93	2.53
		Mean(x)	2.57
		S.D.( $\sigma$ )	0.29
		C.V	11.28

The above table shows that the capital risk ratio of RBB has followed fluctuating trend. The highest ratio is 2.94% in 2007/08 and a lowest ratio is 2.06% in 2006/07 with mean of 2.57% standard deviation of 0.29% and coefficient of variation of 11.28% which shows that the ratios are consistent and stable during the study period.

**F. Growth Ratio**

Growth ratio represents the fund mobilization and investment decision of a commercial bank. It shows how well banks are maintaining their economic and financial position. Higher ratio represents better performance of the bank. To measure the growth ratios of Rastriya Banijya Bank following ratios has been calculated and analyzed.

- (i) Growth Ratio of Total Deposit
- (ii) Growth Ratio of Total loans and advances
- (iii) Growth Ratio of Total Investment
- (iv) Growth Ratio of Net Profit

**(i) Growth Ratio of Total Deposits**

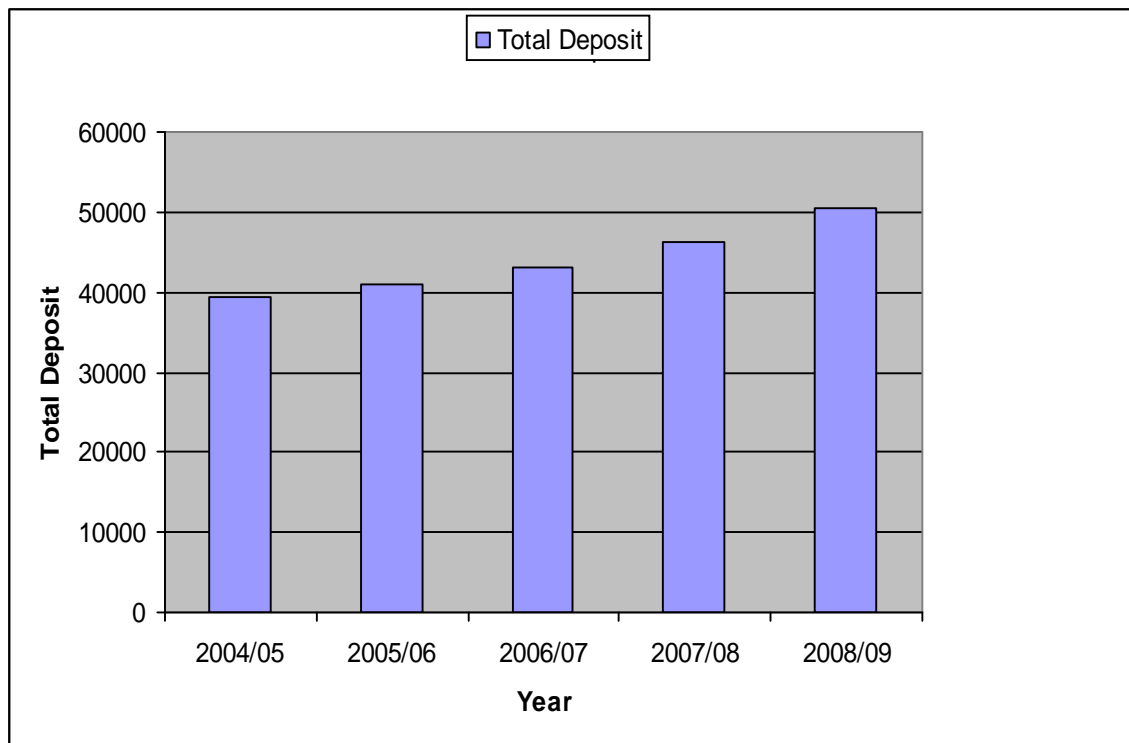
**Table- 4.23**

**Growth Ratio of Total Deposit**

Rs. In Million

Year	2004/05	2005/06	2006/07	2007/08	2008/09	Growth Ratio (%)
Total Deposit	39402.27	40866.77	43016.06	46195.48	50464.13	6.38%

**Figure 4.1 Growth Ratio of Total Deposit**



The above table shows that the growth ratio of the bank is 6.38%, . The total deposit was highest in 2008/09 and lowest in 2004/05. (See annexure 1)

**(ii) Growth Ratio of Total Loans and Advances**

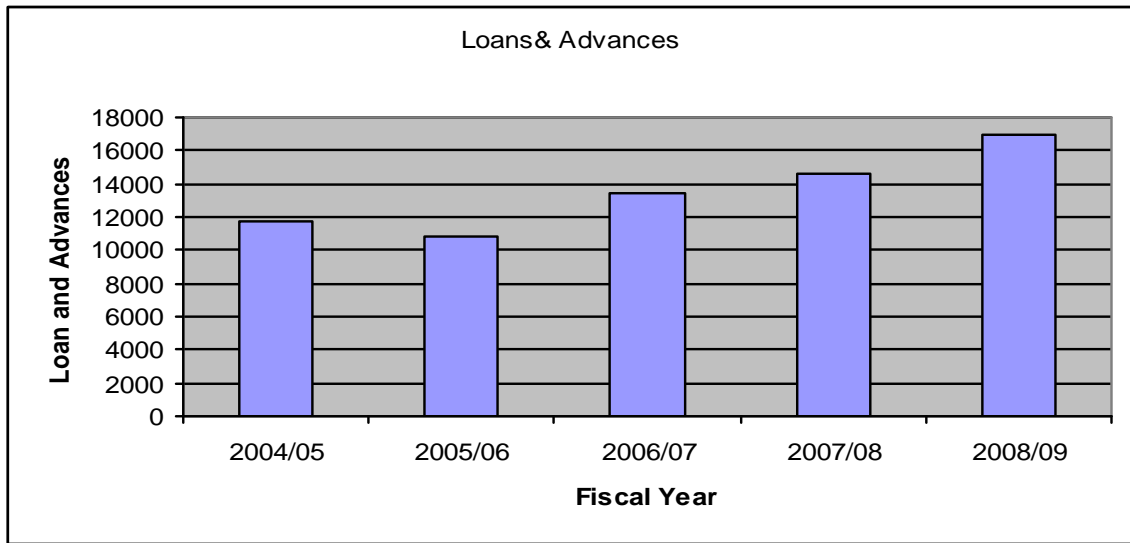
**Table-4.24**

**Growth Ratio of Total Loans and Advances**

Rs. In Million

Year	2004/05	2005/06	2006/07	2007/08	2008/09	Growth Ratio %
Loans & Advances	11679.49	10831.08	13430.93	14633.54	17006.46	9.84

**Figure 4.2 Growth Ratio of Total Loans and Advances**



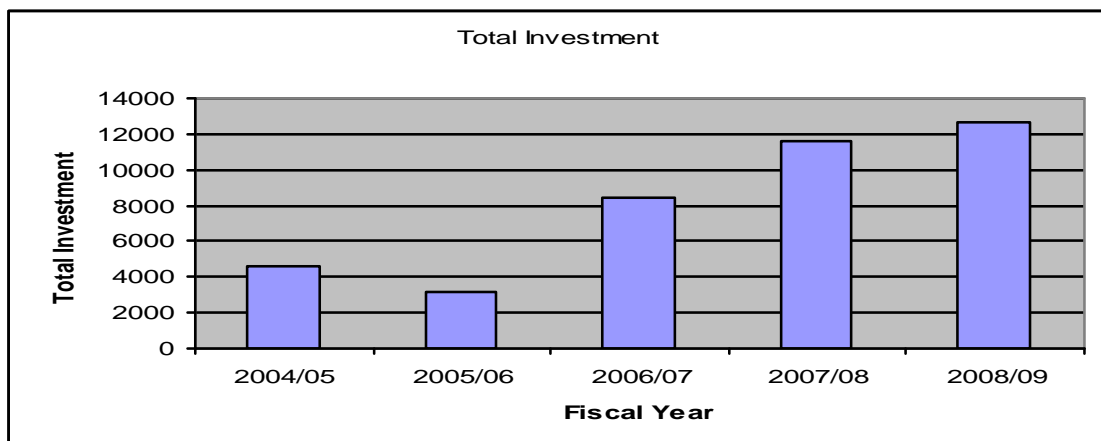
The above table shows that the loans and advances are in fluctuating order. The highest amount was in 2008/09 and the lowest amount was in 2005/06 .The net growth rate is 9.83% during the study period. (See annexure 2)

**(iii) Growth Ratio of Total Investment**

**Table-4.25**  
**Growth Ratio of Total Investment** Rs. In Million

Year	2004/05	2005/06	2006/07	2007/08	2008/09	Growth Ratio (%)
Total Investment	4623.13	3117.03	8415.88	11555.36	12650.15	28.61%

**Figure 4.3 Growth Ratio of Total Investment**



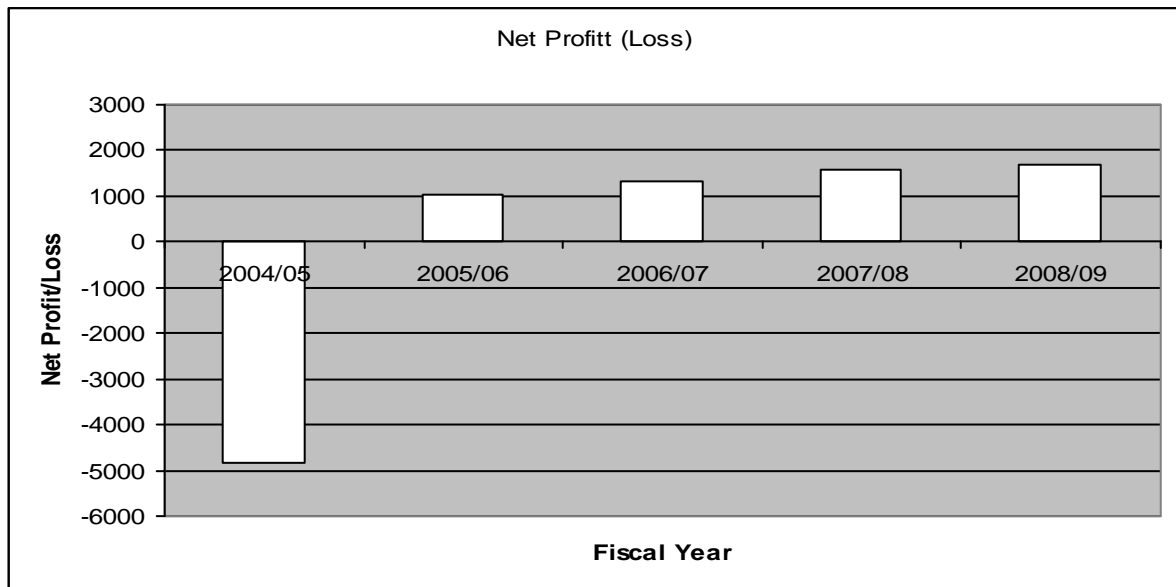
The above table shows that the net growth rate of the bank is 28.61% with the highest investment of Rs12650.15 million in 2008/09 and the lowest of Rs. 3117.03 million in 2005/06 (See annexure 3)

**(iv) Growth Ratio of Total Net Profit**

**Table-4.26**  
**Growth Ratio of Total Net Profit** Rs. In Million

Year	2004/05	2005/06	2006/07	2007/08	2008/09	Growth Ratio (%)
Net Profit (Loss)	(4839.78)	1040.10	1322.89	1591.49	1697.09	(1.77)

**Figure 4.4 Growth Ratio of Total Net Profit**



The above table shows that the net profit of RBB is in increasing trend. But the net growth rate of the bank is in negative i.e. (1.77%). Because in first year the bank was in loss. The above table shows that in year 2004/05 the bank was suffered from losses. But in year 2005/06 to 2008/09. The bank was gain profit. Nowadays, there is new management team who always try to improve the bank condition. And we hope in future the bank will get more profit. (See annexure 4)

**4.2 Statistical Tools:**

Statistical tools help to analyze the financial position of the bank. Statistical tools are the mathematical techniques used to facilitate the analysis and interpretation

of numerical data. It also helps to analyze the relationship between variables and helps bank to make appropriate investment policy regarding to profit maximization and deposit collection. Statistical tools are used to analyze the objectives of the study with the use of statistical tools, it becomes easy to convert abstract problems into figures and complex data in the study are as follows:

### **A. Standard Deviation**

Standard deviation measures the absolute dispersion and gives uniform correct and stable results. It is the positive square root of average sum of square of deviation of given observation from the arithmetic mean of the distribution. Higher the value of standard deviation higher will be the variability and vice-versa. A standard deviation is always a positive number and is superior to mean deviation, quartile deviation and the ranges as it is used of measurement. It is denoted by a small Greek  $\sigma$ . In this study standard deviation of different ratios are calculated.

### **B. Coefficient Correlation Analysis**

Correlation refers to measure of relationship between two or more characteristics of a population or a sample. It measures the changes between the phenomenons. Coefficient of correlation is the mathematical method of measuring the degree of association between the two variable i.e. one dependent the relationship between two or more variables may have effect on other correlated variables. This topic deals with the study to find out relationship between the mentioned variables.

- (i) Coefficient of correlation between deposits and loans & advances
- (ii) Coefficient of correlation between deposits and investment
- (iii) Coefficient of correlation between loans & advances and total net profit
- (iv) Coefficient of correlation between investment and net profit

The above analysis tools analyze the relationship between these relevant variables and help the bank to make appropriate policies regarding deposit collection, fund utilization (loans & advances) and profit maximization. The

reliability of the value of coefficient of correlation is measured by probable error. The limits of correlation are always between -1 to +1. In this chapter, Karl person's coefficient of correlation (r) is used to find out the relationship between variables. Where r = +1, it means there is significant relationship between two variables and when r = -1, it means there is no significant relationship between two variables.

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

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

**(i) Coefficient of correlation between deposits and loans & advances**

Deposits have played a vital role in the better performance of a commercial bank and loan & advances are important to mobilize the collected deposits in different sectors. Coefficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. In this analysis, deposit independent variables (X) and loan & advances are dependent variables (y). The main objectives of computing 'r' between these two variables are to justify whether deposits are significantly used as loan and advances in a proper way or not. The given table shows the value of 'r', r<sup>2</sup>, probable error (P.Er) and 6P.Er between total deposits and loan and advances.

**Table-4.27**  
**Correlation between Deposits and Loans & Advances**

Correlation Coefficient (r)	r <sup>2</sup>	P.Er.	6P.Er.	Remarks
0.97	0.94	0.02	0.12	r>6P.Er.

From the table above it is found that the coefficient of correlation between deposits and loans & advances is 0.97, which shows a positive relationship between these two variables. Similarly, when we consider the value of coefficient of determination (r<sup>2</sup>), which is 0.94 it means that, 94% of the variation in the

dependent variable (loans and advances) has been explained by independent variable (deposit). Since  $r > 6P.Er.$   $r$  is positive but and greater than  $6P.Er.$ , it can be said that there is a higher positive correlation between deposits and loans & advances. But this result indicates that the bank is successful in mobilizing its deposits in proper way as loans and advances. (See annexure 5)

**(ii) Coefficient of correlation between deposits and total investment**

Coefficient of correlation between deposits and total investments measures the degree of relationship between these two variables. In this analysis, deposits are independent variables (X) and investment is dependent variables (Y). The main objectives of computing 'r' between these two variables are to justify whether deposits are significantly used as investment in a proper way or not.

**Table-4.28**  
**Coefficient of correlation between Deposits and Investment**

Correlation Coefficient (r)	$r^2$	P.Er.	6P.Er.	Remarks
0.92	0.84	0.05	0.3	$R > 6P.Er.$

From the above table, it is found that the coefficient of correlation between deposits and investment is 0.92, which shows a positive relationship between these two variables. Similarly, when we consider the value of coefficient of determination ( $r^2$ ) which is 0.84, means that 80% of variation in the dependent variables (deposits). Since,  $r > 6P.Er$  and positive, it can infer that there is a higher positive correlation between deposits and total investment. Thus, this indicates that the bank is successful in maximizing the investments of its deposits. (See annexure 6)

**(iii) Coefficient of correlation between loans & advances and total net profit**

The correlation between loans and advances and total net profit measures the degree of relationship between these two variables. The value of (r) explains whether a percentage change in loans and advances contribute to increase the same percentage of net profit. Here, loans and advances is the independent variable (x) and total net profit is dependent variable (y). The main objective of



computing 'r' between these two variables is to find out whether loans and advances and total net profit are significantly correlated or not. The given table shows the value of 'r',  $r^2$ , probable error (P.Er.) and 6P.Er between loans and advances and net profit.

**Table-4.29**  
**Correlation between Loans & Advances and Total Net Profit**

Correlation Coefficient (r)	$r^2$	P.Er.	6P.Er.	Remarks
0.50	0.25	0.23	1.38	$r < 6P.Er.$

The above table shows that the correlation between loans and advances and total net profit of the bank is -0.50. The value of coefficient of determination ( $r^2$ ) is 0.25 means that 25% of the variation in the dependent variable (total net profit) has been explained by the independent variable (loans and advances). Since,  $r < 6P.Er.$  It can be inferred that there is a no strong correlation between loans & advances and total profit. Thus, it indicates that the increase or decrease in loans and advances affects the total net profit of the bank. (See annexure 7)

**(iv) Coefficient of correlation between investment and net profit**

The correlation between total investment and total net profit (loss) measures the degree of relationship between these two variables. Here, investment is the independent variables (X) and total net profit is dependent variables (Y). The value of 'r' explains whether a percentage changes in investment contribute to increase the same percentage of net profit. The main objectives of computing 'r' between these two variable is to justify whether investment are significantly used to earn net profit in a proper way or not.

**Table-4.30**  
**Coefficient of Correlation between Total Investments**

Correlation Coefficient (r)	$r^2$	P.Er.	6P.Er.	Remarks
0.54	0.29	0.21	1.26	$R < 6P.Er.$

The above table shows that the correlation between total investment and total net profit of the bank is 0.54, which shows a positive relationship between these two

variables. The value of coefficient of determination ( $r^2$ ) is 0.29 that means 29% of the variation in the dependent variables (total net profit) has been explained by the independent variable (total investment). Since  $r < 0.6$  it can be inferred that there is no strong correlation between total investment and total net profit. Thus, this indicates that the increase or decrease in total investment affects the total net profit of the bank. (See annexure 8)

### **C. Trend Analysis**

The main objectives of this topic are to analyze the trend of deposit collection, its utilization and the net profit of RBB. Under this topic, trend of deposit, loans and advances, total investment and total net profit are forecasted for next five years time. The following trend value analyses have been used in this study.

- Trend Analysis of total deposit
- Trend analysis of loans and advances
- Trend analysis of total investment
- Trend Analysis of net profit

The trend of related variables can be calculated as,  $Y_c = a + bx$

#### **(i) Trend Analysis of Total Deposit**

The following table shows the trend value of total deposit of RBB for five years from 2004/05 to 2008/09 and forecasted the same for next five years from 2009/10 to 2013/14.

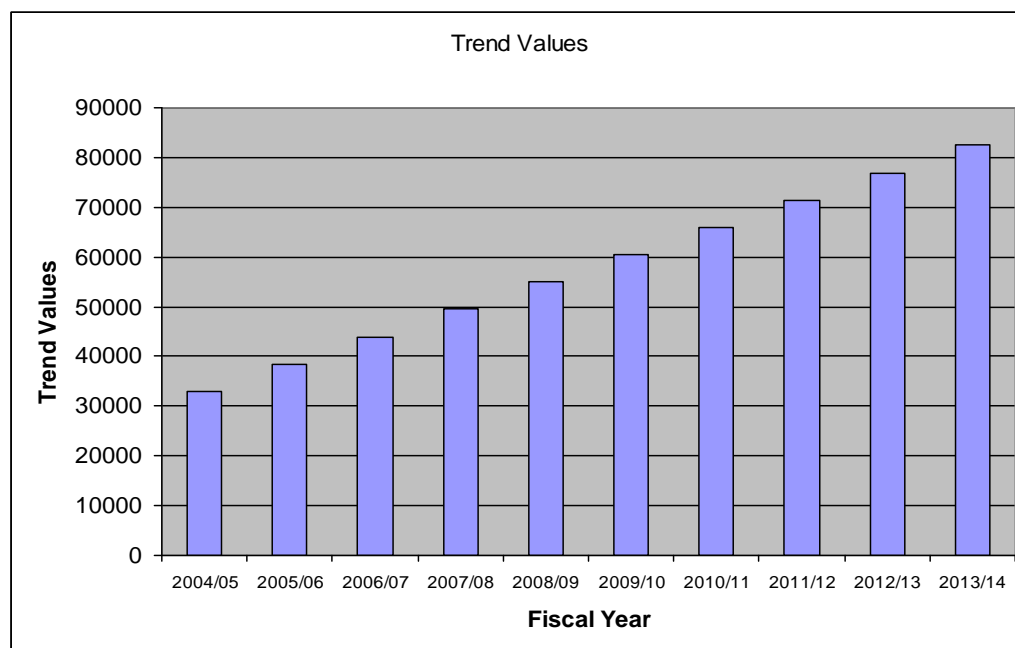
**Table-4.31**

**Trend Value of Total Deposits**

Rs. In Million

Years	Trend Values
2004/05	33007.96
2005/06	38498.45
2006/07	43988.94
2007/08	49479.43
2008/09	54969.92
2009/10	60460.41
2010/11	65950.9
2011/12	71441.39
2012/13	76931.88
2013/14	82422.37

**Figure 4.5 Trend Value of Total Deposits**



From the above table, we see that the total deposit of the bank is in increasing trend. Other things remaining the same, total deposit of RBB will be Rs. 82422.37 million in 2013/14, which is the highest under the study period.(See annexure 9)

## (ii) Trend analysis of Total Loans & Advances

The table below shows the trend values of total loans and advances from 2004/05 to 2008/09 and a forecast of the same for the next five years from 2009/10 to 2013/14.

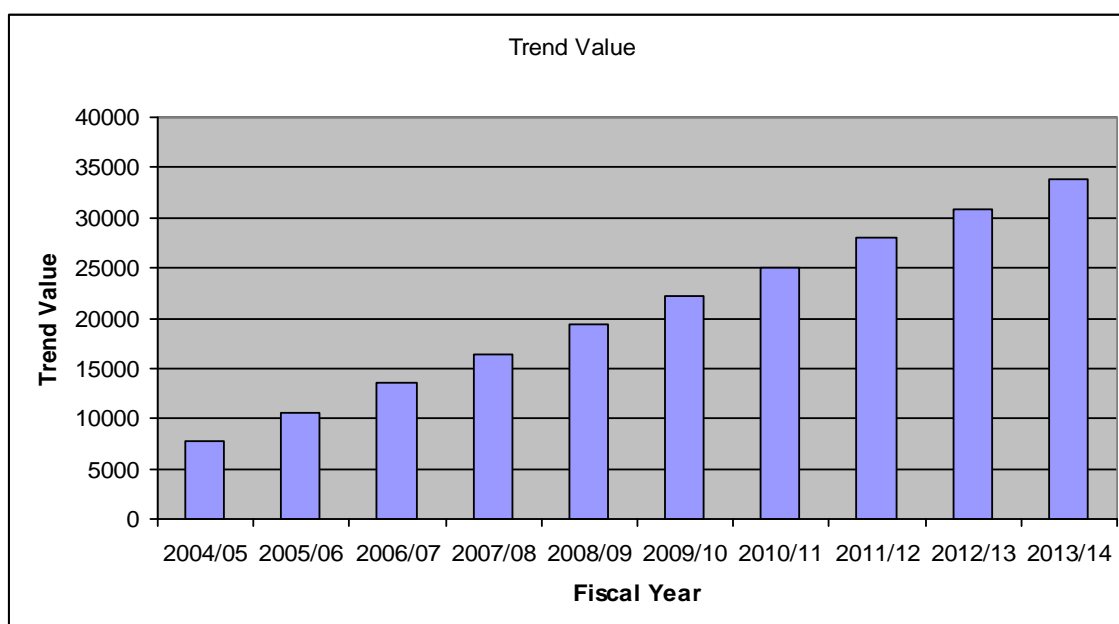
**Table-4.32**

### **Trend Value of Total Loans & Advances**

Rs. In Million

Years	Trend Value
2004/05	7733.74
2005/06	10625.02
2006/07	13516.3
2007/08	16407.58
2008/09	19298.86
2009/10	22190.14
2010/11	25081.42
2011/12	27972.7
2012/13	30863.98
2013/14	33755.26

**Figure 4.6 Trend Value of Total Loans & Advances**



From the above table, it has been seen that the total loans and advances of RBB is in increasing trend. Other things remaining the same, the total loan and advances of RBB in 2013/14 will be Rs.33755.26 million, which is the highest under the study period. (See annexure 10)

**(iii) Trend Analysis of Total Investment**

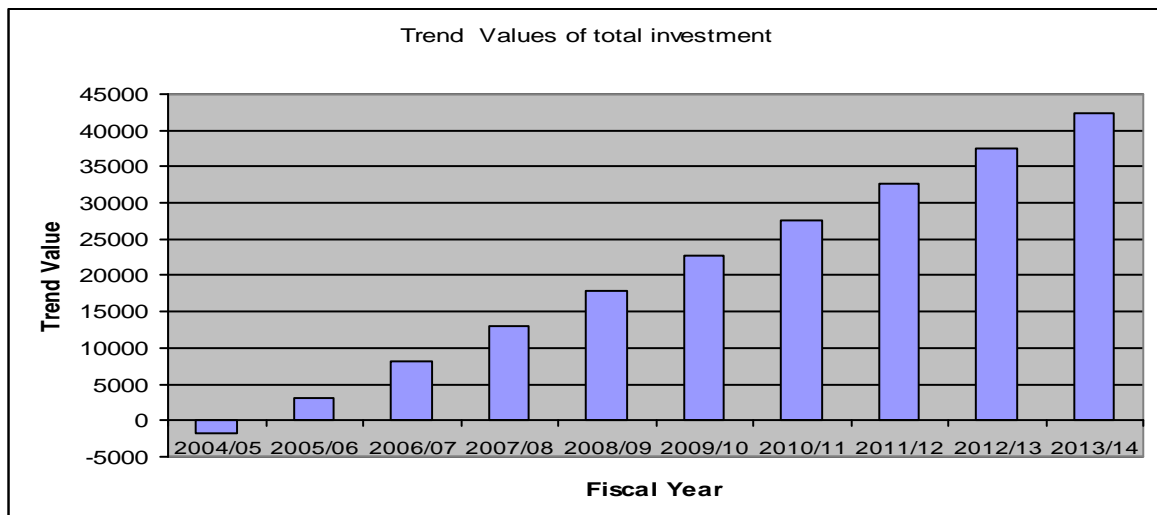
Here, an attempt has been made to analyze the trend value of total investment of RBB for five years from 2004/05 to 2008/09 and forecast the same for the next five years from 2009/10 to 2013/14.

**Table-4.33**

**Trend Value of Total Investment** Rs. In Million

Years	Trend Values
2004/05	(1724.63)
2005/06	3173.84
2006/07	8072.31
2007/08	12970.78
2008/09	17869.25
2009/10	22767.72
2010/11	27666.19
2011/12	32564.66
2012/13	37463.13
2013/14	42361.60

**Figure 4.7 Trend Value of Total Investment**



From the above table we see that the trend values of total investment of RBB are in increasing trend. Other things remaining same, total investment of the bank will be Rs. 42361.60 million in 2013/14, which is the highest under the study. (See annexure 11)

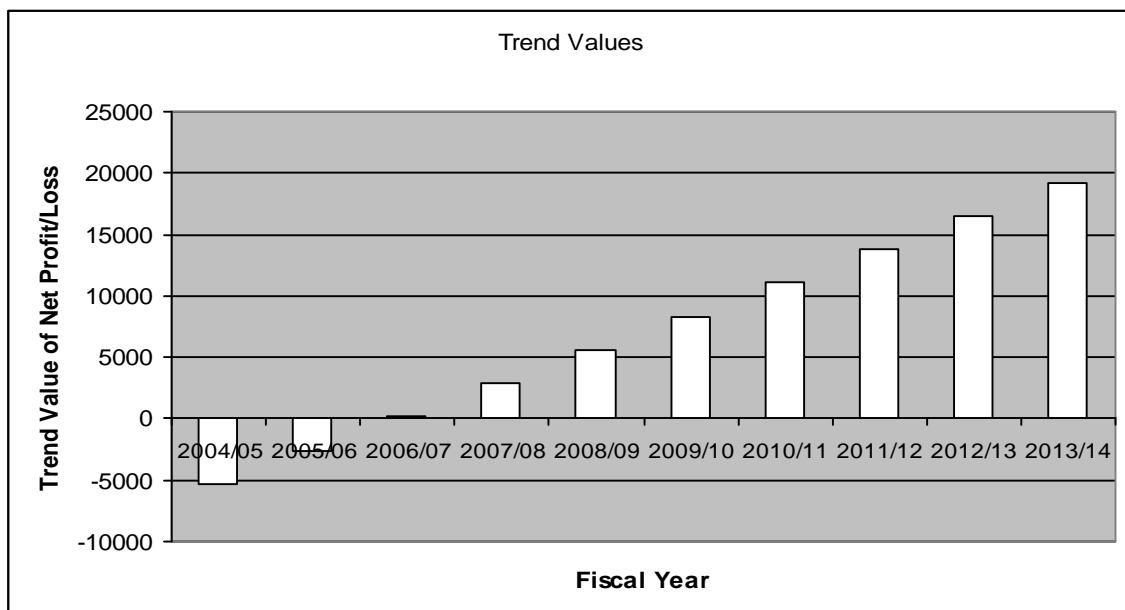
**(iv) Trend Analysis of Net Profit**

Here, an attempt has been made to analyze the trend values of total net profit of RBB for five years from 2004/05 to 2008/09 and forecasted the same for the next five years from 2009/10 to 2013/14

**Table-4.34**  
**Trend Values of Net Profit (Loss) Rs. In Million**

Years	Trend Values
2004/05	(5287.7)
2005/06	(2562.67)
2006/07	162.36
2007/08	2887.39
2008/09	5612.42
2009/10	8337.45
2010/11	11062.48
2011/12	13787.51
2012/13	16512.54
2013/14	19237.57

**Figure 4.8 Trend Values of Net Profit (Loss)**



From the above table, it is clear that the net profit of RBB is in fluctuating trend. Other things remaining same, the net profit of RBB will be Rs. 19237.57 million which is the highest under the study period. (See annexure 12)

### **4.3 The Major Findings of the Study**

It is an analytical part, which is the most important function of the study. It makes an analysis of various aspects of the investment policy of RBB. After the completion of the basic analysis required for the study, the final and the most important task of the researcher, is to enlist findings issues and gaps of the study and give suggestions for the improvement of the overall activity of the bank. This would be meaningful to the top management of the bank to initiate action and achieve the desire result. The objective of the research isn't just to pinpoint the errors and mistakes but to correct and recommend corrective measures for the future growth and improvement. The major findings of the study, that are derived on the basis of financial data analysis of Rastriya Banijya Bank Limited presented below:

#### **Liquidity Ratios**

- ) From the analysis of the current ratio, current liabilities of RBB have exceeds current assets in average in the study period from 2004/05 to 2008/09. The highest ratio is 0.76 in 2005 where the lowest is 0.55 in 2007/08 with an average ratio of 0.59 during the study period. The ratios show the fluctuating trend during the period. The coefficient of variation (C.V.) between the ratio for study period is 9.59%, which shows that current ratio during the study period aren't so consistent. In general, the analysis of the bank indicates that it was able to meet its short-term obligation and had a satisfactory liquidity position.
- ) The cash and bank balance to current assets ratio of RBB has fluctuating trend. trend. The highest ratio is 18.74% in 2007/08 and the lowest ratio is 9.81% in 2004/05. Similarly, the mean of the ratio for the study period is 15.03% and C.V. is 24.15%. Based on the C.V., we can conclude that the ratio is less consistent and more variable. The bank can meet its daily requirements to make the payments on customer highest deposits withdrawals

- J) The cash and bank balance to total deposit ratio of RBB is in fluctuating trends. The highest ratio is 17.18% in 2005/06 while the lowest ratio is 9.49% in 2004/05. The mean ratio of the study period is 12.57% with standard deviation of 2.57% and coefficient of variation of 20.45% which shows that the ratio is not consistent. According to NRB guidelines, there should be minimum balance of 6% of total deposit liability. The above analysis of cash and bank balance to total deposits shows that RBB is successful in maintaining this balance.
- J) The investment on government securities to current assets ratio of RBB has fluctuating trend with the highest ratio of 13.40% in 2007/08 and lowest ratio is 7.03% in 2005/06. The mean ratio of the bank is 18.64% and C.V. between them is 55.15% On the basis of the C.V. , it can be concluded that the ratios are variable and less consistent. Investment on government securities is the secondary defense mechanism for commercial banks. It shows the proportion of additional sourced of liquidity in addition to cash and bank balance in total current assets.
- J) The loans and advances to current assets ratio of RBB is in fluctuating trend. The highest ratio is 52.44% in 2007/08 and lowest ratio is 26.07% in 2005/06. The mean ratio of the bank is 37.65% and C.V. is 30.89%. Since, the bank is in better position to mobilize its fund as loans and advances with respect to current assets.

#### **Assets Management Ratio :**

- J) The loans and advances to total deposit ratio is 33.70% in 2008 /09 which is the highest and 26.50% in 2005/06 is the lowest. The mean of the ratio is 30.55% with the standard deviation of 2.38 and coefficient of variation is 7.79%. Loans and advances is the proportion of the bank investment into most risky assets. High level of risk isn't desirable for commercial banks as any default can create risk. But higher ratio shows that the bank is in better position to mobilize its total deposits as loan and advances.
- J) The investment to total deposit ratios is in fluctuating trend during the study period. The highest ratio is 25.07% in 2008/09 and the lowest ratio is 7.63% in



2005/06. The mean ratio is 17.80% with the standard deviation of 7.04. The C.V. between them is 39.55%, which shows that the ratios are less consistent and more variable. The figures show that the bank has mobilized higher amount of deposits in securities.

- J) The loans and advances to total working fund ratio is in decreasing trends. The highest ratio is 36.69% in 2007/08 and the lowest ratio is 23.64% in 2006/07. The mean ratio is 29.62% and the C.V. between them 19.88, which indicates that the mobilization of total working fund in to loan and advances is in decreasing condition in 2005/06 and 2006/07 but after that it is in increasing condition. This shows that the loan and the advances comprise 29.62% in average of total assets of the bank. The study shows that a little more than one-fourth of the assets comprises loan and advances i.e. risky assets. High ratio means high risk and eventually higher return. Therefore, the bank has taken minimum risk towards the mobilization of its funds to risky assets.
- J) Investment on government securities to total working fund ratio is in fluctuating trend during the study period. The highest ratio is 22.25% in 2007/08 and lowest ratio 6.48% in 2007/08. The mean ratio is found to be 14.25% with 45.40% C.V. between them, which indicates that the ratios are variable and not consistent during the study period. Investments on government securities are the risk free investment for the commercial banks. It shows the proportion of the risk free asset is the total assets of the bank. This ratio shows that the bank has mobilized a considerable amount of fund on government securities, which is less productive and risk free sector.
- J) Investments on shares and debentures to total working fund ratio has ranged from lowest of 2.06% in 2006 /07 to the higher of 2.94% in 2007/08. The average of the ratio is 2.57% with 12.06% C.V. between them, which indicates that the ratio is not so consistent over the study period. So, the bank has invested very small percentage of total working fund into shares and debentures of other companies.

### **Profitability Ratios:**

- J Return on total assets ratio shows that RBB had suffered from loss in 2004/05 and the bank had gain profit in 2005/06 to 2008/09. The maximum loss is 11.21% in 2004/05 and minimum profit is 3.99% in 2007/08. We know that RBB had suffered from loss before some years but now there is a new management team who are trying to get success in banking competition market. We can see that the new management team has do better improvement because in four year period the bank has subtract losses into profit from 11.21% loss to 3.66% profit.
- J Return on loans and advances ratio shows that the bank's return on loan and advances are in negative position in 2004/05 and positive position from 2005/06 to 2008/09. The highest loss ratio is 44.44% in 2004/05. But from 2005/06 the bank has got profit and return on loans and advances in better. The highest return on loan and advances is 10.87% in 2007/08, which is in improvement condition than before.
- J The interest income to total income ratio is in fluctuating trend during the study period. The highest ratio is 87.04% in 2004/05 and lowest ratio is 53.10% in 2007/08. The mean ratio is 64.30% and C.V. is 31.40%. Since, the mean ratio is high we can conclude that the contribution made by lending and investing activities is higher on the other hand the contribution by interest income to total income is high. However, the C.V. is less which means that the ratios are less variables and more consistent.
- J The interest expenses to total expenses ratio are in fluctuating trend. The highest ratio is 54.86% in 2005/06 and the lowest ratio is 29.30% in 2004/05. However the ratios seem to be increasing in 2004/05 to 2005/06 and in 2007/08 to 2008/09 but decreasing in 2006/07. The mean ratio for the study period is 39.80% with 23.74% C.V. between them. Based on the C.V. we can conclude that the ratios are inconsistent and variables. When the deposits of different accounts is increasing than the interest expenses is also increasing. It is better for bank can mobilize its fund in different sector. In the other hand when the interest expenses are increasing then the total expenses is also increase.

- J) The total interest income to total working fund ratio is in fluctuating trend in the study period. The maximum ratio is 5.72% in 2007/08 and the minimum ratio is 4.09% in 2006/07. The mean ratio is found to be 4.92% with 10.97% C.V. between them, which indicates that the ratios are variable and less consistent.
- J) The total interest paid to total working fund ratio are in fluctuating trends in the study period. The highest ratio is at the first year of the study period i.e. 4.88% and the lowest ratio is at the third of the study period i.e. 1.77%. The mean ratio is 2.83% and the C.V. is 40.64% which is very high. Thus, the ratios are less consistent and more variable. Hence, the bank has paid less interest on its total working fund as a whole.
- J) Total income to total expenses ratio, shows that the first three year the total expenses is higher than total income because in this period the bank has suffered from losses. And the last two years the total income is higher than total expenses because in this period the bank has get some profit. The highest ratio is 1.67% in 2007/08 and the lowest ratio 0.33% in 2004/05 with the mean ratio of 1.32 times and C.V. of 37.88. The ratios are in fluctuating trend. Analysis of C.V. shows that shows that the ratio is consistent and less variables during the study period.
- J) Total income to total working fund ratios are in fluctuating trend. The highest ratio is 10.78% in 2007/08 and the lowest ratio is 5.46% in 2004 /05 respectively. Similarly the mean ratio is 7.98% and C.V between them is 24.56% which indicates that the ratios are less consistent over the study period.

**Activity Ratio :**

- J) The loan loss provision to total loans and advances ratio is in fluctuating trend during the study period. The lowest ratio is 46.25% in 2008/09 and highest ratio is 127.83% in 2004/05. The ratio seems to be increasing trend in first two years and is in decreasing trend from the last three years, which shows that the banks efficiency in managing the loans and advances and the efforts of the bank to recover the loans in time.

J) The non-performing loans to total loans & advances ratios are fluctuating over the study period. The highest ratios range is 136.92% in 2004 /05 and lowest ratios range is 40.44% in 2008/09 with an average of 94.34% during the study period. Similarly, the C.V. is 41.23% which is high as a result the ratios are variable & less consistent. As per the international standard, the non-performing assets for commercial banks should be less than 10%.but the high ratio shows that the NPA level of RBB is in very bad but it is in improvement condition.

#### **Risk Ratios:**

J) The credit risk ratio shows that the bank has maintained a highest ratio of 36.69% in 2007/08 and a lowest ratio of 23.64% in 2006/07. Similarly the bank has a mean ratio of 29.62% and C.V. of 19.88, which shows that the ratios are consistent and less variable. Thus, this indicates that the bank has a stable credit policy though the chances of default or the loan being not paid is a little more.

J) The capital risk ratio of RBB has followed fluctuating trend. The highest range is 2.94% in 2007/08 and the lowest is 2.06% in 2006/07. The mean ratio of the bank is 2.57% and the C.V. is 11.28% between them, which shows that the ratios are consistent and stable during the study period.

#### **Growth Ratios:**

From the analysis of the growth ratios of total deposit, total loans and advances, total investment and net profit of RBB during the study period. It shows that the total deposits of the bank is in fluctuating trend with the net growth rate of 6.38% in better increasing trend .The loans and advances of the bank are in fluctuating trend with the net growth rate 9.83%. Thus the loans and advances of the bank was in decreasing trend in second year and but it is increasing from 2006/07 to 2008/09 . So the total investment of the bank is also in fluctuating trend, the net growth rate is 28.61%. Hence, the total investment is increasing trend from 2006/07 to 2008/09. At the end the net profit of the bank is in increasing trend but its net growth rate is (1.77%). The bank had suffered from losses by high amount in the first year and had get profit by low amount in the last four years of the study period. So the net growth rate of the bank is in negative position.

The main source of fund of the bank is deposit from its customer and it is in fluctuating trend with slow growth rate. Similarly the bank utilization of its funds in loans and advances and investment are fluctuating trend but have, satisfactory growth rate. The net profit of the bank which is in increasing trend with slowly shows that the bank is performing well in its overall operation.

### **Correlation Analysis**

- J The coefficient of correlation between deposits and loans & advances is 0.97, which shows a positive relationship between these two variables. Similarly, when we consider the value of coefficient of determination ( $r^2$ ), which is 0.94 it means that, 0.94% of the variation in the dependent variable (loans and advances) has been explained by independent variable (deposit). Since  $r > 6P.Er.$   $r$  is positive but greater than 6P.Er., it can be said that there is a strong positive correlation between deposits and loans & advances. But this result indicates that the bank is successful in maximizing its deposits in proper way as loans and advances.
- J The coefficient of correlation between deposits and investment is 0.92, which shows a positive relationship between these two variables. Similarly, when we consider the value of coefficient of determination ( $r^2$ ) which is 0.84, means that 84% of variation in the dependent variables (deposits). Since,  $r > 6P.Er.$  and positive, it can infer that there is a higher positive correlation between deposits and total investment. Thus, this indicates that the bank is successful in mobilizing the investments of its deposits.
- J The correlation between loans and advances and total net profit of the bank is 0.50, which shows a positive relationship between these two variables. The value of coefficient of determination ( $r^2$ ) is 0.23 means that 23% of the variation in the dependent variable (total net profit) has been explained by the independent variable (loans and advances). Since,  $r < 6P.Er.$  and positive. It can be inferred that there is a no strong correlation between loans & advances and total profit. Thus, it indicates that the increase or decrease in loans and advances affects the total net profit of the bank.

- ) The correlation between total investment and total net profit of the bank is 0.54, which shows a positive relationship between these two variables. The value of coefficient of determination ( $r^2$ ) is 0.29 that means 29% of the variation in the dependent variables (total net profit) has been explained by the independent variable (total investment). Since  $r < 6P.Er.$  it can be inferred that there is no strong correlation between total investment and total net profit. Thus, this indicates that the increase or decrease in total investment affects the total net profit of the bank.

### **Findings from Trend**

- ) The trend analysis of total deposit of the bank is in increasing trend. Other things remaining the same, total deposit of RBB will be Rs. 82422.37 million in 2013/14, which is the highest under the study period.
- ) The trend analysis of total loans and advances of RBB is in increasing trend. Other things remaining the same, the total loan and advances of RBB in 2013/14 will be Rs.33755.26 million, which is the highest under the study period.
- ) The trend values of total investment of RBB are in increasing trend. Other things remaining same, total investment of the bank will be Rs. 42351.60 million in 2013/14, which is the highest under the study.
- ) The net profit of RBB is in fluctuating trend. Other things remaining same, the net profit of RBB will be Rs.19237.57 million which is the highest under the study period.

Hence, from the above study we conclude that the overall picture of the investment policy of RBB is not good. So it is recommended for RBB to follow liberal policy. When, the bank invest its fund in loan and advances with sufficient guarantee and implement a sound collection policy including procedure which rapid identification of bad debtors loans, immediate contract with borrower, continual follow up and as well as legal procedure if required.

## CHAPTER V

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

This is the last chapter of the research, which includes summary, conclusion and recommendation from the fact findings through analysis of various aspects of investment of commercial banks by using some important financials as well as statistical tools.

#### **5.1 Summary**

Investment means sum of the money is to mobilize in different sector that obtained a good income. Investment means to mobilize the capital in profitable sector or to move the scattered saving for future financial gain. Investment is a present sacrifice for the sake of future benefits. The present is certain but the future is uncertain. Therefore investment always involves risk. Present decision about selecting the best investment alternatives should always take the future risks into consideration. Thus, investment means spending aside money for future financial gain. It is a commitment of funds made in the expectation of the some positive rate of returns. Investment takes place at present but return can be defined as the management of an investor's wealth which is the sum of current income and invested to increase wealth.

Banks are those financial intermediaries who accept deposit and grant loan. In other word banks is an important for under developed economy as they promote formation by developing banking habit of people and collection saving. Banks are mobilizing the deposit of the public in different sector to get the productive use. The development of the country highly depends upon its economic condition. In the modern economy banks are considered not as a dealer in money but as though the leaders of development. Its industry has acquired a key position in mobilizing resources for finance and social economic development of the country.

Bank plays a vital role in economic development of the country. It is a resource mobilizing institution which accept deposit from various sources and invests such accumulated if the different field . The banking sector is largely responsible

for collecting household saving in terms of different types of deposits and regulating it in the society by lending their resources in small scale industries under intensive banking program has enabled the banks to share in the economic growth of the economy.

Investment has to suffering from various types of risk. It means investment operation of commercial banks is a very risky one. It is the most important factor from the point of view of bank management, for this commercial bank has to pay the due consideration while formulating investment policy. A healthy development of any commercial bank depends upon its investment policy. Good investment policy of the bank has positive impact on economic development of the country.

The main source of income of a bank is interest income which is very important that the bank have sound investment policy. A good investment policy attracts both buyers and lenders, which increase both the volume and quality of deposits, loan and investment. The greater the credit created by the bank, the higher will be profitability. Since investment is the most risky venture from the view point of shareholders and management of the bank, the bank should be cautious while formulating investment policy.

The main objective of this study is to evaluate the investment policy of Rastriya Banijya Bank and to suggest measures to improve the investment policy of the bank. This study has been constrained by various common limitations. The study is based on the secondary data from 2004 to 2008. The data have been basically obtained from annual reports and financial statements, official records, periodicals, journals and bulletins, various published reports and relevant unpublished master's thesis. Beside this, personal contracts with the bank personnel have also been made.

Financial as well as statistical tools are used to analyze and interpret the data and information in the study. Under financial analysis various financial ratios relates to the investment function of commercial bank i.e. liquidity ratios, assets management ratio, activity ratio, profitability ratio and growth ratio have been analyzed and interpreted. Similarly, under statistical analysis, some relevant statistical tools i.e. mean, standard deviation, C.V., coefficient of correlation,



trend analysis have been used. The findings from each of these ratios are presented which will give a better picture of the performance of the bank.

In this study, the word investment is conceptualized as the investment of income, savings or other collected funds. The term investment covers a wide range of activities. It is only possible where there is an adequate saving, investment policy is an important ingredient of overall national economic development because it ensures efficient also allocation of fund to achieve the materials and economic well being of the society as a whole.

The income and profit of a bank depends upon its lending procedures, lending policy and investment of its fund in different securities. The greater the credit created by the bank the higher will be the profitably. A sound lending and investment policy is not significant for the promotion of commercial savings of a backward country like Nepal.

## **5.2 Conclusion**

- ) The current ratio of the bank over five years is 0.67 times on an average during the study period. The standard of the current ratio is 2:1, though the acceptability of the value depends on the nature of the business and industry for the banks, a current ratio of 1:1 or above is considered acceptable. Hence, based on this, the liquidity position of the Rastriya Banijya Bank is below from the normal level.
- ) The cash and bank balance to current assets ratio shows that only 15.03% of the current assets are liquid. Thus, the bank has maintained the low percentage of liquid assets with respect to its current assets but still can meet the daily requirements to make payments on customer's deposits withdrawal.
- ) The cash and bank balance to total deposit ratio is also sufficient to meet the short-term obligation of the bank. The mean cash and bank balance to total deposit ratio of 12.57% shows that the bank has enough liquidity to meet the customers deposit withdrawals demand. However, the ratios are variable and less consistent.

- J The investment on government securities to current ratio is 18.64% on an average during the study period, which indicates that the bank has maintained sufficient amount of adequate liquid assets to meet the unexpected future liquidity needs. But the ratio over the study period does not seem consistent during the study period with 55.15% C.V.
- J The loans and advances to current assets ratio is 37.65% on an average during the study period. This ratio indicates that the bank has mobilized a large percentage of its current assets as loans and advances in order to earn high profit rather than keeping it idle as cash and bank balance.
- J Hence, the above results show that the liquidity position of the bank is good enough to meet the short term obligations. The maintenance of the liquidity also depends on the past withdrawal trend of the bank. The investment on loans and advances and government securities are good, which shows that the bank has invested in high earning assets with a view to earn high return.

#### **B. Assets Management Ratios**

- J The loans and advances to total deposit ratio is 30.55% on average during the study period. This shows that the bank is not aggressively lending. Thus, the bank is not able to mobilize properly the total deposits in loans and advances, which has higher return.
- J The investment to total deposit ratio is 17.8% on average during the study period. This shows that the bank has invested a lower portion of its deposits in investment on government securities, shares and debentures of other companies.
- J The loans and advances to total working fund ratio is 29.62% in average during the study period. However, this shows that the bank has not satisfactorily utilized its total assets for the purpose of income generation. It has been able to mobilize around one fourth of the total assets in average in productive areas.
- J The bank has invested 14.25% of funds on government securities in average. The ratios are inconsistent and fluctuating also. So the bank has less

investment on risk free area which has less return also. The inconsistency of the ratios shows that the bank has not specific policy for the investment on government securities

- J The bank has invested 2.57% of funds on shares & debentures in average during the study period. This shows that the bank has very less invest in the shares and debentures of other companies.

### **C. Profitability Ratios**

- J The return on total assets ratio of the bank is 0.22% on average during the study period. First year the bank had suffered from losses but now there is a new management team who are trying to get success in banking competition market.
- J The returns on loans and advances ratio is (1.23%) in an average. This ratio shows also that the RBB has failed to utilize their resources to earn good return for providing loans and advances. In the first year of the study period the bank had got the highest loss ratio i.e. 41.44% and in the last year of the study period, the bank had got the highest profit ratio i.e. 9.98%. In this way, we hope the bank will get more profit very soon.
- J The interest income to total income ratio is found to be 64.30% in an average during the study period. This ratio shows that the bank has invested large amount of funds into different areas. We know higher the interest income to total income ratio indicates that the bank has investment high percentage of funds on risk free areas.
- J The interest expenses to total expenses ratio for the study period is 39.80% and is in fluctuating trend. This shows that the cost of interest to pay customer is very high. We know that when the deposits of different accounts are increasing then the interest expenses are also increasing. It is better for banks because when the deposit is increasing then the bank can mobilize its funds in different sectors.
- J The total interest earned to total working fund ratio is 4.92% with a fluctuating trend. This shows that the ability of the bank to mobilize its total assets to generate high income as interest is deteriorating or in other words, the earning power of the bank is decreasing.

- J Total interest paid to total working fund ratio for the study period is 2.83% an average and is in fluctuating trend. The ratio seems to be consistent and less variable.
- J Total income to total expenses ratio is 1.32 times in an average during the study period. This ratio seems to be consistent over the years. Thus, we conclude that a unit of expenses could generate two units of income. Hence, the productivity of expenses to generate income is shown by this ratio.
- J Total income to total working fund ratio is 7.98% on average during the study period with in fluctuating trend. This shows that the earning power of the assets is less consistent and generating income at a less consistent rate.

Hence, the above results show that the interest earning capacity of total working fund is inconsistent but variable in positive way. Interest income has higher contribution total income of the bank, which shows that the bank has higher proportion of income from fund based transactions. Similarly profitability ratios such as return on loans and advances, return on assets etc are less consistent and variable in the positive way as a result profitability of the bank is increasing. At last, we conclude that the investment policy adopted by the bank is apposite from the perspective of profitability.

#### **D. Activity or Performing Ratio:**

- J The loan loss provision to total loans and advances ratio is found to be 93.15% in an average with in fluctuating trend. Though the loan loss provision seems to be increasing trend but the ratio of the last two years is in decreasing trend which shows the bank is able to efficiency manage its loans and advances and make effort for the timely recovery of it.
- J The non-performing loans to total loans and advances ratio is 94.34% in an average with in fluctuating trend. As per the international standard, the non-performing assets for commercial banks should be in single digit i.e. less than 10%. But the high mean ratio shows that the NPA level of the RBB is in very bad condition. But from the last two year the NPA of RBB is in improvement condition.

### **E. Risk Ratios**

- J The credit risk ratio is 29.62% during the study period with fluctuating trend but more consistency. This shows that the risk of non-payment of loans or the chances of default is high though the bank has more good credit policy.
- J The capital risk ratio of the bank is 2.57% in average in the study period with fluctuating trend. Thus, this shows that there is a greater risk of the bank's value declining.

### **F. Growth Ratio:**

- J The growth ratio of total deposits during the study period is 6.38%. The amount of deposit is in increasing trend of the study period in a slow pace. The growth ratio of loans and advances of the bank during the study period is found to be 9.83% and is in increasing trend every year. The growth rate of investment during the study period is 28.61% with the fluctuating trend. Similarly, the net profit of the bank is also in an increasing trend with the net growth rate of (1.77%) during the study period. We know that the net growth rate is in negative because the bank had got losses in the first year with high amount.

Hence, the above results show that the bank has been collecting the deposit funds are in increasing trend in the study period. Similarly, the loans and advances is also in increasing trend. So, both the sources and uses of fund are in an increasing trend. Though, the investment seems to fluctuate, the growth ratio seems to be satisfactory for investment. The net profit is in increasing trend but it is in negative position. We know from the first year of the study period the profit is in negative position but in last four years the bank has got profit.

### **G. Correlation Ratios:**

The correlation analysis shows that the correlation coefficient ( $r$ ) between deposits and loans & advances of the bank is 0.97 and probable error multiplied by six is found to be 0.12. Since  $r > 6P.Er.$  and  $r$  is positive. So it is inferred that there is low positive correlation between total deposits and loans & advances during the study period.

- J There is a positive relationship between deposits and total investment as (r) is 0.92 probably error multiplied by six is found to be 0.3. This indicates that the bank is successful in maximizing the investment of its deposits.
- J The correlation between loans & advances to total net profit is 0.50 which shows there is positive correlation between them.
- J The correlation between total investment and total net profit is 0.54 and probable error multiplied by six is found to be 1.26. Since,  $r < 6P.Er.$  it is insignificant and there is no correlation between total investment and net profit.

## H. Trend Analysis

The trend analysis of total deposits of the bank is in increasing trend but in slow pace. Other things remaining same, the total deposits of the bank will be Rs. 82422.37 million until at the end of 2013/14, which is the highest under study period. Similarly, growth rate of loans and advances is also in increasing trend. Other things remaining same, the loans and advances of RBB will be Rs 33755.26 million in 2013/14, which is the highest under study period. The total investment of the bank is also in increasing trend. Other things remaining same, total investment of the bank in 2013/14 will be Rs.42361.6 million, which is the highest under the study period. Similarly, the total net profit of the bank is in fluctuating trend. Other things remaining same, the net profit of RBB will be Rs. 19237.57 million, which is the highest under the study period.

## 5.3 Recommendations

Recommendations mean suggestion, which help to take corrective actions in their activities in future. On the basis of above analysis and findings of the study, following recommendation or suggestions have been put forward with a view to improve weakness, inefficiency and for the satisfactory improvement of the investment policy of Rastriya Banijya Bank Limited.

- J From the analysis of liquidity ratios of the bank, the current ratio shows the bank's ability to meet the current obligations. Generally 2:1 is considered as the standard current ratio but for the banks and financial institutions 1:1 is

considered as the standard current ratio. The current ratio of RBB seems to be less than 1 from the second year of the study period. So, it is suggested to increase the bank's current ratio as soon as possible as it could impose bad impact on depositors. Cash and bank balance to current assets ratio shows the bank's liquidity capacity based on cash and bank balance. Based on the analysis of this ratio, we can conclude that the ratio is less consistent and more variable. We know that higher ratio indicates the bank's ability to meet the daily cash requirement of their customer. So it is suggested to the bank to increase its liquidity capacity.

- J Total investment to total deposit ratio shows the bank's ability to mobilize its deposit in different securities. Total investment to total deposit ratio of RBB is very low. This indicates that the bank has not been properly mobilizing its deposits in different sector. If the bank wishes to increase its profit it is highly recommended to increase its investment in different securities. The bank has very nominal investment on government securities, shares and debentures of other companies. Bank may invest in shares and securities of any one organized institution not exceeding 10% of the paid up capital of such organized institution. However it is good that the bank invest more on government securities, shares and debentures of other companies as it encourage fanatical and economic development of the country.
- J The main objectives of the commercial banks are to earn more profit. Return on total assets ratio of RBB shows that the bank had suffered from losses with high ratio. However, it is good that the bank has invested its fund in low risky areas and invests on pass loans. Return on loans and advances ratio also shows that the bank has not properly invest its fund on pass loans. We know high ratio indicates greater success to mobilize its fund as loans and advances. But the return on loans and advances of RBB is in highly negative position. Hence, the bank is recommended to invest its fund on secured area. The bank always considers investing its fund on cash flow secured better than collateral based.

- J The interest income to total income of the bank is high, which indicates that a major portion of the income is generated as interest. The bank is recommended to increase its assets efficiently to earn high interest income.
- J The interest income to total working fund is low and decreasing which indicates that the earning power of the bank is deteriorating. Thus, the bank should consider its investment policy and if it wishes to increase its interest income, it should invest more on risky assets that will give higher return.
- J The bank's credit risk ratios are quite high. The credit risk ratio indicates the changes of default of loans or the risk of non payment of loans. Hence, in order to maximize this, the bank is recommended to make a proper study of the loan appraisal process and adopt aggressive loan recovery and follow up policy. It should follow scientific project appraisal method and train its employees in identifying a better investment avenue from the perspectives of risk and return.



## BIBLIOGRAPHY

### Books:

Agrawal, G.R. (2002). **Dynamic of Business Environment in Nepal**: Kathmandu, M.K. Publishers and Distributors.

American Institute of Banking (1972). **Principles of Bank Operation**: USA, AIB

Bexley, James B. (1987). **Banking Management**: New Delhi, Sujeet Publication

Bhandari, D.R. (2003). **Banking and Insurance, Principles & Practices**: Kathmandu, Kyushu Publication.

Bhattarai Rabindra (2005). **Investment**: 2nd edition, Buddha Academic Publishers & Distributors Pvt. Ltd.

Chandler, L.V. (1973). **The Economic of Money & Banking**: 6th edition

Clemens, J.H. (1963). **Bank Lending**: London, Surop Publication Ltd.

Crosse, H.D. (1963). **Management Policies for commercial Banks**, New Jersey, Prenyice Hall Inc.

Dali, I. (1974). **Commercial Banking in Nepal**: Kathmandu

Dangol, R. M. (2000). **Accounting for Financial Analysis and Planning**: Kathmandu, Taleju Prakasan

Diana, M.N. (1994). **Banking Institutions in Developing Markets**: USA: World Bank Publication.

Francis, J.C. (1990). **Management of Investment**: New York: MC Graw Hill Series.

Gautam, D.K. (2002). **Business Policy and Strategic Management**: Kathmandu Pratiba Parkashan.

Gitman, L.J. (1988). **Principle of Managerial Finance**: 5th edition, San Diego State University, Harper Collins Publishers.

Gitman, L.J. & Jochnk. (1990). **Fundamental of Investment**: 4th edition, New York: Harper & Row Publishers.

Grolier Incorporated, (1985). **The New Encyclopedia**: Britannia, (vol. 14)

Gupta, S.C. (1992). **Fundamental Statistic**: fifth edition Bombay: Himalayan Publishing House.

Jones, C.P. (1988). **Investment: Analysis & Management**: 2nd edition copy right 1988: John Wiley & Sons. Inc,

Joshi, Dr,S. (2058). **Economic Policy Analysis**: Kathmandu, Taleju Parkashan.

Kothari, C.R. (1994). **Quantitative Techniques**: New Delhi Vikas Publishing House Pvt. Ltd.

Sharpe, F.W. Alexander J.G.(1996). **Investment**: New Delhi, Pentice Hall of India Pvt. Ltd.

Sharpe, F.W. Alexander J.G.(1995). **Investment**: New Delhi , Prentice Hall of India Pvt. Ltd.

Singh, P. (1994) .**Investment Management**: Bombay, Himalayan Publishing House Ltd.

The American Bankers Association. (1996). **Principles of Bank Operation**: New York: ABS

### **Journals, Periodicals & Official Publications:**

**Annual Reports** of Rastriya Banijya Bank Limited from FY 2003 to 2007

**Annual Reports** of Nepal Ratra Bank FY 2003 to 2007

Bajracharya, Bodhi B. (1991) **Monetary Policy & Deposit Mobilization in Nepal**, Rajat Jayanti Smarika., Kathmandu: Rastriya Banijya Bank

**Commercial Bank Act, 2031 B.S.**

Ghimire, Prabhakar, 1999. **Banijya Bank Haru Prathmikta Chhetrama Lagani Garnu Bhandha Harjana Tirna Tayar**, Kathmandu: Nepal Samachar Patra.

Kishi, D.L. (1996). **The Changing Face of the Banking Sector and Nepal Sarkar Recent Budgetary Policy**, Nepal Bank Patrika vol. 25

**Manobhab Aarthik Bisleshak, Trraimasik** Nepal Bitiya Sastha. Karmachari Sanga Rastriya Banijya Bank.

**Office Level Pre-service Training Book**, Rastriya Banijya Bank

Pardhan, Dr. R.S. (1994). **Financial Management and Practices in Nepal**, Nepal Bank Patrika, Baishak Masanta, 2051.

Pardhan, S.B. (1996). **Deposit Mobilization: its problem and Prospects**, Nepal Bank Patrika, Baishak Masanta, 2053.

Shrestha, Dr. S. (1998). **Lending Operation of Commercial Banks of Nepal & its impact on GDP, the Business Voice of Nepal (special Issues of Banijya Sansar)**, T.U. Kirtipur, 2055.

'**Souvenir**' (2065). 44th Anniversary Book, Rastriya Banijya Bank, Souvenir Publication Committee.

### **Website:**

[www.financialexpress.com](http://www.financialexpress.com)

[www.google.com](http://www.google.com)

[www.nrb.org.np](http://www.nrb.org.np)

[www.rbb.com.np](http://www.rbb.com.np)

### **Unpublished Thesis:**

Joshi, Jyoti (2005), "**Investment Policy of Commercial Banks in Nepal; A comparative Study of Everest Bank Limited with Nabil Bank Limited.**" An Unpublished Thesis Shanker Dev Campus.

Khanal, D.R. (1987). "**Investment in priority sector by Commercial Banks (A Study of Commercial Banks of Kathmandu Vally)**," Unpublished e Thesis, Central Departmental on Management, T.U.

Mahat, Sushil Chandra (2004). **Investment Policy of Nepal Bangladesh Bank Limited.**" An Unpublished Thesis. Shanker Dev Campus.

Shrestha, Dr. S. (1993). "**Investment Planning of Commercial Banks in Nepal.**" Unpublished PH.D. Thesis, University of Delhi.

Shrestha, S. (2004) conducted a study on "**Nepal Rastra Bank Guidelines on Investment Policy of Commercial Banks in Nepal (A case study of Nepal Investment Bank Ltd.)**." An Unpublished Thesis. Shanker Dev Campus

Khadka, Puspanjali,(2008) A case study on "Investment Policy of Industrial Development Corporation," Unpublished Thesis, Nepal Commerce Campus.

## Appendix-1

### Sample Calculation of Growth Ratios

#### Calculation of Growth Ratios of Total Deposit

Year	Total Deposit
2004/05	39402.27
2005/06	40866.77
2006/07	43016.06
2007/08	46195.48
2008/09	50464.13

#### Calculation of Growth Ratio

$$D_n = D_o (1+g)^{n-1}$$

Where,

$D_n$  = Total deposit in nth year

$D_o$  = Total deposit in initial year

$g$  = Growth Ratio of deposit during the study period

$n$  = Total number of period

Here,

$$D_{2007/08} = 50464.13$$

$$D_{2003/04} = 39402.27$$

$$n = 5 \text{ yrs.}$$

$$\text{So, } D_n = D_o (1+g)^{n-1}$$

$$\text{or, } 50464.13 = 39402.27 (1+g)^{5-1}$$

$$\text{or, } \frac{50464.13}{39402.27} = (1+g)^4$$

$$1.2807 = (1+g)^4$$

$$\text{or, } 1.2807 = (1+g)^4$$

$$1+g = (1.2807)^{1/4}$$

$$g = 1.0638 - 1$$

$$= 0.0638 \text{ or } 6.38\%$$

## Appendix 2

### Calculation of Growth Ratios of Total loans and Advances

Year	Loan and Advances
2004/05	11679.49
2005/06	10831.08
2006/07	13430.93
2007/08	14633.54
2008/09	17006.46

#### Calculation of Growth Ratio

$$D_n = D_0(1+g)^{n-1}$$

Where,

$D_n$  = Total loans and advances in nth year

$D_0$  = Total loans and advances in initial year

$g$  = Growth Ratio loans and advances of during the study period

$n$  = Total number of period

Here,

$$D_{2007/08} = 17006.46$$

$$D_{2003/04} = 11679.49$$

$$n = 5 \text{ yrs.}$$

$$\text{So, } D_n = D_0 (1+g)^{n-1}$$

$$\text{or, } 17006.46 = 11679.49 (1+g)^{5-1}$$

$$\text{or, } \frac{17006.46}{11679.49} = (1+g)^4$$

$$1.4551 = (1+g)^4$$

$$\text{Or } 1.4551 = (1+g)^4$$

$$1+g = (1.4551)^{1/4}$$

$$g = 1.0984 - 1$$

$$= 0.0984 = 9.84\%$$

### Appendix-3

#### Calculation of Growth Ratios of Total Investment

Year	Total Investment
2004/05	4623.13
2005/06	3117.03
2006/07	8415.88
2007/08	11555.36
2008/09	12650.15

#### Calculation of Growth Ratio

$$D_n = D_o(1+g)^{n-1}$$

Where,

$D_n$  = Total investment in nth year

$D_o$  = Total investment in initial year

$g$  = Growth Ratio investment of during the study period

$n$  = Total number of period

Here,

$$D_{2007/08} = 12650.15$$

$$D_{2003/04} = 4623.13$$

$$n = 5 \text{ yrs.}$$

$$\text{So, } D_n = D_o (1+g)^{n-1}$$

$$\text{or, } 12650.15 = 4623.13 (1+g)^{5-1}$$

$$\text{or, } \frac{12650.15}{4623.13} = (1+g)^4$$

$$2.7363 = (1+g)^4$$

$$\text{or, } 2.7363 = (1+g)^4$$

$$1+g = (2.7363)^{1/4}$$

$$g = 1.2861 - 1$$

$$=0.2861 \quad =28.61\%$$

#### Appendix-4

##### Calculation of Growth Ratios of Total Net Profit (Loss)

Year	Net Profit (Loss)
2004/05	(4839.78)
2005/06	1040.10
2006/07	1322.89
2007/08	1591.49
2008/09	1697.09

##### Calculation of Growth Ratio

$$D_n = D_o(1+g)^{n-1}$$

Where,

$D_n$ = Total net profit (loss) in nth year

$D_o$ = Total net profit (loss) in initial year

$g$ = Growth Ratio of net profit (loss) during the study period

$n$ = Total number of period

Here,

$$D_{2007/08}=1697.09$$

$$D_{2003/04} = (4839.78)$$

$$n =5 \text{ yrs.}$$

$$\text{So, } D_n = D_o (1+g)^{n-1}$$

$$\text{or, } 1697.09 = (4839.78) (1+g)^{5-1}$$

$$\text{or, } \frac{1697.09}{(4839.78)} = (1+g)^4$$

$$(0.3506) = (1+g)^4$$

$$\text{or, } (0.3506) = (1+g)^4$$

$$1+g = (0.3506)^{1/4}$$

$$g = -0.7695-1$$

$$=(0.0177) \quad =(1.77\%)$$

## Appendix-5

### Coefficient of Correlation Analysis

(i) Calculation of Coefficient Correlation between total deposits and loans and advances

Year	Deposits (x)	Loans & Advances(y)	X=x-x	Y=y-y	X <sup>2</sup>	Y <sup>2</sup>	XY
2004	39402.27	11679.49	-4586.67	-1836.81	217541.69	3373870.98	8424841.32
2005	40866.77	10831.08	3122.17	-2685.22	9747945.51	7210406.45	8383713.33
2006	43016.06	13430.93	-972.88	-85.37	946495.49	288.04	83054.76
2007	46195.48	14633.54	2206.54	1117.24	4868818.77	1248225.22	2465234.75
2008	50464.13	17006.46	6475.19	3490.16	41928085.54	12181216.83	22599449.13
	x = 2219944.71	y = 67581.5			X <sup>2</sup> = 978528887	Y <sup>2</sup> = 22224021007.52	XY= YY841956293.3 .77

From the above table calculation we have,

$$x = \frac{\sum x}{n} = \frac{219944.71}{5} = 43988.94$$

$$y = \frac{\sum y}{n} = \frac{67581.5}{5} = 13516.3$$

Now, we have

$$\begin{aligned} \text{Correlation of Coefficient (r)} &= \frac{\sum XY}{\sqrt{\sum X^2 \sum Y^2}} \\ &= \frac{41956293.3}{\sqrt{978528887 \times 22224021007.52}} \\ &= 0.97 \end{aligned}$$

$$\text{Coefficient of Determination (r}^2\text{)} = 0.94$$

$$\begin{aligned} \text{Calculation of Probable Error (P.Er.)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.94}{\sqrt{5}} \end{aligned}$$



$$6 \text{ (P.Er.)} = 6 \times 0.02 = 0.12$$

### Appendix-6

#### Coefficient of Correlation Analysis

(i) Calculation of Coefficient Correlation between total deposits and total investment

Year	Deposits (x)	Investment (y)	X= x-x	Y=y-y	X <sup>2</sup>	Y <sup>2</sup>	XY
2004	39402.27	4623.13	-4586.67	-3449.18	21037541.69	11896842.67	15820250.43
2005	40866.77	3117.03	-3122.17	-4955.28	9747945.51	24554799.88	15471226.56
2006	43016.06	8415.88	-972.88	343.57	946495.49	118040.34	-334252.38
2007	46195.48	11555.36	2206.54	3483.05	4868818.77	12131637.3	7685489.15
2008	50464.13	12650.15	6475.19	4577.84	41928085.54	20956619.07	29642383.79
	x= 219944.71	y= 40361.55			X <sup>2</sup> =78528887	Y <sup>2</sup> =69657939.26	XY= 68285097.55

From the above table calculation we have,

$$x = \frac{\sum x}{n} = \frac{184474.71}{5} = 36894.94$$

$$y = \frac{\sum y}{n} = \frac{40361.55}{5} = 8072.31$$

Now, we have

$$\begin{aligned} \text{Correlation of Coefficient (r)} &= \frac{\sum XY}{\sqrt{\sum X^2 \sum Y^2}} \\ &= \frac{68285097.55}{\sqrt{78528887 \times 69657939.26}} \\ &= 0.92 \end{aligned}$$

$$\text{Coefficient of Determination (r}^2\text{)} = 0.84$$

$$\begin{aligned} \text{Calculation of Probable Error (P.Er.)} &= 0.6745 \times \frac{1-r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1-0.84}{\sqrt{5}} \end{aligned}$$

$$6 \text{ (P.Er.)} = 6 \times 0.05 = 0.3$$

### Appendix-7

#### Coefficient of Correlation Analysis

(i) Calculation of Coefficient Correlation between loans & advances and total net profit /( loss)

Year	Loans & Advances (x)	Net Profit (Loss) (y)	X= x-x	Y=y-y	X <sup>2</sup>	Y <sup>2</sup>	XY
2004	11679.49	(4839.78)	-1836.81	-5002.14	3373870.98	25021404.58	9187980.77
2005	10831.08	1040.10	-2685.22	877.74	7210406.45	770427.51	-2356925
2006	13430.93	1322.89	-85.37	1160.53	7288.04	1346829.88	-99074.45
2007	14633.54	1591.49	1117.24	1429.13	1248225.22	2042412.56	1596681.20
2008	17006.46	1697.09	3490.16	1534.73	12181216.83	2355396.17	5356453.26
	x= 67581.5	y= 811.79			X <sup>2</sup> = 24021007.52	Y <sup>2</sup> = 31536470.7	XY= 13685115.78

From the above table calculation we have,

$$x = \frac{\sum x}{n} = \frac{67581.5}{5} = 13516.3$$

$$y = \frac{\sum y}{n} = \frac{811.79}{5} = 162.36$$

Now ,we have

$$\begin{aligned} \text{Correlation of Coefficient (r)} &= \frac{\sum XY}{\sqrt{\sum X^2 \sum Y^2}} \\ &= \frac{13685115.78}{\sqrt{24021007.52 \times 31536470.7}} \\ &= 0.50 \end{aligned}$$

$$\text{Coefficient of Determination (r}^2\text{)} = 0.25$$

$$\begin{aligned} \text{Calculation of Probable Error (P.Er.)} &= 0.6745 \times \frac{1-r^2}{N} \\ &= 0.6745 \times \frac{1-0.25}{5} \end{aligned}$$

$$6 \text{ (P.Er.)} = 6 \times 0.25 = 1.5$$

$$= 0.23$$

$$= 1.38$$

### Appendix-8

#### Coefficient of Correlation Analysis

(i) Calculation of Coefficient Correlation between investment and total net profit  
( loss)

Year	Investment (x)	Net Profit (Loss) (y)	X= x-x	Y=y-y	X <sup>2</sup>	Y <sup>2</sup>	XY
2004	4623.13	(4839.78)	-3449.18	-5002.14	11896842.67	25021404.58	17253281.25
2005	3117.03	1040.10	-4955.28	877.74	24554799.88	770427.51	-4349447.47
2006	8415.88	1322.89	343.57	1160.53	118040.34	1346829.88	398723.29
2007	11555.36	1591.49	3483.05	1429.13	12131637.3	2042412.56	4977731.25
2008	12650.15	1697.09	4577.84	1534.73	20956619.07	2355396.17	7025748.38
	x= 40361.55	y= 811.79			X <sup>2</sup> = 69657939.26	Y <sup>2</sup> = 7131536470.7	XY= 25306036.7

From the above table calculation we have,

$$x = \frac{\sum x}{n} = \frac{40361.55}{5} = 8072.31$$

$$y = \frac{\sum y}{n} = \frac{811.79}{5} = 162.36$$

Now ,we have

$$\text{Correlation of Coefficient (r)} = \frac{\sum XY}{\sqrt{\sum X^2 \sum Y^2}}$$

$$= \frac{25306036.7}{\sqrt{69657939.26 \times 7131536470.7}}$$

$$= 0.54$$

$$\text{Coefficient of Determination (r}^2\text{)} = 0.29$$

$$\text{Calculation of Probable Error (P.Er.)} = 0.6745 \times \sqrt{1-r^2}$$

$$= \frac{0.6745 \times 1 - 0.29}{5}$$

$$= 0.21$$

$$6 (\text{P.Er.}) = 6 \times 0.21 = 1.26$$

### Appendix-9

#### Calculation of Trend Analysis

Let the linear trend equation between 'y' and 'x' be given by

$$Y_c = a + bx \dots \dots \dots (1)$$

#### Calculation of trend analysis of total deposit

Year (t)	Total Deposit(y)	t-2005(x)	x <sup>2</sup>	xy	Y <sub>c</sub> = a+bx
2004/05	39402.27	-2	4	-78804.54	33007.96
2005/06	40866.77	-1	1	40866.77	38498.45
2006/07	43016.06	0	0	0	43988.94
2007/08	46195.48	1	1	46195.48	49479.43
2008/09	50464.13	2	4	100928.26	54969.92
	y = 219944.71	x = 0	x <sup>2</sup> = 10	xy = 27452.43	

$$a = \frac{y}{n} = \frac{219944.71}{5} = 43988.94$$

$$b = \frac{xy}{n} = \frac{27452.43}{5} = 5490.49$$

Substituting the values of 'a' and 'b' in equation (1) the least square total deposit trend line is given by

$$Y_c = a + bx \dots \dots \dots (2)$$

#### Trend value of total deposits

Year	t-2005 = (x)	Y <sub>c</sub> = a+bx
2009/10	3	60460.41

2010/11	4	65950.9
2011/12	5	71441.39
2012/13	6	76931.88
2013/14	7	82422.37

### Appendix-10

#### Calculation of Trend Analysis

Let the linear trend equation between 'y' and 'x' be given by

$$Y_c = a + bx \dots \dots \dots (1)$$

#### Calculation of trend analysis of total loans and advances

Year (t)	Total Loans & advances (y)	t-2005(x)	x <sup>2</sup>	xy	Y <sub>c</sub> = a+bx
2004/05	11679.49	-2	4	-23358.98	7733.74
2005/06	10831.08	-1	1	-10831.08	10625.02
2006/07	13430.93	0	0	0	13516.3
2007/08	14633.54	1	1	14633.54	16407.58
2008/09	17006.46	2	4	34012.92	19298.86
	y = 67581.5	x = 0	x <sup>2</sup> = 10	xy = 14456.4	

$$a = \frac{\sum y}{n} = \frac{67581.5}{5} = 13516.3$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{14456.4}{10} = 2891.28$$

Substituting the value of 'a' and 'b' in equation (1) the least square total loans & advances trend line is given by

$$Y_c = a + bx \dots \dots \dots (2)$$

#### Trend value of total loans & advances

Year	t-2005 = (x)	Y <sub>c</sub> = a+bx
2009/10	3	22190.14

2010/11	4	25081.42
2011/12	5	27972.7
2012/13	6	30863.98
2013/14	7	33755.26

### Appendix-11

#### Calculation of Trend Analysis

Let the linear trend equation between 'y' and 'x' be given by

$$Y_c = a + bx \dots \dots \dots (1)$$

#### Calculation of trend analysis of total Investment

Year (t)	Total Investment (y)	t-2005(x)	x <sup>2</sup>	xy	Y <sub>c</sub> = a + bx
2004/05	4623.13	-2	4	-9246.26	-1724.63
2005/06	3117.03	-1	1	-3117.03	3173.84
2006/07	8415.88	0	0	0	8072.31
2007/08	11555.36	1	1	11555.36	112970.78
2008/09	12650.15	2	4	25300.3	17869.25
	y = 40361.55	x = 0	x <sup>2</sup> = 10	xy = 24492.37	

$$a = \frac{y}{n} = \frac{40361.55}{5} = 8072.31$$

$$b = \frac{xy}{n} = \frac{24492.37}{5} = 4898.47$$

Substituting the value of 'a' and 'b' in equation (1) the least square total investment trend line is given by

$$Y_c = a + bx \dots \dots \dots (2)$$

Trend value of total investment

Year	t-2005 = (x)	Yc = a+bx
2009/10	3	22767.72
2010/11	4	27666.19
2011/12	5	32564.66
2012/13	6	37463.13
2013/14	7	42361.6

### Appendix-12

#### Calculation of Trend Analysis

Let the linear trend equation between 'y' and 'x' be given by

$$Y_c = a+bx \dots\dots\dots (1)$$

#### Calculation of trend analysis of total net profit (loss)

Year (t)	Net Profit (Loss) (y)	t-2005x)	x <sup>2</sup>	xy	Yc= a+bx
2004/05	(4839.78)	-2	4	9679.56	((5287.7)
2005/06	1040.10	-1	1	-1040.10	(22562.67)
2006/07	1322.89	0	0	0	162.36
2007/08	1591.49	1	1	1591.49	2887.39
2008/09	1697.09	2	4	3394.18	5612.42
	y = 811.79	x = 0	x <sup>2</sup> = 10	xy = 13625.13	

$$a = \frac{y}{n} = \frac{811.79}{5} = 162.36$$

$$b = \frac{xy}{n} = \frac{13625.13}{5} = 2725.03$$

Substituting the value of 'a' and 'b' in equation (1) the least square total net profit (loss) trend line is given by

$$Y_c = a+bx \dots\dots\dots (2)$$

Trend value of total investment

Year	t-2005 = (x)	$Y_c = a+bx$
2009/10	3	8337.45
2010/11	4	11062.48
2011/12	5	13787.51
2012/13	6	16512.54
2013/14	7	19237.57