Investment Policy of Commercial Banks In Nepal

(A comparative study of NABIL Bank

&

Standard Chartered Bank Nepal Ltd.)

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DECLARATION

I hereby, declare that the work reported in this thesis entitled "**Investment Policy of Commercial Banks In Nepal**"**(A comparative study of NABIL Bank & Standard Chartered Bank Nepal Ltd.)** submitted to the St.Xavier's College, Faculty of Management, Tribhuvan University, is my original done in the form of partial fulfillment of the requirements for the Masters of Business Studies (M.B.S), under the supervision of Prof. Shanker Thapa, for St.Xavier's College, Tribhuvan University.
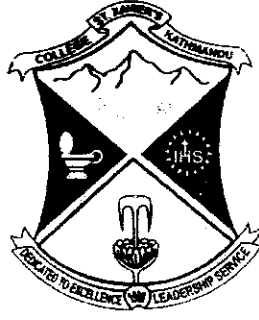

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RECOMMENDATION

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Entitle

Investment Policy of Commercial Bank in Nepal

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

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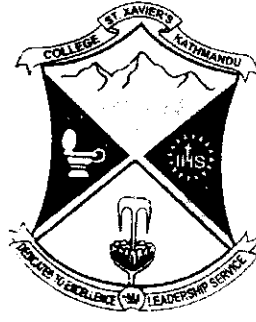
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VIVA - VOCE SHEET

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

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Investment Policy of Commercial Bank in Nepal

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

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TABLE OF CONTENTS

CHAPTER 4: PRESENTATION AND ANALYSIS

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

List of Tables

LIST OF FIGURES

LIST FO ABBREVIATIONS

NABIL	:	Nepal Arab Bank Limited
SCBNL	:	Standard Chartered Bank Nepal Limited
NIDC	:	Nepal Industrial Development Corporation
NRB	:	Nepal Rastra Bank
RBB	:	Rastriya Banijya Bank
NBL	:	Nepal Bank Ltd.
EBL	:	Everest Bank Ltd.
CAPM	:	Capital Assets Pricing Model
NIBL	:	Nepal Investment Bank Ltd.
NBBL	:	Nepal Bangladesh Bank Ltd.
NGBL	:	Nepal Grindlays Bank Ltd.
HBL	:	Himalayan Bank Ltd.
GDP	:	Gross Domestic Product
Govt.	:	Government
HMG/N	:	His Majesty's Government of Nepal
HBL	:	Himalayan Bank Ltd.
IRR	:	Interest Rate Risk
JVBs	:	Joint Venture Banks
NGBL	:	Nepal Grindlays Bank Ltd.
NPAs	:	Non-Performing Assets
NRB	:	Nepal Rastra Bank
NBBL	:	Nepal Bangladesh Bank Ltd.
ROA	:	Return on Asset
Rs	:	Rupees
RWE	:	Risk Weighted Assets

S.D.	:	Standard Deviation
C.V.	:	Coefficient Variation
COV	:	Covariance
F/Y	:	Fiscal Year
No.	:	Number
TU	:	Tribhuvan University
i.e.	:	that is
etc	:	Etcetera
Fig	:	Figure
e.g.	:	For Example

CHAPTER – I
INTRODUCTION

1.1   General Background of Study

Nepal is one of the least developed countries of the world. The economic development of the country, which is reflected by the annual GDP growth rate, is also not very significant. Nepal's average GDP growth rate in recent years is around 3 percent and recently it has declined to 0.8% and it has also the fluctuating trend. The development of any country largely depends upon its economic development. Thus the primary goal of any nation, including Nepal is rapid economic development to promote the welfare of the people and the nation as well.

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. A key factor in the development of the country is the mobilization of domestic resources and their investment for productive use to the various sectors. To make it more effective, commercial banks formulate sound investment policies, which eventually contribute to the economic of a country. The sound policies help commercial bank maximize quality and quantity of investment and thereby, achieve the own objective of profit maximization and social welfare. The banking sector has to play development role to boost the economy by adopting the growth oriented investment policy and building up the financial structure for future economic development. Formulation of sound investment policies and coordinated and planned efforts forward the forces of economic growth. "Banks are those institutions which accept deposit from the public and in turn provide credit to business and industry that directly makes a remarkable impact on the economic development of a

1

country. To collect fund and utilize it in good investment is a very risky job. Ad-hoe investment decision leads the bank out of the business there by downing the economic growth of the country. Hence sound investment policy of a bank is another secret of a successful bank. Various people have given their view regarding the investment policy of commercial banks." (Bhalla, 1983: 2)

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.

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). In Nepal economic growth and development has been considered as an 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 objectives 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. There are total 31 NRB licensed commercial banks in Nepal.

1.1.2 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 (*Sharpe W.F. and Alexander J. Gorden, 1998: 1)*
There are basically three concepts of investment:

1. Economic investment- that is on economist's definition of investment.
2. Investment in more general or extended sense, which is used by the man of the street" or ordinary people
3. 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 V.K and Tutesa K.S, 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 for a future uncertain benefit *(Francis Jack Clark, 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 (*Vaidya Shakespeare, 1999: 46-47).*

1.1.3 An Introduction of 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 Vol iv (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:

2   To have performing assets.

3   To contribute to economic development.

4   To give guidance to lending officials.

5   To establish a standard for control, etc.

6   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 of NABIL on fund mobilization in comparison to SCBNL?
- What is the relationship between various important variables of NABIL i.e deposits, loan and advances, total investments and net profit in comparison to SCBNL?
- What is the liquidity, efficiency of assets management, profitability and risk position of NABIL in comparison to 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 compares it with the investment policy of SCBNL.

The major objectives of the study are given below:
- To examine the fund mobilization of NABIL Bank Limited in comparison to SCBNL.
- To analyze deposit utilization and its relationship with total investment and Net Profit of bank.

- 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.

In order to meet the above mentioned objective, the following analysis has been done:
- Financial Analysis
- Statistical Analysis
- Investment Policy Analysis

1.5 Limitation 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.
- The whole study is based on the data of different period
- Only two banks (Nabil Bank Limited and Standard Chartered Bank Limited) are taken for study
- 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.

1.6 Organization of the Study

The whole study has been divided into five chapters as:

Chapter - I: Introduction
This chapter deals with the background of the study, focus of the study, statement of the problem, objective of the study, significant of the study, limitation of the study and organization of the study.

Chapter - II: Review of Literature
This chapter includes the conceptual review, review of related study and justification of the study.

Chapter - III: Research Methodology
This chapter includes the research design, population and sample, sources of data, data collection technique and data analysis tools

Chapter - IV: Presentation and Analysis of Data
This chapter presents the primary data that have been collected through questionnaires and interviews as well as secondary data collected from different sources. They have been presented in the form of tables and diagrams. The major findings of the study have been also presented in this section.

Chapter – V: Summary, Conclusion and Recommendations
This chapter includes summary, conclusion and recommendations of the study.

CHAPTER – II
REVIEW OF LITERATURE

The first chapter highlighted the importance of Investment for economic development of the country and performance of commercial banks in terms of their Investment operation.

This chapter deals with the review of research studies related to similar topic. Under this chapter, a conceptual framework, compilation of extracts from various texts, journals, articles reports, previous thesis and terminologies related to investors have been presented.

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).

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.

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:-

a)   Should be basically of short term characters,

b)   Should be well spread,

c)   Should be repayable on demand,

d)   Must be profitable,

e)   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.

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 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 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 Thesis

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.

Joshi Rabindra (2003) in his research work," **Comparative study on Investment Policy of Standard Chartered Bank Nepal Limited and Everest Bank Limited**" has highlighted the main Objectives:

- To compare investment policy of commercial banks and discuss 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.

The findings of the researcher were as follows:

- 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.

Shakya Pramila (2008) in her thesis entitle "Investment Policy of Commercial Banks" made a comparative study of Nabil Bank Limited with Himalayan Bank Limited. The main objectives of the study were as follows :

- To make comparative study of NABIL and HBL on investment policy.
- To analyse, evaluate and interpret financial performance of NABIL and HBL in terms of liquidity, assets management, profitability and risk
- To find the various variables like deposit, loan and advances, investment, net profit and assets of NABIL and HBL.
- To evaluate trend of deposit, Investment, loan and advances and projection for the future.
- To provide suggestions and recommendations to NABIL and HBL on the basis of study made that may help the management to improve investment policy and the performance.

The main findings of the study were as follows:

- Current ratio of both NABIL and HBL is consistent but still below the standard ie. Ratio has not been maintained at 2:1. NABIL is better in terms of current ratio and investment on government securities whereas HBL has maintained cash reserve ratio and cash and bank balance in a better way.
- Asset management ratio and profitability ratio of NABIL is better than that of HBL except total investment to total deposit ratio.
- Both capial risk and credit risk of NABIL is higher compared to HBL. NABIL is more variable and less consistent.
- Deposits, Investment, loans and advances, net profit of both banks are in increasing trend. HBL is slightly better than NABIL in terms of growth ratios.

Basnet Manju (2008) made a comparative study of NABIL and HBL in her thesis entitled "Comparative Study of Commercial Banks" with the following objectives :

- To examine the fund mobilization fund and investment policy of HBL and NABIL selected for the study.
- To assess the liquidity, profitability, risk positions in asset management of these commercial Banks.
- To evaluate the growth ratios of loan and advances, total investment with respect to growth rates of total deposits and net profit of these banks.
- To find out the relationship between the banks' total deposits and loans and advances, total deposit and total investment and total outside assets and net profit.
- To examine, interpret and forecast the trend of their deposits and loan and advances, investment and net profit.

The main findings of the study were as follows:

- HBL had better liquidity position that NABIL in terms of current ratio. HBL had maintained better cash and bank balance, investment on government securities and better deposit collection.
- Asset management ratio and profitability ratio of NABIL is better than that of HBL except total investment to total deposit ratio. Loans and advances to total work fund ratio was comparatively higher than HBL, i.e. NABIL had taken better position. NABIL was successful in utilization its overall working fund on profit generating activity than HBL, and same had happened with return from loan and advances ratios where again NABIL had taken high position. Interest earned to total outside assets ratio resulted that NABIL was somewhat successful to collect the interest from outside assets than HBL. Total interest earned to total working fund of NABIL was successful to utilize total assets to earn high interest.
- Both capial risk and credit risk of NABIL is higher compared to HBL. NABIL is more variable and less consistent. NABIL was successful to attract the deposit and inter bank fund, and utilize its loan and advances

from total assets in safest way by taking high risk, which helped to increase the level of profit and maximizing the value of the firm.

- Deposits, Investment, loans and advances, net profit of both banks are in increasing trend. HBL is slightly better than NABIL in terms of growth ratios.

Saju Shrestha, (2007) conducted a study on "A Comparative Analysis on investment performance of commercial banks in Nepal" with the following objectives:

- To analyze the investment activities and fund mobilization with respect to fund based on-balance sheet transactions and fee based off-balance sheet transactions
- To study the asset utilization system, profitability and risk position of commercial banks under study
- To assess the deposit utilization trends and its projection for the future
- To evaluate the growth ratios of loan and advance and total investment and respective growth rate of total deposit and net profit
- To appraise the suggestion on the basis of findings for further growth of the banks under study

The study was conducted on the basis of secondary data. The research findings of the study were as follows:

The liquidity position of NIBL was stronger than NABIL and HBL. At the same time, liquidity position of NIBL was highly fluctuating, which showed that NIBL bore higher risk than other two banks. NIBL had the least investment in Government Securities, which considered the least risky asset. From the analysis of assets, management ratio of NIBL in comparison to NABIL and HBL was more successful regarding asset management and deposit mobilization. NIBL's investment on shares and debentures was high in comparison to the other two banks but its performance regarding total investment has been very poor. In the profitability analysis, none of the three banks' profitability position was clearly better. However, NABIL was slightly better profitability. Therefore,

their profitability ratios were in moderate position. From the risk point of view, NABIL and NIBL were facing higher risk than HBL, but the risk level of all three banks seemed almost the same. From the analysis of growth ratios, NIBL's collection of deposit, granting of loans and advances and net profit were better but in terms of investment, HBL is better. The coefficient of correlation analysis between different variables of NABIL, NIBL and HBL revealed that NABIL was weaker regarding mobilization of deposits as loans and advances and NIBL was performing extremely well regarding earning profits from outside assets. From the trend analysis study, it was found that all banks were mobilizing their total deposits into loans and advances in increasing trend, which was the indication of efficient mobilization.

Geeta Regmi (2006) conducted "A Comparative Study on Investment Policy of Everest Bank and Himalayan Bank Limited" with the objectives as given below:

- To find out the relationship between total investments, deposits, loans and advances, net profit and assets and compare them.
- To evaluate the liquidity, asset management, efficiency, profitability and risk portion of EBL and HBL.
- To analyze the deposit utilization trend and its projection for five years of HBL and EBL
- To provide package of a workable suggestions and possible guidelines to improve investment policies.

The study was carried out the basis of secondary data. The research findings of the study were:

The liquidity position of EBL was comparatively better than HBL. EBL had the highest cash and bank balance to total deposit ratio, cash and bank balance to current assets ratio than that of HBL. Both EBL and HBL had almost same pattern of investment on government securities, but fluctuating ratios showed the unstable policy of investment. EBL has higher loan and advances to current assets ratio and successful in deposit collection as well. The assets management ratios of both banks are satisfactory. Both

bank EBL and HBL had provided its most portion of deposit as loan and advances. Moreover, EBL had invested its more portions as loan and advances, in case of investment in other sectors, HBL had adopted diversified investment policy. EBL invest its working fund in government securities and other companies share and debentures than that of HBL, So HBL is less effective in comparison to EBL. In profitability analysis, HBL had maintained high profit margin regarding profitability position. HBL was more successful to generate income through loan and advances and operating income and it has earned more from total outside assets and total working fund. From the study, it was concluded that profitability of HBL was better than that of EBL. From the risk point of view, HBL had borne lower liquidity risk and credit risk in comparison to EBL regarding various aspects of banking activities. It could be said that HBL had followed a stable liquidity policy justified by lower coefficient of variation.

Jyoti Joshi (2005) conducted a study on "Investment Policy of Commercial Banks in Nepal: A Comparative Study of Everest Bank Limited with NABIL Bank Limited and Bank of Kathmandu" with the objectives that follow:

- To discuss fund mobilization and investment policy of EBL, NABIL and BOK Ltd.
- To evaluate the liquidity, efficiency and profitability and risk position
- To evaluate the growth ratios of loan & advances, total investments with other financial variables.
- To analyze the trend of deposits utilization towards total investment and loan & advances
- To conduct hypothetical test to find whether there is significant difference between the various important ratios of EBL, NABIL and BOK.

The secondary data were used to conduct the study. The research findings of the study were:

The liquidity position of the EBL was better than NABIL and BOK. EBL had the highest cash and bank balance to total deposits and cash and bank balance to current assets ratio.

Nabil had the lowest liquidity position. EBL had good deposit collection and made enough investment on Government Securities, but it maintained a moderate investment policy on loans and advances. From the analysis of assets management or activity ratio, it was concluded that EBL was average, or in between NABIL and BOK. The total investment of EBL was in between the other two banks. In the study, loans and advances to total deposit was higher in BOK, but total investment to total deposit was higher in NABIL. Investment on shares and debentures to total working fund ratio was higher in BOK. However, the coefficient of variation was higher in EBL. In analysis of profitability, total interest earned to total outside assets of EBL is lowest at all. However, overall analysis of profitability ratios showed that EBL was an average in comparison to other compared banks i.e., NABIL and BOK. From the viewpoint of risk ratio, EBL had higher capital risk ratio, but average of credit risk ratio of NABIL and BOK.

2.3 Review of Books & Articles

Country's growth rate is largely depending on Investment and commercial banks are key for investing funds in productive works as they deal with money. 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

    I.   Economic Investment-that is an economist's definition of Investment.

    II.   Investment in a more general or extended sense, which is used by "the main of street"

    III.   The sense in which we are going to be very much interested, namely financial Investment.

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.

Review of Articles

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."

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.

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 has 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 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:

- Nepal Bank Limited
- Rastriya Banijya Bank Limited
- Nepal Arab Bank Limited.
- Standard Chartered Bank Nepal Limited
- Nepal Investment Bank Limited.
- Himalayan Bank Limited.
- Nepal SBI Bank Limited.

- Nepal Bangladesh Bank Limited.

- Everest Bank Limited.

- Bank of Kathmandu Limited.

- Nepal Credit and Commercial Bank Limited.

- Nepal Industrial and commercial Bank Limited.

- Lumbini Bank Limited.

- Siddhartha Bank Limited

- Macchapuchhre Bank Limited.

- Kumari Bank Limited.

- Laxmi Bank Limited.

- Agricultural Development Bank Limited

- Global Bank Limited.

- Citizens International Bank Limited.

- Prime Commercial Bank Limited.

- Sunrise Bank Limited.

- Bank of Asia Nepal Limited.

- Kist Bank Limited

- Development Credit Bank Limited

- NMB Bank Limited

- Civil Bank Limited

- Janata Bank Limited

- Mega Bank Limited

- Commerz and Trust Bank Limited

- Century Bank 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,

$$\frac{\text{Loan \& Advances}}{\text{Total Deposit}}$$

(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,

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

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,

$$\frac{\text{Loan and Advances}}{\text{Total Working Fund}}$$

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,

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

(V)   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,

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

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,

$$\frac{\text{Net Profit}}{\text{Loan and Advances}}$$

(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,

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

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,

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

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.

(C) 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,

$$\frac{\text{Total Cash and bank balance}}{\text{Total deposits}}$$

(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,

$$\frac{\text{Total loan \& advances}}{\text{Total assets}}$$

(E) Growth Ratios

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

a) Growth ratio of Total Deposits
b) Growth ratio of Loan and Advances
c) Growth ratio of Total Investments
d) 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:

a) Co-efficient of correlation between deposit and loan and advances
b) 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 NABIL and the SCBNL and makes the forecast for the next five years.

a) Trend analysis of Total Deposits
b) Trend analysis of Loan and Advances
c) Total analysis of Total Investment
d) 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:

A. Liquidity ratio
B. Asset Management ratio
C. Profitability ratio
D. Risk ratio
E. Growth ratio

Summaries of Financial Performance

RATIOS	NABIL			SCBNL		
	Mean($\overline{X}$)	S.D (σ)	C.V.	Mean($\overline{X}$)	S.D (σ)	C.V
Liquidity Ratios						
a. Cash and bank balance to Total deposit	5.936	2.50	42.12	6.998	1.37	19.58
b. Investment on Govt. securities to Current Asset Ratio	15.444	3.66	23.70	33.644	4.24	12.60
c. Loans and advances to Current Assest Ratio						
	71.874	3.91	5.44	48.832	4.30	8.80
Asset Management Ratios						
a. Loan and advance to Total deposit ratio	68.746	2.78	4.04	42.310	3.15	7.44
b. Total Investment to Total deposit ratio	32.016	3.32	10.37	54.274	3.80	7.00
c. Loan & Advance to Total Working Fund Ratio	59.444	2.44	4.10	37.276	2.73	7.32
d. Investment on Government Securities to Total Working Fund	12.822	3.30	25.74	25.802	4.11	15.93
e. Investment on shares and debenture to Total working Fund	0.21	0.05831	27.77	0.214	0.09	43.34
Profitability Ratios						
a. Return on Loan and Advance ratio	3.822	0.3162	8.27	6.846	0.539	7.87
b. Return on Equity	33.234	2.57	7.73	37.136	3.63	9.77
c. Total Interest Earned to Total Outside Assets	7.162	0.895	12.50	5.664	0.147	2.60
Risk Ratios						
a. Liquidity Risk Ratio	5.936	2.50	42.12	6.998	1.37	19.58
b. Credit Risk Ratio	59.444	2.437	4.10	37.276	2.75	7.36

Note: 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 No.2

Cash and bank balance to Total Deposit ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	2006/07	2007/08	2008/09	2009/10			
NABIL	3.26	6	8.37	9.03	3.02	5.936	2.5	42.12
SCBNL	5.54	8.2	6.89	8.88	5.48	6.998	1.37	19.58

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 8.88% 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. 6.998%>5.936% 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. 42.12>19.58.

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 No.3

Investment on Govt. Securities to Current Asset Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/10**			
NABIL	13.41	20	15.54	9.74	18.53	15.444	3.66	23.70
SCBNL	40.26	32.29	29.64	36.73	29.30	33.644	4.24	12.60

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 2007/08 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 40.26% in FY 2005/06 and lowest is 29.30% 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 No.4

Loan and Advances to Current Asset Ratio (%)

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/10**			
NABIL	75.43	64.69	71.44	72.53	75.29	71.874	3.91	5.44
SCBNL	41.61	47.67	49.97	50.26	54.81	48.832	4.30	8.80

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 75.43 in F/Y 2005/06 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 No.5

Loan and Advance to Total Deposit Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/10**			
NABIL	66.79	66.6	66.94	73.87	69.53	68.746	2.78	4.04
SCBNL	38.76	42.62	46.12	38.70	45.35	42.310	3.15	7.44

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 73.87% in F/Y 2008/09 and that of SCBNL is 46.12% in F/Y 2007/08. 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 68.746 but in case of SCBNL, it is 42.310. 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. 7.44>4.04%..

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 No.6

Total Investment to Total Deposit Ratio

	Fiscal Year							
Banks	**2005/06**	**2006/07**	**2007/08**	**2008/09**	**2009/10**	**Mean**	**SD**	**C.V%**
NABIL	31.93	38.32	31.23	29.12	29.48	32.016	3.32	10.37
SCBNL	55.74	55.02	46.82	57.31	56.48	54.274	3.80	7.00

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 2008/09 i.e. 29.12%. SCBNL's highest ratio is in F/Y 2009/10 i.e. 56.48 % and lowest

ratio in F/Y 2007/08 i.e. 46.82%. 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. 32.016 <54.274. 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. 10.37%>7.00%.

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 No. 7

Loan & Advances to Total Working Fund ratio (%)

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	2006/07	2007/08	2008/09	2009/10			
NABIL	57.87	57.04	57.54	62.89	61.88	59.444	2.44	4.10
SCBNL	34.68	36.73	41.15	34.14	39.68	37.276	2.73	7.32

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 2008/09 i.e. 62.89% and the lowest ratio is 57.04% in F/Y 2006/07. In case of SCBNL, it maintained the highest ratio in F/Y 2007/08 i.e. 41.15% and the lowest in F/Y 2008/09 i.e. 34.14%

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 canalize 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 NIBL is presented in the following table.

Table No.8

Investment on Government Securities to Total Working Fund Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	2006/07	2007/08	2008/09	2009/10			
NABIL	10.29	17.63	12.51	8.45	15.23	12.822	3.30	25.74
SCBNL	33.52	24.88	24.41	24.96	21.22	25.802	4.11	15.93

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. 25.802% >12.822% 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. 25.74>15.93 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 No.9

Investment on Shares and Debentures to Total Working Fund Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	2006/07	2007/08	2008/09	2009/10			
NABIL	0.12	0.21	0.22	0.19	0.31	0.210	0.05831	27.77
SCBNL	0.06	0.16	0.32	0.27	0.27	0.214	0.09	43.34

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 higher 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. 43.34>27.77. 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 No.10

Return on Loan and Advance Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	2006/07	2007/08	2008/09	2009/10			
NABIL	4.01	4.34	3.49	3.74	3.53	3.822	0.3162	8.27
SCBNL	7.37	6.59	5.97	7.49	6.80	6.846	0.539	7.87

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 NABIL i.e. 8.27% indicates low variability of ratios than that of SCBNL.

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 No.11

Return on Equity

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	2006/07	2007/08	2008/09	2009/10			
NABIL	31.29	35.95	36.29	32.94	29.70	33.234	2.57	7.73
SCBNL	23.51	28.75	18.10	35.58	32.2	37.136	3.63	9.77

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 2009/10 i.e. 29.70. Similarly SCBNL has highest ratio i.e. 35.58 in F/Y 2008/09.

On the basis of mean ratio, it can be said that SCBNL is strong to earn high profit to its shareholders in comparison to NABIL which can be viewed by the higher mean ratio i.e. 37.136%>33.234%. The CV of SCBNL is higher than NABIL i.e. 9.77%>7.73% 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 No.12

Total Interest earned to Total outside Asset Ratio (%)

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	2006/07	2007/08	2008/09	2009/10			
NABIL	6.86	6.48	6.29	7.34	8.81	7.162	0.895	12.50
SCBNL	5.46	5.86	5.76	5.56	5.70	5.664	0.147	2.60

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. 5.664<7.162%. Moreover, C.V of SCBNL is lower than that of NABIL ie: 2.60<12.50%.

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 No.13

Liquidity Risk Ratio (%)

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	2006/07	2007/08	2008/09	2009/10			
NABIL	3.26	6	8.37	9.03	3.02	5.936	2.5	42.12
SCBNL	5.54	8.2	6.89	8.88	5.48	6.998	1.37	19.58

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 8.88 in F/Y 2008/09 and lowest ratio in F/Y 2005/06 i.e. 5.54. The mean ratio of SCBNL is higher than that of

NABIL i.e. 6.998>5.936. 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 No.14

Credit Risk Ratio

Banks	Fiscal Year					Mean	SD	C.V%
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/10**			
NABIL	57.87	57.04	57.54	62.89	61.88	59.444	2.4370	4.10
SCBNL	34.68	36.73	41.15	33.70	39.68	37.276	2.75	7.36

Appendix-M

The above table shows that both banks have fluctuating trend. In case of NABIL, its highest ratio is 62.89% in F/Y 2008/09 and lowest ratio is 57.04 in F/Y 2006/07 where as the ratio of SCBNL subject to highest is 41.15 in F/Y in 2007/08 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. 59.444>37.276. On the other hand, low C.V of NABIL i.e. 4.10% 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 no.15

Growth Ratios of Total Deposits (%)

Total Deposits					(Rs in million)
	Fiscal Year				Growth Rates (%)
Banks	2005/06	2006/07	2007/08	2008/09	2009/10	
NABIL	19348.4	23342.4	31915	37348.25	46410.7	24.45
SCBNL	23050.5	24640.3	29743.9	35350.80	35182.70	11.15

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 24.45% whereas the same of the SCBNL is 11.15%. It indicates SCBNL's poor performance to collect greater deposits year by year.

Figure No. 1

Total Deposit (NABIL & SCBNL)
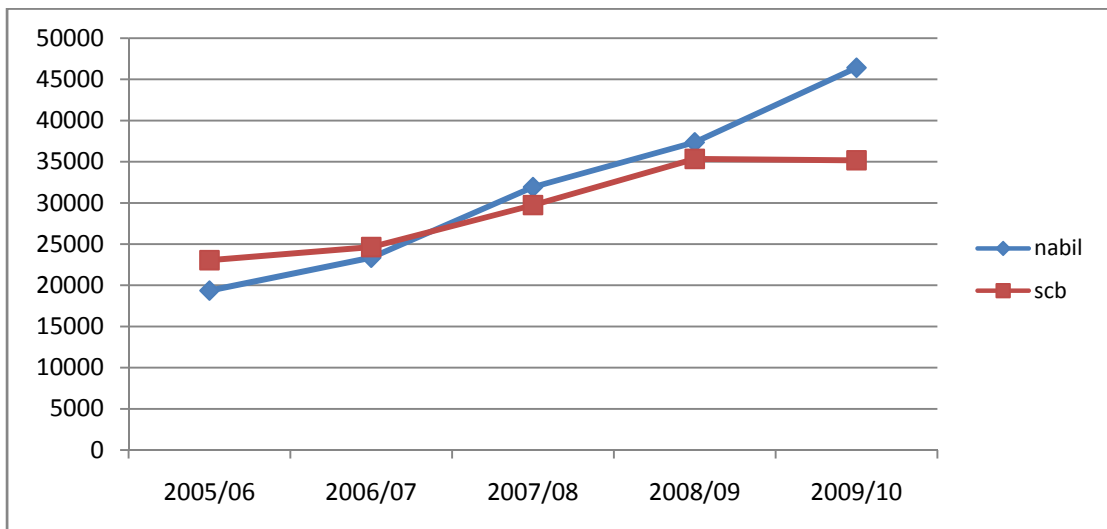
Table no.16

Growth Ratios of Loan and Advances (%)

Loan & Advances					(Rs in million)
	Fiscal Year				**Growth Rates (%)**
Banks	**2005/06**	**2006/07**	**2007/08**	**2008/09**	**2009/10**	
NABIL	12922.54	15545.78	21365.05	27589.93	32268.87	25.71
SCBNL	8935.41	10502.63	13718.59	13679.75	15956.95	15.60

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 No. 2

Total Loan and Advances (NABIL & SCBNL)
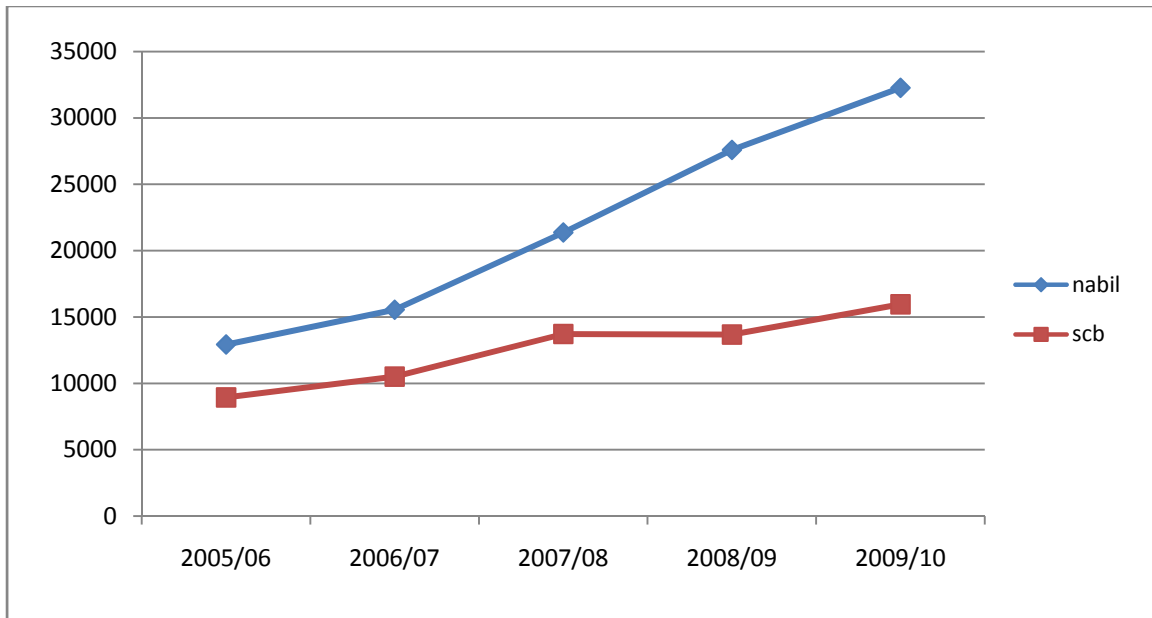
Table no.17

Growth Ratios of Total Investment (%)

Total Investment						(Rs in million)
	Fiscal Year					**Growth Rates (%)**
Banks	**2005/06**	**2006/07**	**2007/08**	**2008/09**	**2009/10**	
NABIL	6178.53	8945.31	9966.5	10874.8	13682.37	21.99
SCBNL	12847.53	13556.23	13927.19	20260.49	19871.89	11.52

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 11.52% as whereas the same of the NABIL is 21.99%. It indicates SCBNL's poor performance on investment of different sectors in comparison to NABIL.

Figure No. 3

Total Investment (NABIL & SCBNL)
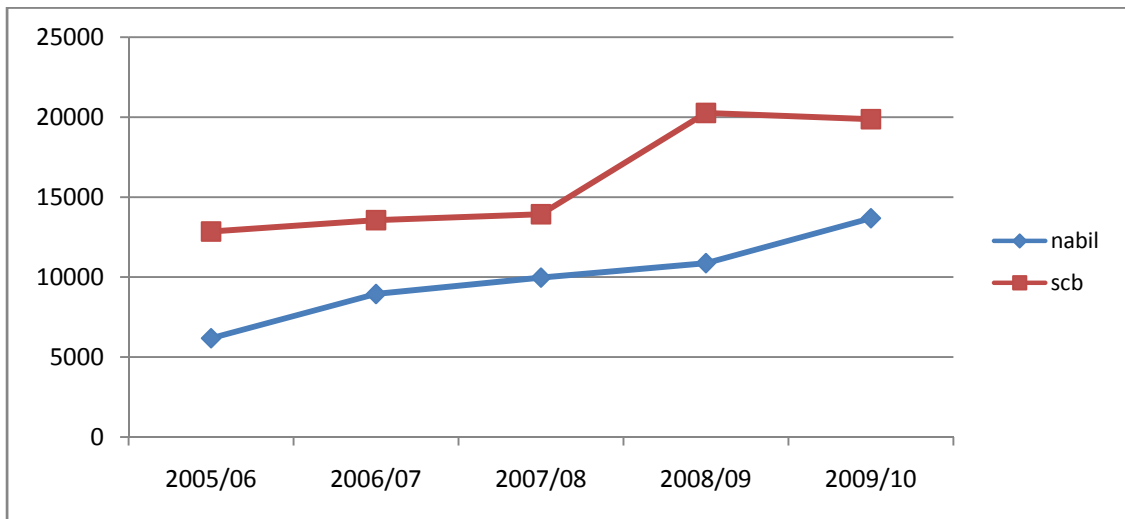
Table no.18

Growth Ratios of Net Profit (%)

Net Profit					
					(Rs in million)
	Fiscal Year				**Growth Rates (%)**
Banks	**2005/06**	**2006/07**	**2007/08**	**2008/09**	**2009/10**	
NABIL	518.63	674	746.5	1031.05	1139.10	21.74
SCBNL	658.76	691.67	818.92	1025.11	1085.87	13.31

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. 21.74>13.31%. It indicates that SCBNL has to invest large amount in various secured and more profitable sectors in comparison to NABIL.

Figure No. 4

Total Net Profit (NABIL & SCBNL)

4.2   Statistical Analysis

Some Statistical tools such as co-efficient of correlation analysis between different variables, trend analysis of deposits, loan and advances, Investments and Net profit as well as Hypothesis Test (t-statistics) are used to achieve the objectives of the study.

4.2.1. Co-efficient of Correlation Analysis

Under this topic, Karl Pearson's co-efficient has been used to find out the relationship between Deposit and Loan and advances, Deposit and Total Investment and Net Profit and Total outside Assets.

I. Co-efficient of Correlation between Deposit and Loan and Advances

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

The following table shows relation between those variables of NABIL and SCBNL during the study period.

Table No.19

Banks	Evaluation Criterions			
	R	r^2	P.Er	6P.Er
NABIL	0.9941	0.9882	0.0036	0.0215
SCBNL	0.92	0.8464	0.0465	0.279

Appendix- R (I) & (II)

From the above table, in case of NABIL, it is found that co-efficient of relation between Deposits and loan and advances is 0.9941. It shows positive relationship between these two variables. Moreover, we consider the value of co-efficient of determination (r^2) is 0.9882 and it means 98.82% of the variation in the dependent variable (loan and advances) has been explained by the independent variable (deposit). Similarly considering the value of 'r' is i.e. 0.9941 and comparing it with 6P.Er i.e. 0.0215, we can find that 'r' is highly greater than the value of 6 P.Er which reveals that the value of 'r' is

significant. In other words there is significant relationship between deposits and loan and advances in case of NABIL.

Likewise, in case of SCBNL, the Karl-Pearson's co-efficient of correlation between deposits (independent variables) and loan and advances (dependent variable) is 0.92, which indicates positive correlation between these two variables. Similarly, the value of co-efficient of determination (r^2) is found 0.8464, which shows that 84.64% in the dependent variable (loan and advances) has been explained by the independent variable (deposits). Moreover, the value of r = 0.92 is more than six times of probable error (0.279) which means the relationship between deposits and loan and advances is significant. In other words, the SCBNL are successful to mobilize their funds in proper way in loan and advances.

Lastly, we can draw a conclusion from the above analysis that in both NABIL and SCBNL, there is positive relationship between deposits and loan and advances. The relationship is significant and the value 'r^2'shows high percent in the dependent variable has been explained by the independent variable. This indicates that NABIL as well as SCBNL are successful to mobilize their deposits in proper way as loan and advances.

II. Co-efficient of Correlation between Deposits and Total Investment
The co-efficient of correlation between deposit and total investment measures the degree of relationship between these two variables. In this analysis, Deposit is independent variable(X) and Total Investment is dependent variable (Y). The purpose of computing correlation of co-efficient is to justify whether the deposits are significantly used in proper way or not and whether there is any relationship between these two variables.
The following table shows relation between deposits and total investment i.e. P.Er, 6 P.Er, and co-efficient of determination of NABIL and SCBNL during the study period.

Table No.20

Banks	Evaluation Criterions			
	r	r^2	P.Er	6P.Er
NABIL	0.968	0.937024	0.01908	0.114
SCBNL	0.94	0.8836	0.035	0.21

Appendix- S (I) & (II)

From the above table, in case of NABIL, it is found that co-efficient of relation between deposits (independent) and total investments (dependent) value of 'r' is 0.968. It shows positive relationship between these two variables. Moreover, we consider the value of co-efficient of determination (r^2) is 0.937024 and it means 93.7024% of the variation in the dependent variable (total investments) has been explained by the independent variable (deposits). Similarly considering the value of 'r' is i.e. 0.968 and comparing it with 6P.Er i.e. 0.114, we can find that 'r' is greater than the value of 6 P.Er which reveals that the value of 'r' is significant. In other words there is significant positive relationship between deposits and total investments in case of NABIL.

Likewise, in case of SCBNL, the Karl-Pearson's co-efficient of correlation between deposits (independent variables) and total investments (dependent variable) is 0.94, which indicates positive correlation between these two variables. Similarly, the value of co-efficient of determination (r^2) is found 0.8836, which shows that 88.36% in the dependent variable (total investments) has been explained by the independent variable (deposits). Moreover, the value of r = 0.94 is more than six times of probable error (0.21) which means the relationship between deposits and total investments is significant. In other words, the SCBNL are successful to mobilize their funds in proper way in total investments.

From the above analysis, we can draw a conclusion from the above analysis that in both NABIL and SCBNL, there is positive relationship between deposits and total investments. The relationship is significant and the value 'r^2'shows high percent in the dependent variable has been explained by the independent variable. 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.

4.2.2. Trend Analysis and Projection for next three 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 three 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 2006-2010 are given below and forecast for next three years from 2011 to 2013 is done. Regarding this topic, an effort has been made to calculate the trend values of deposit of NABIL and SCBNL.

Table No.21

Trend values of Total Deposit of NABIL and SCBNL (Amount in NPR Million)

Years	Trend values of NABIL	Trend values of SCBNL
2006	18046.86	22598.66
2007	24859.905	26096.15
2008	31672.95	29593.64
2009	38485.995	33091.13
2010	45299.04	36588.62
2011	52112.085	40086.11
2012	58925.13	43583.60
2013	65738.175	47081.09

Appendix- T (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 No. 5

Trend value of total deposit of NABIL & SCBNL
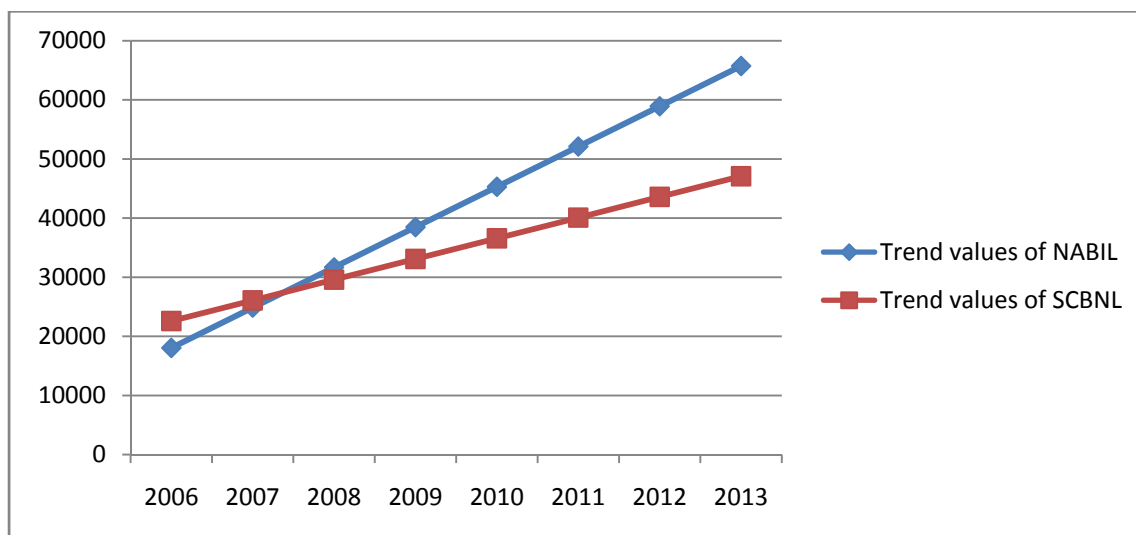
II. Trend Analysis of Loan and Advances

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 three year till 2013 has also been done.

Table No.22

Trend values of Loan and Advances of NABIL and SCBNL

(Rs. In million)

Years	Trend values of NABIL	Trend values of SCBNL
2006	11791.072	9114.626
2007	16864.753	10836.646
2008	21938.434	12558.666
2009	27012.115	14280.686
2010	32085.796	16002.706
2011	37159.477	17724.726
2012	42233.158	19446.746
2013	47306.839	21168.766

Appendix- U (I) & (II)

60

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 2013 will be Rs 47,306.839 million which is the highest under the study period. Similarly, the same of SCBNL will be Rs 21,168.766 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 No. 6

Trend value of loan and advances of NABIL & SCBNL
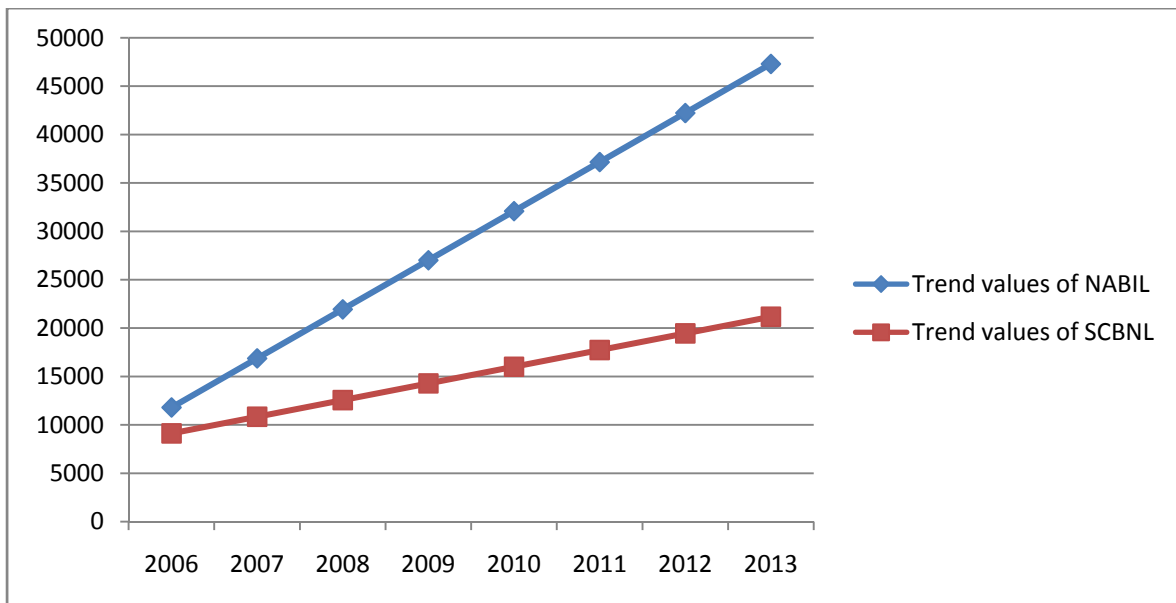
- **Trend Analysis of Total Investment**

Under this topic, the trend value of total investment for five years from 2006-2010 have been calculated and forecast for next three years from 2011-2013. The following table shows the trend value of total investment for eight years from 2006 to 2013 of NABIL and SCBNL.

Table No.23

Trend values of Total Investment of NABIL and SCBNL

(Rs. In million)

Years	Trend values of NABIL	Trend values of SCBNL
2006	6542.06	11942.07
2007	8235.78	14017.37
2008	9929.50	16092.67
2009	11623.22	18167.97
2010	13316.94	20243.27
2011	15010.66	22318.57
2012	16704.38	24393.87
2013	18398.10	26469.17

Appendix- V (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 2013 will be Rs. 18,398.10 million and that of SCBNL will be Rs 26,469.17 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 No. 7

Trend value of Total Investment of NABIL & SCBNL

62
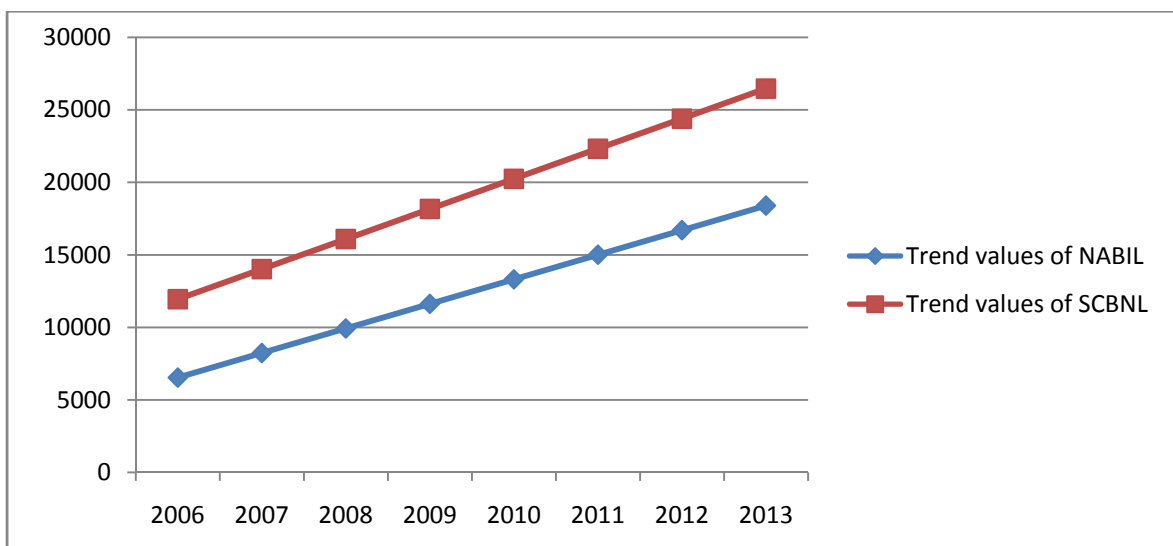
- **Trend Analysis of Net Profit**

Under this topic the trend value of net profit for five years from 2006-2010 have been calculated and forecast for next three years from 2011-2013. The following table shows the trend value of net profit for eight years from 2006-2013 of NABIL and SCBNL.

Table No.24

Trend values of Net Profit of NABIL and SCBNL

(Rs. In million)

Years	Trend values of NABIL	Trend values of SCBNL
2006	502.26	618.53
2007	662.06	737.30
2008	821.86	856.07
2009	981.66	974.84
2010	1141.46	1093.61
2011	1301.26	1212.38
2012	1461.06	1331.15
2013	1620.86	1449.92

Appendix- W (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 2013 will be Rs 1,620.86 million. Similarly, the net profit of SCBNL in 2013 will be Rs 1,449.92 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 No. 8

Trend value of Net Profit of NABIL & SCBNL

63
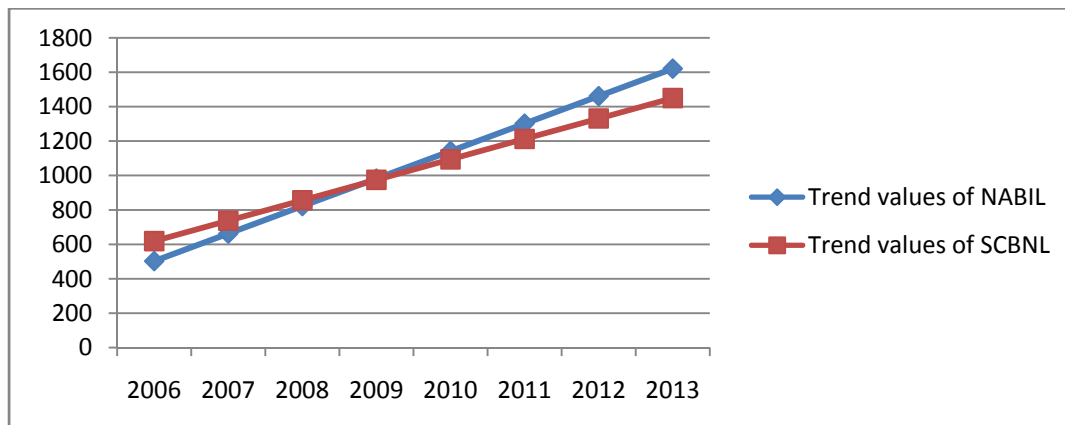
4.2.3. Test of Hypothesis

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 No.25

Hypothesis test on loan & advances to total deposit ratio

S.N		NABIL			SCBNL		
	Year	X	x=(X-68.746)	x^2	Y	y=(Y-42.31)	y^2
1	2004/05	66.79	-1.96	3.826	38.76	-3.55	12.603
2	2005/06	66.60	-2.15	4.605	42.62	0.31	0.096
3	2006/07	66.94	-1.81	3.262	46.12	3.81	14.531
4	2007/08	73.87	5.12	26.255	38.70	-3.61	13.032
5	2008/09	69.53	0.78	0.615	45.35	3.04	9.242
		$\sum X=343.73$	$\sum x=0$	$\sum x^2=38.563$	$\sum Y=211.55$	$\sum y=0$	$\sum y^2=49.504$

$$\text{Mean } (\overline{X}) = \frac{\sum X}{n1} = 343.73/5 = 68.746 \quad \text{Mean}(\overline{Y}) = \frac{\sum Y}{n2} = 211.55/5 = 42.31$$

$$S^2 = \frac{1}{n1+n2-2} \; [\; \{\; \sum x^2 - \frac{(\sum x)^2}{n1} \;\} + \{\sum y^2 - \frac{(\sum y)^2}{n2} \;\}]$$

$$= \frac{1}{5+5-2}\left(\left\{38.563 - \frac{(0)^2}{5}\right\}\right) + \left(\left\{49.504 - \frac{(0)^2}{5}\right\}\right)$$

$$= \frac{1}{8} \; \{38.563 + 49.504\}$$

$$= 88.067/8 \quad = 11.008375$$

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:

$$t = \frac{\overline{X} - \overline{Y}}{\sqrt{S^2\left(\dfrac{1}{n1} + \dfrac{1}{n2}\right)}}$$

$$= \frac{68.746 - 42.31}{\sqrt{11.008375 \,(1/5 + 1/5)}}$$

$$= 26.436/\sqrt{4.40335}$$

$$= 26.436/2.09842$$

= 12.60

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. 12.60 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 No.26

Hypothesis test on total investment to total deposit ratio

S.N		NABIL			SCBNL		
	Year	X	x=(X-32.016)	x^2	Y	y=(Y-54.274)	y^2
1	2004/05	31.93	-0.09	0.007396	55.74	1.466	2.149156
2	2005/06	38.32	6.30	39.740416	55.02	0.746	0.556516
3	2006/07	31.23	-0.79	0.617796	46.82	-7.454	55.562116
4	2007/08	29.12	-2.90	8.386816	57.31	3.036	9.217296
5	2008/09	29.48	-2.54	6.431296	56.48	2.206	4.866436
		$\sum X$=160.08	$\sum x$=0	$\sum x^2$=55.18372	$\sum Y$=264.22	$\sum y$=0.00	$\sum y^2$=72.35152

$$\text{Mean}(\overline{X}) = \frac{\sum X}{n1} = 160.08/5 = 32.016 \qquad \text{Mean}(\overline{Y}) = \frac{\sum Y}{n2} = 264.22/5 = 54.274$$

$$S^2 = \frac{1}{n1 + n2 - 2} \left[\left\{ \sum x^2 - \frac{(\sum x)^2}{n1} \right\} + \left\{ \sum y^2 - \frac{(\sum y)^2}{n2} \right\} \right]$$

$$= \frac{1}{5+5-2} \left(\left\{ 55.18372 - \frac{(0.00)^2}{5} \right\} + \left\{ 72.35152 - \frac{-(0.00)^2}{5} \right\} \right)$$

$$= \frac{1}{8} \{55.18372 + 72.35152\}$$

$$= 127.53524/8$$

$$= 15.94$$

Here,

Null Hypothesis (H$_0$) : μx = μy

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

Alternative Hypothesis (H$_1$): μx ≠ μy (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:

$$t = \frac{\overline{X} - \overline{Y}}{\sqrt{S^2\left(\dfrac{1}{n1} + \dfrac{1}{n2}\right)}}$$

$$= \frac{32.016 - 54.274}{\sqrt{15.94\,(1/5 + 1/5)}}$$

$= -22.258/\sqrt{6.376}$

$= -22.258/2.53 = -8.815$

i.e. /t/ = 8.815

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. 8.815 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.

CHAPTER-5
SUMMARY, CONCLUSION AND RECOMMENDATION

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 Conclusion

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. 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 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.

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

a) 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.

b) 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.

c) 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.

d) 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.

e) 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.

f) 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.

g) 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.

h) 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: Government securities such as treasury bills, development bonds, and national saving bonds are considered as the safest medium of investment as they are risk-free and highly liquid in nature. 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.

- Gain 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.

  - **Simple Credit Procedure and Prompt Credit Decision** :In the present scenario, when there is high liquidity in the market and most of the commercial banks are flooding towards the retail banking, these two banks should also come up with innovative and competitive rates to grab the market position. The most effective weapon for achieving this target would be to apply very simple procedure and prompt decision on the credit request

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.

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Cash and Bank Balance to Total Deposit Ratio

NABIL

(Rs in million)

FY	Cash and Bank Balance (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	630.3	19348.40	3.26	7.161
2006/07	1399.6	23342.40	6	0.004
2007/08	2671.1	31915.00	8.37	5.924
2008/09	3372.51	37348.25	9.03	9.573
2009/10	1400.09	46340.70	3.02	8.503

$(\sum(X-\overline{X})^2 = 31.165$

SCBNL

(Rs in million)

FY	Cash and Bank Balance (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	1276.2	23050.5	5.54	2.120
2006/07	2021.02	24640.3	8.2	1.450
2007/08	2050.2	29743.9	6.89	0.011
2008/09	3137.6	35350.82	8.87	3.512
2009/10	1929.30	35182.72	5.48	2.298

$(\sum(X-\overline{X})^2 = 9.391$

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

Standard Deviation is calculated by STDEV = $[\sqrt{(\sum(X-\overline{X})^2)/N}]$
Where N = 5
C.V = $(\sigma/\overline{X}) \times 100\%$

Investment on Govt. Securities to Current Assets Ratio

NABIL

(Rs in million)

FY	Investment on Govt. Securities (Rs)	Current Assets (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	2297.9	17132.44	13.41	4.137
2006/07	4805.7	24029.83	20	20.757
2007/08	4646.9	29908.15	15.54	0.009
2008/09	3706.1	38039.14	9.74	32.536
2009/10	7941.55	42857.95	18.53	9.523

$\sum(X-\overline{X})^2 = 66.963$

SCBNL

(Rs in million)

FY	Investment on Govt. Securities (Rs)	Current Assets (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	8644.9	21472.27	40.26	43.771
2006/07	7115.7	22033.55	32.29	1.833
2007/08	8137.6	27453.25	29.64	16.032
2008/09	9998.75	27219.48	36.73	9.523
2009/10	8531.52	29115.54	29.30	18.870

$\sum(X-\overline{X})^2 = 90.031$

Loan and Advances to Current Assets Ratio

NABIL

(Rs in million)

FY	Loan &Advances (Rs)	Current Assets (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	12922.54	17132.44	75.42	12.574
2006/07	15545.78	24029.83	64.69	51.610
2007/08	21365.05	29908.15	71.44	0.188
2008/09	27589.93	38039.14	72.53	0.430
2009/10	32268.87	42857.95	75.29	11.669

$\sum(X-\overline{X})^2 = 76.472$

SCBNL

(Rs in million)

FY	Loan &Advances (Rs)	Current Assets (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	8935.41	21472.27	41.61	52.538
2006/07	10502.63	22033.55	47.67	1.429
2007/08	13718.59	27453.25	49.97	1.229
2008/09	13679.75	27219.48	50.26	1.947
2009/10	15956.95	29115.54	54.81	35.327

$\sum(X-\overline{X})^2 = 92.469$

Loan & Advances to Total Deposit Ratio

NABIL

(Rs in million)

FY	Loan &Advances (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	12922.54	19348.40	66.79	3.826
2006/07	15545.78	23342.40	66.6	4.605
2007/08	21365.05	31915.00	66.94	3.262
2008/09	27589.93	37348.25	73.87	26.255
2009/10	32268.87	46340.70	69.53	0.615

$\sum(X-\overline{X})^2 = 38.563$

SCBNL

(Rs in million)

FY	Loan &Advances (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	8935.41	23050.5	38.76	12.603
2006/07	10502.63	24640.3	42.62	0.096
2007/08	13718.59	29743.9	46.12	14.531
2008/09	13679.75	35350.82	38.70	13.032
2009/10	15956.95	35182.72	45.35	9.242

$\sum(X-\overline{X})^2 = 49.504$

Total Investment to Total Deposit Ratio

NABIL

(Rs in million)

FY	Total Investment (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	6178.53	19348.40	31.93	0.007
2006/07	8945.31	23342.40	38.32	39.768
2007/08	9966.5	31915.00	31.23	0.621
2008/09	10874.8	37348.25	29.12	8.402
2009/10	13682.36	46340.70	29.48	6.426

$\sum(X-\overline{X})^2 = 55.223$

SCBNL

(Rs in million)

FY	Total Investment (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	12847.53	23050.5	55.74	2.139
2006/07	13556.23	24640.3	55.02	0.551
2007/08	13927.19	29743.9	46.82	55.507
2008/09	20260.49	35350.82	57.31	9.234
2009/10	19871.88	35182.72	56.48	4.875

$\sum(X-\overline{X})^2 = 72.306$

Loans & Advances to Total Working Fund Ratio

NABIL

(Rs in million)

FY	Loan &Advances (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	12922.54	22329.97	57.87	2.475
2006/07	15545.78	27253.39	57.04	5.771
2007/08	21365.05	37132.76	57.54	3.637
2008/09	27589.93	43867.4	62.89	11.902
2009/10	32268.87	52150.24	61.88	5.918

$\sum(X-\overline{X})^2 =29.703$

SCBNL

(Rs in million)

FY	Loan &Advances (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	8935.41	25767.35	34.68	6.753
2006/07	10502.63	28596.68	36.73	0.302
2007/08	13718.59	33335.78	41.15	15.029
2008/09	13679.75	40066.57	34.14	9.819
2009/10	15956.95	40213.32	39.68	5.783

$\sum(X-\overline{X})^2 =37.686$

Investment on Govt. Securities to Total Working Fund Ratio

NABIL

(Rs in million)

FY	Investment on Govt. Securities (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	2297.9	22329.97	10.29	6.408
2006/07	4805.7	27253.39	17.63	23.15
2007/08	4646.9	37132.76	12.51	0.095
2008/09	3706.1	43867.4	8.45	19.128
2009/10	7941.55	52150.24	15.23	5.79

$\sum(X-\overline{X})^2 = 54.570$

SCBNL

(Rs in million)

FY	Investment on Govt. Securities (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	8644.9	25767.35	33.55	60.029
2006/07	7115.7	28596.68	24.88	0.845
2007/08	8137.6	33335.78	24.41	1.935
2008/09	9998.75	40066.57	24.96	0.717
2009/10	8531.52	40213.32	21.22	21.035

$\sum(X-\overline{X})^2 = 84.560$

Investment on Shares & Debenture to Total Working Fund Ratio

NABIL

(Rs in million)

FY	Investment on Shares &Debenture (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	27.56	22329.97	0.12	0.007
2006/07	57.85	27253.39	0.21	0.000
2007/08	80.55	37132.76	0.22	0.000
2008/09	82.5	43867.4	0.19	0.000
2009/10	159.85	52150.24	0.31	0.009

$\sum(X-\overline{X})^2 = 0.017$

SCBNL

(Rs in million)

FY	Investment on Shares &Debenture (Rs)	Total Working Fund (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	15.34	25767.35	0.06	0.024
2006/07	44.94	28596.68	0.16	0.003
2007/08	106.04	33335.78	0.32	0.011
2008/09	106.92	40066.57	0.27	0.003
2009/10	106.92	40213.32	0.27	0.003

$\sum(X-\overline{X})^2 = 0.043$

Return on Loan & Advances Ratio

NABIL

(Rs in million)

FY	Net Profit (Rs)	Loan &Advances (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	518.63	12922.54	4.01	0.037
2006/07	674	15545.78	4.34	0.264
2007/08	746.5	21365.05	3.49	0.108
2008/09	1031.05	27589.93	3.74	0.007
2009/10	1139.10	32268.87	3.53	0.085

$\sum(X-\overline{X})^2 = 0.500$

SCBNL

(Rs in million)

FY	Net Profit (Rs)	Loan &Advances (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	658.76	8935.41	7.37	0.277
2006/07	691.67	10502.63	6.59	0.068
2007/08	818.92	13718.59	5.97	0.768
2008/09	1025.11	13679.75	7.49	0.419
2009/10	1085.87	15956.95	6.80	0.002

$\sum(X-\overline{X})^2 = 1.534$

Return on Equity Capital

NABIL

(Rs in million)

FY	Net Profit (Rs)	Equity Capital (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	518.63	1657.53	31.29	3.782
2006/07	674	1874.99	35.95	7.360
2007/08	746.5	2057.05	36.29	9.338
2008/09	1031.05	3130.24	32.94	0.087
2009/10	1139.10	3834.75	29.70	12.456

$\sum(X-\overline{X})^2 = 33.023$

SCBNL

(Rs in million)

FY	Net Profit (Rs)	Equity Capital (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	658.76	1576.3	41.79	21.674
2006/07	691.67	1755.3	39.40	5.147
2007/08	818.92	2117.2	38.68	2.382
2008/09	1025.11	3052.47	33.58	12.624
2009/10	1085.87	3369.71	32.22	24.123

$\sum(X-\overline{X})^2 = 65.950$

Total Interest Earned to Total outside Assets

NABIL

(Rs in million)

FY	Total Interest (Rs)	Total outside Assets (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	1310	19101.07	6.86	0.092
2006/07	1587.8	24491.09	6.48	0.461
2007/08	1978.7	31311.19	6.32	0.708
2008/09	2798.48	38420.88	7.34	0.032
2009/10	4047.72	45944.69	8.81	2.716

$\sum(X-\overline{X})^2 = 4.009$

SCBNL

(Rs in million)

FY	Total Interest (Rs)	Total outside Assets (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	1189.6	21773.96	5.46	0.040
2006/07	1411.98	24071.85	5.87	0.041
2007/08	1591.19	27635.29	5.76	0.009
2008/09	1887.22	34110.01	5.53	0.017
2009/10	2042.11	35822.29	5.70	0.001

$\sum(X-\overline{X})^2 = 0.108$

Liquidity Risk Ratio

NABIL

(Rs in million)

FY	Cash and Bank Balance (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	630.3	19348.4	3.26	7.161
2006/07	1399.6	23342.4	6	0.004
2007/08	2671.1	31915	8.37	5.924
2008/09	3372.5	37348.25	9.03	9.573
2009/10	1400.09	46340.70	3.02	8.503

$(\sum(X-\overline{X})^2 = 31.165$

SCBNL

(Rs in million)

FY	Cash and Bank Balance (Rs)	Total Deposit (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	1276.2	23050.5	5.54	2.120
2006/07	2021.02	24640.3	8.2	1.450
2007/08	2050.2	29743.9	6.89	0.011
2008/09	3137.16	35871.2	8.87	3.512
2009/10	1929.30	35182.72	5.48	2.298

$(\sum(X-\overline{X})^2 = 9.391$

Credit Risk Ratio

NABIL

(Rs in million)

FY	Loans &Advances (Rs)	Total Assets (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	12922.54	22329.97	57.87	2.475
2006/07	15545.78	27253.39	57.04	5.771
2007/08	21365.05	37132.76	57.54	3.637
2008/09	27589.93	43867.4	62.89	11.902
2009/10	32268.87	52150.24	61.88	5.918

$\sum(X-\overline{X})^2 = 29.703$

SCBNL

(Rs in million)

FY	Loans &Advances (Rs)	Total Assets (Rs)	Ratio (X)	$(X-\overline{X})^2$
2005/06	8935.41	25767.35	34.68	6.753
2006/07	10502.63	28596.68	36.73	0.302
2007/08	13718.59	33335.7	41.15	15.030
2008/09	13679.75	40066.57	34.14	9.818
2009/10	15956.95	40213.32	39.68	5.783

$\sum(X-\overline{X})^2 = 37.686$

Calculation of Growth Rate of Total Deposit of NABIL

D_n = Total deposit of the nth year
D_0 = Total deposit of the initial year
N = Total no. of year

Here,

NABIL
$D_{2009/10}$ = 46,410.70
$D_{2005/06}$ = 19,348.40

N = 5

Now,
We have,

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

$D_{2009/10} = D_{2005/06} (1+g)^{n-1}$

$46,410.70 = 19,348.40 (1+g)^{5-1}$

$(1+g)^4 = 46,410.70/19,348.40$

$(1+g) = (2.3987)^{1/4}$

$(1+g) = 1.2445$

$g = 0.2445$

$g = 24.45\%$

Calculation of Growth Rate of Total Deposit of SCBNL

D_n = Total deposit of the nth year
D_0 = Total deposit of the initial year
N = Total no. of year

Here,

SCBNL
$D_{2009/10}$ = 35182.70
$D_{2005/06}$ = 23050.50

$N = 5$

Now, We have,

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

$D_{2009/10} = D_{2005/06} (1+g)^{n-1}$

$35182.70 = 23050.50 (1+g)^{5-1}$

$(1+g)^4 = 35182.70/23050.50$

$(1+g) = (1.5263)^{1/4}$

$(1+g) = 1.1115$

$g = 0.1115$

$g = 11.15\%$

Calculation of Growth Rate of Loan & Advances of NABIL

D_n = Total Loan and advances of the nth year
D_0 = Total Loan and advances of the initial year
N = Total no. of year

Here,

NABIL
$D_{2009/10}$ = 32268.87
$D_{2005/06}$ = 12922.54

N = 5

Now,
We have,

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

$D_{2009/10} = D_{2005/06} (1+g)^{n-1}$

$32268.87 = 12922.54 (1+g)^{5-1}$

$(1+g)^4 = 32268.87/12922.54$

$(1+g) = (2.4971)^{1/4}$

$(1+g) = 1.2571$

$g = 0.2571$

$g = 25.71\%$

Calculation of Growth Rate of Loan & Advances of SCBNL

D_n = Total Loan and advances of the nth year
D_0 = Total Loan and advances of the initial year
N = Total no. of year

Here,

SCBNL
$D_{2009/10}$ = 15956.95
$D_{2005/06}$ = 8935.41

N = 5

Now,
We have,

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

$D_{2009/10} = D_{2005/06} (1+g)^{n-1}$

$15956.95 = 8935.41 (1+g)^{5-1}$

$(1+g)^4 = 15956.95/8935.41$

$(1+g) = (1.7858)^{1/4}$

$(1+g) = 1.1560$

$g = 0.1560$

$g = 15.60\%$

Calculation of Growth Rate of Total Investment of NABIL

D_n = Total Investments of the nth year
D_0 = Total Investments of the initial year
N = Total no. of year

Here,

NABIL
$D_{2009/10}$ = 13682.37
$D_{2005/06}$ = 6178.53

N = 5

Now, We have,

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

$D_{2009/10} = D_{2005/06} (1+g)^{n-1}$

$13682.37 = 6178.53 (1+g)^{5-1}$

$(1+g)^4 = 13682.37/6178.53$

$(1+g) = (2.2145)^{1/4}$

$(1+g) = 1.2199$

$g = 0.2199$

$g = 21.99\%$

Calculation of Growth Rate of Total Investment of SCBNL

D_n = Total Investments of the nth year
D_0 = Total Investments of the initial year
N = Total no. of year

Here,

SCBNL
$D_{2009/10}$ = 19871.89
$D_{2005/06}$ = 12847.53

N = 5

Now, We have,

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

$D_{2009/10} = D_{2005/06} (1+g)^{n-1}$

$19871.89 = 12847.53 (1+g)^{5-1}$

$(1+g)^4 = 19871.89/12847.53$

$(1+g) = (1.5467)^{1/4}$

$(1+g) = 1.1152$

g = 0.1152

g= 11.52%

Calculation of Growth Rate of Net Profit of NABIL

D_n = Net Profit of the nth year
D_0 = Net Profit of the initial year
N = Total no. of year

Here,

NABIL
$D_{2009/10}$ = 1139.10
$D_{2005/06}$ = 518.63

N = 5

Now,
We have,

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

$D_{2009/10} = D_{2005/06} (1+g)^{n-1}$

$1139.10 = 518.63 (1+g)^{5-1}$

$(1+g)^4 = 1139.10/518.63$

$(1+g) = (2.1964)^{1/4}$

$(1+g) = 1.2174$

g = 0.2174
g = 21.74%

Calculation of Growth Rate of Net Profit of SCBNL

D_n = Net Profit of the nth year
D_0 = Net Profit of the initial year
N = Total no. of year

Here,

SCBNL
$D_{2009/10}$ = 1085.87
$D_{2005/06}$ = 658.76

N = 5

Now,
We have,

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

$D_{2009/10} = D_{2005/06} (1+g)^{n-1}$

$1085.87 = 658.76 (1+g)^{5-1}$

$(1+g)^4 = 1085.87/658.76$

$(1+g) = (1.6484)^{1/4}$

$(1+g) = 1.1331$

$g = 0.1331$

$g = 13.31\%$

Correlation between Total Deposit and Loan & Advances Ratio

NABIL

(Rs in million)

FY	Deposit (x)	Loan & Advances (y)	X= (x-31672.95)	Y= (y-21,938.434)	X²	Y²	XY
2005/06	19,348.40	12,922.54	-12324.55	-9,015.89	151,894,532.7	81,286,344.62	111,116,836.4
2006/07	23,342.40	15,545.78	-8330.55	-6,392.65	69,398,063.30	40,866,025.16	53,254,323.78
2007/08	31,915.00	21,365.05	242.05	-573.38	58,588.20	328,769.21	-138,787.6
2008/09	37,348.00	27,589.93	5675.30	5,651.50	32,209,030.09	31,939,407.04	32,073,935.25
2009/10	46,410.7	32,268.87	14737.75	10,330.44	217,201,275.06	106,717,907.95	152,247,383.16
N=5	∑x= 158,364.75	∑y= 109,692.17			∑X²= 470,761,489.36	∑Y²= 216,138,453.98	∑XY= 348,553,690.99

Now we have,

N=5,
$$\sum X^2 = 470,761,489.36$$
$$\sum Y^2 = 216,138,453.98$$
$$\sum XY = 348,553,690.99$$

Correlation of Coefficient can be calculated by using following formula

$$r = \frac{\sum XY}{\sqrt{\sum X^2}\sqrt{\sum Y^2}}$$

$$r = \frac{348,553,690.99}{\sqrt{470,761,489.98}\sqrt{216,138,453.98}}$$

$$r = \frac{348,553,690.99}{21697.0387\ 2 \times 16159.7789}$$

$$r = \frac{348,553,690.99}{350619348.5}$$

$$r = 0.9941$$

Calculation of P.Er.

$$P.Er. = 0.6775 \times \frac{1-r^2}{\sqrt{N}}$$

$$= 0.6775 \times \frac{1-0.9941}{\sqrt{5}}$$

$$= 0.6775 \times \frac{0.01}{2.236}$$

$$= 0.0060$$

Then, $6P.Er. = 6 \times 0.0060 = 0.0362$

SCBNL

FY	Deposit (x)	Loan & Advances (y)	X= (x-29593.64)	Y= (y-12558.666)	X²	Y²	XY
2005/06	23050.5	8935.41	-6,543.14	-3,623.26	42,812,681.06	13,127,984.04	23,707,471.26
2006/07	24640.3	10502.63	-4,953.34	-2,056.04	24,535,577.16	4,227,284.03	10,184,245.36
2007/08	29743.9	13718.59	150.26	1,159.92	22,578.07	1,345,423.69	174,290.18
2008/09	35871.72	13679.75	5,757.16	1,121.08	33,144,891.27	1,256,829.34	6,454,259.96
2009/10	35182.7	15956.95	5,589.06	3,398.28	31,237,591.68	11,548,334.14	18,993,213.17
N=5	∑x= 147968.2	∑y= 62793.33			∑X²= 131,753,319.23	∑Y²= 31,505,855.24	∑XY= 59,513,479.94

Now we have,

N=5
$$\sum X^2 = 131,753,319.23$$
$$\sum Y^2 = 31,505,855.24$$
$$\sum XY = 59,513,479.94$$

Correlation of coefficient can be calculated by using following formula

$$r = \frac{\sum XY}{\sqrt{\sum X^2}\sqrt{\sum Y^2}}$$

$$r = \frac{59{,}513{,}479.94}{\sqrt{131{,}753{,}319.23}\sqrt{31{,}505{,}855.24}}$$

$$r = \frac{2340022934\,9.04}{11478.38 \times 5613.01}$$

$$r = \frac{2340022934\,9.04}{2340484656\,6.1362}$$

$$r = 0.9998$$

Calculation of P.Er.

$$\text{P.Er.} = 0.6775 \times \frac{1-r^2}{\sqrt{N}}$$

$$= 0.6775 \times \frac{1-0.9996}{\sqrt{5}}$$

$$= 0.6775 \times \frac{0.0004}{2.236}$$

$$= 0.00012$$

Then, $6\text{P.Er.} = 6 \times 0.00012 = 0.00072$

Correlation between Total Deposit and Total Investment

NABIL

Rs in million

FY	Deposit (X)	Total Investment (Y)	X= (x-126540.60)	Y= (y-40234.80)	X²	Y²	XY
2004/05	14,586.80	4269.66	-111,953.80	-35,965.14	12,533,653,334.44	1,293,491,295.22	4,026,434,090.53
2005/06	19,348.40	6178.53	-107,192.20	-34,056.27	11,490,167,740.84	1,159,829,526.31	3,650,566,505.09
2006/07	23,342.40	8945.31	-103,198.20	-31,289.49	10,649,868,483.24	979,032,184.46	3,229,019,046.92
2007/08	31,915.00	9966.5	-94,625.60	-30,268.30	8,954,004,175.36	916,169,984.89	2,864,156,048.48
2008/09	37348	10874.8	-89,192.60	-29360	7955319895	862009600	2618694736
	126,540.60	**40234.8**			**51,583,013,628.64**	**5,210,532,590.88**	**16,388,870,427.02**

Now we have,

N=5

$\sum X^2$= **51,583,013,628.64**

$\sum Y^2$= **5,210,532,590.88**

$\sum XY$= **16,388,870,427.02**

Correlation of coefficient can be calculated by using following formula

$$r = \frac{\sum XY}{\sqrt{\sum X^2}\sqrt{\sum Y^2}}$$

$$r = \frac{16388870427.02}{\sqrt{51583013628.64}\sqrt{5210532590.88}}$$

$$r = \frac{1638887042 \ 7.02}{227118\,.9416 \times 72184\,.01894}$$

$$r = \frac{11,697,181,653.16}{16394357982.1831}$$

$$r = 0.9997$$

Calculation of P.Er.

$$\text{P.Er.} = 0.6775 \times \frac{1-r^2}{\sqrt{N}}$$

$$= 0.6775 \times \frac{1-0.9994}{\sqrt{5}}$$

$$= 0.6775 \times \frac{0.0006}{2.236}$$

$$= 0.00018$$

Then, 6 P.Er. $= 6 \times 0.00018 = 0.00108$

<div align="right">

Appendix –S (II)

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Correlation between Total Deposit and Total Investment

<div align="center">

SCBNL

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<div align="right">

Rs in million

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FY	Deposit (X)	Total Investment (Y)	X= (x-132650.42)	Y= (y-70293.94)	X²	Y²	XY
2004/05	19344	9702.5	-113306.42	-60591.44	12838344813.22	3671322601.27	6865399149.04
2005/06	23050.5	12847.53	-109599.92	-57446.41	12012142464.01	3300090021.89	6296121940.29
2006/06	24640.3	13556.23	-108010.12	-56737.71	11666186022.41	3219167736.04	6128246865.63
2007/08	29743.9	13927.19	-102906.52	-56366.75	10589751858.51	3177210505.56	5800506086.21

2008/09	35871.72	20260.49	-96778.7	-50033.45	9366116773.69	2503346118.90	4842172247.52
	132650.42	70293.94			56472541931.84	15871136983.67	29932446288.68

N=5

$\sum X^2$ = 56472541931.84

$\sum Y^2$ = 15871136983.67

$\sum XY$ = 29932446288.68

Correlation of coefficient can be calculated by using following formula

$$r = \frac{\sum XY}{\sqrt{\sum X^2}\sqrt{\sum Y^2}}$$

$$r = \frac{29932446288.68}{\sqrt{56472541931.84}\sqrt{15871136983.67}}$$

$$r = \frac{29932446288.68}{237639.521 \times 125980.7008}$$

$$r = \frac{29932446288.68}{29937993399.96}$$

r = 0.9998

Calculation of P.Er.

$$P.Er. = 0.6775 \times \frac{1-r^2}{\sqrt{N}}$$

$$= 0.6775 \times \frac{1-0.9996}{\sqrt{5}}$$

$$= 0.6775 \times \frac{0.0004}{2.236}$$

$$= 0.00012$$

Then, 6P.Er. = 6×0.00012 = 0.00072

Trend Values of Total Deposit

			NABIL		(Rs in million)
Year (t)	Total Deposit (y)	x(t-2008)	x^2	xy	Yc= a+bx Yc=31672.95+6813.045x
2006	19348.4	-2	4	**-38696.8**	18046.86
2007	23342.4	-1	1	-23342.4	24859.905
2008	31915	0	0	0	31672.95
2009	37348.25	2	4	37348.25	38485.995
2010	46410.7	1	1	92821.40	45299.04
N=5	**∑Y = 158364.75**	**∑X = 0**	**∑X² = 10**	**∑XY = 68130.45**	

Here,

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

$$= \frac{158364.75}{5}$$

$$= \mathbf{31672.95}$$

Now,

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

$$= \frac{68130.45}{10}$$

$$= \mathbf{6813.045}$$

Trend Values of Total Deposit of NABIL (2011-2013)

Year (t)	x(t-2008)	Trend value Yc=31672.95+6813.045x
2011	3	52112.085
2012	4	58925.13

2013	5		65738.175	

Trend Values of Total Deposit

SCBNL (Rs in million)

Year (t)	Total Deposit (y)	x(t-2008)	x²	xy	Yc= a+bx Yc=29593.64+3497.49x
2006	23050.5	-2	4	-46101	22598.66
2007	24640.3	-1	1	**-24640.3**	26096.15
2008	29743.9	0	0	0	29593.64
2009	35350.8	1	1	**35350.8**	33091.13
2010	35182.7	2	4	**70365.40**	36588.62
N=5	**∑Y = 147968.2**	**∑X = 0**	**∑X² = 10**	**∑XY = 34974.9**	

Here,

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

$$= \frac{147968.20}{5}$$

$$= 29593.64$$

Now,

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

$$= \frac{34974.9}{10}$$

$$= 3497.49$$

Trend Values of Total Deposit of SCBNL (2011-2013)

Year (t)	x(t-2007)	Trend values Yc=29593.64+3497.49x
2011	3	40086.11
2012	4	43583.6
2013	5	47081.09

Trend Values of Loans & Advances

			NABIL		**(Rs in million)**
Year (t)	**Loan & Advances (y)**	**x(t-2008)**	**x²**	**xy**	**Yc= a+bx** **Yc=21938.43+5073.68x**
2006	**12922.54**	-2	4	-25845.08	11791.072
2007	**15545.78**	-1	1	-15545.78	16864.753
2008	**21365.05**	0	0	0	21938.434
2009	**27589.93**	1	1	27589.93	27012.115
2010	**32268.87**	2	4	64537.74	32085.796
N=5	∑Y = 109692.17	**∑X = 0**	**∑X² = 10**	∑XY = 50736.81	

Here,

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

$$= \frac{109692.17}{5}$$

$$= 21938.43$$

Now,

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

$$= \frac{50736.81}{10}$$

$$= 5073.68$$

Trend Values of Loan & Advances of NABIL (2011-2013)

Year (t)	**x(t-2008)**	**Trend values Yc=21938.43+5073.68x**
2011	3	37159.477
2012	4	42233.158

| 2013 | 5 | 47306.839 |

Trend Values of Loan & Advances

					SCBNL (Rs in million)
Year (t)	Loan & Advances (y)	x(t-2007)	x²	xy	Yc= a+bx Yc=12558.666+1722.02x
2006	**8935.41**	-2	4	-17870.82	9144.626
2007	**10502.63**	-1	1	-10502.63	10836.646
2008	**13718.59**	0	0	0	12558.666
2009	**13679.75**	1	1	13679.75	14280.686
2010	**15956.95**	2	4	31913.9	16002.706
N=5	**ΣY = 62793.33**	**ΣX = 0**	**ΣX² = 10**	**ΣXY = 17220.20**	

Here,

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

$$= \frac{62793.33}{5}$$

$$= 12558.666$$

Now,

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

$$= \frac{17220.20}{10}$$

$$= 1722.02$$

Trend Values of Loan & Advances of SCBNL (2011-2013)

Year (t)	x(t-2008)	Trend values Yc=12558.666+1722.02x
2011	3	17724.726
2012	4	19446.746
2013	5	21168.766

Trend Values of Total Investment

				NABIL	(Rs in million)
Year (t)	Total Investment (y)	x(t-2008)	x^2	Xy	Yc= a+bx Yc=9929.50+1693.72x
2006	**6178.53**	-2	4	-12357.06	6542.06
2007	**8945.31**	-1	1	-8945.31	8235.78
2008	**9966.5**	0	0	0	9929.50
2009	**10874.8**	1	1	10874.8	11623.22
2010	**13682.37**	2	4	27364.74	13316.94
N=5	∑Y = 49647.51	∑X = 0	∑X² = 10	∑XY = 16937.17	

Here,

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

$$= \frac{49647.51}{5}$$

$$= 9929.50$$

Now,

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

$$= \frac{16937.17}{10}$$

$$= 1693.72$$

Trend Values of Total Investment of NABIL (2011-2013)

Year (t)	x(t-2008)	Yc=9929.50+1693.72x
2011	3	15010.66
2012	4	16704.38
2013	5	18398.10

Trend Values of Total Investment

					SCBNL (Rs in million)
Year (t)	**Total Investment (y)**	**x(t-2008)**	**x^2**	**Xy**	**Yc= a+bx** **Yc=16092.67+2075.30x**
2006	**12847.53**	-2	4	-25695.06	11942.07
2007	**13556.23**	-1	1	**-13556.23**	14017.37
2008	**13927.19**	0	0	0	16092.67
2009	**20260.49**	1	1	**20260.49**	18167.97
2010	**19871.89**	2	4	**39743.78**	20243.27
N=5	**∑Y = 80463.33**	**∑X = 0**	**∑X² = 10**	**∑XY = 20752.98**	

Here,

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

$$= \frac{80463.33}{5}$$

$$= 16092.67$$

Now,

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

$$= \frac{20752.98}{10}$$

$$= 2075.30$$

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

Year (t)	x(t-2008)	Trend values Yc=16092.67+2075.30x
2011	3	22318.57
2012	4	24393.87
2013	5	26469.17

Trend Values of Net Profit

Year (t)	Net Profit (y)	x(t-2008-)	x^2	xy	Yc= a+bx Yc=821.86+159.80x
					NABIL (Rs in million)
2006	**518.63**	-2	4	-1037.26	502.26
2007	**674**	-1	1	-674	662.06
2008	**746.5**	0	0	0	821.86
2009	**1031.05**	1	1	1031.05	981.66
2010	**1139.10**	2	4	2278.20	1141.46
N=5	**ΣY = 4109.28**	**ΣX = 0**	**ΣX² = 10**	**ΣXY = 1597.99**	

Here,

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

$$= \frac{4109.28}{5}$$

$$= 821.86$$

Now,

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

$$= \frac{1597.99}{10}$$

$$= 159.80$$

Trend Values of Net Profit of NABIL (2011-2013)

Year (t)	x(t-2008)	Trend values Yc=821.86+159.80x
2011	3	1301.26
2012	4	1461.06
2013	5	1620.86

Appendix-W (II)

117

Trend Values of Net Profit

<div align="center">

SCBNL   (Rs in million)

</div>

Year (t)	Net Profit (y)	x(t-2008)	x^2	xy	Yc= a+bx Yc=856.07+118.77x
2006	**658.76**	-2	4	-1317.52	618.53
2007	**691.67**	-1	1	-691.67	737.30
2008	**818.92**	0	0	0	856.07
2009	**1025.11**	1	1	1025.11	974.84
2010	**1085.87**	2	4	2171.74	1093.61
N=5	**ΣY = 4280.33**	**ΣX = 0**	**ΣX² = 10**	**ΣXY = 1187.66**	

Here,

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

$$= \frac{4280.33}{5}$$

= 856.07

Now,

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

$$= \frac{1187.66}{10}$$

= 118.77

Trend Values of Net Profit of SCBNL (2011-2013)

Year (t)	x(t-2008)	Trend values Yc=856.07+118.77x
2011	3	1212.38
2012	4	1331.15
2013	5	1449.92