CHAPTER - I

INTRODUCTION

1.1 General Background of Study

The development of the country highly depends upon its economic condition. The well-organized financial system of the country has played a great role in this regard, it collects financial resources from public and provide fund from commercial and economic activities. Thus financial institutions provide capital to develop invest them into most desirable and highly yielding saving from the community and invest them into most desirable and highly yielding sector as a full to a process of economic development.

Nepal, being a developing country, is trying to embark upon the path of economic development by economic growth rate and developing all sector of economy. Even though, the process of economic development depends upon various factors, however economist are now convinced that capital formation and its proper utilization plays a vital roles. “The increase in capital has always been a sort of prime mover in the process of material growth and the rate of capital formulation has been the principal variable in setting the overall pace of economic development.”(Nigam, 1976: 9) In this regard, the network of well-organized financial system of the country has great bear. It collects scattered financial resources from the masses and invests them among those engaged in economic and commercial activities of the country. In this way, financial institutions provide savers highly liquid divisible assets at a lower risk while the investor receives a large pool of resources.

Bank is a financial institution, which plays an important role in the economic development of the nation. It is the backbone as well as the foundation for the

development of the country. “The business of banking is one of collecting funds from the community and extending credit (making loans) to people for useful purposes” (Edmister, 1980:73). Its principle operations are concerned with the accumulation on the temporary idle money of the public for advancing others for expenditure. Two major task of the bank is to accept deposit from the depositors and to lend it to the borrower. Loans are essential aspect of commercial bank. “First, income from loan contributes substantially to the revenues and profit of the bank. Second, lending money to people in the community strengthens the community-bank relationship. Third, lending money spurs business development and supports a growing economy” (Edmister, 1980: 84).

Commercial banks are major financial institutions, which occupy quite and important place in the framework of every economy because they provide capital for the development of industry, trade and business and other resources deficit sectors contributes to the economic growth of the nation. Besides this commercial banks render numerous devices to their customer in view of facilitating their economic and social life. Commercial banks formulate sound investment policies to make it more effective, which eventually contribute to the economic growth of a country. The sound policies help commercial banks maximize quality of investment and here by achieve the own objective of profit maximization and social welfare. Formulation of sound investment policies and coordination and planned efforts pushes forward forces of economic growth.

Commercial banks should be careful while performing the credit creation function. Investment policy should ensure minimum risk and maximum profit from lending. Nepalese commercial banks log for behind fulfilling the responsibility to invest in the crucial sectors of the economy for the enlistment of the national economy. Thus the problem has become very serious one in developing countries like Nepal. This can be solved through formulation of sound investment

policy. Good investment policy ensures maximum amount on investment to all sector with proper utilization.

Investment-policy is an important-ingredient of overall national economic development because it ensure efficient allocation of fund to achieve the material and economic well being of the society as a whole .In this regards joint venture bank investment policy push drives to achieve priority of commercial sector in the context of Nepal's economic development .The general principle is that the investment can be retired when cash is needed. The decision to investment now is the most crucial decision as the future level of wealth is not certain. Time and risk are the two conflicting attributes involved in the investment decision. The term investment covers a wide range of activities. It is commonly known fact that an investment is only possible where there is adequate saving. Therefore, both saving and investment are interrelated.

Decision of investment is very tough one for any business mole. For this they have to pay a lot of consideration before taking any action .A healthy development of any bank depends heavily upon its investment policy. A good investment policy attracts borrows and lenders, which helps to increase the volume and quality of deposit ,loan and investment .Several principal have to be followed for providing loan in a commercial bank such as length of time, purpose of loan ,profit margin ,security etc. These fundamental principal of commercial banks investment are fully considered while making investment policy. Every financial institution should take full care while preparing investment functions. Investment policy should insure minimum risk and maximum profit. Commercial banks play important role in removing problems like inflation and deflation of monetary trade, tread defeat, budget deficit (created by economic problem) by capital formulation for deficits spending units. They also finance in small cottage industries and agricultural sector under priority sector investment scheme to serve the marginal people.

Every commercial bank should consider government and central bank i.e. Nepal Rastra Bank' instructions and their interest as well before preparing the investment policies. Nepalese commercial bank however lags far behind in consideration of good investment opportunities. They are more insecure and do not want to take risk by investing in crucial sectors. But formulation of good investment policy may boost their interest on different investment opportunities that may lead for the enlistment of the national economy.

Investors invest their income for future use or to satisfy the individual investor's expectations. In the market, there are three types of investment alternatives, preferred by investors. So it says there are three types of investors .First those who want to take risk or risk taker, second those who doesn't want to take risk and the third one, who only invest for small return. In the context of Nepal, we can mostly find the third type of investors .Investing is one of the very sensitive part for investors. Only an individual saving is not enough, because this saving means fixed deposits, which will only be single utilization. As we know drop of water makes full of pot, similarly small amount of saving makes large amount of investment. We should very careful while investment, because there is always risk and return characteristics behind investment policy. Without return investment become ineffective. Investment can help various sector of the nation like society, business, organization, and infrastructure and so on.

Investing is being used for describing all kinds of activities in financial world. Some of these activities are antithesis of investing; some have nothing to do with investing while very few actually are investing. People have among many motivates for investing. Some people invest in order to gain sense of power or prestige while others invest for monetary advantage. In the former motive, often the control of corporate empires is a driving motivate. According to William N Geotzmann, people are willing to "invest to make something happen that might not, otherwise people

could invest to build a museum, to finance low income housing or to re-claim urban neighborhoods which has not an economic value. For most investors, however, their interest in investments is largely pecuniary to earn a return on their money.

Investment policy is one fact of the overall spectrum of policies that guide banks Investment operation. Investment operation of commercial bank is very risky one. For this, banks have to pay due consideration while formulating Investment policy. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loans and investment. Some studied have suggested that there is a connection between economic development of a society and commercial banks. To some extend, commercial banks, which are major financial intuition occupy quite an important place in the framework of economy of a country. Commercial banks formulate sound investment policies, which eventually contribute in the economic development. Formulation of sound investment policies and coordinated and planned efforts depends on the growth not only of a particular bank but also of a society. Seen in this light, the study of investment policy of commercial banks assumes special importance. In today's competition market, it has become increasingly important for banks to know about investment policies to get success in competition.

1.1.1 Evolution of the Banking System in Nepal

The history of banking was started from the very beginning. It started when goldsmith deposited valuables from people and changes same amount to the people for doing the same. However, in Nepal, banking history is said to be started from 723 AD when a king named *Gunakama Dev* borrowed money to reconstruct his kingdom, Kathmandu. Similarly, *Jayasthiti Malla* established a caste *Tankadhari* to lend money to the people.

In 1877 AD *Tejarath Adda* was established as a financial institution during the prime minister ship of *Ranoddip Singh*. At the beginning only government staffs were allowed to take loan at 5% interest rate, later, public were also allowed to take loan, after depositing collateral, at the same rate. Nepal Bank Limited replaced *Tejrath Adda* with the ownership of public and government on 1937 AD under Nepal bank act 1937 AD. However, there was a need of central bank in the country; therefore, Nepal Rastra Bank the central bank of the country came into existence in 1956.Later on, it was followed by another commercial bank called Rastriya Banijya Bank with the full government ownership. The Nepalese authorities restricted the entry of new bank for many years in order to protect the entry of new bank for many years in order to protect the domestic banks. But, the authorities ultimately lifted its restriction in 1984 on the entry of new banks in the form of joint venture banks with foreign collaboration (Bista, 1989: 8). Economic growth and development of Nepal has been considered as a primal objective of economic planning since the beginning of the first five year plan in 1956. Objectives of the plan were to increase production, employment and to improve the living standard of the people. To fulfill these objectives of planning it was necessary that banking activities especially the loan was to be regulated as per priority. Thus, Nepal Rastra Bank was established under the first five year plan in 1956 with objective below

- To ensure facilities and maintain economy interest of general public of safeguarding the issue of paper currency.
- To ensure countrywide circulation of Nepalese currency
- To mobilize capital for economic development and stipulated in trade and industries
- To achieve stability in its exchange rate and
- Development of banking system of the country

Under the guidance of Nepal Rastra Bank, the commercial banks establish a branch in each district of the country. The growing influence of liberal economic policies in early 80's first of all appeared in the form of Nepal's liberal policies in the banking

sector. The financial system in Nepal has undergone rapid change particularly during the past decade. By Mid 2011, NRB licensed bank and non- bank financial institutions totaled 277. Out of them, 31 are commercial banks, 87 development banks, 79 finance companies, 21 micro-credit development banks, 15 saving and credit co-operatives, and 45 NGOs.

1.1.2 Types of Banks

There are different types of banks that get differed as according to functions they carry out. Banks normally are categorized as Commercial Bank, Development Bank, Exchange Bank, Saving Bank, Co-operative Bank and Indigenous Bank.

Commercial Bank

As the name suggest, commercial banks deal with trade, finance and commerce. It is established with capital collected by issuance of shares and debentures.. There are altogether 31 commercial banks operating in the country. They have been providing various services as per the needs and the requirements of the customers.

Development Bank

Development banks are established to promote the development of a particular sector of economy. It is the government, which has the responsibility to enhance the development of economic sector such as agriculture, industry etc. They collect fund from shares, debentures, long term deposit and refinance from central bank. They normally give long term loan and provide technical and other advice. The origin of development bank dates back to agriculture and industry revolution in England. Nepal Industrial Development Corporation (NIDC) is the first development bank, which was established in 2018 B.S. Development Act 2052 was introduced under which Nepal Development Bank was established. Altogether there are 87 development banks operating in different sectors.

Exchange Bank

Exchange bank deals with foreign exchange. They are specialized in financing foreign trade. They are also known as Export and Import Bank. Such banks facilitate international payment.

Saving Bank

The main purpose of establishing saving bank is to promote savings among the public. They accept deposit under various types of saving accounts from small depositors and mobilize them in secured and productive sectors. Such banks were established to tackle the problem of poverty by encouraging the saving habits among individuals.

They are set up by government and usually provide higher interest rate. Trustee saving set up around 1800 A.D were very popular in UK. In Nepal, *Hulas Bachat Bank* (Postal Saving Bank) was established in 2019 B.S to encourage saving habit of poor. It is out of function in urban areas.

Co-operative Bank

The bank established under Co-operative Act is known as Co-operative bank. They collect deposit from the members of the co-operative bank and provide loans only to the members. All types of banking services as that of commercial banks is provided only to the members of the bank. Members on the basis of investment also entertain profit. It was first set up in England in the name of Credit Union. In Nepal, Co-operative Act was introduced in 2048 B.S. *Navajeevan Co-operative Society Limited* operated under this act Nepal Rastra Bank has approved 35 co-operative banks among them to provide limited banking services to customers.

Indigenous Bank

People have involved in different types of occupation for their livelihood. Some people engage in banking profession in a traditional way. Indigenous banks are the traditional form of the modern bank which practices banking services privately without banking laws, rules and regulations. Generally, such banks charge higher interest rate in loan. Such banks are found all over the world. They were found since the civilization when development of trade emerged. They are still playing a dominant role in rural sectors.

Commercial banks are major financial institutions, which occupy quite an important place in the framework of every economy because they provide capital for the development of industry, trade and business and other resource deficit sectors by investing the saving collected as deposits. Besides this, commercial banks render numerous services to their customer in view of facilitating their economic and social life. Commercial banks, by playing active roles, have changed the economic structure of the world. Thus, Commercial banks become the heart of financial system.

1.1.3 Definition of Investment

In international context:

"Investment in its broadest sense means the sacrifice of certain present value for (possibly uncertain) future values." He says the investment is the venture that the return is uncertain. So they have presented their view in the books that bank should look for the safe and less risky investment (*Gorden, 1998: 1).*

There are basically three concepts of investment:

- Economic investment- that is on economist's definition of investment.
- Investment in more general or extended sense, which is used by the man of the street" or ordinary people
- The sense in which we are going to be very much interested, namely; financial investment.

Banks are those institutions which accepts deposit from the public in turn provide credit to trade, business and industry that directly makes a remarkable impact on the economic development of a country. To collect fund and collect as a good investment is a very risky job. Ad-hoc investment decision leads the bank out of the business thereby drawn the economic growth of the country. Hence a sound investment policy is another secret of a successful bank (Bhalla, and Tutesa, *1983: 2).*

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 afar a future uncertain benefit *(Francis, 1991: 1*).

In Nepalese Context:

A sound investment policy of a bank is such that its fund are distributed on different types of assets with good profitability on the one hand & provides maximum safety and security to the depositors and banks on the other hand. Moreover, risk in banking sectors tends to be concentrated in loan portfolio. When banks gets into serious financial trouble its problem usually spring from significant amounts of loan that have become uncollectible economic down turn. Therefore, the banks investment policy must be such that it ensures that it is sound and prudent in order to protect public funds.

Further in details it deals with what type of loan do bank make? And how much of loans in each sector to be invested? The banks make a variety of loans to a wide variety of customers from many different purposes from purchasing automobile to construction of homes and making trade with foreign countries. Therefore no uniform rules can be laid down to determine the portfolio of a bank. The environment in which the bank operates is influenced by its investment policy. The nature and availability of funds also differ widely. The investment policy to be applied in Kathmandu may not applicable to the customer of Jumla because the demand for loans is less in rural areas whereas it is higher in city in urban areas (*Shakespeare, 1999: 46-47).*

1.1.4 Sources of Investment Risk

There are the various sources, which continually provide the various risks to the operation of the banks. Such risks should be minimized as much as possible. Following points represent the various risks the bank may face in its course of operation.

Business risk

It refers to the uncertainty about the rate of return caused by the nature of business. The firm's sales are not guaranteed and will fluctuate as the economy fluctuates or nature of industry change. It's related to sales volatility as well as to the operating leverage caused by the fixed operating expenses.

Financial Risk

The firm's capital structure or sources of financing determine financial risk. If the firm is all equity financed, then any variability in the operating income is passed directly to net income in an equal percentage basis. If the firm is partially financed debt that requires fixed interest payment or by preferred stock that requires preferred

dividend payment which introduces financial leverage. The introduction of financial leverage causes the firms' lenders and its stockholders to view their income as having additional uncertainty.

Liquidity Risk

It is associated with the uncertainty created by the inability to sell the investment quickly for cash. The arrangement of cash receipts and cash payments is ascertained to ensure that there is no mismatch between the timing of receipts and payments of cash. When there is huge mismatch, liquidity crises arises.

Default Risk

Default risk is related to the probability that some initial investment won't be returned. Some default risk is undiversifiable because it is systematically related to the business cycle which affects almost all investments. However, some default risk may be diversified away in a portfolio of independent investments.

Interest Rate Risk

Money has its time value. Fluctuations in interest rate will cause the value of investment to fluctuate also. Although interest rate risk is most commonly associated with bond price movements, movement in interest rate affects almost all investment alternatives.

Management Risk

Decisions made by a firm's management and board of directors materially affect the risk faced by the investors. Areas affected by these decisions range from product innovation and production methods, financing to acquisition.

Purchasing Power Risk

Purchasing power risk is perhaps most difficult to recognize than the other types of risks. It's easy to observe the decline in the price of a stock or bond but it's often more difficult to recognize that the purchasing power of the return that the investor has earned on investment has declined as a result of inflation or deflation.

1.1.5 Characteristics of Good Investment Policy

There are some of the main characteristics of good investment policy, which helps to measure its efficiency. These are as follows:

a. Liquidity

The commercial banks are considered as financial mediators. Generally people deposit their earnings in different accounts of the bank having confidence that the bank will repay their money whenever it is needed. Liquidity is the ability of the firm to satisfy its short-term obligations as they become due. Scrupulous care must be taken to see that the funds lent are not subject to any undue risk of being lost due to deployment for unproductive or speculative ventures or due to dishonesty of the borrowers. The recovery of a bank's money will be ensured when the advance goes to the right type of borrower and is utilized in such a way that it will be safe at the time of lending but will remain so throughout.

b. Profitability

Any advance given has to be profitable, otherwise banks can not run. Sometimes, the loan may not appear profitable in itself, but may bring substantial deposits or foreign exchange business, which may be remunerative to a bank. A banker has to see that the advance is on the whole profitable. Lending rates are affected by bank's internal policy like credit rating of the borrower; inter bank competition and NRB directives on lending rates.

c. Safety and Security

The security offered against the loan can be of various types. It may vary from a piece of land or a building to bullion. Whatever may be the security, a banker has to realize that it is only a cushion to fall back upon in case of need and its adequacy alone should not form the sole consideration for advance. It must be ensured that the security when accepted must be adequate, readily marketable, easy to handle and free from burden. So banks should not invest in speculative business which results in very fluctuating earnings for the bank.

d. Suitability:

Bank should know that why a customer needs loan or it is for appropriate purpose or not. If the borrower misuse the loan granted by bank, he will never to be able to repay the loan which possess heavy bad debts to bank. In order to avoid such situation advances should be allowed to selected and suitable borrowers and necessary all detailed information about the scheme of the project or activities should be demanded and it should be examined before investing. Therefore suitability is the important factor for investment.

e. Diversification:

A successful banker is one who manages his risks. One of the tools of management is to diversify his advance portfolio not only among many borrowers but also to diversify lending to different types of industries and against different types of securities

1.1.6 An Introduction to Nabil Bank Ltd and Standard Chartered Bank Nepal Ltd.

Nabil Bank Limited

Nabil bank Ltd., the first joint venture bank in Nepal was established in 1984, under the Company Act 1964. Its equity configuration showed that Dubai Bank Ltd (DBL) owned 50% equity partner which was transferred to Emirates Bank International Ltd. Later on, Emirates Bank International Ltd, Dubai sold its entire 50% holding to National Bank Ltd, Bangladesh. So the current configuration is given as follows:

- National Bank Ltd., Bangladesh 50%
- Nepal Industrial Development Corporation (NIDC) 10%
- Rastriya Beema Sansthan 9.66%
- Nepal Stock Exchange (NEPSE) 0.34%
- Nepalese Public 30%

Being the large equity holder, National Bank Ltd. Bangladesh is managing the bank in accordance with the Technical Service Agreement signed between it (NBL) and the bank in June 1955. Financial Statements of listed Companies in (Nepal Stock Exchange Ltd, 1997/98).

The bank expanded its banking services towards the different and parts of the country by expanding its branches. Besides banking, the other facilities provided are,

- Credit cards
- International trade and bank guarantee
- Tele banking
- Society for worldwide interbank financial telecommunications (SWIFT)
- Safe deposit locker
- Western Union Money Transfer
- ATM (Automated Teller Machine)

Standard Charted Bank Limited

Standard Charted Bank was established in 1987 A.D. under the collaboration between Nepal and Grindlays Bank of London, under the Company Act 1964 A.D. Since then it has been contributing in the progress of economical development of the country. The facilities provided by this bank are as follows:

- Credit Card
- Tele banking
- ATM (Automatic Teller Machine)
- International trade and bank guarantee, etc
- Society for worldwide inter bank financial telecommunications (SWIFT)
- Safe deposit locker
- Western Union Money Transfer
- Loans and advances

1.2 Focus of the Study

A bank always puts in efforts to maximize its profitability. The profit is excess of income over expenses. To maximize profit, income should be reasonably excess over expenses. The major source of income of a bank is interest income from loans and investments and fee based income. As loan and advances dominate the asset side of the balance sheet of any bank; similarly earnings from such loan and advances occupy a major space in income statement of the bank. However, it is very important to be reminded that most of the bank failures in the world are due to the shrinkage in the value of loans and advances. Hence loan is known as risky asset and investment operation of commercial banks is very risky one. Risk of non-repayment of loan is known as credit risk or default risk. Performing loans have multiple benefits to the society by helping for the growth of economy while non-performing loans erodes even existing capital. Considering the importance of lending to the individual banks

and also to the society it serves, it is imperative that the bank meticulously plans its credit operations. Sound credit policy has the following objectives:

- To have performing assets.
- To contribute to economic development.
- To give guidance to lending officials.
- To establish a standard for control, etc.
- Considering these facts, this study mainly focuses on the investment policy of NABIL in comparison with SCBNL..

1.3 Statement of the Problem

The major problem in almost all underdeveloped countries and Nepal is no exception, is that of capital formation and proper utilization. In such countries, the commercial banks have to shoulder more responsibilities and act as development banks, due to the lack of other specialized institutions (Dali, 1974: 52).

Credit extended by commercial banks is directly related to the National interest of the country. So the investment policy of the commercial banks should be very sound and farsighted. "A policy is a statement or general understanding which provides guidance in decision making to members of an organization in respect to any course of action" (Gautam, 2002:33). Defining the commercial banks investment policy, Naughton (1994) state that investment policy should incorporate several elements such as regulatory environment, the availability of the funds, the selection of the risk, and loan portfolio balance and term structure of the liabilities.

Loan supervision and follow up regarding whether clients are properly utilizing the bank investment is found to be poor in many of the commercial banks. Due to all these reasons, the proportion of non-performing asset on total loan and advances has been increasing significantly. Credit extended by commercial banks to agricultural and industrial sector is not satisfactory. Even if NRB has regulated to invest in

priority sector like agriculture, small-scale industries and service, all the commercial banks have not yet financed full 100% of their loans to this sector. Commercial banks are following conservative loan policy that is based on string security. There is not good trade-off between liquidity and profitability of banks. They dip high liquid assets and flow lower funds to the productive sectors, which results into lower profitability to commercial banks and ignorance to the national economic growth process. This is due to the effect of the economical, political, demographical & geographical condition of the nation, so this is the main reason for crisis in the commercial banks and in the whole national economy as well.

Granting loan against insufficient deposit, over valuation of goods pledged, land and building mortgaged, risk averting decision regarding loan recovery and negligence in recovery of overdue loan are some of the basic lapses and the result of unsound investment policy sighted in the banks. Similarly, Nepalese commercial banks have not formulated their investment policy in an organized manner. They mainly rely upon the instructions and guidelines of Nepal Rastra Bank. They don't have clear view towards their own investment policy. Furthermore, the implementation of policy is not practiced in an effective way. Lack of farsightedness in policy formulation and absence of strong commitment towards its proper implementation has caused many problems to commercial banks.

Thus, the present study will make a modest attempt to analyze investment policy of NABIL & SCBNL. The problems specially related to investment function of the commercial banks of Nepal have been present briefly as under:

- What is the position fund mobilization in NABIL and SCBNL?
- What is the comparison between various important variables i.e. deposits, loan and advances, total investments and net profit in NABIL and SCBNL?
- What is the comparative liquidity, efficiency of assets management, profitability and risk position of NABIL and SCBNL?
- What is the trend of deposit collection, its utilization, net profit and its projection?

1.4 Objective of the Study

The basic objective of this study is the evaluation of the investment policy adopted by NABIL Bank and SCBNL. The specific objectives of the study are given below:

- To examine the fund mobilization of NABIL and SCBNL.
- To analyze deposit utilization and its relationship with total investment and Net Profit of banks.
- To analyze the liquidity, asset management efficiency, profitability, risk and growth position of Nabil Bank Limited and Standard Chartered Bank with respect to investment pattern.
- To find out the major problems that bank are facing and the polices and guidelines of Nepal Rastra Bank.
- To provide suitable suggestions and recommendations for the improvement of the banks performance.

1.5 Scope of the Study

In the context of Nepal, there is less availability of research works, journals and articles in the field of investment policy and activities of the commercial banks. As it is a well known fact that the commercial banks can affect the economic condition of the whole country, the effort is made to highlight the investment policy of commercial banks. The scope of the study lies in filling the gap on the study of investment policy of commercial banks. The study is basically confined to reviewing the investment policy of commercial banks in the five years period from 2006-2011.

This study is expected to provide a useful feedback to the policy makers of commercial banks of Nepal and to the government and central bank in formulating appropriate strategies for the improvement in the performance of commercial banks.

1.6 Limitations of the Study

The study is carried out as an academic requirement for the degree of Master of Business Studies. So, the study may not be able to reveal the reliability and validity in every field. Basically, the study is limited within the following factors:

- The study is mainly based on secondary data collected from the bank. Research based on secondary data is not fair from limitation due to inherent character.
- Whole study is based on the data of five-year period
- This study has taken only concerned banks SCBNL and NABIL
- There are many factors that affect Investment decision and valuation of the firm. However, this study concentrates only those factors, which are related with Investment.

1.7 Organization of the Study

The study is organized in the following chapters:

Chapter I: Introduction

Chapter one deals with the introduction part of the study which includes background of the study, profile of the sample bank ,statement of the problems, objective of the study ,significance of the study, limitation of the study and organization of the study.

Chapter II: Review of Literature

It deals with the review of available articles, previous thesis, conceptual review related studies.

Chapter III: Research Methodology

It includes Research design, Population and Sample unit, Nature and Sources of data, Data collection technique, Data presentation and analysis and statistical tools.

Chapter IV: Data Presentation and Analysis

This chapter deals with the presentation and analysis of data and scoring the empirical finding out the study through definite course of research methodology.

Chapter V: Summary, Conclusion and Recommendations

This is the final chapter with discuss with the summary, conclusion of the whole study and recommendations in the basis of the study for improving the future performance of the sample banks.

CHAPTER-II

REVIEW OF LITERATURE

In this chapter, the focus has been made on the review of literature relevant to the investment policy of commercial banks. Every possible effort has been made to grasp knowledge and information that is available from the libraries, document collection centers, other information managing bureaus and concerned commercial banks. This chapter will help to take adequate feed back to broaden the information base and inputs to the study. Conceptual framework given by different authors, research scholars, practitioners etc, will be reviewed from books, research papers, annual reports, and articles etc. This chapter comprises the conceptual framework, review of related studies and justification of the study / research gap.

2.1 Conceptual Framework

A Commercial Bank is business organization that receives and holds deposits of fund from others, makes loans or extends credits and transfers funds by written order of deposits (Grolier Incorporated, 1984).

Commercial Bank Act of Nepal (1974) has defined that "A commercial bank is one which exchanges money, deposits money, accepts deposits, grant loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture, industries or for such specific purpose."

Commercial bank is a corporation which accepts demand deposits subject to check and makes short-term loans to business enterprises, regardless of the scope of its other services (American Institute of Banking, 1972:345). The act has laid emphasis on the functions of commercial bank while defining it. Commercial banks provide short-term debts necessary for trade and commerce. They take deposits from the

public and grant loans in different forms. They purchase and discount bills for exchange, promissory notes and exchange foreign currency. They discharge various functions on the behalf of their customers provided that they are paid for their services.

Optimal investment decision plays a vital role in each and every organization. But especially for the commercial banks and other financial institutions the sound knowledge of investment is the must because this subject is relevant for all surrounding that mobilize funds in different sectors in view of return. As it is concerned to the commercial banks and other financial institutions, they must mobilize (i.e., investment on different sectors) their collections (deposits) and other funds towards the profitable, secured and marketable sectors so that they will be in profit. For this purpose these banks and financial institutions should gather the sufficient information about the firm (client) to which supposed to be invested. This information include as financial background, nature of business as well as its ability to repay the loan back. These all information should be gathered from the viewpoint of security.

The income and profit of the bank depend upon the lending procedure applied by the bank. As well as lending policy and investment in different securities also affect the income and profit. In the investment procedures and policies it is always taken in mind that "the greater the credit created by the bank, higher will be the profitability." A sound lending and investment policy is not only pre-requisite for bank's profitability but also crucially significant for the promotion of commercial savings of a developing country like Nepal.

The sound policies help commercial banks maximize quality and quantity of investment and thereby, achieve 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.

Commercial banks, as financial institutions, perform a number of internal functions. Among them, providing credit is considered as most important one. In the words of Crosse (1963), "Commercial banks bring into being the most important ingredient of the money supply, demand deposit through the creation in the form of loan and investments."

Investment operation of commercial banks is very risky one. For this, commercial banks have to pay due consideration while formulation investment policy regarding loan investment. Investment policy is one facet of the overall spectrum of policies that guide banks investment operations. A healthy development of any bank depends heavily upon its investment policy. A sound and viable investment policy can attract both borrowers and lenders, which helps to increase the volume and quality of deposits, loans and investments. The loan provided by commercial bank is guided by several principles such as length of time, their purpose, profitability, safety. These fundamental principles of commercial bank's investment are fully considered while making investment policy. Emphasizing upon this H.D. Crosse stated, "The investment policy should be carefully analyzed". Commercial bank should be careful while performing the credit creation function. Investment policy should ensure minimum risk and maximum profit from lending.

According to Clemens (1963), "Commercial bank should consider the national interest followed by borrower's interest and the interest of the bank itself before investing to the borrowers". To further pursue his view, bank lending must be for such purposes of the borrowers that are in keeping with the national policy and bank's overall investment policy. A bank's overall investment:-

- Should be basically of short term characters,
- Should be well spread,
- Should be repayable on demand,
- Must be profitable,
- Must be well in adequate security.

Thus, commercial banks have to consider government and Nepal Rastra Bank's instructions and national and their own interest as well. Good investment policy ensures maximum amount of investment to all sectors with proper utilization.

According to Pradhan and Yadav (2003), Saving is income not consumed. It is one of the important and perhaps the chief sources of Investment. In developing countries about 45% of the incremental saving is invested domestically, while in developed countries about 75% of the incremental saving is invested domestically. This suggests that capital is more mobile in developing countries than in developed countries. Savings are of great significance in a country's development. While saving results in high economic growth rate, rapid development leads in turn high savings. Nepal's saving rate is lower as to other developing countries, however, even to achieve 5 to 6 percent economic growth rate, more than 25% annual Investment of GDP is considered necessary. The situation is such that huge portion of Investment has still to be made with external resources. The amount of saving of a typical household in Nepal is small because of the people have limited opportunities for Investment. They prefer to spend savings on commodities rather than on financial assets. This restricts the process of financial intermediation, which might otherwise bring benefits such as reduction of Investment risk and increase in liquidity. When capital is highly mobile internationally, saving from abroad can also finance the Investment needed at home. When capital is not mobile internationally, saving form abroad will limit Investment at home.

Wherever there is Investment there must be Capital formation. The development of an economy requires expansion of productive activities, which in turn is the result of the capital formation, which is the capital stock of the country. The change in the capital stock of the country is known as Investment. Therefore Capital formation is closely related to Investment. Investment generally takes two forms

- Financial Investment and
- Physical Investment

Physical Investment related to real Investment in the economy or industry, which is known as Capital formation. Capital formation shows the change in gross fixed assets of productive units of manufacturing industries.

Capital formation refers to the creation of physical productive facilities such as building tools, equipment and roads. The process of adding to the amount of stock of the real assets produces growth in the economy. It means increasing a country's stock of real capital. It implies additions to the existing supply of capital goods in a country. It represents an addition of new capital stock to existing stock after deducting depreciation, damage and other physical deterioration of the existing capital stock. Economic progress in country depends upon its rate of capital formation. Hence, a key factor in the development of an economy is the mobilization of domestic resources. In the process of capital formation, the capacity to save by certain classes of people an institution becomes quite important. These people have varied asset-preferences, which change from time to time. The need of entrepreneurs who actually use savings for productive purpose also varies over time (Pradhan and Yadav, 2002: 183).

Capital formation is regarded as one of the important and principal factors in economic development because it leads to the expansion of market. A rapid rate of capital formation gradually dispenses with the need for foreign aid. In fact, capital formation helps in making a country-self-sufficient and reduces the burden of foreign aid. The process of capital formation helps in raising national income. Therefore, capital formation is necessary pre-requisite for economic growth. And without Investment capital formation is not possible.

Investment activities greatly depend on the development of capital markets. Capital markets are characterized by a number of characteristics, which make them suitable to serve a means for capital resources mobilization and channeling the resources for the Investment. The government as well as private sector undertakes Investment. Investment can be made either on proprietorship business, partnership business or on large company. Proprietors or partners might use their own funds or borrow loan from banks for Investment but to establish industrial company of large type investors own saving may not be sufficient. Therefore, they usually floats share in capital market.

In the absence of well-developed capital market it is not possible to arrange capital through the sale of shares. The concept of capital market in Nepal began with the flotation of share by Nepal Bank Limited and Biratnagar Jute Mills in 1937.

The stock market is a recent development in Nepal with the incorporation of the securities Exchange Act, 1983 and Conversion of the securities Exchange Center into the Nepal Stock Exchange. Under the government policy on capital market reforms has greatly contributed to the development of primary as well as secondary market for the corporate securities.

Development and expansion of capital market are essential for the rapid economic growth of countries like Nepal. Capital market helps economic developing by mobilizing long-term capital needed for productive sector. The main objective of capital market is to create opportunity for maximum number of people to get benefit from the return obtained by directing the savings towards the productive activities.

Tax laws play a major role in the way securities are priced in the marketplace because investors are understandably concerned with after tax returns not before tax return. Accordingly, the investors should determine the tax rate applicable to him or

her before making any Investment decisions. This tax rate is not the same for all securities for given individual investors. It can be low in the case of certain tax exempt securities issued by states and municipalities or small tax is levied on NGO, foundation etc. And it may be as high as 40% for corporate bonds when both federal and state taxes are considered. Income earned by proprietorship and partnerships is taxed primarily through the personal income tax levied on their owners. Income earned by a corporation may be taxed twice. Once when it is earned, via the corporate income tax and again, when it is received as dividends by holders of the firm's securities via the personal income tax. After determining the applicable tax rate the investor can estimate a security's expected return and risk. Upon doing so, an investment decision can be made wisely.

Although the corporate income tax is an important feature of the investment, its impact on most individuals is indirect. The provisions of the personal income tax laws that deal with the treatment of capital gains and losses have had a great impact on Investors behavior.

There are features of the tax code that virtually all investors should consider. Specially, investors should take advantage of the opportunities available to invest their money on a before tax basis where, in addition, the income earned on the initial Investment grows tax free. Inflation is a major concern for investors. By and large, people have come to fear significant inflation, particularly when it is unpredictable.

Capital rationing is likely to result in Investment because depreciation charges do not reflect replacement costs and a firm's taxes grow at a faster rate than inflation. In estimating cash flows one should take account of anticipated inflation. Otherwise a bias arises in using an inflation-adjusted required return and non-inflation-adjusted cash flows and there is a tendency to reject some projects that should be accepted (Van Horn, 1996: 168).

There is no completely satisfactory way to summarize the price changes that have occurred over a given time period for the large number of goods and services available. Nevertheless, the government has attempted to do so by measuring the cost of a specific mix of major items at various points in time. The 'overall' price level computed for this representative combination of items is termed as a cost of living index. The percentage change in this index over a given time period can then be viewed as a measure of the inflation (or deflation) that took place from the beginning of the period to the end of the period. This measure of inflation may not be relevant as the price of the goods might change according to the quality also.

2.2 Review of Related Studies

Country's growth largely depends on Investment and commercial banks are key for investing funds in productive areas. They collect funds and utilize it in a good Investment, which is not an easy task for them. Therefore an Investment of fund may be the question of life and death for the bank. They must have effective and good Investment policy to exist in this world of competition.

Different people had defined Investment in different terms. According to Clark Investment means sacrifice of current money for future money.

According to Investment agreement in the Western Hemisphere of American states (2003), the term Investment comprise any kind of asset, invest by an investor of one contracting party in the territory of the other contracting party, according to the latter's laws and regulations. The Investment doesn't mean real estate or other property, tangible or intangible not acquired in the expectation or used for the purpose of economic benefit or other business purposes.

There are mainly 3 concept of Investment

- Economic Investment-that is an economist's definition of Investment.
- Investment in a more general or extended sense, which is used by "the main of street"
- The sense in which we are going to be very much interested, namely financial Investment.

2.2.1 Review of Books and Articles

Reilly (1995) in his book *"Investment"* has defined investment as the current commitment of funds for a period to derive a future flow of funds that will compensate the investing unit for the time the funds are committed for the expected rate of inflation.

The problem of the Investor is to select the funds whose objectives and degree of risk taking most closely match its own situation. The one that will accomplish for him what he would wish to do for himself if he could diversify and manage his own holdings (Bhalla, 1983: 2).

Chandler (1973) says "*A Banker Seeks Optimum Combination of Earning Liquidity and Safety, while Formulating Investment Policy*." Nepal's Industrial development strategy has entrusted a significant role to the private sector in promoting and successful managing industrial enterprises. The New Industrial Policy and Industrial Enterprises Act aim at attracting both local and foreign private Investment in Industrial undertakings by providing liberal incentives and a broad range of Investment opportunities. Nepal Government wishes to encourage private Investment not only to attract capital but also to transfer technology and managerial know – how Nepal, with its modest level of industrialization offers good prospects for expanding industrial activities for both Import and for capital formation but also to transfer technology and effective management technique.

Country's growth rate is largely depends on Investment. Many authors have resorted to empirical studies regarding the relationship between Investment and growth. In 1970, Modigliani's work based on a mixed sample of 36 countries showed a strong relation between output growth and the proportion of country's income invested. In world book (2000), it states that Investment promotes economic growth and contributes to a nation's wealth when people deposit money in a saving account in bank. For example, the bank may invest by lending the funds of various business companies. These firms, in return, may invent the money in new factories and equipment to increase their production. In addition to borrowing from the banks, most companies issue stocks and bonds that they sell to investors to raise capital needed for business expansion.

Charles and Christopher (2002) concludes their main hypothesis is that the banks have the ability to accurately price financial claims, thus inducing a preference for undervalued firms to choose bank debt as their marginal financial source. They refer to this motivation for using bank debt as the information benefit of bank debt finance. They expect that this information benefit will be weighed against a variety of contracting costs in a firm's ultimate financing choice.

They estimate logic models predicting financing choices and present several pieces of evidence that are consistent with their main hypothesis. In particular, they find that firms who exhibit small pronouncement stock price run-ups and those with high stock return volatility are relatively more likely to announce new bank loans. Since they expect that these firms are the most likely to be undervalued, these finding are consist with the presence of an information benefit to bank debt finance.

To identify whether firms weigh these information benefits of bank debt finance against other contracting costs, they examine the variation in the sensitivity of the bank loan likelihood to their variables measuring potential under valuation. They

find that firms with public debt outstanding tend to exhibit a relatively low sensitivity of bank loan likelihood to these variables. Since they expect that the contracting costs of bank debt finance are relatively that firms weigh the information benefits of bank debt against the contracting costs. In particular, the results suggest that for firms with public securities markets for the firm to cross the threshold where the information benefits of bank debt finance outweigh the relative contracting costs.

They supplement our logic findings with an analysis of the cross-sectional variation in the market reaction to their sample bank loan announcements.

Sharma and Bhatta (2002) concludes that "Commercial banks should take care of broad national interest and they showed not confine their lending activities only to commercial area providing quick interest, if some proportion could be directed to the area conclusive to build economic infrastructures of the country it would create atmosphere conducive to their investment in future. Therefore, in our society where ignorance and illiteracy is in wide scale, it is essential that the banks search entrepreneurs instead of entrepreneurs searching banks. They have opined that the priority sector program is a timely and appropriate will designed to create additional productive, employment opportunities thereby, increasing production and the general living, standard of rural poor. But the success of the program largely depends upon the integrated operation with other programs designs for rural development. Further they argue that various programmers viz; Rural Development, land reform, sajha, Back to the village National Campaign, Adult Literacy etc. could not materials their objective despite their sound theoretical philosophy and good objective."

2.2.2 Preview of Research Works

Many theses were reviewed in course of preparation of this thesis. Among them, some were relevant and some were not. Here the researcher has tried to include only the relevant theses that are significant for this research. Every research thesis has a long list of its findings, summary, conclusion and recommendations. However, the researcher has tried to edit them for brevity.

Gupta (2008), has conducted her study on "*A Comparative Study on Investment Practices of Commercial Banks (With Special Reference to Nabil Bank Ltd , Standard Chartered Bank Nepal Ltd and Himalayan Bank Ltd).*"

His Objectives:

- To analyze trend of investment made by Nabil Bank Ltd, SCBNL and Himalayan Bank Ltd.
- To analysis the different investment sector of Nabil Bank Ltd, SCBNL and Himalayan Bank Ltd.
- To evaluate and criteria efficient, inefficient, the liquidity assets management efficiency and profitability position of the selected banks.
- To recommend the policies to be adopted by the selected banks on the basis of the study.

His Major Findings:

- The Research findings were the current ratio of NABIL is comparatively better then SCBNL and HBL. NABIL has maintained highest current assets ratio but it has lower mean ration of cash and bank balance to total deposit and cash and bank balance to current assets ratio. NABIL has minimum deposit collection.
- From the analysis of assets management ratio it can be concluded that: NABIL has successfully maintained and managed its assets towards different income generating activities. The ratio of loan and advances to total deposit is higher but the mean ratio is lower then SCBNL and HBL.

- Investment on government securities to total working fund is in moderate position in compare to other two banks. The mean ration of total working fund of NABIL is more consistent and homogeneous than SCBNL and HBL.
- In Profitability ratio, the mean returns on total working fund and total working fund and total interest earned to total working fund of NABIL is higher than SCBNL and HBL. The mean ration of total interest earned to total outside assets return on loan and advances and total interest paid to total working fund of NABIL is in moderate position in comparison to SCBNL and HBL. So, the profit earning capacity of NABIL is high hen other two banks.
- There is high degree of significant relationship between deposit and loan and advances, deposit and investment and outside assets and net profit of NABIL in compare to SCBNL and HBL.
- Total deposit, investment and net profit of three sample banks are in increasing trend. Other things remaining the total deposit of NABIL will be on average portion in compare to other two banks but total investment trend of NABIL is not better in comparison to SCBNL and HBL. The net profit of NABIL will be highest among three banks.
- It can be concluded that all three banks have significant difference between loan and advances, returns on loan and advances. There is no significance difference between investment on government securities to total current assets of NABIL and SCBNL. But there is significant difference between investment on government securities to total current assets of NABIL and SCBNL and significant difference between total interest earned to total outside assets of NABIL and HBL.

K.C (2007), in his thesis, "*A Study on Investment Policy of Paschimanhal Finance company Limited."*

His Objectives:

- To examine the investment policy and its impact upon the optimum utilization of financial resources of PAFICOL.
- Financial Analysis of Portfolio investment of loan and advances and investment of the company.
- An Analysis of contribution in the context of industrial and commercial development up on its area.
- To provide some relevant suggestion and recommendation for improvement of investment policy of PAFICOL.

His Major Findings:

- PAFICOL has collected inactive capital and it has provided financial assistance to the investors.
- It has provided attractive interest rate for the deposit to collect the money as also enhance to mobilizing those kinds of resources.
- Company has make financial resources through the collecting deposit and acquiring the share from new and existing shares.
- It was increased the number of share through the existing shareholders.
- During the study period, it was found that the each sectors of investment of loan and advance is going to positive changes.
- It was found that market value of PAFICOL is running normal standard but not increased its value with effectively.

Shrestha (2006), has conducted a thesis *on "Study on Investment Policy of Joint Venture Commercial Bank (Reference with Himalayan Bank Ltd and Standard Chartered Bank Ltd)".*

His objectives:

- To evaluate the liquidity management ,asset management efficiency, profitability, risk portion and investment practices of SCBNL and HBL.
- To analysis the trends of deposits utilization towards total investment to loan and advances and its projection for next five years.
- Evaluate the growth ratios of loan and advances and total investment with respective growth rate of the total deposit and net profit.
- To study the fund mobilization and investment policy with respect to based off Balance Sheet transaction and fund based on Balance Sheet transaction.
- To provide suggestion and recommendations for the policies that have adopted by the sample organization based on the financial analysis for its future development.

His Major Findings:

- The mean liquidity ratio of HBL is lower than SCBNL It means the HBL has maintained lower liquidity and higher risk in compare to SCBNL. The ratio of HBL is highly variable than SCBNL which indicates the unstable liquidity policy.
- The cash reserve ratio of SCBNL and HBL is likewise. However, the coefficient of variance between the two banks, HBL ratio is lower than that of SCBNL. It shows the ratio of HBL is more stable and SCBNL has maintained lower cash reserve ratio during the study period.
- The mean ratio of cash and bank balance to C.A of HBL is higher than SCBNL where as the liquidity position of SCBNL from the point of view of investment on government securities is better than HBL. The mean ratio of SCBNL is higher than HBL which indicated that it wants to invest more in productive sector in compare to HBL .
- The mean ratio of loan and advances plus investment to total deposit of

SCBNL is higher than HBLSCBNL has more successful in utilizing its fund in government securities than HBL.HBL has maintained higher mean loan and advance to total working fund ratio and also maintained higher mean investment on share and debenture to total working fund ratio than SCBNL.

- Profitability ratio of both bank shows that both banks are running profit. Mean return on loan and advance ratio, mean return on total assets and mean return on equity ratio shows that SCBNL has higher return than HBL. Bit the mean ratio of interest income to total income of HBL is higher than SCBNL. It shows that both bank's main income generating source is investment and loan and advances.
- The mean credit risk ratio of HBL is higher than SCBNL which indicates the high credit risk of HBL. Regarding the cv ratio of above both banks has follow the unstable credit policy.
- Growth ratio of deposit ,loan and advances, and investment is higher than that of SCBNL. But the growth ratio of net profit of SCBNL is higher than HBL.
- From the trend analysis of financial data of both banks it is found that both banks are in increasing trend.

Roy (2000) has conducted a thesis research on "*An Investment Analysis of Rastriya Banijya Bank (in Comparison with Nepal Bank Ltd)"*.

His Objectives:

- To evaluate liquidity, activity & profitability ratio of RBB in comparison with NBL & industry average.

- To use trend analysis to compare loan and advances, total investment, total deposits and net profit of RBB and compare the same with others two.
- To analysis relationship of loan and advances and total investment with total deposits and net profit of RBB and to compare it with that of NBL and industry average.
- To examine the loan loss provision of Rastrya Banijya Bank & NBL.
- To provide suggestion and recommendation on the basis of findings.

His Major Findings:

- RBB has good deposit collection, enough loan and advances and small investment in government securities.
- The assets management ratio of RBB is not better than that of NBL.
- The profitability position of RBB is worse in comparison with NBL due to low return on working fund, loans and advances and outside assets.
- The fund collection and mobilization position of RBB is satisfactory in comparison to NBL while considering growing rate.
- In relation to fund flow analysis; the RBB has poor loan and advance issued.
- RBB has better and positive relationship between net profit, return on loan and advances and return on investment but has worse performance in income as commission and discount and exchange income.
- There is significant relationship between deposit and loan and advances, where there is no signification relation between deposit and investment of both banks RBB and NBL. And this is no relationship between outside assets and net profit.

Joshi (2003) in his research work, "*Comparative study on Investment Policy of Standard Chartered Bank Nepal Limited and Everest Bank Limited"*

His Objectives:

- To compare investment policy of commercial banks and discusses the fund mobilization of the sample bank.

- To find out empirical relationship between total investment, deposit and loan & advance, and net profit and outside assets and compare them.
- To analyze the deposit utilization and its projection for next five years of SCBNL and EBL.
- To evaluate comparatively the profitability and risk position, liquidity asset management efficiency of SCBNL & EBL.
- To provide a package of possible guidelines to improve investment policy, it's problems and way to solve some problems and provide suggestions and recommendation on the basis of the study.

His Major Findings:

- It can be concluded that both have good deposit collection. EBL has the highest cash and bank balance to total deposit, cash and bank balance to current ratio; this may make the bank to be in good position to meet the daily cash requirement.
- SCBNL has successfully maintained and managed its assets towards different income generation activities. SCBNL has made high portion of total working fund in investment on government on share and debentures of other companies.
- The profitability position of SCBNL is comparatively better than EBL. It indicates that SCBNL has maintained high profit margin regarding profitability position and EBL does not have a better position in comparison. It must maintain high profit margin for the well being in future.
- There is comparatively lower risk in SCBNL than EBL regarding various aspects of banking function.
- The SCBNL has not been more successful to increase in source of funds i.e. deposit and mobilization of loan and advances and total investment. It seems that SCBNL has not made any effective strategy to win the confidence of shareholders, depositors and its all customers.

Raya (2003) in his thesis, "*Investment Policy and Analysis of Commercial Banks in Nepal"* made a comparative study of Standard Chartered Bank Ltd. with Nepal Investment Bank and Nepal Bangladesh Bank Ltd.

His Objectives:

- To discuss fund mobilization and Investment policy of SCBL in respect to its fee based off-balance sheet transaction and fund based on balance sheet transaction.
- To evaluate the liquidity, efficiency and profitability and risk position.
- To evaluate trend of deposit, Investment, loan and advances and projection for next five years.

His Major Findings:

- Mean current ratio of SCBL is slightly higher than that of SCBL and Nepal Investment bank.
- Mean ratio of cash and bank balance to total deposits of SCBL is lower than NIBL and NBBL.
- Liquidity position of SCBL is comparatively better than NIBL and NBBL. It has the lowest cash and bank balance to total deposit and cash & bank balance to current ratio. SCBL has a good deposit collection. It has made enough Investment on government securities but it has maintained low Investment on loan and advances.

Karki (2001) has completed his thesis on *"An Analysis of Deposit Mobilization of RBB. Lahan Branch Siraha District, Nepal".*

His Objectives:

- How far the interest rates of deposit and credit have positive relationship with deposit collection and credit extending.
- How far the deposits of RBB, Lahan branch have efficiently mobilized.

His Major Findings:

- Interest rate has not influence to the deposit collection.
- Due to lengthy lending the credit experience is unsatisfactory.
- The deposit is not efficiency utilized.

2.3 Justification of the Study

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

Both NABIL & SCBNL are one of a leading commercial banks of the country having huge market share and its investment activities has significant impact on the national economy. Hence, this study fulfills the prevailing research gap about the in depth analysis of the investment policy pursued by the organization, which is the major concern of shareholders and other stakeholders.

2.4 Research Gap

The purpose of the research work is quite different from the studies made by the above person (related to Joint venture banks). The author focuses this study in effectiveness on investment policy analysis of SCBNL and NABIL in comprehensive manner considering the major items. The method of analysis is fully different. Financial tools and statistical tools are used in this study as ratio

analysis, trend analysis, and correlation. This study is a little bit different than previous studies. It may be the first research study in the field of investment policy taking the comparative study of SCBNL and NABIL. This study tried to indicate the effectiveness of investment policy of commercial banks.

It is necessary to bring out a fresh study in investment policy of SCBNL and NABIL whether the findings of above studies are still valid or not. This Study is totally focused on Investment Policy of Commercial Bank in this Current Situation i.e. in the financial crisis and liquidity Crunch.

This research study is based on different variable and tools using new data (2006/2007, 2010/2011).This study focus only on investment policy of SCBNL and NABIL. The study will be fruitful to those interested person, researchers, teachers, students and businessmen and government for academically as well as policy perspectives.

CHAPTER - III

RESEARCH METHODOLOGY

3.1 Research Design

"A research design is the specification of methods and procedures for acquiring the information needed. It is the overall operational pattern of frame work of the project that stipulates what information is to be collected from which sources by what procedure. If it is a good design, it will ensure that the information obtained is relevant to the research question and that it was collected by objective and economical procedures" Paul, e. Green Donald S. Tull. Research for marketing decision.

A well settled research design is necessary to fulfill the objectives of the study. It means definite procedures and technique that guides to study and propound way for research variability. To achieve the objective of this study, descriptive and analytical research design has been used. Descriptive Techniques have been applied to evaluate investment performance of Nabil Bank Ltd and compare with Standard Chartered Bank Limited as well as some statistical and financial tools adopted to examine facts.

3.2 Population and Sample

The populations of the study are altogether Thirty One commercial banks functioning all over the kingdom. In this study Investment policy of NABIL Bank Limited is compared with the Standard Chartered Bank Limited, which is selected from population. The population is as follows:

1. Nepal Bank Ltd
2. Rastriya Banijya Bank Ltd
3. Nepal Arab Bank Ltd.
4. Standard Chartered Bank Ltd
5. Nepal Investment Bank Ltd.
6. Himalayan Bank Ltd.
7. Nepal SBI Bank Ltd.
8. Nepal Bangladesh Bank Ltd.
9. Everest Bank Ltd.
10. Bank of Kathmandu Ltd.

11. Nepal Credit and Commercial Bank Ltd.
12. Nepal Industrial and commercial Bank Ltd.
13. Lumbini Bank Ltd.
14. Siddhartha Bank Ltd
15. Macchapuchre Bank Ltd.
16. Kumari Bank Ltd.
17. Laxmi Bank Ltd.
18. Agricultural Development Bank
19. Global Bank Ltd.
20. Citizens International Bank Ltd.
21. Prime Bank Ltd.
22. Sunrise Bank Ltd.
23. Bank of Asia Nepal Ltd.
24. DCBL Bank Limited.
25. NMB Bank Limited.
26. Kist Bank Limited.
27. Janata Bank Nepal Limited.
28. Megha Bank Limited
29. Civil Bank Nepal Limited.
30. Commerz and Trust Bank Nepal Limited.
31. Century Bank Nepal Limited.

From these samples NABIL Bank Limited has been selected and its data related to Investment policy has been comparatively studied with Standard Chartered Bank Limited.

3.3 Data Collection Procedure

The study is conducted on the basis of the secondary data. The data required for the analysis are directly obtained from the P/L account and balance sheet of concerned banks' annual reports. Supplementary data and information are collected from

couple of institutions and regulating authorities like NRB, security exchange board, Nepal stock exchange Ltd, etc.

All the secondary data are compiled, processed and tabulated in the time series as per the need and objectives. Formal and informal talks with the concerned authorities of the bank were also helpful to obtain the additional information of the related problem. Likewise, various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and documents from various sources.

3.4 Data Analysis Method

Various financial and statistical tools have been used for the data analysis. Financial ratios have been used for measuring Investment policies of the bank and its effect on economic development. Due to limited time and resources simple analytical statistical tools such as mean, coefficient of correlation between different variables, and trend analysis of important variable as well as hypothesis test have been used.

3.4.1 Financial Tools

Financial tools are used to examine the strength and weakness of bank. In this study financial tools like ratio analysis and financial statement analysis have been used.

Ratio Analysis

Financial Ratio is the mathematical relationship between two accounting figures. "Ratio analysis is a part of the whole process of analysis of financial statements of any business or industrial concern especially to take output and credit decisions." Thus, ratio analysis is used to compare a firm's financial performance and status to that of other firm's or to it overtime. The qualitative judgment regarding financial performance of a firm can be done with the help of ratio analysis.

Therefore, there are many ratios; only those ratios have been covered in this study, which are related to the investment operation of the bank. This study contains following ratios.

(A) Liquidity Ratios

Liquidity ratios are used to judge the ability of banks to meet its short-term liabilities that are likely to mature in the short period. From them, much insight can be obtained into present cash solvency of the bank and its ability to remain solvent in the event of adversities. It is measurement of speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations. The following ratios are evaluated under liquidity ratios:

(I) Cash and Bank Balance to Total Deposit Ratio

Cash and bank balances are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositor.

This ratio is computed by dividing cash and bank balance by total deposit. This can be presented as =,$\frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$

Hence, cash and bank balance includes cash on hand, foreign cash on hand; cheques and others cash items, balance with domestic banks and balance held in foreign banks. The total deposit encompasses current deposits, saving deposit, fixed deposits, money at call and short notice and other deposits.

(II) Investment on Government Securities to Current Asset Ratio

This ratio is calculated to find out the percentage of current assets invested in government securities i.e. treasury bills and development bonds. This ratio is calculated to find out the percentage of current assets invested in government securities i.e. treasury bills and development bonds. This ratio is computed by dividing investment on government securities by current assets. We can state it as,

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

Here, Investment on government securities includes treasury bills and development bond etc.

(III) Loan and Advances to Current Assets Ratio

Loan and Advances are the current assets, which generates income for the bank. Loan and advances to current asset ratio shows the percentage of loan and advances in the total current assets. This ratio can be computed by dividing loan and advances by current assets. This can be state as,

$$= \frac{\text{Loan and Advances}}{\text{Current Assets}}$$

The numerator consists of loans, advances, cash credit, local and foreign bills purchased and discounted.

(B) Asset Management Ratio

Asset management ratio measures how efficiently the bank manages the resources at its command. The following ratios are used under this asset management ratio.

I. Loan and Advances to Total Deposit Ratio

This ratio is calculated to find out, how successfully the banks are utilizing their total deposits on loan and advances for profit generating purpose. Greater ratio implies the better utilization of total deposits. This ratio can be obtained by dividing loan and advances by total deposit, which can be states as,

Loan and Advances by Total $= \frac{\text{Loan and Advances}}{\text{Total Deposit}}$

II. Total Investment to Total Deposit Ratio

Investment is one of the major forms of credit created to earn income. This implies the utilization of firm's deposit on investment in government securities and shares debentures of other companies and bank. This ratio can be calculated by dividing total investment by deposit. This ratio can be mentioned as,

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

The numerator consists of investment on government securities, investment on debenture and bonds, shares in subsidiary companies, shares in other companies and other investment.

III. Loan and Advances to Working Fund Ratio

Loan and advance is the major component in the total working fund (total assets), which indicates the ability of bank to canalizes its deposits in the form of loan and advances to earn high return.

This ratio is computed by dividing loan and advances by total working fund. This is stated as,

$$\text{Loan and Advances by total working fund} = \frac{\text{Loan and Advances}}{\text{Total Working Fund}}$$

Here, the denominator includes all assets of on balance sheet items. In other words, this includes current assets, loans for development banks and other miscellaneous assets but excludes off balance sheet items like letter of credit, letter of guarantee etc.

IV. Investment on Government Securities to Total Working Fund Ratio

This ratio shows that banks investment on government securities in comparison to the total working fund. This ratio is calculated by dividing investment on government securities by total working fund. This is presented as,

Investment on Government Securities by Total Working Fund

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

Investment on Shares and Debenture to Total Working Fund Ratio

This ratio shows the banks investment in shares and debenture of the subsidiary and other companies. Dividing Investment on shares and shares and debentures by total working fund, which can be mentioned as, can derive this ratio,

Investment on shares and shares and debentures by total working fund

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

The numerator includes investment on debentures, bonds and shares of other companies.

(C) Profitability Ratios

Profitability ratios are calculated to measure the efficiency of operation of a firm in term of profit. It is the indicator of the financial performance of any institution. This implies that higher the profitability ratio, better the financial performance of the bank and vice versa. Profitability position can be evaluated through following different way

(I) Return on Loan and Advances Ratio

This ratio indicates how efficiently the bank has employed its resources in the form of loan and advances. This ratio is computed by dividing net profit (loss) by loan and advances. This can be expressed as,

Net Profit (loss) by Loan and Advances $= \frac{\text{Net Profit}}{\text{Loan and Advances}}$

(II) Return on Equity Ratio (ROE)

Net worth refers to the owner's claim of a bank. The excess amount of total assets over total liabilities is known as net worth. The ratio measures how efficiently the banks have used the funds of the owners. This ratio is calculated by dividing net profit by total equity capital (net worth). This can be stated as,

$$\text{Net Profit by Total Equity Capital} = \frac{\text{Net Profit}}{\text{Total Equity Capital}}$$

Here, total equity capital includes shares holder's reserve including P/L a/c and share capital i.e. ordinary share and preference share capital.

(III) Total Interest Earned to Total outside Assets Ratio

This ratio measures the interest earning capacity of the bank through the efficient utilization of outside assets. Higher ratio implies efficient use of outside assets to earn interest. This ratio is calculated by dividing total interest earned by total outside assets and can be mentioned as,

$$\text{Total Interest Earned by Total Outside Assets} = \frac{\text{Total Interest Earned}}{\text{Total Outside Assets}}$$

The denominator includes loan and advances, bills purchased and discounted and all types of investments. The numerator comprises total interest income from loans, advances, cash credit and overdrafts, government securities, inter bank and other investments.

(D) Risk Ratios

Risk taking is the prime business of bank's investment management. It increases effectiveness and profitability of the bank. These ratios indicate the amount of risk associated with the various banking operations, which ultimately influences the banks investment policy.

The following ratios are evaluated under this topic:

(I) Liquidity Risk Ratio

This ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance hat are kept in the bank for the purpose of satisfying the deposit demand for cash. This ratio is calculated by dividing total cash and bank balance by total deposits. It can be stated as,

Total Cash and Bank Balance by Total Deposits = $\frac{\text{Total Cash and bank Balance}}{\text{Total Deposits}}$

(II) Credit Risk Ratio

Credit risk ratios measure the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition, credit risk ratio is expressed as the percentage of non performing loan to total loan and advances. Here, dividing total loan and advances by total assets derives this ratio. This can be stated as,

Total Loan and Advances by Total Assets = $\frac{\text{Total Loan and Advance}}{\text{Total assets}}$

(E) Growth Ratios

To examine and analyze the expansion and growth of the banks business, following growth ratios are calculated in this study.

- Growth ratio of Total Deposits
- Growth ratio of Loan and Advances
- Growth ratio of Total Investments
- Growth ratio of Net Profit

3.4.2 Statistical Tools

Some important statistical tools have been used, to present and analyze the data for achieving the objective of this study. Co-efficient of variance, co-efficient correlation analysis, Standard deviation, least square, linear trend analysis etc. have been used for the purpose. The basic statistical analysis related to this study is discussed below:

Co-efficient of Correlation Analysis

This analysis identifies and interprets the relationship between the two or more variables. In the case of highly correlation variables, the effect on one variable may have effect on other correlated variable. Under this topic, Karl-Pearson's co-efficient of correlation has been used to find out the relationship between the following variables:

- Co-efficient of correlation between deposit and loan and advances
- Co-efficient of correlation between deposit and total investment

This tools analyze the relationship between these variables and help the bank to make appropriate policy regarding deposit collection, fund utilization and maximization profit.

Trend Analysis

This topic analyses the trend of deposits, loan and advances, investments and net profit of NBBL and the HBL and makes the forecast for the next five years.

- Trend analysis of Total Deposits
- Trend analysis of Loan and Advances
- Total analysis of Total Investment
- Trend analysis of Net Profit

Test of Hypothesis

The objective of this test is to test the significance regarding the parameters of the population on the basis of sample drawn from the population. This test has been conducted on the various ratios related with the banking business. Generally, following steps are followed for the Test of Hypothesis.

- Formulating Hypothesis
- Null Hypothesis

- Alternative Hypothesis
- Computing the Test Statistic
- Fixing the Level of Significance
- Finding Critical Region
- Deciding Two Tailed or One Tailed Test
- Making Decision

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Financial Analysis

Financial analysis is the act of identifying the financial strength and weakness of the organization presenting the relationship between the items of balance sheet. For example in this study, ratio analysis has been mainly used and with the help of it, data have been analyzed. Various financial ratios related to the investment and the fund mobilization are presented and discussed to evaluate and analyze the performance of the bank. Financial ratios are calculated and data will be analyzed with the help of those ratios. Some important ratios are only calculated from the point of view of the fund mobilization and investment policy. The ratios are designed and calculated to highlight the relationship between financial items and figures; it is kind of mathematical relationship and procedure dividing one item by another. All these calculations are based on financial statements of the bank. The objective of this chapter is to study evaluate and analyze those major financial performances, which are mainly related to the investment management & fund mobilization of NABIL in comparison with SCBNL. The important and needed financial ratios, which are to be calculated for the purpose of this study, are mentioned below:

- Liquidity ratio
- Asset Management ratio
- Profitability ratio
- Risk ratio
- Growth ratio

Table: 4.1

Summaries of Financial Performance

Ratios	NABIL			SCBNL		
	Mean($\bar{x}$)	S.D	C.V.	Mean($\bar{x}$)	S.D	C.V

		(σ)			(σ)	
Liquidity Ratios						
a. Cash and bank balance to Total deposit	6.26	2.21	35	7.43	1.15	15.48
b. Investment on Govt. securities to Current Asset Ratio	15.92	3.41	21.42	28.88	5.41	18.73
c. Loans and advances to Current Assets Ratio	70.58	3.07	4.35	46.37	3.28	7.07
Asset Management Ratios						
a. Loan and advance to Total deposit ratio	70.71	3.9	5.51	44.14	3.54	8.02
b. Total Investment to Total deposit ratio	30.90	4.015	12.99	52.04	4.88	9.37
c. Investment on Government Securities to Total Working Fund	13.78	3.12	22.64	23.57	1.4	5.94
d. Investment on shares and debenture to Total working Fund	0.25	01018	7.16	0.25	0.052	20.78
Profitability Ratios						
a. Return on Loan and Advance ratio	3.72	0.32	8.6	6.58	0.55	8.36
b. Return on Equity	32.84	2.97	9.04	28.62	5.51	19.25
c. Total Interest Earned to Total Outside Assets	7.84	1.15	19.26	6.17	0.74	11.99
Risk Ratios						
a. Liquidity Risk Ratio	6.26	2.21	0.35	7.43	1.15	15.48
b. Credit Risk Ratio	60.98	3.23	5.29	38.66	2.79	7.22

Source: Detail Calculation is given in Appendices

4.1.1. Liquidity Ratios

Commercial Bank must maintain its satisfactory liquidity position to satisfy the credit needs of the community, to meet demands for deposits withdrawals, pay maturity obligation in time and convert non cash assets into cash to satisfy immediate needs without loss to bank and consequent impact on long run profit.

a) Cash and Bank Balance to Total Deposit Ratio

Cash and bank balance are assets that constitute the banks first line of defense and consist of Cash on hand, Foreign Cash on hand, cheques and other cash items, balance with domestic banks and balance held abroad.

Table: 4.2

Cash and bank balance to Total Deposit ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	6	8.37	9.03	3.02	4.9	6.26	2.21	35
SCBNL	8.2	6.89	8.75	5.48	7.83	7.43	1.15	15.48

Source: Appendix-A

It is observed that total cash and bank balance to total deposit ratio of both banks are in a fluctuating trend. NABIL's highest ratio is 9.03 % in 2008/09 and the lowest ratio is 3.02% in F/Y 2009/10. Similarly, in case of SCBNL, the highest ratio is 8.75% in F/Y 2008/09 and the lowest is 5.48% in F/Y 2009/10. The mean ratio of SCBNL is higher than that of NABIL i.e. 7.43%>6.26% which reveals that its liquidity position regard to its total deposit is more satisfactory than NABIL. On the basis of the C.V, it can be concluded that NABIL's ratios are less consistent than that of SCBNL i.e. 35>15.48

.

b) Investment on Govt. Securities to Current Asset Ratio

This ratio examines that portion of a commercial bank's current assets, which is invested on different Govt. securities. More or less, each commercial bank is interested to invest their collected fund on different securities issued by government in different times to utilize their excess funds and for other purpose. Though government securities are no so liquid as cash and bank balance of commercial bank, they can easily be sold in the market or they can be converted into cash in other ways.

This ratio shows that out of total current assets, how much percentage of it has been occupied by the Investment on Govt. securities. The ratio is computed by dividing Investment on Govt. securities by Total current assets.

Table: 4.3
Investment on Govt. Securities to Current Asset Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	20	15.54	9.74	17.41	16.9	15.92	3.41	21.42
SCBNL	32.29	29.64	36.73	22.21	23.54	28.88	5.41	18.73

Source: Appendix-B

The above table shows that the Investment on Govt. securities to Current Asset ratio of both banks is in fluctuating trend and was in decreasing trend till 2008/09 of Nabil Bank but Investment on Govt. securities to Current Asset ratio of SCBNL increased in 2008/09 whereas of Nabil Bank is still in decreasing trend. NABIL's highest ratio is 20% in FY 2006/07 and lowest is 9.74% in FY 2008/09. Similarly, in a case of SCBNL, highest ratio is 36.73% in FY 2008/09 and lowest is 22.21% in FY 2009/10. In average SCBNL has maintained higher ratio of Investing in govt. securities than that of NABIL. NABIL's liquidity position from the point of view of investment on govt. securities is poorest. NABIL's investing position of current assets as govt. securities indicate that it wants to invest more in other productive sector.

c) Loan and Advances to Current Assets Ratio

Loan and advances are the current assets of commercial bank, which includes loan and advances, cash, credit, overdraft, loan and foreign bill purchase and discount. A commercial bank should not keep its all collected funds as cash and bank balances but they should be invested as loan and advance to the customer because they must earn high profit by mobilization of the funds for long life banking. They should pay interest on these deposit funds even they don't generate loan and advances and may lose some earning. But high loan and advances may be harmful because they need sufficient liquidity.

The ratio is calculated by dividing loan and advances to current assets. The ratios are presented in the following tables.

Table: 4.4

Loan and Advances to Current Asset Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	64.69	71.44	72.53	70.77	73.5	70.58	3.07	4.35
SCBNL	47.83	48.65	50.26	41.55	43.55	46.73	3.28	7.07

Source: Appendix-C

The above table shows that both banks loan and advances to current assets ratio are in a fluctuating trend. The highest ratio of NABIL is 73.5 in F/Y 2010/11 and SCBNL is 50.26 in F/Y 2008/09. In case of the mean ratio, NABIL has maintained high ratio in comparison to SCBNL. The higher mean ratio of loan and advances to current assets of NABIL reveals that its liquidity position in regard to its current assets is more satisfactory than of SCBNL.

4.1.2. Assets Management Ratio

A commercial bank must be able to manage its assets very well to earn high profit, to satisfy its customers and for its own existence. Asset management ratio measures how efficiently the bank manages the resources at its commands.

a) Loan and Advances to Total Deposit Ratio

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

Table: 4.5

Loan and Advance to Total Deposit Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	66.6	66.94	73.87	69.63	76.53	70.71	3.9	5.51
SCBNL	42.62	46.12	38.14	45.35	48.49	44.14	3.54	8.02

Source: Appendix-D

The above comparative table listed above shows that NABIL's and SCBNL's rising and falling trend during the study period. The highest ratio of NABIL is 76.53% in F/Y 2010/11 and that of SCBNL is 48.49% in F/Y 2010/11. While comparing the mean ratio of loan and advances of NABIL & SCBNL, NABIL seems to be good to mobilize its total deposit as mean ratio under the study period is 70.71% but in case of SCBNL, it is 44.14%. On the basis of coefficient of variation, it can be concluded that the SCBNL's ratio are less consistent than that of NABIL i.e. 8.02%>5.51%..

It is concluded that NABIL is successful in mobilizing the its total deposit as loan and advances and SCBNL is found slightly weak in comparison to NABIL.

b) Total Investment to Total Deposit Ratio

Commercial bank may mobilize its bank deposit by investing its fund different securities issued by government and other financial or non-financial companies.

Table: 4.6

Total Investment to Total Deposit Ratio

	Fiscal Year					Mean	SD	C.V%
Banks	**2006/07**	**2007/08**	**2008/09**	**2009/10**	**2010/11**			
NABIL	38.32	32.23	29.12	29.53	26.32	30.90	4.02	12.99
SCBNL	55.02	46.82	56.48	56.48	45.42	52.04	4.88	9.37

Source : Appendix-E

Now the effort has been made to measure the extent to which the banks are successful to mobilize the deposits on investment. In the process of portfolio management of the banks assets various factors such as availability of fund, liquidity requirement, central banks norms etc are to be considered in general. A high ratio is the indicator if high success to mobilize the banking fund as investment and vice-versa.

Above table reveals that both banks total investment to total deposit ratios are in a fluctuating trend. NABIL's highest ratio in F/Y 2006/07 i.e. 38.32 and lowest ratio in F/Y 2010/11 i.e. 26.32%. SCBNL's highest ratio is in F/Y 2009/10 i.e. 56.48 % and lowest ratio in F/Y 2010/11 i.e. 45.42%. on the basis of mean ratio it can be said that NABIL's capacity to mobilize its deposit on total investment is not so good than SCBNL as its mean ratio is lower than that of SCBNL. i.e. 30.90 %< 52.04%. On the basis of coefficient of variation we can further conclude that NABIL's ratios during the study period have been seen more inconsistent than of SCBNL because of its higher C.V i.e. 12.99%>9.37%.

So it is clear from the above analysis that NABIL is not so successful in utilizing its resources on investment than that of SCBNL.

c) Loan and Advances to Total Working Fund Ratio

A commercial bank's working fund should play a very significant role in profit generation through fund mobilization. The ratio reflects the extent to which the banks are successful in mobilizing their total assets of loan and advances for the purpose of income generation. A high ratio indicates a better fund mobilization as loan and advances and vice-versa.

Table: 4.7
Loan & Advances to Total Working Fund Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	57.04	57.54	62.89	61.96	65.46	60.98	3.23	5.3
SCBNL	36.73	41.15	33.7	39.68	42.06	38.66	3.07	7.94

Source: Appendix-F

Above table shows that NABIL's ratio s more consistent than SCBNL's ratio and both are in fluctuating trend. NABIL has the highest ratio in the F/Y 2010/11 i.e. 65.46% and the lowest ratio is 57.04% in F/Y 2006/07. In case of SCBNL, it maintained the highest ratio in F/Y 2010/11 i.e. 42.06% and the lowest in F/Y 2008/09 i.e. 33.70%.

From the above analysis, it can be concluded that NABIL mean ratio is higher than that of SCBNL. It indicates that NABIL is able to mobilize its deposits in the form of loans and advances than SCBNL.

d) Investment on Government Securities to Total Working Fund (%)

The ratio reflects to which the banks are successful in mobilizing their total working fund on different types of government securities to maximize the income. All the deposits of the bank should not be utilized its loan from liquidity point view.

Therefore, commercial banks seem to be interested to invite their deposit by purchasing government securities. A high ratio shows that there is better mobilization of funds as investment on government securities and vice-versa. This ratio is calculated by dividing investment on government securities by total working fund and the ratio of NABIL and SCBNL is presented in the following table.

Table: 4.8

Investment on Government Securities to Total Working Fund Ratio

Banks	**Fiscal Year**					**Mean**	SD	C.V%
	2006/07	**2007/08**	**2008/09**	**2009/10**	**2010/11**			
NABIL	17.63	12.51	8.45	15.25	15.05	13.78	3.12	22.64
SCBNL	24.88	24.41	24.64	21.22	22.72	23.57	1.4	5.94

Source: Appendix-G

The above comparative table shows that the ratio of both banks have fluctuating trend in the study period. The mean ratio of SCBNL is higher than NABIL i.e. 23.57% >13.78% which reveals that SCBNL is strong in mobilizing their working funds as investment on government securities. The C.V of NABIL is higher than that of SCBNL i.e. 22.64%>5.94% which indicate that NABIL's ratios are less consistent than that of SCBNL. Likewise NABIL's variability between the ratios during the study period is greater than that of SCBNL.

From the above analysis, it can be concluded that SCBNL has invested more portion of its working fund on government securities than NABIL.

e) Investment on Shares and Debentures to Total Working Fund Ratio (%)

Investment on shares and debentures to working fund ratio reflects the extent to which the banks are successful to mobilize their working fund in purchasing shares and debentures of other companies to generate income and utilize extra fund. The

high ratio indicates the more portion of working fund investment on share and debenture and vice versa.

Table 4.9

Investment on Shares and Debentures to Total Working Fund Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	0.21	0.22	0.19	0.31	0.33	0.25	0.018	7.16
SCBNL	0.16	0.32	0.26	0.27	0.25	0.25	0.52	20.78

Source: Appendix-H

From the above comparative table, it is found that the NABIL and SCBNL have invested nominal percentage of total working fund into shares and debentures of other companies. Both banks ratios are in rising trend till FY 2007/08 but falls in FY 2008/09.

In comparison to mean ratios of NABIL and SCBNL, it reveals that NABIL has invested nearly equal amount in shares and debenture than that of SCBNL. Moreover, C.V. of SCBNL is higher than that of NABIL's C.V. i.e. 20.78%>7.16. Higher C.V of SCBNL states that its ratios are less consistent than of NABIL.

4.1.3. Profitability Ratio

The main objective of a commercial bank is to earn profit providing different types of banking services to its customers. To meet various objective like to have a good liquidity position, meet fixed internal obligation, overcome the future contingencies, grab hidden investment opportunities, expand banking transactions in different places, finance government in need of development funds etc, a commercial bank must have to earn sufficient profit.

Of course, profitability ratios are the best indicators of overall efficiency. Here, mainly those ratios are presented and analyzed which are related with profit as well as fund mobilization. Through the following ratios, effort has been made to measure the profit earning capacity of NABIL in comparison to SCBNL.

a) Return on loan and Advances Ratio

Return on loan and advances ratio measures the earning capacity of a commercial bank on its mobilized fund- based loan and advances. A high ratio indicates greater success to mobilize fund as loan and advances and vise versa.

Table: 4.10

Return on Loan and Advance Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	4.34	3.49	3.74	3.53	3.52	3.72	0.32	8.6
SCBNL	6.59	5.97	7.49	6.80	6.07	6.58	0.55	8.36

Source: Appendix-I

The above comparative table proves that the ratio of return on loan and advances of both NABIL and SCBNL are fluctuating trend. In case of NABIL, the highest ratio recorded was 4.34% in F/Y 2006/07 and lowest ratio is 3.49 in F/Y 2007/08. In case of SCBNL, the highest ratio is 7.49 in the F/Y 2008/09 and the lowest is 5.97 in F/Y 2007/08. On the other hand, when the mean ratios are observed SCBNL seems to be good to maintain its high return on loan and advances in comparison to SCBNL. However, the low CV of SCBL i.e. 8.36% indicates low variability of ratios than that of Nabil.

In conclusion it can be said that SCBNL is failure to earn high return on its loan and advances in comparison to NABIL. So SCBNL has to invest their fund in productive sector to increase return ratio.

b) Return on Equity

Equity capital of any bank is its owned capital. The prime objective of any bank is wealth maximization or in other words to earn high profit and thereby, maximizing return on its equity capital.

ROE is the measuring role of the profitability of bank. It reflects the extent to which the bank has been successful to mobilize or utilize its equity capital. A high ratio indicates higher success to mobilize its owned capital (equity) and vice versa. This ratio is calculated by dividing net profit by total equity capital including paid up equity capital, P/L a/c, various reserves, general loan loss provision etc.

Table: 4.11

Return on Equity

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	35.95	36.29	32.94	29.71	29.29	32.84	2.97	9.04
SCBNL	28.75	18.1	33.58	32.22	30.43	28.62	5.51	19.25

Source: Appendix-J

The above listed table reveals that return on equity ratios of both banks are in fluctuating trend for the year of study period. NABIL has maintained the highest ratio in F/Y 2007/08 i.e. 36.29 and lowest in F/Y 2010/11 i.e. 29.29. Similarly SCBNL has highest ratio i.e. 33.58 in F/Y 2008/09.

On the basis of mean ratio, it can be said that NABIL is strong to earn high profit to its shareholders in comparison to SCBNL which can be viewed by the higher mean ratio i.e. 32.84%>28.62%. The CV of SCBNL is higher than NABIL i.e. 19.25%>9.04% which indicates that SCBNL low degree of stability than that of NABIL. Thus it can be concluded that SCBNL has not been able to earn high profit through the efficient utilization of its owned capital. Moreover its high C.V shows its

less homogenous ratio during the study period which shows lack of efficient investment policy for the mobilization of capital resources.

c) Total Interest Earned to Total outside Asset Ratio

The outside assets have played a significant role in commercial banks as a main asst which includes loan and advances, investment on government securities, investment on share and debenture and all other types of investment. A high ratio indicated high earning on total outside assets and vice versa.

Table: 4.12

Total Interest Earned to Total outside Asset Ratio

(in %)

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	6.48	6.29	7.34	8.82	10.28	7.84	1.15	19.26
SCBNL	5.87	5.76	5.56	6.04	7.62	6.17	0.74	11.99

Source: Appendix-K

The above comparative table shows that the both banks ratio's are in fluctuating trend during the period under study. On the other hand, when mean ratios are observed, SCBNL seems to have earned lower amount of interest on their outside assets in comparison to NABIL i.e. 6.17<7.84%. Moreover, C.V of SCBNL is lower than that of NABIL ie: 11.99<19.26%.

4.1.4. Risk Ratio

The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So, the banks opting for high profit have to accept the risk and manage it efficiently. A bank has to have idea of the level of risk that one has to bear while investing its funds.

a) Liquidity Risk Ratio

The liquidity risk of the bank defines its liquidity need for deposit. The ratio of cash and bank balance to total deposit is the indicator of bank liquidity needed. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposits as the liquidity needed. A higher liquidity indicates less risk and less profitable bank and vice versa.

Table: 4.13

Liquidity Risk Ratio

	Fiscal Year					Mean	SD	C.V%
Banks	**2006/07**	**2007/08**	**2008/09**	**2009/10**	**2010/11**			
NABIL	6	8.37	9.03	3.02	4.9	6.26	2.21	0.35
SCBNL	8.2	6.89	8.75	5.48	7.83	7.43	1.15	15.48

Source: Appendix-L

The above table shows that the liquidity risk ratio of both banks have fluctuating trend. In case of NABIL, its highest ratio is 9.03 in F/Y 2008/09 and lowest ratio is 3.02 in F/Y 2009/10, whereas the SCBNL has maintained the highest ratio 8.7 in F/Y 2008/09 and lowest ratio in F/Y 2009/10 i.e. 5.48. The mean ratio of SCBNL is higher than that of NABIL i.e.7.43>6.26. It indicates that SCBNL's liquidity risk ratios are less variable than that of NABIL.

b) Credit Risk Ratio

Bank utilizes its collected funds by providing credit to different sectors. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. Generally credit risk ratio shows the proportion of non-performing assets in the total loan and advances of a bank. But, due to unavailability of the relevant data, here we presented the credit risk as the ratio of total loan and advances to total assets.

Table: 4.14

Credit Risk Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2006/07	2007/08	2008/09	2009/10	2010/11			
NABIL	57.04	57.54	62.89	61.96	65.46	60.98	3.23	5.29
SCBNL	36.73	41.15	33.7	39.68	42.06	38.66	2.79	7.22

Source: Appendix-M

The above table shows that both banks have fluctuating trend. In case of NABIL, its highest ratio is 65.46% in F/Y 2010/11 and lowest ratio is 57.04 in F/Y 2006/07 where as the ratio of SCBNL subject to highest is 42.06 in F/Y in 2010/11 and the lowest is 33.70 in F/Y 2008/09. On the basis of mean ratio, it can be said that credit of NABIL is higher than SCBNL i.e. 60.98>38.66. On the other hand, low C.V of NABIL i.e. 5.29% indicates low variability of ratios than that of SCBNL. From the above analysis it can be concluded that the degree of credit risk in NABIL is higher and the risk ratios are more volatile.

4.1.5. Growth Ratio

Here, those growth ratios are analyzed and interpreted which are directly related to the fund mobilization and investment management of a commercial bank. Growth ratios represent how well the commercial banks are maintaining their economic and financial position. Under this topic, four types of growth ratios i.e. growth ratios of total deposits, loan and advances, total investment and net profit are given in different tables. The ratios can be calculated dividing the last period figure by the first period figure then by referring to the compound interest tables. This high ratio generally indicates better performance of a bank and vice versa.

Table: 4.15

Growth Ratios of Total Deposits

(Rs in million)

Banks	Fiscal Year					Growth Rates (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	
NABIL	23342.4	31915.0	37348.25	46410.7	49696.11	20.71
SCBNL	24640.3	29743.9	35871.72	35182.7	37999.24	11.43

Source: Appendix-N (I) & (II)

The above table shows that the growth ratio of total deposit of SCBNL is lower than NABIL. The growth ratio of NABIL's total deposit is 20.71% whereas the same of the SCBNL is 11.43%. It indicates SCBNL's poor performance to collect greater deposits year by year.

Figure 4.1

Total Deposit (NABIL & SCBNL)

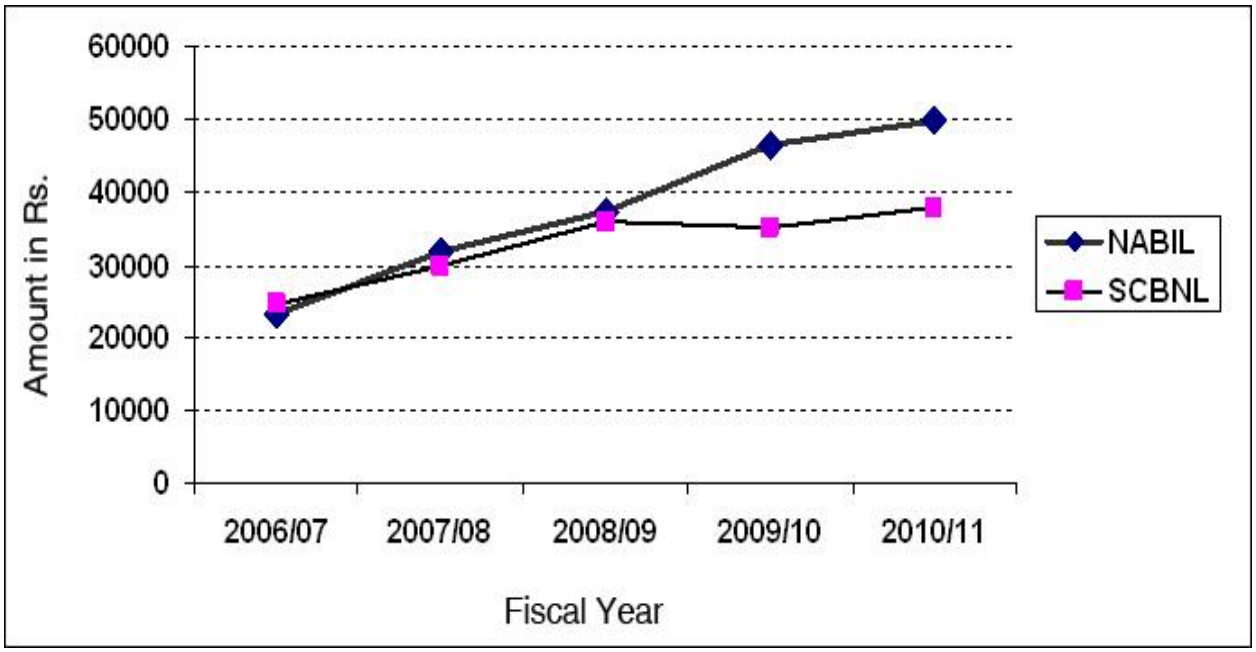


Table: 4.16

Growth Ratios of Loan and Advances (%)

(Rs in Million)

Banks	Fiscal Year					Growth Rates (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	
NABIL	15545.78	21365.05	27589.93	32268.87	38034.09	25.06
SCBNL	10502.63	13718.59	13679.75	15956.95	18427.27	15.09

Source: Appendix-O (I) & (II)

The above comparative table reveals that the growth ratio of loan and advances in case of SCBNL is lower than NABIL. It indicates that NABIL is more successful in utilizing its fund as loan and advances in comparison to SCBNL. From the above analysis it can be said that the performance of NABIL to grant loan and advance in comparison to SCBNL is better year by year.

Figure: 4.2

Total Loan and Advances (NABIL & SCBNL)

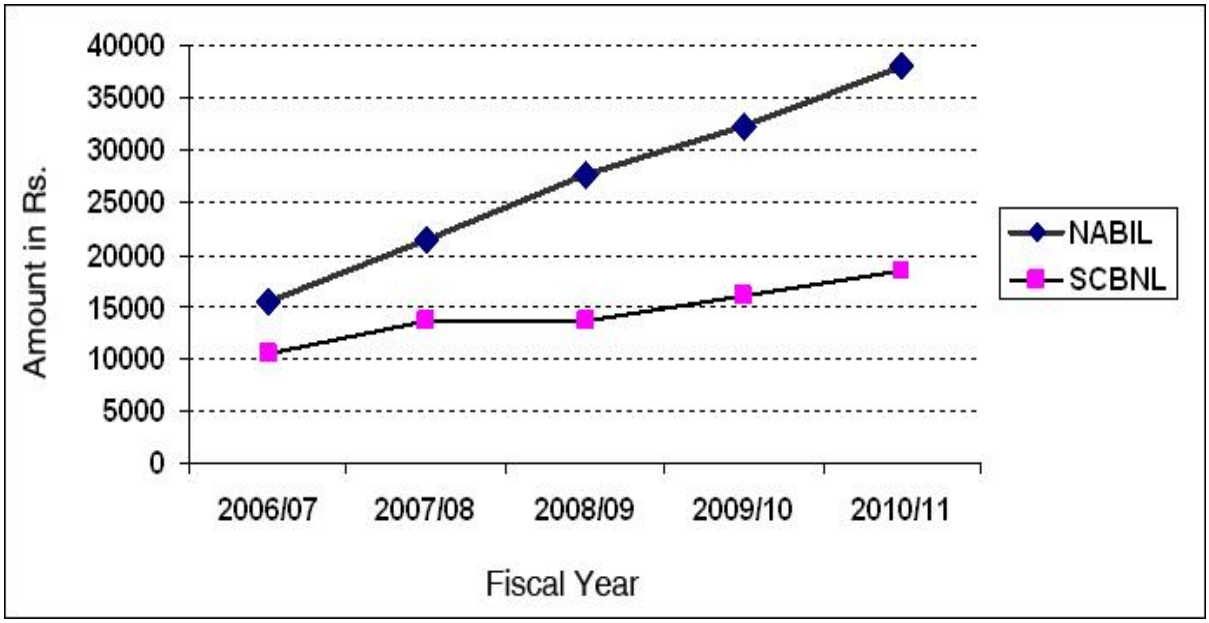


Table: 4.17

Growth Ratios of Total Investment (%)

(Rs in Million)

Banks	Fiscal Year					Growth Rates (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	
NABIL	8945.31	9966.5	10874.8	13682.37	13081.21	9.60
SCBNL	13556.23	13927.19	20260.49	19871.89	17258.68	6.22

Source: Appendix-P (I) & (II)

The above table reveals that the growth ratio of investment of SCBNL is lower than the NABIL. The growth ratio of SCBNL's investment is 6.22% as whereas the same of the NABIL is 9.60%. It indicates SCBNL's poor performance on investment of different sectors in comparison to NABIL.

Figure: 4.3

Total Investment (NABIL & SCBNL)

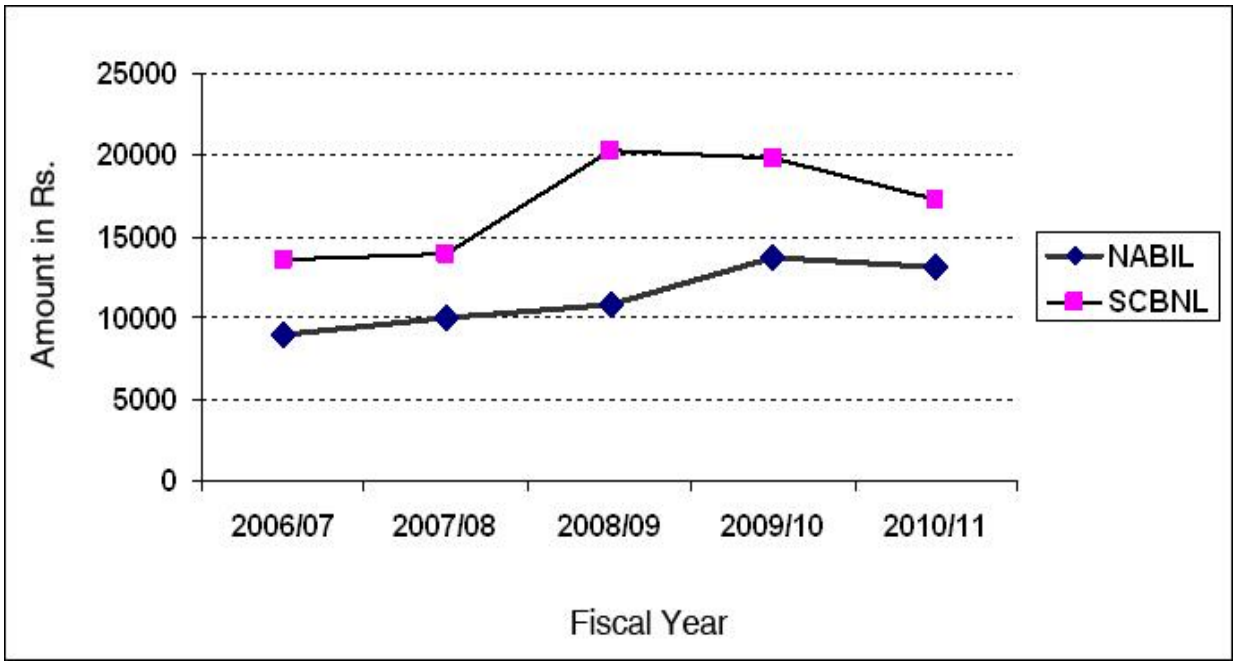


Table 4.18

Growth Ratios of Net Profit (%)

(Rs in Million)

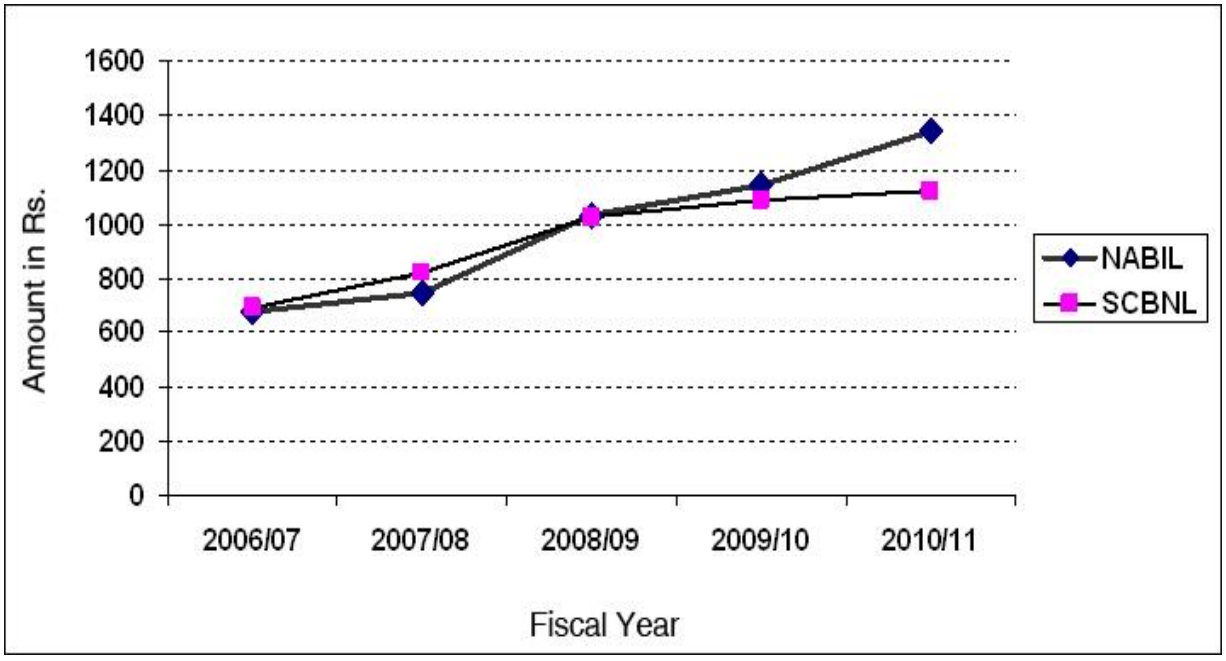
Banks	Fiscal Year					Growth Rates (%)
	2006/07	2007/08	2008/09	2009/10	2010/11	
NABIL	674	746.5	1031.05	1139.09	1337.74	18.69
SCBNL	691.67	818.92	1025.11	1085.87	1119.17	12.78

Source: Appendix-Q (I) & (II)

The above comparative table reveals that the growth ratio of net profit of NABIL is higher than that of SCBNL i.e. 18.69>12.78%. It indicates that SCBNL has to invest large amount in various secured and more profitable sectors in comparison to NABIL.

Figure 4.4

Total Net Profit (NABIL & SCBNL)



4.2 Trend Analysis and Projection for next five Years

To utilize deposits, a commercial bank may grant loan and advances and invest some of the funds in government securities and shares and debentures of other companies. Regarding this topic, trend of deposit, loan and advances, total investments and Net profit are forecasted for next five years. The projections are based on the following assumption:

- The main assumption is that other things will remain unchanged
- The forecast will be true only when the limitations of least square method are carried out.
- The bank will run in present stage.
- Nepal Rastra Bank will not change its guideline to commercial banks.
- The economy will remain in the present stage.

I. Trend Analysis of Total Deposit

The trend values of deposit of NABIL and SCBNL for five year from 2005-2010 are given below and forecast for next five years from 2011 to 2015 is done. Regarding this topic, an effort has been made to calculate the trend values of deposit of NABIL and SCBNL.

Table 4.19

Trend Values of Total Deposit of NABIL and SCBNL

(Amount in NPR Million)

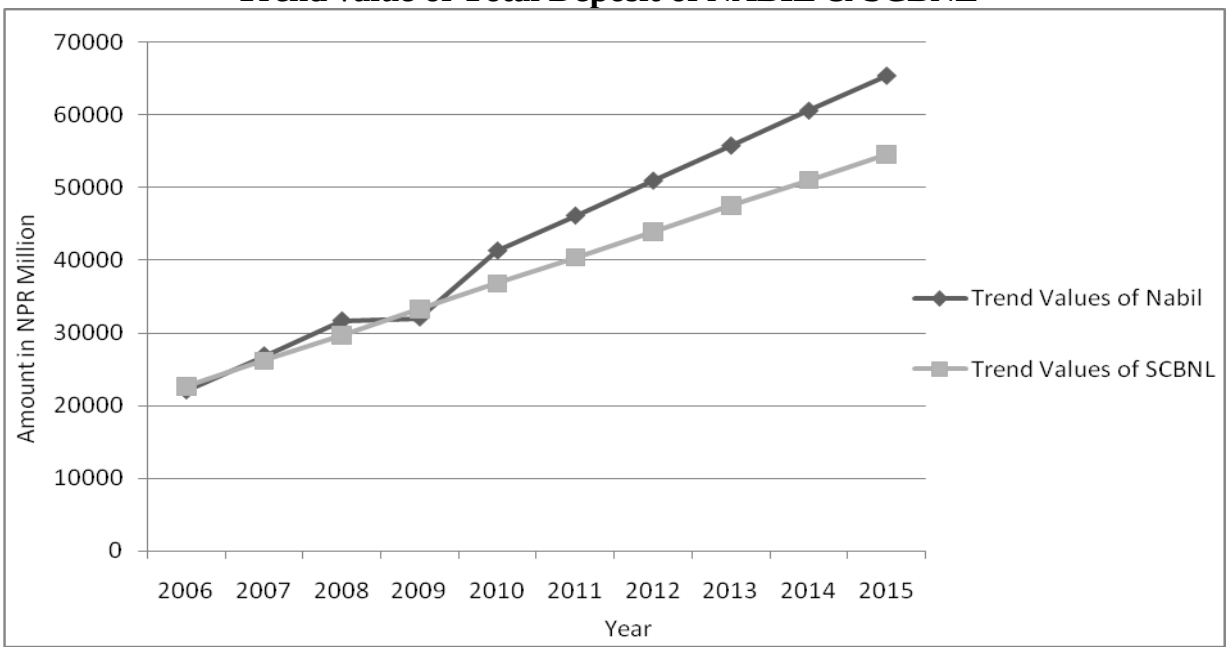
Year	Trend Values of NABIL	Trend Values of SCBNL
2006	22032.36	22598.66
2007	26845.59	26148.19
2008	31658.82	29697.72
2009	41285.28	33247.25
2010	36472.05	36796.78
2011	46098.51	40346.31
2012	50911.74	43895.84
2013	55724.97	47445.37
2014	60538.2	50994.9
2015	65351.43	54544.43

Source: Appendix- R (I) & (II)

The above comparative table of trend values of total deposit of both banks shows increasing trend. The graph below shows that NABIL is comparatively better than the SCBNL. SCBNL needs to increase its deposit mobilization capacities in order to capture the market share.

Figure 4.5

Trend value of Total Deposit of NABIL & SCBNL



II. Trend Analysis of Loan and Advances

Here, the trend values of loan and advances of NABIL and SCBNL has been calculated for five years from 2006 to 2010. The forecast for next five year till 2015 has also been done.

Table: 4.20

Trend values of Loan and Advances of NABIL and SCBNL

(Rs. In million)

Year	Trend values of NABIL	Trend values of SCBNL
2006	11791.07	9114.63
2007	16864.75	10836.65
2008	21938.43	12558.67
2009	27012.11	14280.69
2010	32085.79	16002.71
2011	37159.47	17724.73
2012	42233.15	19446.75
2013	47306.84	21168.77
2014	52380.52	22890.79
2015	57454.20	24612.81

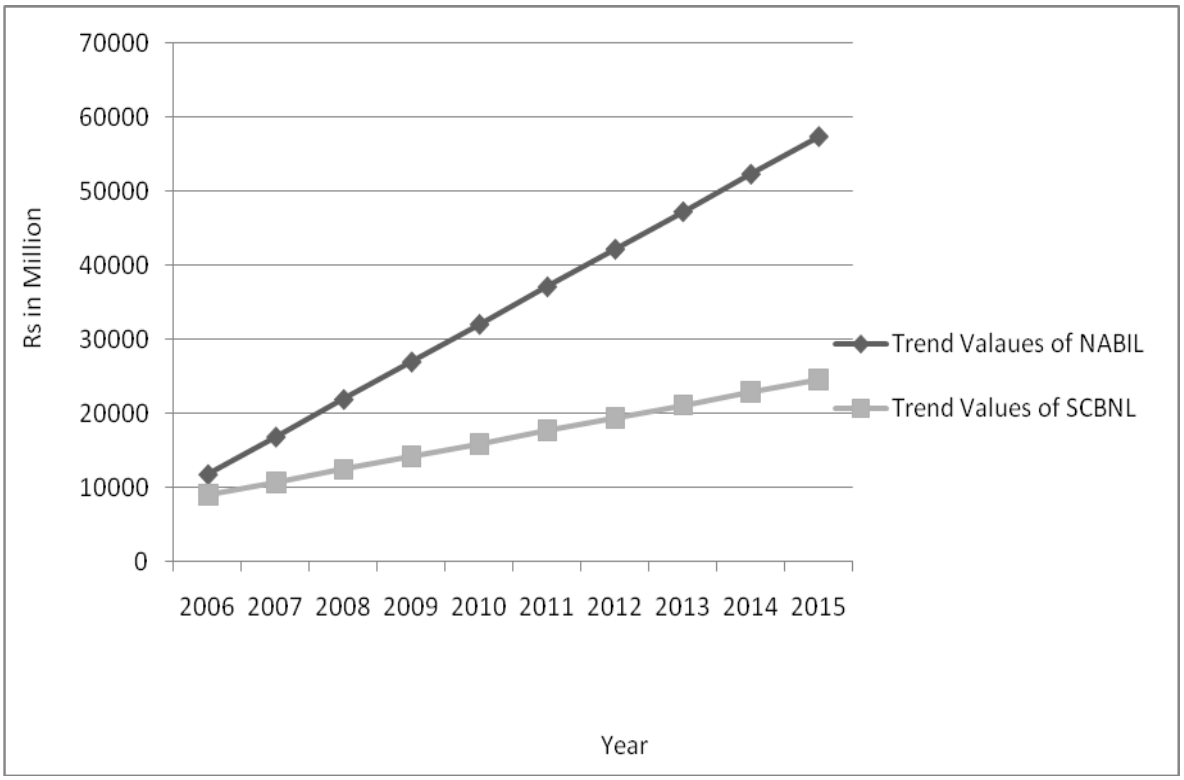
Source: Appendix- S (I) & (II)

The above comparative table reveals that the trend value of loan and advances of both banks are in increasing trend. The loan and advances of NABIL in 2015 will be Rs 57,454. 2 million which is the highest under the study period. Similarly, the same of SCBNL will be Rs 24612.81 million.

From the above analysis, it is clear that NABIL will attain greater success in increasing loan and advances amount in comparison to SCBNL. The above calculated trend values of loan and advances of NABIL and SCBNL are fitted in the trend lines given below:

Figure 4.6

Trend value of Loan and Advances of NABIL & SCBNL



Trend Analysis of Total Investment

Under this topic, the trend value of total investment for five years from 2006-2010 have been calculated and forecast for next years from 2011-2015. The following table shows the trend value of total investment for ten years from 2006 to 2015 of NABIL and SCBNL.

Table: 4.21

Trend values of Total Investment of NABIL and SCBNL

(Rs. In million)

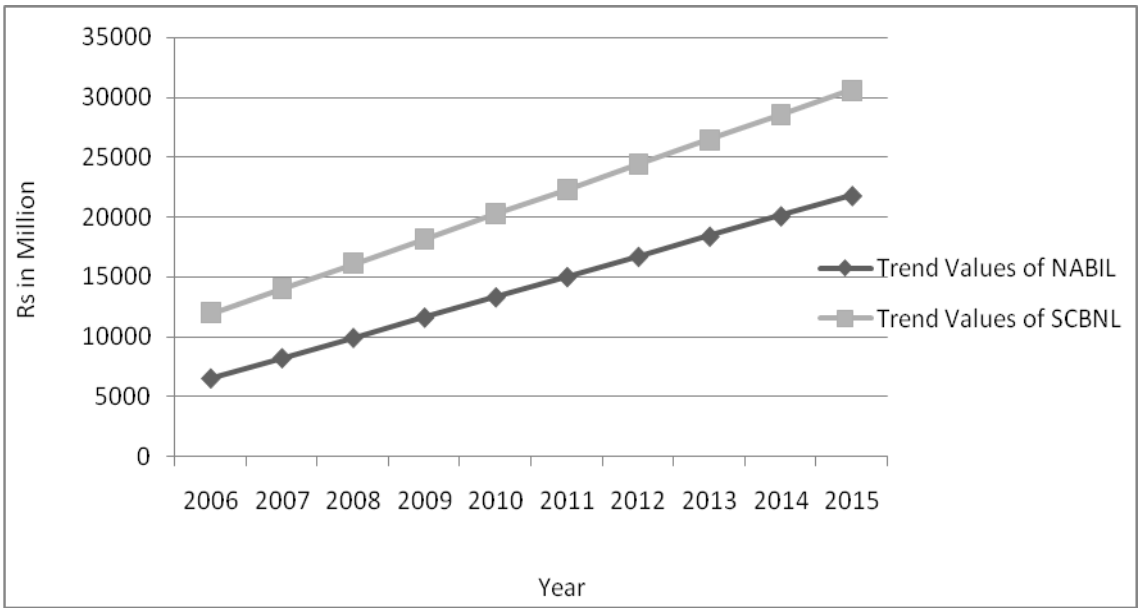
Year	Trend values of NABIL	Trend values of SCBNL
2006	6542.07	11942.07
2007	8235.78	14017.37
2008	9929.50	16092.67
2009	11623.22	18167.96
2010	13316.94	20243.26
2011	15010.65	22318.56
2012	16704.37	24393.86
2013	18398.08	26469.15
2014	20091.80	28544.45
2015	21785.52	30619.75

Source: Appendix- T (I) & (II)

The above table shows that the total investment of both NABIL & SCBNL's is in increasing trend. The total investment of NABIL in 2015 will be Rs. 21,785.52 million and that of SCBNL will be Rs 30,619.75 which are both highest under the study period. The above calculated trend values of total investment of both banks are fitted in the trend lines given below,

Figure 4.7

Trend value of Total Investment of NABIL & SCBNL



Trend Analysis of Net Profit

Under this topic the trend value of net profit for five years from 2006-2010 have been calculated and forecast for next five years from 2011-2015. The following table shows the trend value of net profit for ten years from 2006-2015 of NABIL and SCBNL.

TableA: 4.22
Trend Values of Net Profit of NABIL and SCBNL

(Rs. In million)

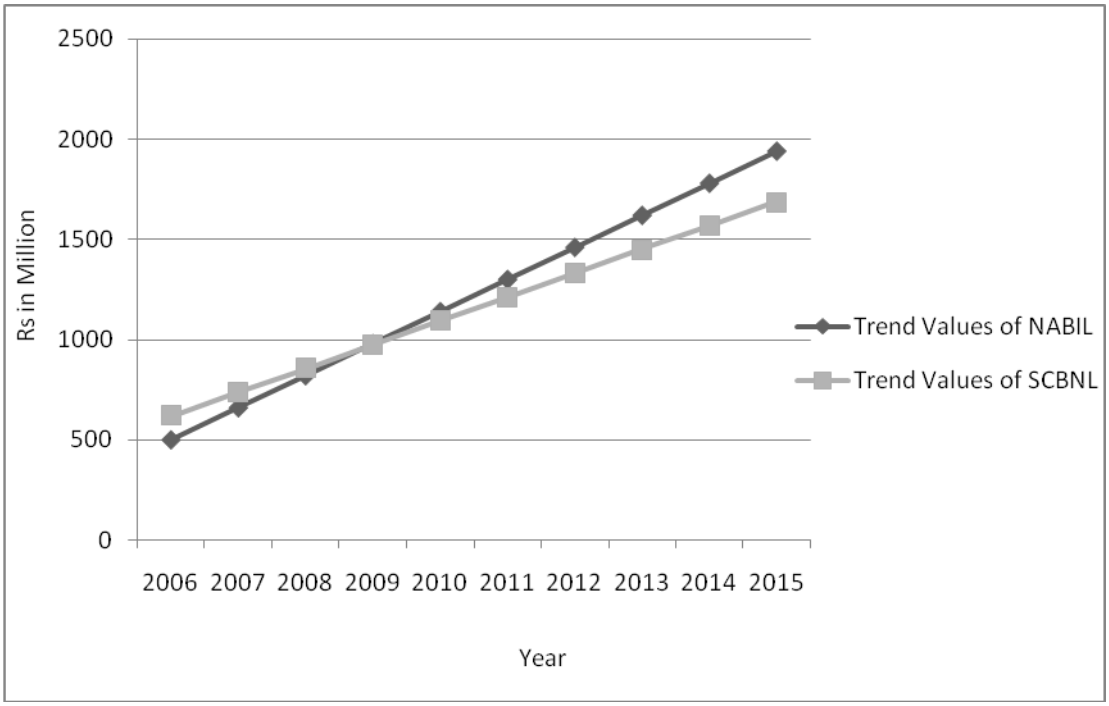
Year	Trend values of NABIL	Trend values of SCBNL
2006	502.26	618.53
2007	662.06	737.3
2008	821.85	856.07
2009	981.65	974.83
2010	1141.45	1093.6
2011	1301.25	1212.36
2012	1461.04	1331.13
2013	1620.84	1449.90
2014	1780.64	1568.66
2015	1940.43	1687.43

Source: Appendix- U (I) & (II)

From the above comparative table of trend values of net profit, it has been found that the expected amounts of both banks are in increasing trend. The net profit of NABIL in 2015 will be Rs 1,940.43 million. Similarly, the net profit of SCBNL in 2015 will be Rs 1,687.43 million. From above trend analysis, it is clear that NABIL's net profit is comparatively better than the SCBNL. The above calculated trend values of net profit of both banks are fitted in the rend lines given below:

Figure: 4.8

Trend value of Net Profit of NABIL & SCBNL



4.3 Test of Hypothesis

It is an assumption about the population, which may or may not be true; to determine whether it is true or not by taking or not by taking some sample with followed some procedure. In this topic, effort has been made to test the significance regarding the parameter of the population on the basis of sample drawn from the population. Generally, following steps are followed for the test of hypothesis.

- Formulating hypothesis: Null Hypothesis
- Alternative Hypothesis
- Computing the test statistic
- Fixing the level of significance
- Finding critical region
- Deciding two tailed or one tailed test
- Making decision

In the following lines, some of the main hypothesis tests are calculated and decisions are made.

I) Test of Hypothesis on Loan and Advances to Total Deposit Ratio

Here, mean ratio of loan and advances to total deposit of NABIL and SCBNL are taken and carried out t-test of significance difference.

Let, Loan and Advances to total deposit ratios of NABIL and SCBNL are X and Y respectively.

Table 4.25

Hypothesis test on Loan & Advances to Total Deposit Ratio

S.N		NABIL			SCBNL		
	Year	X	x=(X-70.71)	x^2	Y	y=(Y-44.14)	y^2
1	2006/07	66.6	-4.11	16.89	42.62	-1.52	2.31
2	2007/08	66.94	-3.77	14.21	46.12	1.98	3.92
3	2008/09	73.87	3.16	9.98	38.14	-6	36
4	2009/10	69.63	-1.08	1.166	45.35	1.12	1.46
5	2010/11	76.53	5.82	33.87	48.49	4.35	18.89
		$\sum X=353.57$	$\sum x=0$	$\sum x^2=76.116$	$\sum Y=220.72$	$\sum y=0$	$\sum y^2=62.58$

Mean ($\bar{x}$) = $\frac{\sum X}{n1}$ = 353.57/5 = 70.714

($\bar{Y}$) = $\frac{\sum Y}{n2}$ = 220.72/5 = 44.144

$$S^2 = \frac{1}{n1 + n2 - 2} \quad \frac{[\{(\sum x)^2\}}{n^1} + \frac{\{\sum y2 - (\sum Y)^2\}]}{n^2}$$

$$= \frac{1}{5+5-2}\left(\left\{76.116 - \frac{(0)^2}{5}\right\}\right) + \left(\left\{62.58 - \frac{(0)^2}{5}\right\}\right)$$

$$= \frac{1}{8}\{76.116 + 62.58\}$$

= 138.70/ 8 = 17.34

Here,

Null Hypothesis (H_0) : $\mu x = \mu y$

i.e. There is no significant difference between mean ratios of total deposit of NABIL and SCBNL.

Alternative Hypothesis (H_1): $\mu x \neq \mu y$ (Two tailed test)

i.e. There is significant difference between mean ratios of total deposit of NABIL and SCBNL.

Under H_0, the test-statistic is:

$$t = \frac{x - \bar{y}}{\sqrt{s^2\left(\frac{1}{n1} + \frac{1}{n2}\right)}}$$

$$= \frac{70.71 - 44.14}{\sqrt{17.34\left(\frac{1}{5} + \frac{1}{5}\right)}}$$

$$= \frac{26.57}{\sqrt{6.936}}$$

$$= \frac{26.57}{2.63}$$

= 10.103

Tabulated value of 't' (two tailed test) at 5% level for (n1 + n2 – 2) i.e. 8d.f is 2.306

Decision

Since the calculated value of 't' i.e. 10.354 is greater than tabulated value of 't' i.e 2.306. H0 is rejected. In other words there is significant different between mean ratios of loan and advances to total deposits of NABIL and SCBNL.

II) Test of Hypothesis on Total Investment to Total Deposit Ratio

Let, Total investment to total deposit ratios of NABIL and SCBNL are x and y respectively.

Table 4.26

Hypothesis test on Total Investment to Total Deposit Ratio

S.N		NABIL			SCBNL		
	Year	X	x=(X-30.90)	x^2	Y	y=(Y-52.044)	y^2
1	2006/07	38.32	7.42	55.0564	55.02	2.58	6.6564
2	2007/08	31.23	0.33	0.1089	46.82	-5.62	31.5844
3	2008/09	29.12	-1.78	3.1684	56.48	4.04	16.3216
4	2009/10	29.53	-1.37	1.8769	56.48	4.04	16.3216
5	2010/11	26.32	-4.58	20.9764	45.42	-7.02	49.2804
		$\sum X=154.52$	$\sum x=0$	$\sum x^2=81.19$	$\sum Y=260.22$	$\sum y=0$	$\sum y^2=120.16$

Mean $(\bar{x}) = \frac{\sum X}{n1}$ = 154.52/5 = 90.9

$(\bar{Y}) = \frac{\sum Y}{n2}$ = 260.22/5 = 52.04

$$S^2 = \frac{1}{n1 + n2 - 2} \quad \frac{[\{(\sum x)^2\}}{n^1} + \frac{\{\sum y2-(\sum Y)^2\}]}{n^2}$$

$$= \frac{1}{5+5-2}\left(\left\{81.19-\frac{(0.00)^2}{5}\right\}\right)+\left(\left\{120.16-\frac{(0.00)^2}{5}\right\}\right)$$

$= \frac{1}{8} \{81.19+120.16\}$

$= 201.35/8$

$= 25.17$

Here,

Null Hypothesis (H_0) : $\mu x = \mu y$

i.e. There is no significant difference between mean ratios between total investment to total deposit of NABIL and SCBNL.

Alternative Hypothesis (H_1): $\mu x \ (H^2) \ \mu y$ (Two tailed test)

i.e. There is significant difference between mean ratios of total investment to total deposit of NABIL and SCBNL.

Under H_0, the test-statistic is:

$$t = \frac{\bar{x}-\bar{y}}{\sqrt{s^2\left(\frac{1}{n1}+\frac{1}{n2}\right)}}$$

$$= \frac{30.90-52.044}{\sqrt{25.17\left(\frac{1}{5}+\frac{1}{5}\right)}}$$

$$= \frac{-21.144}{\sqrt{10.068}}$$

$= -6.67$

i.e. $/t/ = 6.67$

Tabulated value of 't' (two tailed test) at 5% level for (n1 + n2 – 2) i.e. 8 d.f is 2.306

Decision

Since the calculated value of 't' i.e. 6.67 is greater than tabulated value of 't' i.e 2.306. H_0 is rejected. In other words there is significant different between mean ratios of total investment to total deposits of NABIL and SCBNL.

4.3 Major Finding

The major findings of the study are derived on the basis of analysis & interpretations of financial data are as follows:

- Cash & bank balance to total deposit ratio reveals both banks have fluctuating trend. The mean ratio of SCBNL is higher than that of NABIL. NABIL'S ratios are less consistency in comparison to SCBNL.
- Loan & advances to total deposit ratio of both NABIL and SCBNL shows rising & falling trend. The mean ratio of NABIL is higher than that of SCBNL which show that the NABIL's ratios are less variable than SCBNL.
- The mean ratio of total investment to total deposit of SCBNL is higher than that of NABIL & the variability of the ratios of NABIL is higher than that of SCBNL. It is clear that NABIL is not so successful in utilizing its resources on Investment.
- The mean ratio of loan and advances to total working fund of NABIL is higher than that of SCBNL and NABIL's ratios are less variable than that of SCBNL in comparison.
- When we observe the mean ratio of Return on loan & advance ratio, it can be concluded that SCBNL seem to be good to maintain its high return on loan and advances in comparison to NABIL.
- Return on equity reveals NABIL has rising ratios whereas SCBNL has fluctuating ratios. The mean ratio of NABIL is higher than that of SCBNL which indicate that SCBNL has not been able to earn profit due to the lack of efficient investment policy for the mobilization of capital resources.

- The mean ratio of total interest earned to total outside asset of SCBNL is slightly lower than that of NABIL. However, SCBNL's ratios are more uniform than that of NABIL.
- The average credit risk ratio of NABIL is higher than SCBNL. Credit risk ratio has fluctuating trend with high risk. It indicates the unstable credit policy of the bank.
- The growth ratio of total deposit, loan and advances, total investment and total profit of NABIL is higher than SCBNL.

CHAPTER -V

SUMMARY, CONCLUSION AND RECOMMENDATION'S

The last chapter of this study is conclusions and recommendations developed from the completion of analysis part on the investment policy of sample bank. Conclusion and recommendation consists of two parts, the first one is conclusion which is drawn from the major findings of this study and the second one is recommendation to the banks, to solve the problems found on the basis of analysis and conclusion.

5.1 Summary

Industrial Development is very important for economic development of any country. And there must be Investment made on productive activities for Industrial development. Investment is one of the financial activities which involve the decision of capital to establish commercial or industrial venture. Investment in its broadest sense means the sacrifice of current money for future money. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and is certain. The reward or result of sacrifice comes later and the magnitude is generally uncertain. Time and risk are predominates for investment. Such as Investment in government bonds time is predominates whereas in common stock time and risk both are important. Investment involves uses of funds to long term assets that would yield benefits in the future.

Investment greatly depends on the saving behavior of that country. The amount of saving of typical household in Nepal is small because of the people have limited opportunities for Investment. They prefer to spend savings on commodities rather than on financial assets. This restricts the process of financial intermediation, which might otherwise bring benefits such as reduction of Investment risk and increase in

liquidity. Investment depends on development of the capital market also. It provides and allocates funds to firms with profitable Investment opportunities and offers an avenue of liquidity for individuals to invest current income or borrow against future income.

Similarly Investment is related with Tax, inflation, risk and return from that Investment. Investment activities of the country also depend on the development of financial institutions, as financial institution as a key for Investment. Financial institution plays a very important role to develop the nation by collecting and investing money. Commercial banks are major financial institutions which occupy quite an important place in the frame work of every country's economy because they provide capital for the development of the industries, trade and business and other resources deficit sectors by investing the saving collected as deposits.

The beginning and establishment is financial institution depends upon the level of economic activities and monetary transaction in the country. In Nepal history of modern financial institution begins with the establishment of NBL in 1937A.D. Since then several financial institutions have come into existence. But Nepalese Industries have been facing challenges especially due to inadequacy of financial resources although numerous financial institutions have emerged both in regional as well as in international financial centers to extend credit facilities to the financially viable enterprises. But there still a big gap between demand for and supply of financial resources and the gap seems ever widening over the years. Globalization and freeing up the economy, decentralization, restructuring, and downswing of large firms, worldwide communication networks and transfer and acquisition of state of the art, technology and other application, all have brought the challenges and opportunities to entrepreneur. Those entrepreneurs who respond to these challenges and mobilize necessary financial resources will become successful and those who do not fall victim in their rapidly changing economic environment. Banks plays a

crucial role in this matter. Commercial banks not only collect the scattered saving from individual by accepting deposits but also provides various types of loan. And it itself invest in various share and debentures of other companies. A healthy development of any band depends heavily upon its Investment policy. A sound and viable Investment policy can be effective one for the economy to attain the economic objectives directed towards the acceleration of the pace of development. A good Investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and Investment.

Bank which serves as a repository of the cash resources of the public and as purveyors of finance for trade and industry play a vital role in the economic and financial life of a country. Unlike other joint stock companies, banks generally obtain a very large proportion of their working capital from the depositors rather than from the share holders. Therefore it should wisely and carefully use its collected fund. The Investment policy should be carefully analyzed. Commercial banks have to pay due consideration while formulating Investment policy regarding loan and Investment. Investment policy should ensure minimum risk and maximum profit (return) from lending. The loan provided by bank is guided by several principles such as length of time, their purpose, profitability, safety etc.

The basic objective of this study is to find out the position of NABIL Bank Limited on fund mobilization and investment policy in comparison to Standard Chartered Bank Limited. The subsidiary objectives determined to achieve the foresaid objective are : To analyze the relationship between various important variables of NABIL Bank Limited i.e deposits, loan and advances, total investments and net profit in comparison to SCBNL; To analyze the liquidity, asset management efficiency, profitability, risk and growth position of NABIL Bank Limited in comparison to Standard Chartered Bank with respect to investment pattern; To provide the suggestion for improving the investment policy of NABIL Bank Limited in comparison to Standard Chartered Bank on the basis of findings of the analysis.

To fulfill these objectives and other specific objectives an appropriate research methodology has been developed which include the analysis of time series and test of hypothesis as a statistical tools. Some null hypothesis formulated during the study tested in appendix and analyzed.

5.2 Conclusions

From the study it is found that only Joint venture commercial banks are running in profit. Banks plays a crucial role in sustainable development of least developed countries. Because of bottlenecks inherent in the economies of least developed countries are either unemployed or under-employed or only seasonally employed. It can absorb the population in gainful employment activities. Thus, they can play an important role in poverty alleviation in the country. The major sources for financial resources to Industries in the least developed countries are the commercial banks. By Mid- 2011, NRB licensed bank and non- bank financial institutions totaled 277. Out of them, 31 are commercial banks, 87 development banks, 79 finance companies, 21 micro-credit development banks, 15 saving and credit co-operatives, and 45 NGOs. A few more development banks and finance companies may come into operation this year. It is certain that competition will intensify among commercial banks, development banks and finance companies. Under such circumstances, it is imperative for the Bank to have its own separate identity in the market by formulating a special strategy.

Increasingly, bankers are being forced by both competition and regulatory pressure to assess their bank's performance over time and relative to other banks, analyze the reasons behind any performance problems that appear and find ways to strengthen the bank's performance in the future. Two key dimensions of bank performance are profitability and exposure to risk. Profitability is clearly the more important, because satisfactory profits preserve the bank's capital, providing it with a base for future survival and growth. For larger banks, the value of their stock in the market is the

best overall indicator of whether they are achieving adequate profitability relative to the risks they have assumed.

NABIL and SCBNL is one of the successful commercial bank of Nepal. Both banks have made a great achievement within last decade. These commercial banks should take favorable step for the development of rural parts of the country.

With a view to maintain the financial stability, a number of regulatory measures were adopted. The umbrella directive incorporates 16 directives relating to capital adequacy, classification of loan and advances and loan loss provisioning, sectoral credit limit, accounting policy and structure of financial statement, risk minimization arrangement, corporate good governance, work schedule for directives implementation, investment, statistical returns to be submitted, sale of promoters shares, consortium lending, credit information and black listing arrangement, cash reserve ratio, branch office opening, interest rates and financial resources collection.

The management of excess liquidity of commercial banks is considered to be an important operating procedure of monetary policy. First, it helps to achieve the policy objective of maintaining monetary stability through the necessary adjustment in the availability of credit. Second, in turn, the change in credit availability can contribute to achieve the financial sector stability.

The lending operation of the commercial banks in Nepal is extended to various sectors such as the lending operation of the commercial banks in Nepal is extended to various sectors such as industrial sector, commercial sector, agriculture sector, service sector, general purpose sector, these sectors are also categorized in productive, nonproductive or priority sector and the investment on the securities consist of the investment in treasury bill, development bonds, national saving bonds, shares on government owned companies or non government companies.

The conclusion derived from the comparative study of the investment policy of NABIL Bank Limited and Standard Chartered Bank reveals that:

- As shown the liquidity position of both banks is satisfactory. The liquidity position of SCBNL is better than NABIL as its cash and bank balance ratio is higher than NABIL.
- The analysis also depicts that the total investment to total deposit, investment on government securities to working fund are highest in SCBNL. But NABIL's capacity to mobilize its loan ad advances to total working fund and its investment on shares and debenture is better than SCBNL. Finally it can be concluded that asset management position of both banks are not so effective.
- From this analysis it can be concluded that the profitability position of NABIL is slightly better than SCBNL. SCBNL has highest return on loan and advances ratio whereas NABIL has highest return on total interest earned to total deposit asset ratio and return on equity. SCBNL has not maintained better position in comparison to NABIL.
- From the risk ratio point of view, it can be concluded that NABIL has higher degree of credit risk and SCBNL has higher degree of liquidity risk.
- From the analysis of growth ratio, NABIL has greater growth rate on total deposits, loan & advances, total investment and net profit than SCBNL. Therefore NABIL has successfully collected and utilized the fund than SCBNL.
- From this study we can conclude that there is positive relation between deposit & loan and advances of NABIL & SCBL. The relation between deposit and loan and advance is significant. Both banks are successful to mobilize their deposit in proper way as loan and advances. Likewise there is positive relation between deposit and total investment of both banks. Lastly, it can be said that both NABIL as well as SCBNL are successful to mobilize their total investments but have no certain investment policy to invest their deposits.

- From the study it can be concluded that the trend analysis of total deposit , total investment, total loan and advances and total profit of both NABIL and SCBL is in increasing trend.
- The hypothesis test on loan and advances to total deposit and total investment to total deposit shows that there is significant difference between mean ratio of loan & advances to total deposit and total investment to total deposit of NABIL& SCBNL.

5.3 Recommendation

Suggestion is output of the whole study. It helps to take corrective action in their activities in future. On the basis of analysis, findings of the study, following recommendations can be advanced to overcome weakness, inefficiency and to revitalize improve present fund mobilization and investment policy of NABIL and SCBNL.

- Increase Cash and Bank Balance: The liquidity position of a bank can be effected by external as well as internal factors. The effecting factors can be interest rates, supply as demand position of loan and advance as well as saving, investment situation, central bank direction, the lending policies, capability of management strategic planning and funds flow situation. As NABIL has maintained the ratios of cash and bank balance to total deposit considerably lower than SCBNL, NABIL's cash and bank balance to deposit ratio is not performing well. So it is recommended to increase cash and bank balance to meet current obligations and loans and demand for such loans.
- Increase investment in government securities: NABIL has not invested more money in government securities than that of SCBNL. Investment on those securities issued by government i.e. treasury bills, development bonds, saving certificates are free of risk and highly liquid in nature and have very lower yield than other companies' securities. This also helps to maintain the sound portfolio of the bank. It is better in regard to safety than other means of investment. So

both banks are strongly recommended to invest more finds in government securities.

- Increase Deposit Mobilization Capacity: To get success in competitive banking environment, deposit money must be utilized as loan and advances. Negligence in administering - the largest item of the bank in asset side i.e. loan and advances could be one of the main reasons of the bank failure. When mean ratios of loan and advances of NABIL and SCBNL are compared, NABIL seems to be good to mobilize its total deposit. It means that SCBNL has not properly used their existing fund as loan and advances. To overcome this situation SCBNL needs to increase its deposit mobilization capacities and find out more profitable sector in order to capture the market share.
- Increase Profit Margin: Both Banks should be more careful in increasing profit in a real sense to maintain the confidence of shareholders, depositors and all its customers. They can't keep its eyes closed from the profit motive. Therefore both banks needs to form a Committee to identity the reasons behind sharp decline in profit over the years and adopt various measures to improve its profitability. SCBNL is strongly recommended to utilize its risky assets and shareholder's fund to gain profit margin similarly it should reduce its expenses and should try to collect cheap fund being more profitable. Equity capital gives the bank protection against declining income and grants management time to correct the bank's earnings problems. However, these problems must be addressed quickly before continuing earnings losses erode the bank's remaining capital and threaten its survival.

- Investment Vision: Portfolio management is very important for each and every investor. Forming the efficient and optimal portfolios can minimize the risk. Both banks have been increasing total investment in every year and total investment amount size of SCBNL is higher in comparison to NABIL. So, portfolio conditions of SCBNL and NABIL should be examined carefully from

time to time and alteration should be made to maintain equilibrium in the portfolio of loans and investment and make continuous efforts to explore new, competitive and high yielding investment opportunities to optimize the return.

- Sector wise Investment: During all the years, commercial banks have mainly focused its investment only on the industrial and commercial sectors whereas another important sector "agriculture sector" which is categorized as priority sector seems to be neglected. Analysis of the investment portfolio shows that lending on the industrial sector was getting more loans from the commercial banks. It means that both banks have not properly used their existing fund as loan and advances. A number of serious shortcomings were found in the Bank such as drawbacks in the credit flow and management and violations of the Nepal Rastra Bank directives in regards to priority and deprived sector credit. Thus NABIL was recommended to maintain adequate capital fund in order to extend credit access to the marginalized and deprived people.
- Enhance Market Monitoring: Countries like Nepal with low financial development and high poverty incidence are more vulnerable to crises in case the regulatory mechanism fails to deliver or when the regulatory capture supersedes the market monitoring. Thus, a strategic approach is needed to maximize the number of motivated, watchful eyes to enhance market monitoring. Promoting market monitoring will pave the way for sound and sustainable financial development and stability and will reduce the chances of banking crisis.
- Growing Competition: In the light of growing competition in the banking sector, the business of the bank should be customer oriented. It should strengthen and activate its marketing function, as it is an effective tool of attracting and retaining customer. Growing economic sophistication, global financial integration, trade and investment interdependence and revolution in information and communication technology are influencing in the banking sector tremendously.

Both NABIL & SCBNL are taken as one the most leading bank in Nepal today. Today is the world of the competition which is growing day by day in the banking sector. It must mobilize its deposits and other funds to profitable, secured and marketable sector so that it can earn a handsome profit as well as it should be secured and can convert into cash whenever needed.

In the light of growing competition in the banking sector, the business of the bank should be customer oriented. The bank should involve in different kind of social and community development activities. The bank has been able to provide more personalized services and a better environment for its customer, it is an effective tool to attract and retain the customers.

An income and profit of the bank depends upon its lending procedure, lending policy and investment of its fund in different securities. The greater the credit created by the bank the higher will be the profitability. Both the banks have achieved a success in banking sector in term of market share and profitability because of its reliable and professional services.

In order to collect more funds, both banks are not to be surrounded and limited only big clients i.e. multinational companies, large industries, manufacturing companies , NGOs and INGOs etc. it should also cater the lower and middle level people.

BIBLIOGRAPHY

Books:

Bhalla, V.K. (1997)**.** *Investment Management. (4th edition).* New Delhi: S. Chand and Company.

Bhandari, D.R. (2003). *Principle & Practices of Banking & Insuran*ce. *(3rdedition).*

Bhattarai, R. (2005). *Investment.* Kathmandu: Buddha Academic Publishers & Distributors Pvt. Ltd.

Chandler, L.V. (1973). *The Economics of Money & Banking*. *(6th edition).* Kathmandu : Telaju Publication.

Charles, J.H. & Christopher, M.J. (2002). *Do Banks Provide Financial Slack?* The Journal of Finance VOL VII no. 3.

Cheney, J.M. & Moses, E.A. (1999). *Fundamentals of Investment.* USA: West Publishing Company.

Crosse, H.D. (1963). *Management Policies for Commercial Banks*. *(2nd edition).* Englewood Cliffs: N.J. Prentice Hall, Inc.

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

Dongol, R.M. (2000). *Accounting for Financial Analysis and Planning.* Kathmandu: Aayush Publication.

Edmister, R.O. (1980). *Financial Institutions.* New York: Mac Graw Hill.

Francis, C.J. (1991). *Investment Analysis and Management*. Singapore: MC Graw Hill Series.

Gerald, M.M. (1995). *Leading Issues in Economic Development.* Bombay: Oxford University Press.

Ghimire, R. (2062). *Foreign Capital in Nepa.* Kathmandu: Nepal Rastra Bank Samachaar, NRB.

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

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

Joshi, P.R. (2002). *Research Methodology*. Kathmandu: Budhha Academic Enterprises Pvt. ltd.

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

Nigam, B.M.L. (1976). *Banking and Economic Growth*. (*1st edition).* Bombay: Vohara and Co. Publisher Pvt. Ltd.

Pradhan, R.S. & Yadav, M.P. (2002). *The Economic Journal of Nepal*. A Quarterly Publication of Central Department of Economics, T.U.

Pradhan, S.B. (2053). *Deposit Mobilization, its Problem & Prospectus*. Kathmandu: NBL Nepal Bank Patrika,

Radhaswamy, M. & Vasudevan, S.V. (1997). *A Text Book of Banking*. New Delhi: S. chand & Co.

Reilly, F.K. (1995). *Investment.* Japan: The Dryden Press, CBS Publishing Japan Ltd.

Sharma, M.P. & Bhatta, M.P. (2003). *Priority Received Sector*. The Journal of Priority Sector, VOL II no.3.

Sharpe, F.W. & Alexander J.G. (1998). *Investments.* New Delhi: Pentice Hall of India Pvt. Ltd.

Shrestha, S. (1993). *Lending Operations of Commercial Banks of Nepal and its Impact on GDP.* The business voice of Nepal.

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

The World book Encyclopedia, *World Book of International*. USA: Vol 10,

Vaidya, S. (1999). *Banking Management*. Monitor Nepal.

Van Horne, J.C. (1998). *Financial Management and Policy. (10th edition).* New Delhi: Prentice Hall of India Ltd.

Weston, J.F. & Brigham, E. (1980). *Managerial Finance. (7th edition).* USA: Dryden Press.

Articles, Journal and Reports:

- NABIL Bank Limited (FY 2006/07 to 2010/11). *Annual Reports*. Kathmandu.
- Standard Chartered Bank (FY 2006/07 to 2010/11).*Annual Reports*. Kathmandu.
- Nepal Rastra Bank's *Annual Reports*. Various Issues.
- Research Department of NRB *Economic Report*. Kathmandu. Nepal Rastra Bank.

Previous Research Work:

Gupta (2008), *A Comparative Study on Investment Practices of Commercial Banks (With Special Reference to Nabil Bank Ltd , Standard Chartered Bank Nepal Ltd and Himalayan Bank Ltd).* An Unpublished Master Degree Thesis Submitted to Faculty of Management Shanker Dev Campus T.U.

Joshi, R. (2007). *Comparative Study on Investment Policy of Standard Chartered Bank Nepal Limited and Everest Bank Limited*. An Unpublished Master Degree Thesis Submitted to Faculty of Management Shanker Dev Campus T.U.

K.C (2007), *A Study on Investment Policy of Paschimanhal Finance Company Limited.* An Unpublished Master Degree Thesis Submitted to Faculty of Management Shanker Dev Campus T.U.

Raya, T.K. (2008). *Investment Policy and Analysis of Commercial Banks in Nepal (A Comparative Study of SCBNL with NIBL and NBBL).* An Unpublished Master Degree Thesis Submitted to Faculty of Management Shanker Dev Campus T.U.

Roy, D. (2005). *An Investment Analysis of Rastriya Banijya Bank (In Comparison with Nepal Bank Ltd.).* An Unpublished Master Degree Thesis Submitted to Faculty of Management Shanker Dev Campus T.U.

Shrestha (2006), *Study on Investment Policy of Joint Venture Commercial Bank (Reference with Himalayan Bank Ltd and Standard Chartered Bank Ltd).* An Unpublished Master Degree Thesis Submitted to Faculty of Management Shanker Dev Campus T.U.

Tuladhar, U. (1999). *A Study on Investment Policy of Nepal Grindlays Banks Ltd. In Comparison to other Joint Venture Banks (NABIL and HBL)***.** An Unpublished Master Degree Thesis Submitted to Faculty of Management Shanker Dev Campus T.U.

Website:

www.nabil.com.np

www.nrb.org.np

www.standardchartered.com.np

APPENDICES

Appendix - A

Cash and Bank Balance to Total Deposit Ratio of NABIL

(Rs in million)

FY	Cash and Bank Balance (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-x)^2$
2006/07	1399.6	23342.40	6	0.068
2007/08	2671.1	31915.00	8.37	4.45
2008/09	3372.51	37348.25	9.03	7.67
2009/10	1400.09	46410.70	3.02	10.49
2010/11	2436.55	49696.112	4.9	1.85

$(\sum(X- x)^2 = 24.53$

Cash and Bank Balance to Total Deposit Ratio SCBNL,

(Rs in million)

FY	Cash and Bank Balance (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-x)^2$
2006/07	2021.02	24640.3	8.2	0.59
2007/08	2050.2	29743.9	6.89	0.29
2008/09	3137.6	35871.72	8.75	1.74
2009/10	1929.3	35182.7	5.48	3.8
2010/11	2975.79	37999.24	7.83	0.16

$(\sum(X- x)^2 = 6.58$

Source: - Nabil Bank Ltd. Annual Report, Various Issues

Standard Chartered Bank Ltd. Annual Report, Various Issues

Standard Deviation is calculated by STDEV = $[\sqrt{(\sum(X- x)^2)/N}]$

Where,

N = 5

C.V = $(\sigma / \overline{X}) \times 100\%$

Appendix – B

Investment on Govt. Securities to Current Assets Ratio of NABIL

(Rs in million)

FY	Investment on Govt. Securities (Rs)	Current Assets (Rs)	Ratio (X)	$(X-x)^2$
2006/07	4805.7	24029.83	20	16.65
2007/08	4646.9	29908.15	15.54	0.144
2008/09	3706.1	38039.14	9.74	38.19
2009/10	7941.56	45595.9	17.41	2.22
2010/11	8745.23	51746.4	16.9	0.96

$\sum(X- x)^2 = 58.16$

Investment on Govt. Securities to Current Assets Ratio of SCBNL

(Rs in million)

FY	Investment on Govt. Securities (Rs)	Current Assets (Rs)	Ratio (X)	$(X-x)^2$
2006/07	7115.7	22033.55	32.29	11.63
2007/08	8137.6	27453.25	29.64	0.58
2008/09	9998.75	27219.48	36.73	61.62
2009/10	8531.52	38407.41	22.21	44.48
2010/11	9957.26	42304.69	23.54	28.52

$\sum(X- x)^2 = 146.83$

Appendix – C

Loan and Advances to Current Assets Ratio of NABIL

(Rs in million)

FY	Loan &Advances (Rs)	Current Assets (Rs)	Ratio (X)	$(X-x)^2$
2006/07	15545.78	24029.83	64.69	34.69
2007/08	21365.05	29908.15	71.44	0.74
2008/09	27589.93	38039.14	72.53	3.8
2009/10	32268.87	45595.9	70.77	0.036
2010/11	38034.097	51746.4	37.5	8.53

$\sum(X- x)^2 = 47.79$

Loan and Advances to Current Assets Ratio of SCBNL

(Rs in million)

FY	Loan &Advances (Rs)	Current Assets (Rs)	Ratio (X)	$(X-x)^2$
2006/07	10502.63	22033.55	47.83	2.13
2007/08	13718.59	27453.25	48.65	5.19
2008/09	13679.75	27219.48	50.26	15.13
2009/10	15956.95	38407.41	41.55	23.23
2010/11	18427.27	42304.69	43.55	7.95

$\sum(X- x)^2 = 53.63$

Appendix- D

Loan & Advances to Total Deposit Ratio of NABIL

(Rs in million)

FY	Loan &Advances (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-x)^2$
2006/07	15545.78	23342.40	66.6	16.89
2007/08	21365.05	31915.00	66.94	14.29
2008/09	27589.93	37348.25	73.87	9.98
2009/10	32268.87	46340.70	69.63	1.16
2010/11	38034.097	49696.11	76.53	33.87

$\sum(X- x)^2 = 76.19$

Loan and Advances to Current Assets Ratio of SCBNL

(Rs in million)

FY	Loan &Advances (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-x)^2$
2006/07	10502.63	24640.3	42.62	2.31
2007/08	13718.59	29743.9	46.12	3.92
2008/09	13679.75	35871.72	38.14	36
2009/10	15956.95	35182.7	45.35	1.46
2010/11	18427.27	37999.24	48.49	18.89

$\sum(X- x)^2 = 62.58$

Appendix – E

Total Investment to Total Deposit Ratio of NABIL

(Rs in million)

FY	Total Investment (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-x)^2$
2006/07	8945.31	14586.8	38.32	55.06
2007/08	9966.5	14586.8	31.23	0.11
2008/09	10874.8	14586.8	29.12	3.17
2009/10	13682.37	46340.70	29.53	1.88
2010/11	13081.21	49696.11	26.32	20.98

$\sum(X- x)^2 = 81.2$

Total Investment to Total Deposit Ratio of SCBNL

(Rs in million)

FY	Total Investment (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-x)^2$
2006/07	13556.23	24640.3	55.02	8.86
2007/08	13927.19	29743.9	46.82	27.29
2008/09	20260.49	35871.72	56.48	19.68
2009/10	19871.89	35182.72	56.48	19.68
2010/11	17258.68	37999.24	45.42	43.88

$\sum(X- x)^2 = 119.39$

Appendix – F

Loans & Advances to Total Working Fund Ratio of NABIL

(Rs in million)

FY	Loan &Advances (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-x)^2$
2006/07	15545.78	27253.39	57.04	15.52
2007/08	21365.05	37132.76	57.54	11.83
2008/09	27589.93	43867.4	62.89	3.65
2009/10	32268.87	52079.7	61.96	0.96
2010/11	38034.097	58099.62	65.46	20.07

$\sum(X- x)^2 = 52.03$

Loans & Advances to Total Working Fund Ratio of SCBNL

(Rs in million)

FY	Loan &Advances (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-x)^2$
2006/07	10502.63	28596.68	36.73	3.72
2007/08	13718.59	33335.78	41.15	6.2
2008/09	13679.75	40066.57	33.7	24.6
2009/10	15956.95	40213.32	39.68	1.04
2010/11	18427.27	43810.52	42.06	11.56

$\sum(X- x)^2 = 47.12$

Appendix – G

Investment on Govt. Securities to Total Working Fund Ratio of NABIL

(Rs in million)

FY	Investment on Govt. Securities (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-x)^2$
2006/07	4805.7	27253.39	17.63	14.82
2007/08	4646.9	37132.76	12.51	1.61
2008/09	3706.1	43867.4	8.45	28.41
2009/10	7941.56	52079.7	15.25	2.16
2010/11	8745.23	58099.62	15.05	1.61

$\sum(X- x)^2 = 48.61$

Investment on Govt. Securities to Total Working Fund Ratio of SCBNL

(Rs in million)

FY	Investment on Govt. Securities (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-x)^2$
2006/07	7115.7	28596.68	24.88	1.72
2007/08	8137.6	33335.78	24.41	0.72
2008/09	9998.75	40587.46	24.64	1.14
2009/10	8531.52	40213.32	21.22	5.52
2010/11	9957.26	43810.52	22.72	0.72

$\sum(X- x)^2 = 9.82$

Appendix – H

Investment on Shares & Debenture to Total Working Fund Ratio of NABIL

(Rs in million)

FY	Investment on Shares &Debenture (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-x)^2$
2006/07	57.85	27253.39	0.21	0.0016
2007/08	80.55	37132.76	0.22	0.0009
2008/09	82.5	43867.4	0.19	0.0036
2009/10	159.86	52079.7	0.31	0.0036
2010/11	192.49	58099.62	0.33	0.0064

$\sum(X- x)^2 = 0.0161$

Investment on Shares & Debenture to Total Working Fund Ratio of SCBNL

(Rs in million)

FY	Investment on Shares &Debenture (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-x)^2$
2006/07	44.94	28596.68	0.16	0.0081
2007/08	106.04	33335.78	0.32	0.0049
2008/09	106.92	40587.46	0.26	0.0001
2009/10	106.92	40213.32	0.27	0.0004
2010/11	109.43	43810.52	0.25	0

$\sum(X- x)^2 = 0.014$

Appendix – I

Return on Loan & Advances Ratio of NABIL

(Rs in million)

FY	Net Profit (Rs)	Loan &Advances (Rs)	Ratio (X)	$(X-x)^2$
2006/07	674	15545.78	4.34	0.38
2007/08	746.5	21365.05	3.49	0.053
2008/09	1031.05	27589.93	3.74	0.0004
2009/10	1139.09	32268.87	3.53	0.036
2010/11	1337.74	38034.097	3.52	0.04

$\sum(X- x)^2 = 0.51$

Return on Loan & Advances Ratio of SCBNL

(Rs in million)

FY	Net Profit (Rs)	Loan &Advances (Rs)	Ratio (X)	$(X-x)^2$
2006/07	691.67	10502.63	6.59	0.0001
2007/08	818.92	13718.59	5.97	0.37
2008/09	1025.11	13679.75	7.49	0.83
2009/10	1085.87	15956.95	6.80	0.048
2010/11	1119.17	18427.27	6.07	0.26

$\sum(X- x)^2 = 1.52$

Appendix – J

Return on Equity Capital of NABIL

(Rs in million)

FY	Net Profit (Rs)	Equity Capital (Rs)	Ratio (X)	$(X-x)^2$
2006/07	674	1874.99	35.95	9.67
2007/08	746.5	2057.05	36.29	11.9
2008/09	1031.05	3130.24	32.94	0.01
2009/10	1139.09	3834.22	29.71	9.79
2010/11	1337.74	4566.52	29.29	12.6

$\sum(X- x)^2 = 43.97$

Return on Equity Capital of SCBNL

(Rs in million)

FY	Net Profit (Rs)	Equity Capital (Rs)	Ratio (X)	$(X-x)^2$
2006/07	691.67	1755.3	28.75	0.017
2007/08	818.92	2117.2	18.1	110.67
2008/09	1025.11	3052.57	33.58	24.6
2009/10	1085.87	3369.71	32.22	12.96
2010/11	1119.17	3678.52	30.43	3.28

$\sum(X- x)^2 = 151.53$

Appendix – K

Total Interest Earned to Total Outside Assets of NABIL

(Rs in million)

FY	Total Interest (Rs)	Total outside Assets (Rs)	Ratio (X)	$(X-x)^2$
2006/07	1587.8	24491.09	6.48	1.85
2007/08	1978.7	31304.82	6.29	2.4
2008/09	2798.48	38116.31	7.34	0.25
2009/10	4047.73	45869.79	8.82	0.96
2010/11	5254.03	51115.3	10.28	5.95

$\sum(X- x)^2 = 11.41$

Total Interest Earned to Total Outside Assets of SCBNL

(Rs in million)

FY	Total Interest (Rs)	Total outside Assets (Rs)	Ratio (X)	$(X-x)^2$
2006/07	1411.98	24055.85	5.87	0.09
2007/08	1591.19	27621.4	5.76	0.17
2008/09	1887.22	33915.87	5.56	0.37
2009/10	2042.11	33804.47	6.04	0.0169
2010/11	2718.70	35685.95	7.62	2.1

$\sum(X- x)^2 = 2.75$

Appendix – L

Liquidity Risk Ratio of NABIL

(Rs in million)

FY	Cash and Bank Balance (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-x)^2$
2006/07	1399.6	23342.40	6	0.068
2007/08	2671.1	31915.00	8.37	4.45
2008/09	3372.51	37348.25	9.03	7.67
2009/10	1400.09	46410.70	3.02	10.49
2010/11	2436.55	49696.112	4.9	1.85

$(\sum(X- x)^2 = 24.53$

Liquidity Risk Ratio of SCBNL

(Rs in million)

FY	Cash and Bank Balance (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-x)^2$
2006/07	2021.02	24640.3	8.2	0.59
2007/08	2050.2	29743.9	6.89	0.29
2008/09	3137.6	35871.72	8.75	1.74
2009/10	1929.3	35182.7	5.48	3.8
2010/11	2975.79	37999.24	7.83	0.16

$(\sum(X- x)^2 = 6.58$

Appendix – M

Credit Risk Ratio of NABIL

(Rs in million)

FY	Loans &Advances (Rs)	Total Assets (Rs)	Ratio (X)	$(X-x)^2$
2006/07	15545.78	27253.39	57.04	15.52
2007/08	21365.05	37132.76	57.54	11.83
2008/09	27589.93	43867.4	62.89	3.65
2009/10	32268.87	52079.7	61.96	0.96
2010/11	38034.097	58099.62	65.46	20.07

$\sum(X- x)^2 = 52.03$

Credit Risk Ratio of SCBNL

(Rs in million)

FY	Loans &Advances (Rs)	Total Assets (Rs)	Ratio (X)	$(X-x)^2$
2006/07	10502.63	28596.68	36.73	3.72
2007/08	13718.59	33335.7	41.15	6.2
2008/09	13679.75	40587.46	33.7	24.6
2009/10	15956.95	40213.32	39.68	1.04
2010/11	18427.27	43810.520	42.06	3.4

$\sum(X- x)^2 = 38.96$

Appendix – N (I)

Calculation of Growth Rate of Total Deposit of NABIL

D_n = Total deposit of the n^{th} year

D_0 = Total deposit of the initial year

N = Total no. of year

Here,

NABIL

$D_{2010/11}$ = 49696.112

$D_{2006/07}$ = 23342.4

N = 5

Now, we have,

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

$D_{2010/11} = D_{2006/07} (1+g)^{n-1}$

$49696.112 = 23342.4 (1+g)^{5-1}$

$(1+g)^4 = 49696.112 / 23342.4$

$(1+g) = (2.129)^{1/4}$

$(1+g) = 1.2079$

$g = 1.2079-1$

$g = 0.2079$

$g = 20.79\ \%$

Appendix – N (II)

Calculation of Growth Rate of Total Deposit of SCBNL

D_n = Total deposit of the n^{th} year

D_0 = Total deposit of the initial year

N = Total no. of year

Here,

SCBNL

$D_{2010/11}$ = 37999.24

$D_{2006/07}$ = 24640.3

N = 5

Now, we have,

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

$D_{2010/11} = D_{2006/07} (1+g)^{n-1}$

$37999.24 = 24640.3 (1+g)^{5-1}$

$(1+g)^4 = 37999.24/24640.3$

$(1+g) = (1.542)^{1/4}$

$(1+g) = 1.1143$

$g = 1.1143 – 1$

$g = 0.1143$

$g = 11.43\ \%$

Appendix – O (I)

Calculation of Growth Rate of Loan & Advances of NABIL

D_n = Total Loan and advances of the n^{th} year

D_0 = Total Loan and advances of the initial year

N = Total no. of year

Here,

NABIL

$D_{2010/11}$ = 38034.097

$D_{2006/07}$ = 15545.78

N = 5

Now, we have,

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

$D_{2010/11} = D_{2006/07} (1+g)^{n-1}$

$38034.097 = 15545.78 (1+g)^{5-1}$

$(1 + g)^4 = 38034.097/15545.78$

$(1 + g) = (2.4465)^{1/4}$

$(1 + g) = 1.25065$

$g = 1.25065 - 1$

$g = 0.25065$

$g = 25.065\ \%$

Appendix – O (II)

Calculation of Growth Rate of Loan & Advances of SCBNL

D_n = Total Loan and advances of the n^{th} year

D_0 = Total Loan and advances of the initial year

N = Total no. of year

Here,

SCBNL

$D_{2010/11}$ = 18427.27

$D_{2006/07}$ = 10502.63

N = 5

Now, we have,

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

$D_{2010/11} = D_{2006/07} (1+g)^{n-1}$

$18427.27 = 10502.63 (1+g)^{5-1}$

$(g + 1)^4 = 18427.27/10502.63$

$(g + 1)^4 = 1.7545$

$(g + 1) = (1.7545)^{1/4}$

$(g + 1) = 1.1509$

$g = 1.1509 – 1$

$g = 0.1509$

$g = 15.09\ \%$

Appendix – P (I)

Calculation of Growth Rate of Total Investment of NABIL

D_n = Total Investments of the n^{th} year

D_0 = Total Investments of the initial year

N = Total no. of year

Here,

NABIL

$D_{2010/11}$ = 13081.206

$D_{2006/07}$ = 8945.31

N = 5

Now, we have,

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

$D_{2010/11} = D_{2006/07} (1+g)^{n-1}$

$13081.206 = 8945.31(1+g)^{5-1}$

$(1 + g)^4 = 13081.206 / 8945.31$

$(1 + g) = (1.462)^{1/4}$

$(1 + g) = 1.0996$

$g = 0.0996$

$g = 9.96\ \%$

Appendix – P (II)

Calculation of Growth Rate of Total Investment of SCBNL

D_n = Total Investments of the n^{th} year

D_0 = Total Investments of the initial year

N = Total no. of year

Here,

SCBNL

$D_{2010/11}$ = 17258.68

$D_{2006/07}$ = 13556.23

N = 5

Now, we have,

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

$D_{2010/11} = D_{2006/07} (1+g)^{n-1}$

$17258.68 = 13556.23 (1+g)^{5-1}$

$(1 + g)^4 = 17258.68 / 13556.23$

$(1 + g) = (1.273)^{1/4}$

g = 1.0622 - 1

g= 6.22 %

Appendix – Q (I)

Calculation of Growth Rate of Net Profit of NABIL

D_n = Net Profit of the n^{th} year

D_0 = Net Profit of the initial year

N = Total no. of year

Here,

NABIL

$D_{2010/11}$ = 1337.74

$D_{2006/07}$ = 674

N = 5

Now, we have,

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

$D_{2010/11} = D_{2006/07} (1+g)^{n-1}$

$1337.74 = 674 (1+g)^{5-1}$

$(1 + g)^4 = 1337.74 / 674$

$(1 + g) = (1.985)^{1/4}$

$g = 1.18697 – 1$

g = 18.69 %

Appendix – Q (II)

Calculation of Growth Rate of Net Profit of SCBNL

D_n = Net Profit of the n^{th} year

D_0 = Net Profit of the initial year

N = Total no. of year

Here,

SCBNL

$D_{2010/11}$ = 1119.17

$D_{2006/07}$ = 691.67

N = 5

Now, we have,

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

$D_{2010/11} = D_{2006/07} (1+g)^{n-1}$

$1119.17 = 691.67(1+g)^{5-1}$

$(1 + g)^4 = 1119.17 / 691.67$

$(1 + g) = (1.618)^{1/4}$

$g = 1.1278 - 1$

g= 12.78 %

Appendix-R (I)

Trend Values of Total Deposit of NABIL

(Rs in million)

Year (t)	Total Deposit (y)	x(t-2008)	x^2	xy	Yc= a+bx Yc=25308.12+5808.9x
2006	23342040	-2	4	**-29173.6**	22032.36
2007	31915	-1	1	-19348.4	26845.59
2008	37348.25	0	0	0	31658.82
2009	46410.70	2	4	31915	41285.28
2010	49696.11	1	1	74696	36472.05
N=5	$\sum Y$ = 126540.6	$\sum X = 0$	$\sum X^2$ = 10	$\sum XY$ = 58089	

Here,

$$\mathbf{a} = \frac{\sum y}{N} = \frac{126540.6}{5} = 25308.12$$

Now,

$$\mathbf{b} = \frac{\sum xy}{\sum x^2} = \frac{58089}{10} = 5808.9$$

Trend Values of Total Deposit of NABIL (2011-2015)

Year (t)	x(t-2008)	Trend values Yc=25308.12+5808.9x
2011	3	46098.51
2012	4	50911.74
2013	5	55724.97
2014	6	60538.2
2015	7	65351.43

Appendix-R (II)

Trend Values of Total Deposit of SCBNL

(Rs in million)

Year (t)	Total Deposit (y)	x(t-2008)	x^2	xy	Yc= a+bx Yc=26529.98+3974.73x
2006	23050.5	-2	4	-38688	22598.66
2007	24640.3	-1	1	-23050.5	26148.19
2008	29743.9	0	0	0	29697.72
2009	35871.2	1	1	29743.9	33247.25
2010	37999.2	2	4	71742.4	36796.78
N=5	$\sum Y$ = 132649.9	$\sum X = 0$	$\sum X^2$ = 10	$\sum XY$ = 39747.3	

Here,

$$\mathbf{a} = \frac{\sum y}{N} = \frac{132649.9}{5} = 26529.98$$

Now,

$$\mathbf{b} = \frac{\sum xy}{\sum x^2} = \frac{39747.3}{10} = 3974.73$$

Trend Values of Total Deposit of SCBNL (2011-2015)

Year (t)	x(t-2007)	Trend values Yc=26529.98+3974.73x
2011	3	40346.31
2012	4	43895.84
2013	5	47445.37
2014	6	50994.9
2015	7	54544.43

Appendix-S (I)

Trend Values of Loans & Advances of NABIL

(Rs in million)

Year (t)	Loan & Advances (y)	x(t-2008)	x^2	xy	Yc= a+bx Yc=17601.89+1486.01 x
2006	15545.78	-2	4	-21172.34	11791.07
2007	21365.05	-1	1	-12922.54	16864.75
2008	27589.93	0	0	0	21938.43
2009	32268.87	1	1	21365.05	27012.11
2010	38034.097	2	4	27589.93	32085.79
N=5	∑Y = 88009.47	∑X = 0	$\sum X^2$ = 10	∑XY = 14860.1	

Here,

$$\mathbf{a} = \frac{\sum y}{N} = \frac{88009.47}{5} = 17601.89$$

Now,

$$\mathbf{b} = \frac{\sum xy}{\sum x^2} = \frac{14860.1}{10} = 1486.01$$

Trend Values of Loan & Advances of NABIL (2011-2015)

Year (t)	x(t-2008)	Trend values Yc=17601.89+1486.01x
2011	3	37159.47
2012	4	42233.15
2013	5	47306.84
2014	6	52380.52
2015	7	28003.96

Appendix-S (II)

Trend Values of Loan & Advances of SCBNL

(Rs in million)

Year (t)	Loan & Advances (y)	x(t-2008)	x^2	xy	Yc= a+bx Yc=10995.916+1585.628x
2006	20502.63	-2	4	-12820.48	9114.63
2007	13718.59	-1	1	-8143.2	10836.65
2008	13679.75	0	0	0	12558.67
2009	15956.95	1	1	10502.63	14280.69
2010	1842.27	2	4	27437.18	16002.71
N=5	∑Y = 54979.59	∑X = 0	$\sum X^2$ = 10	∑XY = 15856.28	

Here,

a = $\frac{\sum y}{N}$ = $\frac{54979.59}{5}$ = 10995.916

Now,

b = $\frac{\sum xy}{\sum x^2}$ = $\frac{16976.1}{10}$ = 1697.613

Trend Values of Loan & Advances of SCBNL (2011-2015)

Year (t)	x(t-2008)	Trend values Yc=10995.916+1585.628x
2011	3	17724.73
2012	4	19446.75
2013	5	21168.77
2014	6	22890.79
2015	7	24612.81

Appendix- T (I)

Trend Values of Total Investment NABIL

(Rs in million)

Year (t)	Total Investment (y)	x(t-2008)	x^2	Xy	Yc= a+bx Yc=8046.96+1699.825x
2006	4269.66	-2	4	-8539.32	6542.07
2007	6178.53	-1	1	-6178.53	8235.78
2008	8945.31	0	0	0	9929.50
2009	9966.5	1	1	9966.5	11623.22
2010	10874.8	2	4	21749.6	13316.94
N=5	$\sum Y$ = 40234.8	$\sum X = 0$	$\sum X^2$ = 10	$\sum XY$ = 16998.25	

Here,

$$\mathbf{a} = \frac{\sum y}{N} = \frac{40234.8}{5} = 8046.96$$

Now,

$$\mathbf{b} = \frac{\sum xy}{\sum x^2} = \frac{16998.25}{10} = 1699.825$$

Trend Values of Total Investment of NABIL (2011-2015)

Year (t)	x(t-2007)	Yc=8046.96+1699.825x
2011	3	15010.65
2012	4	16704.37
2013	5	18398.08
2014	6	20091.80
2015	7	21785.52

Appendix-T (II)

Trend Values of Total Investment of SCBNL

(Rs in million)

Year (t)	Total Investment (y)	x(t-2008)	x^2	Xy	Yc= a+bx Yc=14058.788+2219.564x
2006	9702.5	-2	4	19405	11942.07
2007	12847.53	-1	1	12847.53	14017.37
2008	13556.23	0	0	0	16092.67
2009	13927.19	1	1	13927.19	18167.96
2010	20260.49	2	4	40520.98	20243.26
N=5	$\sum Y$ = 70293.94	$\sum X = 0$	$\sum X^2$ = 10	$\sum XY$ = 22195.64	

Here,

$$\mathbf{a} = \frac{\sum y}{N} = \frac{70293.94}{5} = 14058.788$$

Now,

$$\mathbf{b} = \frac{\sum xy}{\sum x^2} = \frac{22195.64}{10} = 2219.564$$

Trend Values of Total Investment of SCBNL (2011-2015)

Year (t)	x(t-2007)	Trend values Yc=14058.788+2219.564x
2011	3	22318.56
2012	4	24393.86
2013	5	26469.15
2014	6	28544.45
2015	7	30619.75

Appendix- U (I)

Trend Values of Net Profit of NABIL

(Rs in million)

Year (t)	Net Profit (y)	x(t-2008)	x^2	xy	Yc= a+bx Yc=685.1+137.933x
2006	455.32	-2	4	-910.64	502.26
2007	518.63	-1	1	-518.63	662.06
2008	674	0	0	0	821.85
2009	746.5	1	1	746.5	981.65
2010	1031.05	2	4	2062.1	1141.45
N=5	∑Y = 3425.5	∑X = 0	$\sum X^2$ = 10	∑XY = 1379.33	

Here,

$$\mathbf{a} = \frac{\sum y}{N} = \frac{3425.5}{5} = 685.1$$

Now,

$$\mathbf{b} = \frac{\sum xy}{\sum x^2} = \frac{1379.33}{10} = 137.933$$

Trend Values of Net Profit of NABIL (2011-2015)

Year (t)	x(t-2008)	Trend values Yc=685.1+137.933x
2011	3	1301.25
2012	4	1461.04
2013	5	1620.84
2014	6	1780.64
2015	7	1940.43

Appendix-U (II)

Trend Values of Net Profit of SCBNL

(Rs in million)

Year (t)	Net Profit (y)	x(t-2008)	x^2	xy	Yc= a+bx Yc=746.732+113.198x
2006	539.2	-2	4	-1078.4	618.53
2007	658.76	-1	1	-658.76	737.3
2008	691.67	0	0	0	856.07
2009	818.92	1	1	818.92	974.83
2010	1025.11	2	4	2050.22	1093.6
N=5	$\sum Y$ = 3733.66	$\sum X$ = 0	$\sum X^2$ = 10	$\sum XY$ = 1131.98	

Here,

$$\mathbf{a} = \frac{\sum y}{N} = \frac{3733.66}{5} = 746.732$$

Now,

$$\mathbf{b} = \frac{\sum xy}{\sum x^2} = \frac{1131.98}{10} = 113.198$$

Trend Values of Net Profit of SCBNL (2011-2015)

Year (t)	x(t-2008)	Trend values Yc=746.732+113.198x
2011	4	1212.36
2012	5	1331.13
2013	6	1449.90
2014	7	1568.66
2015	8	1687.43