A COMPARATIVE STUDY ON INVESTMENT POLICY OF NABIL AND NEPAL SBI BANK LTD.

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RECOMMENDATION

This is to certify that the thesis

Submitted by:

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

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Prof. Dr. Jay Krishna Pathak	Prof. Dr. Dev Raj Adhikari
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Chairperson, Research Committee	

Date: ……..……

VIVA-VOCE SHEET

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

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

Viva-Voce Committee

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Date: ----------

DECLARATION

I hereby, declare that the work reported in this thesis entitled **"A Comparative Study on Investment Policy of Nabil and Nepal SBI Bank Ltd."** submitted to Central Department of Management, University Campus, T.U., Kirtipur is my original piece of work done in the form of partial fulfillment of the requirement for the Master's Degree in Business studies under the supervision and guidance of Dr. Jay Krishna Pathak, Professor, Central Department of Management.

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TABLE OF CONTENTS

LIST OF TABLES

Page No.

ABBREVIATIONS

CB	Central Bureau
CDM	Central Department of Management
CO.	Company
CDE	Central Department of Economics
e.g.	For example
et al.	and others
FOM	Faculty of Management
FY	Fiscal Year
GDP	Gross Domestic Product
GNP	Gross National Product
i.e.	that
IMF	International Monetary Fund
Ltd.	Limited
NEPSE	Nepal Stock Exchange
NIBL	Nepal investment Bank Ltd.
NRB	Nepal Rastra Bank
RIS	Research and Information System
SBI	State Bank of India
SEBON	Securities Board of Nepal
UN	United Nations

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

Nepal is a small country with unique physical setting surrounded by India in South, East and West and by China in the North. It is a landlocked country. Nepal is one of the least developed and poorest countries in the world. It has been laying emphasis on the upliftment of its economy. The process of economic development depends upon various factors. Financial institutions among others are viewed as catalyst in the process of economic development and growth. They play an important role in mobilizing saving, and put them into productive use.

Commercial banks are major financial institution, occupying an important place in the economy of a country because the deposits collected by them provide much needed capital for the development of industry, trade and commerce and other sectors, thereby contributing to the economic growth of the nation. However, investment activities are not without risks. They have to follow sound Principes of investment policy, the rules and regulations, directives issued by the Central Bank. Diana McNaughton in her research paper "Banking institutions in developing markets" states that investment policy should incorporate several elements such as regulatory environment, the availability of funds, the selection of risk, and loan portfolio balance and term structure of the liabilities. (McNaughton, Diana, 1994:38) The loan provided by commercial bank is guided by several principles such as length of time, their purpose, profitability, safety etc. These fundamental principles of commercial bank's investment policy are needed to be considered while making investment decisions.

1.1.1 Investment Pattern of Nepalese Commercial Banks

The development of banking in Nepal is of relatively recent origin. The establishment of "Tejarath Adda" during the year 1877 A.D. was the first step in institutional development of banking sector in Nepal. Tejarath Adda did not collect deposit from public but granted loans to public against the collateral of bullions. Consequently the major parts of the country remained untouched from these limited-banking activities.

The development of trade with India and other countries increased the necessity of the institutional banker, which can act more widely to enhance the trade and commerce and to touch the remote non-banking sector in the economy. Reviewing this situation, the "Udhyog Parishad" was constituted in 1936 A.D. Nepal Bank Limited was established under Nepal Bank Act in 1937 A.D. as a first commercial bank of Nepal with 10 million authorized capital.

Modern banking practices emerged with the establishment of Nepal Bank Limited in 1937 A.D. However the stand of Nepal Bank Limited alone in total monetary and financial sector was not sufficient and satisfactory. Thus Nepal Rastra Bank was set up in 1956 A.D. (2013.01.14) as a central bank under Nepal Rastra Bank Act, 1956 A.D. (2012 B.S.). Similarly, in 1966 A.D. (2022.10.10) Rastriya Banijya Bank was established as a fully government owned commercial bank. With the emergence of RBB, banking services spread to both the urban and rural areas but customers failed to have taste of quality and competitive service because of excessive political and bureaucratic interference. For industrial development, Industrial Development Center was set up in 1956 A.D (2013 B.S.) which was converted to Nepal Industrial Development Corporation (NIDC) in 1959 A.D. (2016B.S.). Similarly, Agriculture Development Bank (ADB) was established in 1976 A.D. (2024 B.S.) with an objective to provide agricultural loans so that agricultural productivity could be enhanced through introduction of modern agricultural techniques. As the country moved towards economic liberalization since 1980 A.D. foreign banks were permitted to operate in Nepal. The financial scenario has changed with the establishment of joint venture banks from 1984. The number of commercial banks has been increasing. Since then, various financial institutions like JVBs, Domestic Commercial Banks, Development Banks, Finance Companies, Co-operative Banks, Credit Guarantee Corporation, Employee Provident Funds, National Insurance Corporation, and Nepal stock Exchange have come into existence to cater the financial needs of the country thereby assisting financial development of the country.

In 1990 A.D. after the restoration of democracy in Nepal, government highlighted the agenda of economic liberalization policies and emphasized to invite Foreign Direct Investment (FDI) in the Banking sector of Nepal. Therefore the development of CB's

in Nepal is categorized in three phases on the basis of financial policies adopted by the country from time to time. They are:

- CB's prior to 1980's
- CB's of 1980's
- CB's 1990's

There were only two commercials banks prior to 1980's. They are NBL and RBB. All the three CB's of 1980's were established as joint venture bank. Similarly six commercial banks of post 1990 have also came into operation as joint venture banks. They included Nepal Arab Bank Ltd (now Nabil Bank Ltd), Nepal Grindlays Bank (now Standard chartered Bank Nepal Ltd), Nepal Indosuez Bank (now Nepal Investment Bank ltd), Nepal Bank of Ceylon (now Nepal credit and commerce Bank ltd).

Taking an overview of financial institutions providing banking facility in Nepal, there are 31CB's 79 Development banks, 7Rural Development banks, 91 Finance companies, 20 Co-operatives, 46 non-government finance firms licensed by NRB.

After the announcement of liberal and free market economic based policy, Nepalese banks and financial sectors are having greater network and access to national and international markets. They have to go with their portfolio management very seriously. Fighting various challenges in order to increase their regular basis of income as well as to enrich the quality base of service for the attraction of good clients. In this competitive and market oriented open economy, each and every commercial banks and financial institutions have to play a determining role by widening various opportunities for the sake of expanding provisions of best service to their customers and by making themselves as a strong and potential financial intermediaries as per country's need of present scenario to obtain the desired level of economic development of nation

Joint venture banks are the mode of trading to achieve mutual of goods and services for sharing competitive advantage by performing joint investment scheme between Nepalese investors, financial and non-financial institutions as well as private investors and their parent banks, each supplying 50 percent of total investment. The parent banks, which have experiences in highly merchandised and efficient modern banking

services in many parts of the world have come to Nepal with higher technology, advance management skills. Joint venture banks are established by joining different force and with ability to achieve a common goal and with each of the partners. They are more efficient and effective monetary institutions in modern banking fields than other old types of banks in Nepalese context (Thapa, 2001:6).

In Nepal, commercial banks play a vital role in the economic growth. Its investment ranges from small-scale cottage industries to all types of social and commercial loans and large industries. Generally the investment of the CBs include the investment on government securities, like treasury bills, development bonds, national saving bonds, foreign government securities, shares of government owned companies and non-government companies and investment on debentures, similarly the CBs used their funds as loan and advances.

1.1.2 Profile of Concerned Banks

In this section, general introduction of the banks under study is being attempted to furnish for the easy reference of the samples to research.

Nabil Bank Limited

Nabil Bank Ltd, the first commercial bank was incorporated in 1984. Dubai Bank Ltd. Was the initial joint venture partner with 50% equity investment. The shares owned by Dubai Bank Ltd. (DBL) were Transferred to Emirates Bank International Ltd. (EBIL) Dubai. Later on EBIL sold its entire stock to national Bank Ltd, Bangladesh (NBLB).

The present configuration consists of 50% share capital by National Bank Ltd, Bangladesh. 10% NIDC, 9.66% Rastriya beema Sansthan, 0.34% Nepal Stock Exchange and 30% Nepalese public. At present 40 branches of this bank are operate in different parts of the country. Authorized capital and paid up capital of Nabil Bank Ltd are Rs. 1600 million and Rs. 965.74 million.

Nabil Bank Ltd undertakes the following activities and services:

- Tele Banking
- Credit card Facilities

- SWIFT
- Deposit Locker
- Western Union Money Transfer
- ATM
- International Trade and Bank Guarantee

This bank is awarded the "Bank of year 2004".

Nepal State Bank of India (SBI)

Nepal State Bank of India (SBI) Ltd, was established in 1993, under the company Act 1964. This is the joint venture of State Bank of India and Nepalese promoters. This Bank has 34 branches and 3-eztension counter in operation. The authorized capital and paid up capital of the bank is Rs. 1600 million and Rs. 875.28 million respectively.

The following activities and services are provided by SBI including normal functions:

- Tele Banking
- Credit card Facilities
- SWIFT
- Deposit Locker
- ATM
- International Trade and Bank Guarantee

1.2 Statement of Problem

Establishment and expansion of a number of banks and other financial institutions in Nepal has created keen competition among themselves. This has created a lot of challenges to them. The problems the commercial banks are facing in Nepal include the problems of resources mobilization, poor investment climate, heavy regulatory procedure, uncertain government policy, and NRB's directives etc.

Lack of sound investment policy is another reason for commercial banks not utilizing its deposits that is making loan and advances or lending for a profitable project. This condition may even lead the commercial banks to the position of liquidation.

Commercial banks invest their funds in limited areas to achieve highest amount of profit. They are found to be more interested to invest in less risky and highly liquid sectors i. e. treasury bills, development bonds and other securities. There is hesitation to invest on ling-term projects because commercial banks are much more safety minded. So, they seem to follow conservative and un-effective investment policy.

In Nepal, every commercial bank has invested in the similar sectors. These major sectors include tourism, garments, and trading as well. But given the current situation of the country it is not up to them to decide in which sector they want to invest. The main factors for success of any organization is the secured situation. Once the economic and political situation is stabilized, then only commercial banks can consider rationally as to where they should invest and grow. Till then it is a question of moving into sectors as and when things develop. So, security problem is the big problem for every commercial bank to invest their funds in any sectors.

Nepalese commercial banks do not seem to have formulated their investment policy in an organized manner They mainly rely upon the instructions and guidelines of Nepal Rastra Bank. They do not have clear view towards investment policy. Furthermore, the implementation of policy is not done 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.

The issues specially related to investment functions of the commercial banks under study have been presented briefly as under.

a) Comparison between investment policy of Nabil Bank Ltd and SBI Bank.
b) The ability of these banks to utilize the available funds.
c) Analyzing whether the are maintaining sufficient liquidity, profitability and risk position or not.
d) Relationship of investment on loan and advances with total deposits and total net profit.
e) Effects of investment decision on total earnings of the commercial bank.

1.3 Objectives of the Study

The main objective of this study is to examine the investment policy of two JVBs, namely NABIL and SBI Bank. Specifically, we would like to:

a) Make a comparative analysis of the investment policy of the banks under study.
b) Examine and evaluate the utilization of available fund of Nabil's in comparison to SBI bank.
c) Evaluate the liquidity, profitability and risk position of Nabil's in comparison to SBI bank.
d) Find out the empirical relationship between deposits, loans and advances, investment, and net profit.

We would also provide suggestions on the basis of the major findings of this study.

1.4 Test of Hypothesis

The hypothesis test in this study conducted on the various ratios related with the banking procedures.

i. Test of hypothesis on loan and advances to total deposit ratio between NABIL & SBI bank.
ii. Test of hypothesis on total investment to total deposit ratio between NABIL & SBI bank.
iii. Test of hypothesis on investment on government securities to current assets ratio between NABIL & SBI bank.
iv. Test of hypothesis on loan and advances to current assets ratio between NABIL & SBI bank.
v. Test of hypothesis on return on loan and advances ratio between NABIL & SBI bank.
vi. Test of hypothesis on total interest earned to total outside assets ratio between NABIL & SBI bank.

1.5 Focus and Significance of the Study

The main focus of the study is to highlight the investment policies of commercial banks with the expectation that the study can bridge the gap between deposits and

investments. On the other hand, the study would provides information to management of the bank that would help them to take collective actions.

In the context of Nepal, there is less availability of research works, journal and articles in investment policy of commercial banks as well as other financial institutions. As it is well known that the success and prosperity of the bank heavily relies upon the successful investment of collected resources to the important sectors of the economy. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of commercial banks.

There are various problems in effective investment of commercial banks of Nepal, which affect their performance to the great extent. CB's performance does not seem satisfactory in terms of utilizing its resources efficiently in productive sectors. Hence, the main significance of this study if investment portfolio analysis of Nepalese commercial banks is to help how to minimize risk on investment and maximize return through portfolio analysis. Similarly, the study of commercial bank's investment trend, risk return pattern, portfolio management, credit management and effect on investment decision on earning will strive to disclose the internal weakness of the banks and furnish the ideas for improvement.

Therefore, the researcher has undertaken this study to analyze the existing investment portfolio of Nepalese commercial banks and point out their various weaknesses and package of suggestions for its improvement.

1.6 Limitation of the Study

This study is simply a partial study for the fulfillment of MBS degree. The limitations of this study are as follows:

a) The study is mainly based on secondary data.
b) The study has covered only five fiscal years i.e. from 2005/2006 to 2009/2010.
c) Out of the numerous affecting factors this study concentrates only on those factors, which are related with investment policy, and available in the required from for analyzing the different issues.
d) The study deals with only two commercial banks, which may not be representative of all of Nepal.

1.7 Importance of the Study

It is fact that the banks affect the economic condition of whole country. In the absence of study and research it is difficulty to know what it the exact economic condition and flow to take decision about it.

For provided exact information and data to concern institution, bank, shareholders, and persons and also get information for take decision for various ways. It conclusion the importance of the study focuses at following points:

- It will be helpful to concerned financial institution.
- It will be valuable property for decision making.
- It will provides various information and data to required persons, economic planers etc.
- By the above points it helps to study all economic condition of nation.

1.8 Organization of the study

The whole study has been divided into five chapters. The present chapter includes introduction, statement of the problem, and significance of the study, objectives of the study and limitations of the study, importance of the study and organization of the study.

Second chapter deals with the review of available literature in the field of the study being conducted. This includes review of the theories of the concerned topic, review of supportive text, review of books, review of bulletins and annual reports published by bank, review of related articles and review of previous thesis.

The research methods employed to conduct the study and the tools and techniques used in the analysis of the data has been spelt out in the third chapter. This includes research design, sources of data, population samples, method of data analysis, and various financial and statistical tools.

Fourth chapter is devoted to the presentation and analysis of data through definite course of research methodology. The main working of this chapter is to analyze different financial ratios related to the investment and fund mobilization of NABIL in comparison to SBI. Major findings of the study are also included in this chapter.

The last chapter provides summary and conclusion; suggestions and recommendations for improving the future performance of the sample banks have also been outlined.

Bibliography and appendices have been presented at the end of the thesis.

CHAPTER-II

REVIEW OF LITERATURE

This chapter deals with theoretical aspect of the topic on investment policy .It provides the foundation for developing a comprehensive theoretical framework and knowledge of the status relevant to the field of research in order to explore the relevant facts for the reporting purpose .For this, NRB's directives, books, journals, articles, annual reports and some related research papers have been reviewed. This chapter has been, broadly classified into two sectors: theoretical perspective and review of related studies.

2.1 Review of Supportive Text

Review of supportive text provides the fundamental theoretical framework and foundation to the present study. For this various books, research paper, articles etc. dealing with theoretical aspects of investment policy analysis are taken into consideration.

2.1.1 Definition of Investment

Investment is nothing but deploying our saving in a manner that ensures safety of our money and provides a sustained return to supplement our regular income. (Delhi stock exchange, January 2002) The term investment covers a wide range of activities. It is commonly known fact that an investment is only possible where there is adequate saving. If all the incomes and saving are consumed to solve the problem of hand to month and to the other basic needs, then there is no existence of investment. Therefore, both saving and investment are interrelated.

Investments are made in assets. Assets in all are of two types, real assets (land, building, factories etc) and financial assets (stock, bond, T-bill etc). These two investments are not competitive but complementary. Highly developed institutions for financial investment greatly facilitate real investment. (Bhattarai, 2004:3). A number of definitions regarding investment are available. But we can simply say that investments are the use of disposable funds with a view to achieving additional income or growth in value.

2.1.2 Principles of Sound Lending and Investing Policy

Some of the principles of sound lending and investment policies which the banks have to keep in mind are mentioned below:

I) Safety and Security

While selecting the sectors for investing the funds a bank should be very much conscious regarding the safety and security of its funds. It should never invest in securities, which are too volatile because a little difference may cause a great loss. Similarly, the businessman who is expected to be bankrupt at once or earn a million in a minute should not be financed at all. The banks must invest its funds in legal securities only. The bank should accept those types of securities, which have marketability; ascertain ability, stability and transferability and it also should accept those securities, which are commercial, durable and of high market prices. For the safety and security in investing funds the bank can use the investment portfolio tools also.

II) Liquidity

Liquidity generally refers to the cash or any assets that can be converted in to cash immediately. Generally, people deposit money in the bank under different account with confidence that bank will repay their money whenever it is needed. In order to maintain the confidence to the depositors, the bank must always be ready to meet the current or short-term obligation when they become due for repayment. Liquidity is the capacity of bank to pay cash against deposits. Hence, the liquidity position of a bank is such an important factor.

III) Profitability

Commercial banks invest on those sectors from where more and more return can flow, through maximizing the returns on its investment; bank can maximize its volume of wealth. Hence, the investment of granting loans and advances by them are highly influenced by the profit margin. Generally the profit of commercial bank depend upon the interest rate of the bank, volume of loan provided, time period of loan and nature

of investment on different securities. Profitability is only the term, which always motivated commercial banks to invest its money more and more.

IV) Suitability

A bank should always know why a customer is in need of a loan. If a borrower misuses the loan granted by the bank, he will never be able to repay the loan and bank will possess heavy bad debts. Therefore, in order to avoid such circumstances advances should be allowed to select a suitable borrowers and it should demand all the essential detailed information about the scheme of the project. Bank must keep in mind the overall development plans of the nation and credit policy of the bank.

V) Diversification

The bank should be careful that while granting loan; it should not be invested in one sector only. To minimize risk and maximize profit, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss-according law of average because if securities of a companies. In this way, the loss can be recovered.

2.1.3 Sources of Funds for the Investment

There are different sources of funds for the investment of the bank.

a) Capital

Capital is the lifeblood of the trade and commerce. Capital is needed for the operation of the bank as in other business. But it is only a nominal source. Still it can be used for the investment purpose. The capital fund consists of two elements like

i) Shares
ii) General Reserves

i) Shares

Sources of fund to invest. By increasing the issue of share, the bank can increase its capital.

ii) General Reserves

The bank is required to assign certain percentage of its profit to the reserves. This reserve is also invested.

b) Accumulated Profit

When there is a need of more funds for investment, the bank can retain the accumulated profit. The bank invests invest its accumulated profit.

c) Deposit

Deposit are the main source of funds. By providing certain rate of interest, commercial banks call for the deposit from the customer. Mainly, banks accept three types of deposits i.e. current deposit, fixed deposit, saving deposit. These different types of deposits are used for lending the money to different sectors like agriculture, productive work, trade, irrigation and industry. The deposits will lead to increase in the working capital of the bank.

d) External and Internal Borrowings

The funds can be collected by borrowings money through different banks or different institutions. In a developing country like Nepal, borrowing is very important. The commercial bank may not have sufficient fund to invest in different sector. In that case it has to borrow from other bank or other institutions. Generally the commercial bank borrows from two sources i.e. external and internal. Generally external borrowing means the borrowing from foreign banks, and foreign government. Internally, the commercial bank borrows mainly from Nepal Rastra Bank. So the commercial bank cannot provide loan or investment without the funds. From the above different source of fund the commercial bank grants loan.

2.2 Review of previous Study

In this section review of articles, review of research papers & review of thesis of previous study are taken into consideration.

2.2.1 Review of Articles

Under this heading, effort has been made to examine and review some of the related articles published in different economic journal, bulletin of World Bank, dissertation papers, magazines, newspapers and other related books.

F. Morris, in his discussion paper on, "Latin American's Banking System" in the 1980's has concluded that most of the banks are concentrated on compliance with central bank's rules on reserve requirements credit allocation (investment decision) and interest rates. While analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked.

He further adds that mismanagement in financial institution has involved inadequate and overoptimistic loan appraisal, high risk diversification of loan portfolio and investments, high risk concentration, related parties lending etc. are major causes of investment and loan that has gone bad (Morris, 1990;pp81)

Sunity Shrestha in her article, "Lending operation of Commercial Banks of Nepal and its impact on GDP" has presented with the objectives to make an analysis of contribution of commercial banks lending to the gross domestic product (GDP)of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of viz. Agriculture, industrial, commercial service and general multiple regression technique has been applied to analyze the contribution.

The multiple analyses have shown that all the variables except service sector lending have positive impact on GDP. Thus, in conclusion she has accepted the hypothesis i.e. there has been positive impact by the lending of commercial banks in various sectors of economy, except service sector investment. (Shrestha, 2005; 23-27).

Shree Prasad Poudel Deputy Director, NRB in his article "Government Security Markets Rational and Development in Nepal" has concluded that the security markets are center of the financial system. Debt securities markets in Nepal are highly dominated by government debt securities. Debt statistic's evidenced that Nepal

remained debt free nation till 1950's. From the beginning of 1960's foreign loans and domestic loans have been alternative means of debt financing in Nepal as a result, total debt as a percentage of GDP widened from 1% 1960's to 654.3% in 2000.

According to poudel, government debt consists of treasury bills (TBs), national saving certificates (NSCs), development bonds (DBs), special bonds (SBs) and citizen saving certificates (CSCs).

He further added that NRB and commercial banks are the main holders of government bonds. In his article he suggested following improving area in debt securities market in Nepal:-

- To make government securities active instruments of open market operation. Coupon rate on government securities has to be fixed closely to the market rate of interest.
- Exchange of government securities at market price has to be encouraged.
- Products of government debt securities need to be diversified to meet investor's demands.
- Like equity shares the marketable government securities need to be exchanged in the floor of Nepal stock exchange at competitive price. (poudel, 2059; 45-51)

Bodhi B. Bajracharya has mentioned in article, "Monetary policy and deposit mobilization in Nepal" has concluded that the mobilization of domestic saving is one of the monetary policies in Nepal. For this purpose commercial banks stood as the vital and active financial intermediary for generating resources in the from of deposit of the private sector so far providing credit to the investors in different aspects of the economy. (Bajracharya, 199; 93-97)

2.2.2 Review of Research papers

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

Govinda Bhadur Thapa, expresses his views in his research paper "Financial System of Nepal" that the commercial banks including foreign joint ventures bank seem to be doing pretty well in mobilizing deposits. Likewise, loan &advances of these banks are also increasing. But compared to high credit needs particularly by newly emerging industries, the banks still seem to lack adequate funds.

Out of all commercial banks (excluding recently opened regional commercial banks), Nepal Bank Ltd and Rastriya Banijya Bank Ltd are operating with a nominal profit. Because of non-recovery of accrued interest, the margin between interest income and interest expenses is declining.

The foreign banks have been functioning in an efficient way. They are making profit year after year and have been distributing bonus to their employees and dividends to their shareholders.

He concludes that by its very nature of the public sector, the domestic banks couldn't compete with the private sector banks, so only remedy to the problems of these banks, as the government decided, is to hand over the ownership as well as the management of these banks to the private hands (Thapa, 1994,PP29-37).

Radhe S. Pradhan in his research paper "Role of saving, investment and capital formation in economic development. A case of Nepal ," has analyzed about the strong role and impact of saving, investment and capital formation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, investment and capital formation and gross domestic product has been collected for the period of 1974\75 to 200\01. The role and impact of saving, investment and capital formation on economic development were analyzed by using various regression models. The regression equations used in this study have been estimated at current price as well as in real terms with the entire study period divided into different sub period.

The result presented in this chapter suggest that in all cases GDP is significantly associated with saving, investment and capital formation both at current prices and in real terms. The results of the empirical analysis led to three conclusions: First, saving, investment and capital formation have positive impact on economic development. Second the current values and past value of saving, investment and capital formation

have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving and capital formation on economic development while weak role-played by investment. (Pradhan, 2003;PP123-133).

2.2.3 Review of Master Degree and P.H.D. Thesis

Several thesis work have been conducted by many students regarding the various aspects of commercial banks such as lending policy, investment policy, investment planning, liquidity and investment position, trends of saving investment and capital formation, investment on priority sectors etc. Some of them are suppose to be relevant for the study is presented below;

Ramala Bhattarai, in her thesis, "Lending policy of commercial Banks in Nepal ," has made an effort to examine the landing policy of commercial banks. She has concluded that efficient utilization of resources is important than the collection of the resource. Lower investment means lower capital formation which hampers the economic development of the people and the nation. So, she recommended that banks give emphasis on efficient utilization of resources. (Bhattarai, 1978)

Sunity Shrestha has conducted a study on "Investment planning of Commercial Bank in Nepal" with the objectives of:

- To evaluate the financial performance of commercial banks in Nepal.
- To examine the investment of commercial banks of Nepal with reference to securities, loan & advances.
- To establish the relationship of bank portfolio variables with the national income and interest rates.

The research finding of the study are summarized as:

- The general trend of commercial bank's asset holding. Deposits have been a major sources of funds. The excess reserve level of banks allows idle money and loss of opportunity. Debt equity ratios are very high, greater than 100%.
- The return ratios are on average higher for foreign joint venture banks than for the Nepalese banks but return of asset found to be statistically same. Risk taking attitude is higher in foreign joint venture banks. The total management

achievement index is higher in case of forign banks in comparison to the Nepalese banks.

- The hypothesis that commercial banks have non-professional style of decision making in investment have been accepted. The investment of commercial banks in share and securities is normal and not found to have strategic decision towards investment in shares and securities. Yield from the security has been found to be satisfactory.
- Investment in various economic sectors shows industrial and commercial sector taking higher shares of loan till 1990.
- Investment in various sectors has a positive impact on the national income from their respective sectors.
- Lending in priority sector should cottage and small industry sector sharing higher loans.
- Priority sector lending showed positive impact on national income.

The secured loan analysis showed commercial loan as being very important followed by social and industrial loans. The loan loss ratio has been found to be increases with low recovery of loan. Demand of bank credit has been found to be affected by the national income and lending & Treasury bill rate. The investment of commercial banks in government securities is observed to be affected by total deposit, cash reserve requirements and treasury bill and lending rates. Interest rates, lending rate and deposit rate were found to constitute as set of significant variables affecting the bank portfolio composition. (shrestha, 1993)

Kishor Poudel, in his thesis paper "Liquidity and investment position of Joint Venture Commercial Banks in Nepal" has made an attempt to evaluate liquidity and investment of joint venture banks special reference to Everest Bank Ltd and Nabil Bank Ltd. He has concluded that liquidity position of EBL is better than that of Nabil's. Growth rate of investment is higher in EBL than Nabl. He further found that the banks do not have constant and consistent liquidity and investment policy. There is no standard and uniform rate or ratio for maintaining liquid assets by the commercial banks. A commercial bank at its own judgment may decide to maintain an appropriate level of liquid assets. So he has recommended exploring such investment and to increase its investment on share and debenture and the bank should

have laid down policy for timely review of portfolio and to maintain risk and return. (Poudel, 2002).

Sharad Wagle in his thesis, "A Study on Trends of Saving, Investment and Capital Formation in Nepal," has concluded that in Nepal there is a large gap between saving and investment rate. The low saving rate implies that majorities of people are poor. Low rate of saving and investment has been the continuing characteristics of the Nepalese economy as compared to some selected asian countries. The need for the improving internal savings and investment performance in the country has been high in the agenda of Nepalese policy declarations but the performance has remained rather poor. The rate of investment and capital formation is low in Nepal because of saving. He has recommended that the government should review existing restriction on foreign direct investment. (Wagle, 2000).

Rabina Bajracharya, in her thesis paper entitled, "Investment of CBs in priority Sector" has made an effort to examine the banking procedures and services in disbursing loan in priority sector. She has found that:

- Rastriya Banijya Bank has met the target of 12% investment of total outstanding liabilities in priority sector and 3% out of which invested in deprived sector.
- The trend of investment are continued to increase in the following years.
- Investment on agriculture is higher than investment on industry and service sector because investment on agriculture benefited a higher number of households. (Bajracharya, 2000)

Kul Chandra Pandit in his thesis, "A study on the investment policy analysis of S.C. Bank Ltd in comparison to Nabil and Nepal Bangladesh Bank" has mainly found that S.C.'s loan & advances to total deposits ratios are significantly lower than that of Nabil and Nepal Bangladesh Bank. S.C. is recommended to follow a liberal lending policy, invest more portion of deposit as loan & advances. He has further stated that beside giving priority in investing on government securities, S.C. is recommended to invest its fund in the purchase of shares and debentures of other financial, non-financial companies, hotel and government companies. This also helps in the maintenance of a sound portfolio of the banks. (Pandit, 2003)

Mukunda Prasad Lamichhane in his thesis, "Investment policy of the Joint Venture Banks in Nepal" has analyzed between investment policy and different variables like deposits, commission & discount, net profit, interest on loan and investment. He applied correlation, ratio analysis, t-test and standard deviations.

He concluded that there is significant relationship between deposit and loan & advances as well as outside assets and net profit but not deposits and total investment in case of Nabil and other joint venture banks. Most of the joint venture banks have focused their banking services especially to big clients such as to purchase shares and debenture of other financial and non-financial companies. (Lamichhane, 2000)

2.3 Review of Legislative Provisions

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

Investment Management Regulation

"A commercial bank formulating a written policy may decide to invest in shares and securities of an organized institution. However, such investment is restricted to 10% of paid up capital of the organization. However, the cumulative amount of such investment in all the companies in which the bank has financial interest shall be limited by 20% of the paid up capital of the bank. But the total amount of investment in share and securities of organized institution is to 30% of the paid up capital of the bank." (Directive to commercial banks, directive no. 8, NRB banking operation department 81-82)

Likewise, commercial banks are not allowed to invest in any share, securities and hybrid capital instruments issued by any banks and financial institutions, licensed by NRB, where such investment exists prior to issuance of this directive, such investment should be brought within the restrictive limitations by the FY 2060\61. But investment on rural micro finance development banks' shares do not come under such

restriction. A commercial bank is directly related to the fact that how much fund must be collected as paid up capital while being established at a certain place of the nation, how much fund is needed to expand the branch and counters, how much flexible and helpful the NRB rules are important. But, we discuss only those, which are related to investment function of commercial banks. The main provisions, established by NRB in the from of prudential norms in above relevant area are briefly discussed here under:

i) Provisions for investment in the deprived sector

Some rules, which are formulated by NRB, affect the areas of credit and investment extension to the deprived sector by the commercial banks.

According to the new provision, with effect from 3rd quarter of FY 1995\96, investment in shares of the rural development bank by CBs, which used to be counted for the priority sector lending, now is to be included under the deprived sector lending.

According to the new provisions effective from FY 1997\98, NBL, RBB, NABIL, NGBL, NIBL are required to invest 3%, HBL, NSBL, NBBL, EBL are required to invest 2%, Bank of Katmandu is required to invest 1.75%, NCBL is required to invest 0.75% while new commercial banks are required to invest 0.25% of their total loan & advances a to deprived sector.

ii) Provision for credit to the priority sector

NRB requires commercial banks to extend loan & advances amounting at least 12% of their total outstanding credit to the priority sector. Commercial banks' credit to the deprived sector is also a part of priority sector. Under priority sector, credit to agriculture, cottage & small industries and credit to the service are counted commercial banks' loan to the co-operative licensed by NRB is also to be computed as the priority sector credit form the FY 1995\96 onwards.

iii) Provision for the investment in productive sector

Nepal, being a developing country needs to develop infrastructure and other primary productive sectors like agriculture, industry, etc. For this, NRB has directed

commercial banks to extend at least 40% of their total credit to the productive sectors. Loans to priority sector, agriculture sector, & industrial sector have to be included in productive sector investment.

iv) Provision for the single borrower credit limit

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

Similarly, NRB has graded six foreign joint venture banks now as the prestigious class "A" bank, which are NABIL, NGBL, NIBL, HBL, SBI, & NBBL. These banks have been kept outside the purview of the single borrower credit limit.

Likewise, in the case of consortium financing, commercial banks are permitted to extend an additional 10% credit above the limit fixed by the NRB as before. In addition, Nepal Oil-corporation, Agriculture-inputs Corporation and Nepal Food Corporation for there imports of their imports of petrol, diesel, kerosene, fertilizer and foodstuff have been removed from the restrictions of single borrower limit.

v) Provision for minimization of liquidity risk

Commercial banks are required to monitor their liquidity risk. This is to minimize risk inherent in the activities and portfolio of the banks. According to the regulations, a gap fund between maturing assets and liabilities is the liquidity risk. They are monitoring their assets and liabilities on the basis of maturity period. Maturity periods such as 0-90, 91-180, 181-270, 271-365 days and above year classified for the purpose of checking.

vi) Cash reserve requirements (CRR)

To ensure adequate liquidity in the commercial banks to meet depositors' demand for cash at anytime and to inject the confidence in depositors regarding the safety of their

deposited funds, commercial banks are required to have maximum CRR. In this regard, NRB has directed commercial banks to deposit minimum 8% of current and saving and 6% of fixed deposits in the NRB as primary cash reserve. The commercial banks are further required to have 3% cash of total deposit in their own bank as secondary reserve.

vii) Loan classification and loss provision

With a view of improving the quality of assets of commercial banks NRB has directed commercial banks to classify their outstanding loan & advances, investment and other assets into six categories. The classification is done in two days. The loans of more then one lakh are to be classified as debt service ratio, repayment situation, and financial condition of borrower, management efficiency, and quality of collateral. The loans of less than one have to be classified as per maturity period.

viii) Directive regarding interest rate spread

The interest rate spread, the difference between interest charged on loan and advances and the interest paid to the depositors, has widened significantly in the aftermath of deregulation in interest rates. This has caused lower financial intermediation. Therefore, NRB has required commercial banks to limit interest rate spread between deposit and lending rates to a maximum extent of 5%. NRB has also provided commercial banks with new calculation method of interest spread for certain period recently.

2.4 Research Gaps

The purpose of the research work is quite different from the above studies. The present study focuses on effectiveness of investment policy analysis of Nabil in comparison with SBI bank in comprehensive manner considering some major aspects. This study has tried to indicate the effectiveness of investment policy of concerned banks.

CHAPTER- III

RESEARCH METHODOLOGY

This chapter refers to the overall research method followed by us in analyzing the objectives outlined in 1.3.

This study covers quantitative methodology in greater extent and also uses the descriptive part based on both technical aspects and logical aspects. This research tries to perform a well-designed quantitative and qualitative research in a very clear and direct way using both financial and statistical tools.

3.1 Research Design

The study basically follows the descriptive as well as analytical research design. Financial and statistical tools have been applied to examine facts and descriptive techniques have been adapted to evaluate investment performance of CBs. Besides these, some simple questions have been asked to the concerned personnel in the course of visiting the bank. This report also contains other primary data. This report is mainly based on secondary data, which include annual reports published by the concerned banks and other publications related to the concerned topic.

3.2 Sources of Data

The report is mainly based on secondary data with negligible information and data collected from primary sources. The data required for the analysis are directly obtained from the balance sheet and P\L account of concerned banks' annual reports. Supplementary data and information are collected from number of institutions and regulating authorities like NRB, SEBON, NEPSE, Ministry of Finance, and budget speech of different fiscal years and economic survey.

All the secondary data are complied, processed and tabulated in the time series as per the need and objectives of the study. Likewise various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published & unpublished reports and documents from various sources. Formal and

informal talks with the concerned authorities of the banks are also very helpful to obtain the additional information of the related problem.

3.3 Population and Sample

There are altogether 31 commercial banks functioning in the country and most of their stocks are traded actively in the stock market. In this study, NABIL's investment policies have been compared with that of SBI bank.

For the lists of licensed commercial banks operating currently in Nepal see table no. 1.1.

Among them Nabil bank and SBI bank of Nepal are undertaken for study. Their data relating to investment policy are studied and compared.

3.4 Method of Analysis

Various financial, accounting and statistical tools are used to make the analysis more effective, convenience, reliable and authentic. The analysis of data is done according to the pattern of data available because of limited time and resources. Simple analytical statistical tools such as percentage, Karl Person's coefficient of correlation, regression, and the method of least square and test of hypothesis are used in this study. Similarly, some accounting tools such as ratio analysis and trend analysis have also been used for financial analysis. The various tools applied in this study have been briefly presented as under:

3.4.1 Financial Tools

Financial tools are used to examine the financial strength and weaknesses of bank in this study.

Ratio Analysis

Ratio analysis is the relationship between two accounting figures expressed mathematically. It is computed by dividing one item of relationship with the other. Management itself can use these parameters to improve the organization's performance. The knowledge regarding strengths and weakness is necessary for

exploiting maximum benefits and to repair the weaknesses to meet the challenges. The financial ratios, which are calculated and analyzed in this study, are as follows:

A) Liquidity Ratios

Liquidity ratios measure the firm's ability to meet current obligations. It reflects the short-term financial strength of the business. It is the measurement of speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations. A bank should ensure that it does not suffer from luck of liquidity and also it does not have excess liquidity. Both condition of liquidity are not in favor of the banks. The following ratios are evaluated under liquidity ratios.

i) Current Ratio

The ratio between current assets and current liabilities is known as current ratio. It shows the relationship between current assets and current liabilities. Current assets are those assets, which can be converted into cash within short period of time, normally not exceeding one year. Current liabilities are those obligations, which are payable within a short period, normally not exceeding one year.

Mathematically it is expressed as,

$$\text{Current Ratio} = \frac{\text{Total Current Asset}}{\text{Total current Liabilities}}$$

Higher the current ratio better is the liquidity position. The widely accepted standard of current ratio is 2:1 but accurate standard depends on circumstances in case of seasonal business ratio.

This ratio measures the bank's short-term solvency i.e. its ability to meet short-term obligations. As a measure of creditors versus current assets, it indicates each rupee of current assets available for each rupee of current liability.

ii) Cash and Bank Balance to Total Deposit Ratio (Cash Reserve 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 calculated by dividing the cash and bank balance by the amount of total deposits. Mathematically, it is expressed as,

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

Hence, cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic and abroad banks whereas the total deposits include current deposits, saving deposits, fixed deposits, money at call and short-term notice and other deposits.

iii) Cash and Bank Balance to Current Assets Ratio

This ratio measures the proportion of most liquid assets i.e. cash and balance among the total current assets of the bank. Higher ratio shows the banks' ability to meet its demand for cash.

This ratio is calculated by dividing cash and bank balance by current assets. Mathematically, it is expressed as,

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

iv) Investment on Government Securities to Current Assets Ratio

Investment on government securities includes treasury bills and development bonds etc. This ratio is calculated to find out the percentage of current assets invested in government securities.

This ratio is calculated by dividing investment made on government securities by current assets. Mathematically it is expressed as,

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

v) Loan and Advance to Current Assets Ratio

Loan and advances to current assets ratio shows the percentage of loan and advances in the total current assets, where loan & advances by current assets. Mathematically it is expressed as,

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

B) Assets Management Ratio (Activity Ratios)

Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. Assets management ratio measures how efficiently the bank manages its resources.

The following ratios are used under asset management ratio.

i) Loan and Advances to total Deposit Ratio

This ratio is calculated to find out that which banks are able to utilize their total deposits on loans and advances for profit generating purpose. This ratio can be obtained by dividing loan and advances by total deposits, which can be stated as,

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

ii) Total Investment to Total Deposit Ratio

This ratio implies the utilization of firm's deposit invested in government securities and share & debentures of other companies and bank.

This ratio can be calculated by dividing total investment by total deposit. It can be stated as,

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

iii) Loan and Advances to Working Fund Ratio

Loan and advances indicates the ability of any bank to canalize 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, which can be stated as,

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

Where, total working fund consists of current assets, net fixed assets, loan for development banks and other miscellaneous assets.

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, which can be stated as,

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

Investment on government securities includes treasury bills and development bonds etc.

v) Investment on Share and Debentures to Total Working Fund Ratio

This ratio shows the banks' investment in shares and debenture of subsidiary and other companies.

This ratio can be computed by dividing investment on shares and debentures by total working fund, which can be stated as,

$$\text{Investment on share and Debentures to total working fund Ratio} = \frac{\text{Investment on shares and Debentures}}{\text{Total Working Fund}}$$

C) Profitability Ratios

Profit is the difference between revenues and expenses over a period of time. A company should earn profit to survive and grow over a long period of time. Therefore, the financial manager should continuously evaluate the efficiency of its company in terms of profits. The profitability ratios are calculated to measure the operating efficiency of a company. 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.

The following ratios are taken into account under this heading.

i) Return on Total working Fund Ratio

This ratio measures the overall profitability of all working funds I.e. total assets. A firm has to earn satisfactory return on assets or working fund for its survival. This ratio is calculated by diving net profit by total working fund.

This can be expressed as,

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net profit}}{\text{Working Fund}}$$

ii)Return on Loan & Advance 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 by loan and advances.

This ratio can be expressed as,

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

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 diving total interest earned by total outside assets.

It is expressed as,

$$\text{Total Interest Earned to Total Outside Assets Ratio} = \frac{\text{Total Interest Earned}}{\text{Total outside Assets}}$$

iv)Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find out the percentage of earned to total assets (working fund). Higher ratio implies better performance of the bank in terms of interest earning on its total working fund. This ratio is calculated by diving total interest earned by total working fund.

It can be expressed as,

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

Where, total interest earned includes, interest on loan, advances and overdraft, government securities, investment debentures and other inter-bank loans.

v)Total Interest Paid to Total Working Fund Ratio

This ratio is calculated to find out the percentage of paid on liabilities with respect to total working fund. This ratio is calculated by dividing total interest paid by total working fund which is expressed as,

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

Where, total interest paid includes total expenses on deposits, loan and advances, borrowings and other deposits.

D) Risk Ratios

Risk taking is the prime business of banks' 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 taken into account under this heading.

i) Liquidity Risk ratio

This ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance etc. that are kept in the bank for the purpose of satisfying the depositors' demand for cash. Higher the ratio, lower is the liquidity risk.

Mathematically it is presented as,

$$\text{Liquidity Risk Ratio} = \frac{\text{Total Cash \& Bank Balance}}{\text{Total Deposit}}$$

ii) Credit Risk Ratio

This ratio measures the possibility that loan will not be repaid or the investment will deteriorate in quality or result in loss to the bank. By definition, it is expressed as the percentage of non-performing loan to total loan & advances.

Mathematically it is presented as,

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

iii) Capital Risk Ratio

This ratio indicates how much asset values may decline before the position of depositors and other creditors jeopardize. The capital risk is directly related to the return on equity (ROE). Higher the ratio, low is the capital risk.

Mathematically this ratio can be stated as,

$$\text{Capital Risk Ratio} = \frac{\text{Capital (Paid up + Reserves)}}{\text{Risk Weighted Assets}}$$

E) Growth Ratios

Growth ratios measure how well the firm is maintaining its economic position in its industry. It is directly related to the fund mobilization and investment management of a commercial bank. The following growth ratios are calculated in this study.

- ❖ Growth ratio of total deposit
- ❖ Growth ratio of loan & advances
- ❖ Growth ratio of total investment
- ❖ Growth ratio of net profit

3.4.2 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study, statistical tools such as trend analysis of important variables, co-efficient of correlation between different variables as well as test of hypothesis have been used which are as follows:

a) Trend Analysis

This topic analyzes the trend of loan and advances to total deposit ratio and trend of total investment to total deposit ratio of NABIL & SBI bank from 2005\2006 to 2009\2010 and makes the forecast for the next five years. Under this topic following sub- topic have been presented.

i) Trend analysis of loan and advances to total deposit ratio.
ii) Trend analysis of total investment to total deposit ratio.

b) Co-efficient of Correlation Analysis

This analysis identifies and interprets the relationship between the two or more variables. In the case of highly correlated 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.

i.) Co-efficient of correlation between deposit and loan and advances.
ii.) Co-efficient of correlation between deposit and total investment.
iii.) Co-efficient of correlation between total outside assets and net profits.

These tools analyze the relationship between these variables and help the banks to make appropriate policy regarding deposit collection, fund utilization (loan & advances and investment) and maximization of profit.

c) Test of Hypothesis

The objective of this test is to identify 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.

i.) Test of hypothesis on loan and advances to total deposit ratio between NABIL & SBI bank.
ii.) Test of hypothesis on total investment to total deposit ratio between NABIL & SBI bank.
iii.) Test of hypothesis on government securities to current assets ratio between NABIL &SBI bank.
iv.) Test of hypothesis on loan and advances to current assets ratio between NABIL & SBI bank.
v.) Test of hypothesis on return on loan and advances ratio between NABIL & SBI bank.
vi.) Test of hypothesis on total interest earned to total outside assets ratio between NABIL & SBI bank.

Research methodology and the various financial and statistical tools discussed above have been used in the next chapter to analyze and interpret the data regarding the NABIL & SBI bank from 2005/2006 to 2009/2010.

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

In this chapter an attempt has been made to analyze and evaluate major financial items, which have an impact on investment management and fund mobilization of NABIL and SBI bank. A number of financial ratios that are crucial in evaluating the fund mobilization system of commercial banks have been calculated and analyzed in this chapter. After this, the investment policy of the banks has been explored.

4.1 Financial Analysis

We have tried to analyze and evaluate those major financial items, which are mainly related to the investment management and fund mobilization of NABIL and SBI bank. The ratios are designed and calculated to highlight the relation ship between financial items and figures. It is a kind of mathematical procedure to derive relationship between two or more variables. The important financial ratios, which are to be calculated for this study, are as follows:

4.1.1 Liquidity Ratio

This ratio measures the ability of the firm to meet its current obligations. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community, to meet demands for deposits, withdraws, pay maturity obligation in time and convert non-cash assets into cash to satisfy immediate needs without loss to bank and consequent impact in long run profit. In fact, it analyzes liquidity needs, which is helpful for the preparation of cash budget and fund flow statement.

The following ratios are evaluated and interpreted under liquidity ratio:

i) Current Ratio

Current ratio indicates the ability of a bank to meet its current obligation. This is the broad measure of liquidity position of the financial institutions. The widely accepted standard of current ratio is 2:1 but accurate standard depends on circumstances in case of banking and seasonal business ratio such as 1:1 etc.

We have,

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

Where, current assets consist of cash and bank balance, money at call or short-term notice, loan advance investment in government securities, other interest receivable and miscellaneous current assets whereas, current liabilities consist of deposits, loan and advances, bills payable, tax provision, staff bonus, dividend payable and miscellaneous current liabilities.

Table 4.1

Current Ratio (times)

S.N	Fiscal Year	NABIL	SBI
1	2005\2006	0.76	1.02
2	2006\2007	0.81	1.05
3	2007\2008	0.92	1.06
4	2008\2009	0.94	1.07
5	2009\2010	0.96	1.09
Total		4.39	5.29
Mean		0.878	1.058
S.D.		0.079	0.02315
C.V.		0.0895	0.022

Source: Appendix 1 'A'

The above table no.1 shows that the current ratio of these commercial banks. Total mean standard deviation and coefficient of variation have also been calculated.

Although the current ratio of Nabil has been fluctuating it is always around one or less than one. Current ratio of SBI, on the other has always remained at 1:1. In fact, the ratio of both the banks seems to be appropriate. But, the lower ratio of Nabil indicates that it may often not be in a proper liquidity position. SBI's liquidity position is better than that of NABIL's.

The coefficient of variation between the current ratio of Nabil is 8.95% that is greater than that SBI i.e.2.2%. It shows that current ratio of Nabil is fewer consistencies than that of SBI bank.

ii) Cash and Bank Balance to Total Deposit Ratio (CRR Ratio)

Cash and bank balance are the most liquid assets. This ratio measures the ability of the bank to meet the unanticipated cash and all types of deposits.

We have,

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

Where,

Cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic and abroad banks whereas the total deposits include current deposits, saving deposits, fixed deposits, money at call and short-term notice and other deposits.

Table 4.2

Cash and Bank Balance to Total Deposit Ratio (%)

S.N	Fiscal Year	NABIL	SBI
1	2005\2006	5.13	29.42
2	2006\2007	6.78	29.07
3	2007\2008	8.51	20.44
4	2008\2009	6.87	12.01
5	2009\2010	5.38	10.43
Total		32.67	101.37
Mean		6.534	20.274
S.D.		1.215	8.078
C.V.		0.186	0.398

Source: Appendix 1 'B'

The table no.2 shows the total mean, standard deviation and co-efficient of variation of cash and bank balance to total deposit ratio of these two commercial banks.

It is clear from the above table that CRR of the banks quite fluctuating, although SBI's CRRis quite high as compared to that of Nabil's. It indicates that Nabil bank is maintaining appropriate CRR ratio if SBI bank can maintain a consistent CRR, the remaining fund can be used for further investment.

Mean and standard deviation of Nabil bank is less that of SBI bank. C.V. ratio of Nabil and SBI bank are 0.186 and 0.398 respectively. From this, we can conclude that Nabil has better maintained its liquidity than SBI bank.

iii) Cash and Bank Balance to Current Asset Ratio

This ratio shows the banks' liquidity capacity on the basis of cash and bank balance that is the most liquid asset. So, this ratio visualizes higher liquidity position than current ratio.

We have,

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

Where, cash and bank balance represent total of local currency, foreign currencies, cherubs in hand and various bank balances in local as well as foreign banks whereas the current assets consist of cash and bank balance, money at call, short-term notice, loan and advance, investment in government securities and other interest receivable and other miscellaneous current assets.

Table 4.3

Cash and Bank Balance to Current Assets Ratio

S.N	Fiscal Year	NABIL	SBI
1	2005\2006	6.18	27.14
2	2006\2007	7.90	23.87
3	2007\2008	8.25	18.01
4	2008\2009	7.81	15.36
5	2009\2010	6.17	9.41
Total		36.31	93.79
Mean		7.262	18.758
S.D.		0.899	6.259
C.V.		0.124	0.334

Source: Appendix 1 'C'

Table no.3 shows the total mean, standard deviation and C. V. of cash and bank balance to current assets ratio of commercial banks. This ratio of these two banks is better as they show the ability to manage the deposit withdrawals by the customers.

The above table shows that the cash and bank balance to current assets ratio of Nabil bank is at fluctuating trend. It has ranged from 6.18 (in FY 2005\2006) to 8.25 (in FY 2007\2008). But, SBI bank has decreasing trend in FY 2005\2006 i.e. 27.14 to FY 2009/2010 i.e. 9.41 From the above analysis we can conclude that liquidity position (only cash and bank balance) of Nabil bank is lesser than that of SBI bank. But, Nabil bank has higher consistency than SBI bank. The table also reveals that Nabil has utilized its funds more efficiently.

iv) Investment on Government Securities to current Assets Ratio

The government securities are not so much liquid as cash and bank balance. But they can easily be sold in the market or they can be converted in to cash. Investment on government securities includes treasury bills and development bonds etc.

We have,

Investment on Government securities to current ratio =

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

Table 4.4

Investment on Government Securities to Current Assets Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005\2006	20.76	5.09
2	2006\2007	30.95	7.41
3	2007\2008	25.88	16.06
4	2008\2009	25.78	22.43
5	2009\2010	24.87	25.49
	Total	128.24	76.48
	Mean	25.648	15.296
	S.D	3.246	8.022
	C.V	0.127	0.524

Source: Appendix 1 'D'

Table no.4 shows the table mean, standard deviation and coefficient of variation of investment on government securities to current assets ratio of commercial banks.

Figure in the above table shows that investment on government securities to current assets ratio of Nabil bank has increasing trend in the first two years i.e. 20.76 to 30.95 (FY 2005/2006 to 2006/2007) but then after, it follows decreasing trend i.e. 25.88 (FY 2007/2008) to 24.87 (FY 2009/2010). SBI bank has increasing trend, i.e. 5.09 to 25.49 in the FY 2005/2006 to 2009/2010 respectively.

The mean ratio of investment on government securities to current assets of Nabil bank is higher then that of SBI bank i.e. 25.648>15.296. On the other hand, coefficient of variation of Nabil bank is lesser than that of SBI bank i.e. 0.127<0.524.

It can be concluded that Nabil has invested its current assets in government securities more than SBI bank and its investment is also quite stable than that of SBI bank.

v) Loan and Advances to Current Assets Ratio

To make an appropriate profit, a commercial bank should not keep its all collected fund as cash and bank balance but they should be invested as loan and advances to the customers. In the present study, loan and advances represent local and foreign bills discounted & purchased loans, cash credit and overdraft in local currency as well as inconvertible foreign currency.
We have,

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

Table 4.5

Loan and Advances to Current Assets Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005\2006	63.25	58.45
2	2006\2007	55.87	63.34
3	2007\2008	55.93	60.35
4	2008\2009	57.50	61.64
5	2009\2010	59.57	62.46
	Total	291.94	306.24
	Mean	58.388	61.248
	S.D	7.563	2.927
	C.V	0.1295	0.048

Source: Appendix 1 'E'

Table no.5 shows the total mean, standard-deviation and coefficient of variation of loan and advances to current assets ratio of these two commercial banks. Through this table loan and advances to current assets ratios of the sample CBS are analyzed.

In the case of Nabil bank, loans and advances to current assets ratio are in fluctuating trand i.e. highest in the FY 2005/2006 (63.25%) and lowest in the FY2006/2007 (55.87%). Similarly, the ratios of SBI bank are also in fluctuating trend i.e. highest in the FY 2009/2010 (62.46%) and lowest in the FY 2005/2006 (58.45%).

Mean value of this ratio of Nabil bank is less than that of SBI bank i.e. 58.388<61.248. But, coefficient of variation of Nabil bank is slightly greater than that of SBI bank i.e. 0.1295>0.048.

This analysis shows that Nabil bank provides less loan and advances is less consistence than that of SBI bank.

4.1.2 Asset Management Ratios (Activity Ratio)

Asset management ratio measures the efficiency of the bank to manage its asset in profitable and satisfactory sector. This indicates the ability of the bank to utilize their available resources. Following ratios are discussed under this topic.

i) Loan and advances to Total Deposit Ratio

It shows the relationship between loans and advances to total deposit. This ratio measures the extent to which the banks are successful to mobilize their total deposit on loan and advances.

We have,

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

Where, loan and advances include loans, advances, cash credit, local and foreign bill purchased and discount. Total deposit include saving, fixed current call at short deposit and others.

Table 4.6

Loan and Advances to Total Deposit Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005\2006	57	78
2	2006\2007	53	63
3	2007\2008	48	77
4	2008\2009	58	69
5	2009\2010	58	71
	Total	274	358
	Mean	54.80	71.60
	S.D	3.90	5.5
	C.V	0.071	0.077

Source: Appendix 2 'A'

Table no.6 shows the total mean, S.D. and C.V. of loan and advances to total deposit ratio of these two commercial banks. Contents of the table show the percentage of loan and advances to total deposit ratio position Nabil and SBI bank.

The above table exhibits that the ratio of Nabil bank has decreasing trend in FY 2005/2006 i.e. 53% and FY 2006/2007 i.e. 48% but it has increasing trend in FY 2007/2008 i.e. 58% and it is stable in 2008/2009 i.e. 58%. SBI bank has fluctuating trend i.e. highest in the FY 2004/2005 i.e. 78% and lowest in FY 2005/2006 i.e. 63%.

The mean value of Nabil bank is lower than that of SBI bank. Mean ratio of Nabil and SBI bank are 54.8and 71.60 respectively. Coefficient of variation of Nabil is lower than that of SBI bank i.e. 0.071<0.077.

From the above table it shows that SBI has strong position regarding the mobilization of total deposit on loan and advances and acquiring high profit in comparison. But only higher ratio is no better from the point of view of liquidity as the loan and advances are not as liquid as cash and bank balance. On the other hand, Nabil has less C.V. than that of SBI bank, which indicates that loan and advances of Nabil is stable and consistent than that of SBI bank.

ii) Total Investment to Total Deposit Ratio

A commercial bank mobilizes its deposit by investing its fund in different securities issued by government and other financial or non-financial companies. This ratio measures the extent to which the banks are able to mobilize their deposit on investment in various securities.

We have,

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

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

Table 4.7

Total Investment to Total Deposit Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005\2006	48.64	5.65
2	2006\2007	52.88	10.75
3	2007\2008	44.85	18.51
4	2008\2009	41.33	26.50
5	2009\2010	39.48	30.67
	Total	227.18	92.08
	Mean	45.436	18.416
	S.D	4.865	9.352
	C.V	0.107	0.508

Source: Appendix 2 'B'

Table no.7 shows the total mean, S.D., and C.V. of total investment to total deposit ratio of Nabil and SBI bank.

The above table reveals that Nabil has increasing in FY 2005/2006 i.e. 48.64 and in FY2006/2007 i.e. 52.88 but it has followed decreasing trend in FY 2007/2008 i.e. 44.85 and 2009/2010 i.e. 39.48 respectively. But SBI bank has increasing trend; it has ranged from 5.65in FY 2005/2006 to 30.67 in FY 2009/ 2010.

The mean value of Nabil is higher than that of SBI bank i.e. 45.436>18.416. But, C.V. of Nabil is less than that of SBI bank i.e. 0.1071<0.508.

From the above analysis, it is clear that Nabil is more successful to utilize its deposit than SBI bank and also it has higher consistency to investment in securities than the other. SBI bank has least invested in securities and also has less consistency to invest in securities.

iii) Loan and Advances to Total Working Fund Ratio

A commercial bank must be very careful in mobilizing its total assets as loan and advances in appropriate lavel to generate profit. This ratio reflects the extent to which the commercial banks are success in mobilizing their assets on loan and advances for the purpose of income generating. A high ratio indicates better mobilization of funds as loan and advances and vice-versa.

We have,

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

Where, total working fund Consists current assets, net fixed assets, loan for development banks and other miscellaneous assets.

Table 4.8

Loan and Advance to Total Working Fund Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005\2006	45.32	69.70
2	2006\2007	42.19	57.50
3	2007\2008	46.83	61.23
4	2008\2009	48.91	59.06
5	2009\2010	50.38	60.94
	Total	233.63	308.43
	Mean	46.726	61.686
	S.D	2.853	4.229
	C.V	0.061	0.069

Source: Appendix 2 'C'

Table no.8 shows the total mean, S.D. and C.V. of loan and advances to total working fund ratio of Nabil and SBI bank.

The above table shows that the loan and advances to total working fund ratio of Nabil has decreasing trend in FY 2005/2006 i.e. 45.32 and FY 2006/2007 i.e. 42.19. But, it has increasing trend in FY 2007/2008 i.e. 46.83 and FY 2009/2010 i.e.50.38. SBI bank has fluctuating trend, highest in the FY 2005/2006 i.e. 69.70 and lowest ratio in the FY 2006/2007 i.e. 57.50.

Mean value of Nabil is lower than that of SBI bank i.e. 46.726<61.686 and C.V. of Nabil is also lower than that of SBI bank i.e. 0.061<0.069.

From the above analysis, we can conclude that SBI bank has done better utilization of funds as loan and advances for the purpose of generation. Nabil has higher consistency than that of SBI bank.

iv) Investment on Government Securities to Total Working Fund Ratio

To some extent commercial banks seem to utilize its fund by purchasing government securities. Government securities are a safe medium of investment though it is not liquid as cash and bank balance. This ratio is very important to the extent to which the banks are successful in mobilizing their total fund on different type of government securities to maximize their income.

We have,

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

Where, investment on government securities includes treasure bills and development bonds treasury bills and development bonds etc.

Table 4.9

Loan and Advance to Total Working Fund Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	14.88	5.01
2	2006/20067	23.37	7.17
3	2007/2008	21.67	15.72
4	2008/2009	21.93	22.17
5	2009/2010	22.34	26.37
Total		104.19	76.44
Mean		20.838	15.288
S.D		3.035	8.269
C.V		0.146	0.541

Source: Appendix 2 'D'

Table no.9 shows the total mean, S.D. and C.V. of investment on government securities to total working fund ratio of Nabil and SBI bank.

In the above table, it shows that investment on government securities to working fund ratio of Nabil has fluctuating trend. It has ranged from 14.88 (FY 2005/2006) to 23.37 (FY 2006/2007). But, SBI bank has increasing trend i.e. 5.01 in FY 2005/2006, 7.17 in FY 2006/2007, 15.72 in FY 2007/2008, 22.17 in FY 2008/2009 and 26.37 in FY 2009/2010. Mean ratio of Nabil is higher than that of SBI bank. Similarly, C.V. of these two banks are 0.146 and 0.541 respectively.

From the above table, we can say that Nabil bank is more successful in mobilizing its funds as investment on government securities. Nabil's investment policy is also consistence than the other bank.

v) Investment on Share and Debentures to Total Working Fund Ratio

There are two types of investment i.e. investment on government securities and investment on shares and debentures. Investment on shares and debentures to total working fund ratio reflects the extent on which the banks are successful to mobilize their total assets on purchase of shares and debentures of other companies to generate incomes and utilize their excess fund.

We have,

Investment on Share and Debentures to Total Working Fund Ratio =

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

Where, investment on shares and debentures includes investment on debentures, bonds and share of other companies.

Table 4.10

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

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	0.10	0.12
2	2006/20067	0.13	0.25
3	2007/2008	0.13	0.24
4	2008/2009	0.13	0.21
5	2009/2010	0.13	0.19
Total		0.62	1.01
Mean		0.124	0.202
S.D		0.012	0.0462
C.V		0.097	0.23

Source: Appendix 2 'E'

Table no.10 shows the total mean, S.D. and C.V. of investment on shares and debentures to total working fund ratio of Nabil and SBI bank.

The above table shows that the investment on shares and debentures to total working fund ratio of Nabil bank has increased from 0.10 to 0.13 in the FY 2006/2007 than after it is stable up to FY 2009/2010. SBI bank has fluctuating trend. It has highest ratio in FY 2006/2007 i.e. 0.25 and lowest in the FY 2005/2006 i.e. 0.12.

The mean value of Nabil and SBI bank are 0.124 and 0.202 respectively. The S.D of Nabil and SBI bank are 0.012 and 0.0462 respectively. And C.V. of these two banks is 0.097 and 0.23 respectively.

The above analysis shows that Nabil has invested its fund in shares and debentures less than that of SBI bank. As the C.V. of Nabil bank is less than that of SBI bank, we can say that Nabil's investment in shares and debentures is more consistence than the other.

4.1.3 Profitability Ratios

Profitability ratios are very help ful to measure the overall efficiency of operation of financial institutions. Here, profitability ratios are calculated and evaluated in terms of the relationship between net profit and assets. Higher ratio shows the higher efficiency of the bank.

The following profitability ratios are taken into account under this heading.

i) Return on Total Working Fund Ratio

This ratio measures the profit earning capacity of the bank by utilizing its available resources i.e. total asset. Return will be higher if the banks' working fund is well managed and if efficiency is utilized. Maximizing taxes within the legal options available will also improve the return.

We have,

$$\text{Return on total Working Fund Ratio} = \frac{\text{Net Profit}}{\text{Total Working Fund}}$$

Table 4.11

Return on Total Working Fund Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	1.59	0.17
2	2006/20067	1.54	0.58
3	2007/2008	2.51	0.64
4	2008/2009	2.72	0.72
5	2009/2010	3.15	0.96
	Total	11.51	3.07
	Mean	2.302	0.614
	S.D	0.405	0.257
	C.V	0.176	0.418

Source: Appendix 3 'A'

Table no.11 shows the total mean, S.D. and C.V. of return on total working fund ratio of Nabil bank and SBI bank.

In the above table, return on total working fund ratio of Nabil has decreasing trend in FY 2005/2006 and 2006/2007 i.e. 1.59 and 1.54 respectively. Then after, it has increasing trend. The ratio of SBI bank has increasing trend from 2005/2006 (0.17) to FY 2009/2010 (0.96).

Mean ratio of Nabil is higher than that of SBI bank i.e. 2.302>0.614.Whereas, C.V. of Nabil is lower than that of SBI bank i.e.0.176<0.418.

From the mean ratio analysis it is fund that Nabil bank is successful to maintain the higher ratio in return on total working fund. The C.V. of Nabil is lower than that of SBI bank, which indicates that return on total working fund ratio of Nabil is stable and consistence. It also reveals that investment policy of Nabil bank is efficient and effort able.

ii) Return on Loan and Advances Ratio

It measures the earning capacity of a commercial bank on its deposits mobilized on loan and advances. Higher the ratio greater will be the return and vice-versa.

We have

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

Where, loan and advances includes loan cash credit, overdraft bills purchased and discounted.

Table 4.12

Return on Loan and Advances Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	3.50	0.30
2	2006/20067	3.65	0.95
3	2007/2008	5.37	1.09
4	2008/2009	5.56	1.18
5	2009/2010	5.96	1.63
	Total	24.04	5.15
	Mean	4.808	1.03
	S.D	1.026	0.430
	C.V	0.213	0.418

Source: Appendix 3 'B'

Table no. 12 shows the total mean, S.D, and C. V. of return on loan and advances ratio of Nabil and SBI bank.

In the above table, return on loan and advances ratio of Nabil bank has has increasing trend from the FY 2005/2006 to 2009/2010. i.e. 3.50 to 5.96. The ratio of SBI bank has also increasing trend. In the FY 2005/2006 to 2009/2010 i.e. 0.30 to 1.63.

Mean ratio of Nabil is greater than that of SBI bank i.e. 4.808>1..3 whereas, C.V. of Nabil is less than that of SBI bank i. e. o.213<0.41.

From the above analysis, it is fond that Nabil bank has maintained higher ratio than SBIbank, which indicates that it is successful to earn high return on its loan and advances. It also indicates that investment policy of Navil bank is more effective than other banks. Moreover, Nabil has consistency investment policy return than other banks.

III) Total Interest Earned to Total Outside Assets Ratio

It reflects the extent to which the bank is successful to earn interest as major income on all the outside assets. Higher ratio indicates the higher earning power of total outside assets.

We have,

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

Where, total outside assets includes loan and advances, investment on government securities, share and debentures and all other types of investment.

Table 4.13

Total Interest Earned to Total outside Assets Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	7.90	9.74
2	2006/20067	7.16	8.16
3	2007/2008	7.38	8.28
4	2008/2009	7.14	7.00
5	2009/2010	7.09	6.89
	Total	36.67	40.07
	Mean	7.334	8.014
	S.D	1.299	1.036
	C.V	0.177	0.129

Source: Appendix 3 'B'

Table no.13 shows the total mean, S.D. and C.V. of total interest earned to total outside assets ratio of Nabil and SBI bank

The above shows that the ratio total interest earned to total outside assets ratio of Nabil bank has decreasing trend in FY 2005/2006 to 2009/2010 i.e. 7.90 to 7.09 and SBI bank are fluctuating trend. SBI bank has highest ratio in the FY 2005/2006 i.e.9.74.and SBI bank's lowest ratio in the FY 2009/2010 i.e.6.89.

Mean ratio of Nabil is lower than that of SBI bank i.e. 7.334<8.014.But, C.V. of Nabil is greater than that of SBI bank i.e. 0.177>0.129.

Above analysis shows that SBI bank has better position with respect to the income earned from the total outside asset in comparison to Nabil bank.

iv) Total Interest Earned to Total Working Fund Ration

it reflects the extent to which the bands are successful in mobilizing their total assets to generate high income as interest. This ratio actually reveals the earning capacity of a commercial bank by mobilizing its working fund. A high radio is the indicator of high earning power of the bank on its total working fund and vice-versa.

We have,

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

Table 4.14

Total Interest Earned to Total Working Fund Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	6.90	7.21
2	2006/20067	6.35	5.69
3	2007/2008	6.15	8.65
4	2008/2009	5.98	6.85
5	2009/2010	5.00	5.00
	Total	30.38	33.4
	Mean	6.076	6.68
	S.D	0.621	1.264
	C.V	0.1022	0.1892

Source: Appendix 3 'D'

Table no14 shows the total mean, S. D., and C.V. of total interest earned to total working fund ratio of Nabil and SBI bank.

The above table shows that the ratio of total interest earned to total working fund ratio of Nabil bank has decreasing trend i.e.6.90 in FY 2005/2006 to 5.00 in FY 2009/2010. SBI bank has fluctuating trend, it has highest ratio in the FY 2007/2008 i.e. 8.65 and lowest in the FY 2009/2010 i.e. 5.00.

Mean ratio of Nabil bank is lower than that SBI bank i.e. 6.076<6.68. C.V. of Nabil is also lower than that of SBI bank i.e. 0.1022<0.1892.

From the above analysis, we can conclude that the ratio of total interest earned to total working fund ratio of Nabil bank is satisfactory in comparision to SBI bank. It means the ratio of Nabil bank is stable and consistence than that of SBI bank.

V) Total interest paid to total working fund ratio

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

We have,

$$\text{Total interest paid to total working fund ratio} = \frac{\text{Total Interest Paid}}{\text{Total Working Fund}}$$

Where, total interest paid includes total expenses on deposit liabilities, loan and advances (borrowings) and other deposits.

Table 4.15

Total Interest Paid to Total Working Fund Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	3.15	3.73
2	2006/20067	2.62	5.11
3	2007/2008	2.20	4.62
4	2008/2009	1.96	3.03
5	2009/2010	1.64	2.96
	Total	11.57	19.18
	Mean	2.31	3.836
	S.D	0.526	0.9178
	C.V	0.228	0.213

Source: Appendix 3 'E'

Table no.15 shows the table mean, S.D. and C.V of total interest paid to total working fund ratio of Nabil and SBI bank.

The above table shows that the total interest paid to total working fund ratio of Nabil bank has decreasing trend in FY 2005/2006 to FY 2009/2010. SBI bank has fluctuating trend. It has highest ratio in FY 2006/2007 i.e. 5.11 and lowest in the FY 2009/2010 i.e. 2.96.

When these ratio are observed, it is found that Nabil bank has the lowest ratio in comparison with that of SBI bank. The mean ratio of Nabil and SBI bank are 2.31 and 3.836 respectively. It means that Nabil has paid lower interest than SBI bank. But C.V. of Nabil is higher than that of SBI bank i.e. 0.228>.0213, which indicates that the total interest paid to total working fund ratio of Nabil is less consistence than SBI bank. We can say that Nabil bank is paying less interest against its working fund.

4.1.4 Risk Ratio

The possibility of risk makes banks' investment a challenging task. Bank has to take risk to get return on investment. It increases effectiveness and profitability of the bank. If a bank expects high return on its investment, it has to accept the risk and manage it efficiently.

Through following ratios, effort has been made to measures the level of risk.

i) Liquidity risk ratio

The liquidity ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance, etc that are kept in the bank for the purpose of satisfying the depositor's demand for cash. Higher the ratio, lower the liquidity risks.
We have,

$$\text{Liquidity risk ratio} = \frac{\text{Total Cash and Bank Balance}}{\text{Total Deposit}}$$

Table 4.16

Liquidity Risk Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	8.52	29.42
2	2006/20067	5.13	29.07
3	2007/2008	6.78	20.44
4	2008/2009	8.51	12.01
5	2009/2010	6.87	10.96
	Total	35.81	101.90
	Mean	7.162	20.38
	S.D	1.267	7.950
	C.V	0.77	0.390

Source: Appendix '4 'A'

Table no.16 shows the total mean, S.D. and C.V. of liquidity risk ratio of Nabil and SBI bank.

In the above table, liquidity ratios of these commercial banks are in fluctuating trend. Nabil bank has maintained a highest ratio of 8.52 in the FY 2005/2006. Similarly, SBI bank has maintained a highest ratio of 29.42 in the FY 2005/2006. They have maintained a lowest ratio of 5.13 and 10.96 in the FY 2006/2007 and 2009/2010 respectively.

The mean ratio of Nabil is lower than that of SBI bank i.e. 7.162>20.38 which ,indicates that SBI banks' liquidity risk lower than that of Nabil bank. But C.V. of Nabil is lower than that of SBI bank i.e. 0.77<0.390 which, indicates that Nabil's liquidity position is consistence than that of SBI bank.

ii) Credit Risk Ratio

Credit risk ratio measures the possibility that the loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank, actually, credit risk ratio shows the proportion of non-performing assets in total loan an advances of the bank.

We have,

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

Table 4.17

Credit Risk Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	45.32	57.50
2	2006/20067	42.19	61.23
3	2007/2008	46.83	59.06
4	2008/2009	48.91	60.94
5	2009/2010	50.15	61.27
Total		233.4	300
Mean		46.68	60
S.D		2.795	4.493
C.V		0.059	0.075

Source: Appendix '4 'B'

Table no.17 shows the total mean, S.D. and C.V. of credit risk ratio of Nabil and SBI bank.

The above table shows that the credit risk ratio of these two commercial banks are fluctuating in every FY. Nabil bank has maintained highest ratio in the FY 2009/2010 i.e. 50.15 and lowest ratio in the FY 2006/2007 i.e. 42.19. Similarly, SBI bank has maintained highest ratio in the FY 2009/2010 i.e. 61.27 and lowest in the FY 2005/2006 i.e. 57.50.

Mean ratio of Nabil is lower than that of SBI bank i.e. 46.68<60. And also, C.V. of Nabil is lower than that of SBI bank i.e. 0.059<0.075. It indicates that SBI bank has more credit risk than Nabil bank. Similarly, Nabil's risk ratio is more consistence than that of SBI bank.

iii) Capital Risk Ratio

Capital risk ratio measures banks' ability to attract deposits and inter bank funds. It also determines the level of profit, a bank can earn of a bank chooses to take high capital risk. The capital risk is directly related to return on equity.

We have,

$$\text{Capital Risk Ratio} = \frac{\text{Capital (Paid-up capital + Reserves)}}{\text{Risk Weighted Asset}}$$

Table 4.18

Capital Risk Ratio (%)

S.N.	Fiscal year	NABIL	SBI
1	2005/2006	12.77	5.60
2	2006/20067	15.41	13.03
3	2007/2008	16.94	12.75
4	2008/2009	18.09	12.18
5	2009/2010	19.31	10.21
	Total	82.52	53.77
	Mean	16.504	10.754
	S.D	2.268	9.879
	C.V	0.137	0.918

Source: Appendix '4 'C'

Table no.18 shows the total mean, S.D., and C.V. of capital risk ratio of Nabil and SBI bank.

In the above table, capital risk ratio Nabil has increasing trend up 12.77 to 19.31 in FY 2005/2006 to 2009/2010. The ratios of SBI bank are in fluctuating trend it is highest in the FY 2006/2007 i.e. 13.03 and lowest in the FY 2005/2006 i.e. 5.60.

The mean ratio of Nabil bank is higher than that of SBI bank i.e. 16.504>10.754. In the same way, C.V. of Nabil is lower than that of SBI bank i.e. 0.137<0.918. It can be consistence than SBI bank.

4.1.5 Growth Ratio

Growth ratios are directly related to the fund mobilization and investment management of the commercial bank. It represents how well the commercial banks are maintaining the economic and financial position. Higher ratio indicates, better the performance of the bank and vice-versa.

Mathematically it is calculated as,

$$\text{Factor} = \frac{\text{Last Year Figure}}{\text{First Year Figure}}$$

Factor = (1+g)n-1

Where,

g = growth ratio

n = number of period

Again, growth ratio is measured in percentage

Under this section, growth ratio of total deposit, loan and advances, total investment and net profit are calculated.

i) Growth Ratio to Total Deposit

Table 4.19

Growth Ratio to Total Deposit (%)

S.N	Fiscal year	NABIL	SBI
1	2005/2006	12779.51	453.73
2	2006/2007	15839.01	6612.29
3	2007/2008	15506.44	5572.47
4	2008/2009	13447.63	6522.82
5	2009/2010	14119.03	7198.32
Growth Ratio		2.523	99.576

Source: Appendix V.

The above table no.19 shows that the growth ratio of Nabil bank is less than SBI bank. We can see that growth rate of Nabil i.e. 2.523% is less than that of SBI bank i.e. 99.576% the above position of growth rate is indicates that SBI bank used to increase its deposit collection very tightly than Nabil bank.

ii) Growth Ratio of Loan and Advances

Table 4.20

Growth Ratio of Loan and Advances (%)

S.N	Fiscal year	NABIL	SBI
1	2005/2006	7334.76	3559.41
2	2006/2007	8324.44	4188.41
3	2007/2008	7437.90	4299.25
4	2008/2009	7755.95	4468.72
5	2009/2010	8189.99	5143.66
Growth Ratio		2.796	9.64

Source: Appendix V.

The above table no.20 shows the growth ratio of loan and advances. The growth rate of Nabil and SBI bank seems to quit low i.e. 2.796% and 9.64% respectively. This position of growth ratio indicates that the performance of SBI bank to grant loan and advances is better than that of Nabil bank.

iii) Growth Ratio of Table Investment

Table 4.21

Growth Ratio of Table Investment (%)

S.N	Fiscal year	NABIL	SBI
1	2005/2006	1250.94	201.79
2	2006/2007	7704.31	373.63
3	2007/2008	1899.51	599.06
4	2008/2009	6031.18	1280.12
5	2009/2010	5836.07	1907.52
Growth Ratio		46.967	75.345

Source: Appendix V.

The above table no.21 shows the growth ratio of total investment of Nabil and SBI bank.

Growth ratio of total investment of Nabil and SBI bank are 46.967% and 75.345% respectively which indicates that SBI bank's performance is better than that of Nabil bank.

Iv) Growth ratio of Net Profit

Table 4.22

Growth Ratio of Net Profit (%)

S.N	Fiscal year	NABIL	SBI
1	2005/2006	329.12	50.07
2	2006/2007	291.37	12.51
3	2007/2008	271.63	40.85
4	2008/2009	416.25	48.75
5	2009/2010	455.32	60.86
Growth Ratio		8.45	5.00

Source: Appendix V.

The above table shows that growth ratio of net profit of Nabil and SBI bank's are 8.45% and 5.00% respectively. The above position indicates that Nabil bank better position than SBI bank because it has higher ratio than that of SBI bank.

4.2 Statistical Analysis

Some important statically tools are used to achieve the objective of this study. In this study, statistical tools such as, trend analysis, co-efficient of correlation analysis between different variables, test of hypothesis are used.

4.2.1 Trend Analysis

Under this topic, trend analysis of loan and advances to total deposit ratio as well as trend analysis of total investment to total deposit ratios of Nabil and SBI bank are calculated and forecasted for next five years. The forecast is based on the following assumptions.

a. The bank will run in the present position.
b. The economy will remain at the present stage.

c. The forecast will remain in the present stage.
d. The forecast will be true only if the limitation of least square method is carried out.
e. Nepal Rastra Bank will not change its guidelines to commercial banks.
f. Other things will remain constant.

i) Trend Analysis of Loan and Advances to Total Deposit Ratio of Nabil and SBI Bank

In this study, the research has tried to calculate the trend value of loan and advances to total deposit ratio of Nabil and SBI bank for five years from 2001/2005 to 2009/2010 and forecast for next five years from 2009/2010 to 2014/2015. The following table no.23 shows the trend value of deposit for ten years for the Nabil and SBI bank.

Table 4.23

Trend Analysis of Loan and Advance to Total Deposit Ratio of Banks Bank (%)

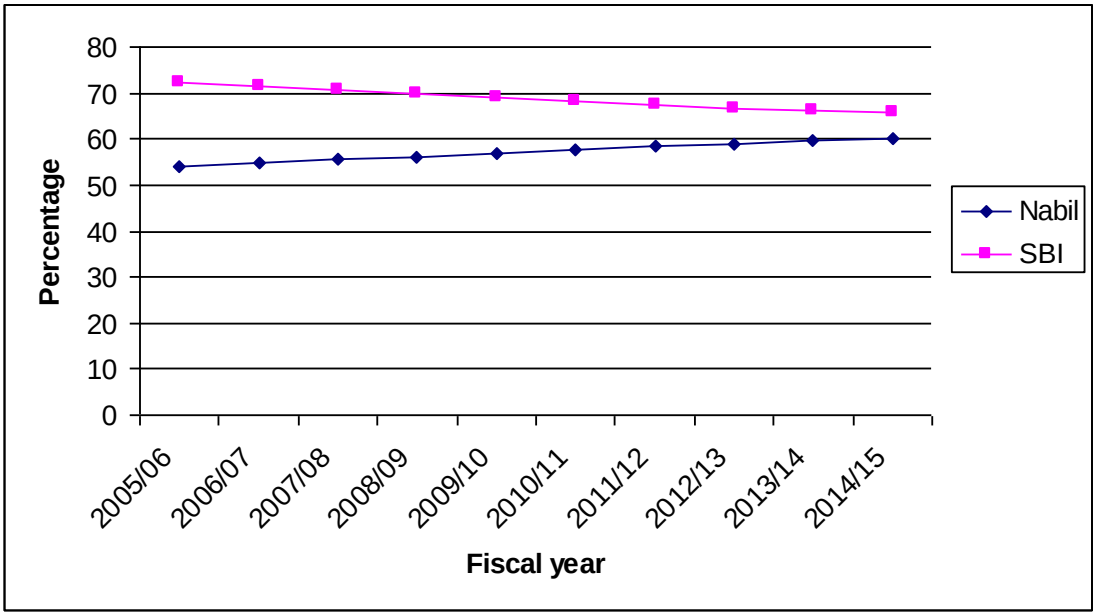
S.N	Fiscal year	NABIL	SBI
1	2005/2006	54.10	72.40
2	2006/2007	54.80	71.60
3	2007/2008	55.50	70.80
4	2008/2009	56.20	70.00
5	2009/2010	56.90	69.20
6	2010/2011	57.60	68.40
7	2011/2012	58.30	67.60
8	2012/2013	59.00	66.80
9	2013/2014	59.70	66.00
10	2014/2015	60.00	65.89

Source: Appendix 6

The calculated and projected trend values of loan and advances to total deposit ratio of Nabil and SBI are fitted in the following trend line.

Figure 4.1

Trend Analysis of Loan and Advances to Total Deposit Ratio of Sample Banks (%)



From the above table and graph, we can observe that ratios of loan and advances to total deposit of Nabil bank are in increasing trend but those of SBI bank are in decreasing trend. If our assumptions are applied the ratio of loan and advances to total deposit of Nabil will be 59.70% in the 2012/2013 which is lower than that of SBI bank. Similarly, the ratio of SBI bank will be 66.00% investment policy the FY 2012/2013.

From the above trend analysis, it is quite obvious that Nabil's deposit utilization position in relation to loan and advances to total deposit ratio is lower than the other bank but it has increasing trend. Its increasing trend ratio is higher than that of SBI bank. These indicate that Nabil may use relatively large portion of its deposit in providing loan. It is also found that Nabil may have better position in the future in the field of providing loan and advances.

ii) Trend Analysis of Total Investment to Total Deposit Ratio of Nabil and SBI bank

The researcher has tried to calculate the trend values of total investment to total deposit ratio of Nabil and SBI bank for five years 2005/2006 to 2009/2010 and

forecast for next five years from 2009/2010 to 2014/2015. The following table no. 24 shows the trend value of total investment to total deposit ratio of Nabil and SBI bank.

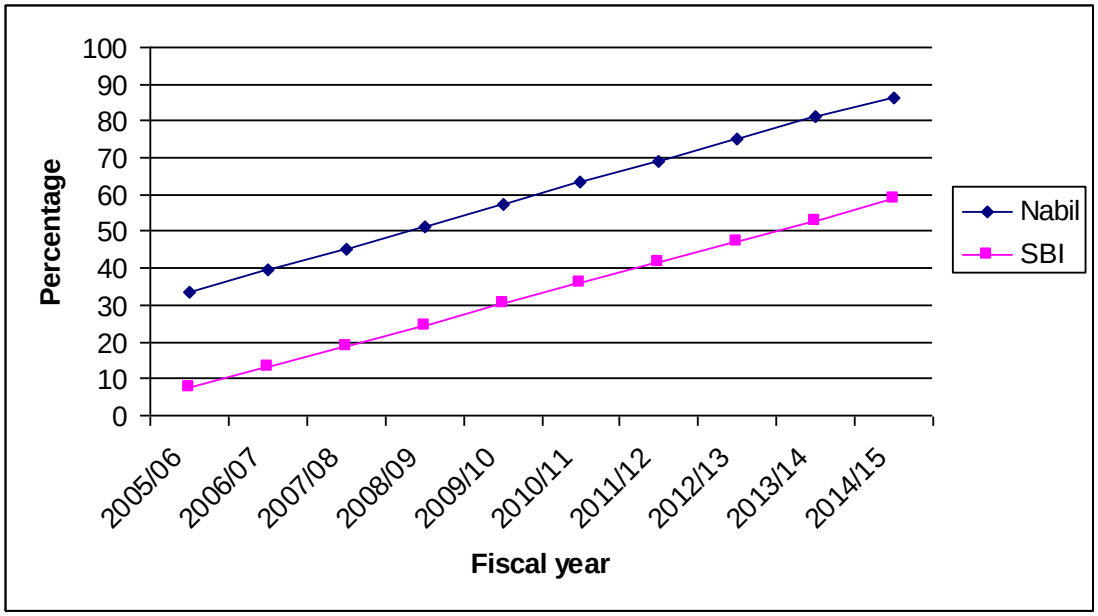
Table 4.24

Trend Analysis of Loan and Advance to Total Deposit Ratio of Banks (%)

S.N.	Fiscal year	Nabil	SBI
1	2005/06	33.569	7.476
2	2006/07	39.498	13.172
3	2007/08	45.427	18.868
4	2008/09	51.356	24.564
5	2009/10	57.285	30.26
6	2010/11	63.214	35.956
7	2011/12	69.143	41.625
8	2012/13	75.072	47.348
9	2013/14	81.001	53.044
10	2014/15	86.124	58.834

Source: Appendix 6.

The calculated and projected trend values of total investment to total deposit ratio of Nabil and SBI bank are fitted in the following trend line.



The above table and graph shows the ratio of total investment to total deposit ratio of Nabil and SBI bank. These ratios are in increasing trend for both the banks. If our

assumption is applied, the ratio will be 86.124% and 58.834% for Nabil and SBI, respectively in the FY 2014/2015.

From the above analysis, it can be concluded that Nabil's increasing trend ratio is 5.929, which is greater than that of SBI bank. It means Nabil may use relatively large portion of deposit for investment in different sectors.

From the above trend chart, it is found that Nabil has favorable condition than SBI bank for utilizing the total deposit towards investment.

4.2.2 Co-efficient of Correlation analysis

Under this, Karl Pearson's co-efficient of correlation is used to find out the relationship between deposit and loan and advances, deposit and total investment, outside asset and net profit.

i) **Co-efficient of Correlation between deposit and loan and advances**

Co-efficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. The purpose of correlation analysis between deposit and loan and advances is to find out whether the deposit is significantly used as long and advances or not. In this analysis, deposit is considered as independent variables, (x) and loan and advances as dependent variables (y)

Table 4.25

Co-efficient of Correlation between deposit and loan and advances

Evaluation Criteria	NABIL	SBI
R	0.45	0.88
r^2	0.20	0.78
P. E. r	0.11	0.03
6P.E.r	0.65	0.18

Source: Appendix 7

In the table no.25 the value of r, r^2, P. E. r and E. r between deposit and loan and advances of Nabil and SBI bank for the period of 2005/2006 to 2009/2010 are tabulated.

From the above table, it is found that the co-efficient of correlation (r) between deposit and loan & advances of Nabil and SBI bank are 0.45 and 0.88 respectively. It shows the highly positive relationship between these two variables. However,co-efficient of determination i.e. r^2 of Nabil bank is 0.20, which means that the 20% of dependent variable i.e. loan and advances has been explained by the independent variable i.e. deposit.

Co-efficient of determination i.e.r^2 of SBI bank is 0.78, which means that the 78% of dependent variable i.e. loan and advances has been explained by the independent variable i.e. deposit. Moreover, while considering the probable error, in case of Nabil bank r^2<6P.E.r i.e. 0.20<0.65 and in case of SBI bank r^2>6P.E.r i.e. 0.78>0.18.

From the above analysis, it can be concluded that the value of 'r' is significant. There is significant relationship between deposit and loan and advances of Nabil and SBI bank. It also reveals that these two banks are successful in mobilizing their deposit as loan and advances. SBI bank has higher value of 'r' indicating that it has better position in mobilizing deposit as loan and advances in comparison to Nabil bank.

ii) Co-efficient of Correlation Between deposit and total investment

Co-efficient of correlation between deposit and total investment measures the degree of relationship between these two variables. The purpose of this analysis is to find out whether deposit is significantly used as investment or not. In this analysis, deposit is independent variable (x) and total investment is dependent variable (y).

Table 4.26

Co-efficient of Correlation between deposit and Total Investment

Evaluation Criteria	NABIL	SBI
R	0.87	0.76
r^2	0.76	0.57
P. E. r	0.03	0.06
6P.E.r	0.19	0.35

Source: Appendix 7

The above table no.26 shows the value of r, r^2, P. E. r and E. r between deposit and total investment of Nabil and SBI bank for the period of 2005/2006 to 2009/2010.

From the above table, it is found that the co-efficient of correlation (r) between deposit and total investment of Nabil and SBI bank are 0.87and 0.76 respectively. It shows the highly positive relationship between these two variables. However, co-efficient of determination i.e. r^2 of Nabil bank is 0.76, which means that the 76% of dependent variable i.e. total investment has been explained by the independent variable i.e. deposit.

Co-efficient of determination i.e. r^2 of SBI bank is 0.57, which means that the 57% of dependent variable i.e. total investment has been explained by the independent variable i.e. deposit. Moreover, while considering the probable error, in case of SBI bank r^2<6P.E.r i.e. 0.57<035 and in case of Nabil bank r^2>6P.E.r i.e. 0.76>0.19.

Above analysis indicates that Nabil bank is successful in maximizing the investment of their deposit in comparison to SBI bank because, we have the higher value of ‘r’ of Nabil than SBI bank.

iii) Co-efficient of Correlation between outside assets and Net profit

Co-efficient of Correlation between outside assets and net profit measures the degree of relationship between these two variables. The purpose of this analysis is to find out whether the net profit is significantly correlated with respect to total assets or not. In this analysis outside asset is independent variable (x) and net profit is dependent variable (Y).

Table 4.27

Co-efficient of Correlation between deposit and Total Investment

Evaluation Criteria	NABIL	SBI
R	(0.15)	0.50
r^2	0.02	0.25
P. E. r	0.13	0.10
6P.E.r	0.79	0.61

Source: Appendix 7

The above table no.27 shows the value of r, r^2, P. E. r and E. r between outside assets and net profit of Nabil and SBI bank for the period of 2005/2006 to 2009/2010.

From the above table, it is found that the co-efficient of correlation (r) between outside assets and net profit of Nabil and SBI bank are (0.15) and 0.50 respectively. It shows that there is negative relationship between the variable of Nabil bank. But, there is positive relationship between the variables of SBI bank. However, co-efficient of determination i.e. r^2 of Nabil bank is 0.02, which means that the 2% of dependent variable i.e. net profit has been explained by the independent variable i.e. outside assets. Co-efficient of determination i.e. r^2 of SBI bank is 0.25, which means that the 25% of dependent variable i.e. net profit has been explained by the independent variable i.e. outside. Moreover, while considering the probable error, in case of Nabil bank r^2>6P.E.r i.e. 0.02>0.79 and in case of SBI bank r^2<6P.E.r i.e. 0.2<0.61.

Here we can observe that Nabil bank is not capable to earn net profit by mobilizing its outside assets. In case of SBI bank, there is positive correlation between outside asset and net profit. The relationship is significant and the value of 'r^2' shows high percent in the dependent variable, which has been explained by the independent variable. Above analysis indicates that SBI bank has significant correlation between mobilization of funds and returns.

4.2.3 The test of Hypothesis

The test of hypothesis discloses the fact whether the difference between the computed statistic and hypothetical parameter is significant.

Types of hypothesis:

i. Null hypothesis
ii. Alternative hypothesis

i) **Null hypothesis (Ho):** $\overline{X}_1 = \overline{X}_2$

This hypothesis always rejects the difference and accepts if the assumption value and the actual value are same i.e. there is no significant difference between mean ratios of loan and advances to total deposit of Nabil and SBI bank.

ii) Alternative hypothesis (Ho): $\overline{X}_1 \neq \overline{X}_2$

Complementary of null hypothesis is called alternative hypothesis i.e. there is significant difference between mean ratios of loan and advances to deposit of Nabil and SBI bank.

Generally, following steps are followed for the test of hypothesis.

a) Formulating hypothesis
   i) Null hypothesis
   ii) Alternative hypothesis
b) Computing the test statistics
c) Fixing the level of significance
d) Finding critical region
e) Deciding two tailed or one tailed test
f) Making decision

In this topic t statistic is used to find out the test of significance regarding the parameter of the population on the basis of sample drawn from the population.

T-test

If we draw a large number of samples i.e. (n<30) and compute the mean for each sample and then plot the frequency distribution of these mean, the resulting sampling distribution would be t-test. In this study, samples are taken only for five years i.e. (5<30)

Assumptions made for using t-test in this case are:-

a) The parent populations from which samples are drawn are normally distributed.

b) The two samples are random independent of each other.
c) The population variances are equal and unknown.

Based on the foregoing concept we plan to test the hypothesis in the sections that follow:

i) Test of Hypothesis on Loan and Advances to Total Deposit Ratio between Nabil and SBI Bank.

We take the mean ratio of loan and advances to total deposit of Nabil and SBI bank to carry out t-test of significance difference.

Table 4.28

Test of Hypothesis on Loan and Advances to Total Deposit Ratio between Nabil and SBI Bank Ltd.

S.N.	Nabil	SBI
1	$\Sigma X_1 = 274.00$	$\Sigma X_2 = 358.00$
2	$\overline{X}_1 = 54.80$	$\overline{X}_2 = 71.60$
3	$\overline{X}_1^2 = 74.80$	$\overline{X}_2^2 = 151.20$

Source: Appendix 6

Test of significance of difference between Nabil and SBI Bank

Setting of hypothesis:

Null hypothesis: (H_0): $\overline{X}_1 = \overline{X}_2$

i.e., there is no significant difference between the mean ratios of loan and advances to total deposit of Nabil and SBI Bank.

Alternative hypothesis (H): $\overline{X}_2 \neq \overline{X}_2$ (Two tailed test)

i.e., there is significant difference between the mean ratios of loan and advances to total deposit of Nabil and SBI Bank.

Test of statistics under H_0,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}}$$

Where,

$S^2 = \frac{1}{n_1 + n_2 - 2} (\Sigma X_1^2 + \Sigma X_2^2)$

$= \frac{1}{5+5-2}(74.80 + 151.20)$

= 28.25

Now,

$t = \frac{54.80 - 71.60}{\sqrt{28.25\left[\frac{1}{5} + \frac{1}{5}\right]}}$

= -4.998

The calculated of |t| = 4.998

Tabulated value of 't' (two-tailed test) at 5% level of (n_1+n_2-2) d.f. i.e. 8d.f. is 2.306.

Decision:

Since the calculated value of 't' i.e. 4.9908 is greater than it's tabulated value i.e. 2.306 at 5% LOS for two-tailed test. Null hypothesis is rejected, i.e. there is significant difference between mean ratios of loan and advances to total deposit ratio of Nabil bank and SBI Bank.

ii. Test of hypothesis on total investment to total deposit ratio between Nabil and SBI Bank.

Mean ratios of total investment to total deposit of Nabil and SBI bank are taken and carried out under t-test of significant difference.

Table 4.29

Test of Hypothesis on Total Investment to Total Deposit Ratio between Nabil and SBI Bank

S.N.	Nabil	SBI
1	ΣX_1 = 197.49	ΣX_2 = 65.86
2	$\overline{X}_1$ = 39.498	$\overline{X}_2$ = 13.17
3	$\overline{X}_1^2$ = 1177.22	$\overline{X}_2^2$ = 344.649

Source: Appendix 6.

Test of significance of difference between Nabil and SBI Bank

Setting of hypothesis

Null hypothesis: (H_0): $\overline{X}_1 = \overline{X}_2$

i.e., there is no significant difference between the mean ratios of total investment to total deposit of Nabil and SBI bank.

Alternative hypothesis (H): $\overline{X}_2 \neq \overline{X}_2$ (Two tailed test)

i.e., there is significant difference between the mean ratios of total investment to total deposit of Nabil and SBI bank.

Test of statistics under H_0,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}}$$

Where,

$$S^2 = \frac{1}{n_1 + n_2 - 2} (\Sigma X_1^2 + \Sigma X_2^2)$$

$$= \frac{1}{5 + 5 - 2}(1177.22 + 344.649)$$

$$= 190.234$$

Now,

$$t = \frac{39.498 - 13.172}{\sqrt{190.234\left[\frac{1}{5} + \frac{1}{5}\right]}}$$

$$= 3.018$$

The calculated of t = 3.018

Tabulated value of 't' (two-tailed test) at 5% level of (n_1+n_2-2) d.f. i.e. 8d.f. is 2.306.

Decision:

Since calculated value of t i.e. 3.018 is greater than its tabulated value i.e. 2.306 at 5% LOS for two-tailed test. Null hypothesis is rejected., i.e. there is significant difference between mean ratios of total investment to total deposit ratio of Nabil and SBI bank.

iii. Test of Hypothesis on Government Securities to Current Assets Ratio between Nabil and SBI Bank

Here, mean ratios of government securities to current assets of Nabil and SBI bank are taken and carried out under t-test of significant difference.

Table 4.30

Test of Hypothesis on Government Securities to Current Assets Ratio between Nabil and SBI Bank

S.N.	Nabil	SBI
1	$\Sigma X_1 = 111.71$	$\Sigma X_2 = 54.85$
2	$\overline{X}_1 = 22.342$	$\overline{X}_2 = 10.97$
3	$\overline{X}_1^2 = 296.994$	$\overline{X}_2^2 = 255.04$

Source: Appendix 6.

Test of significance of difference between Nabil and SBI Bank

Setting of hypothesis

Null hypothesis: (H_0): $\overline{X}_1 = \overline{X}_2$

i.e., there is no significant difference between the mean ratios of government securities to current assets of Nabil and SBI bank.

Alternative hypothesis (H): $\overline{X}_2 \neq \overline{X}_2$ (Two tailed test)

i.e., there is significant difference between the mean ratios of government securities to current assets of Nabil and SBI bank.

Test of statistics under H_0,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}}$$

Where,

$$S^2 = \frac{1}{n_1 + n_2 - 2}\ (\Sigma X_1^2 + \Sigma X_2^2)$$

$$= \frac{1}{5 + 5 - 2}(296.95 + 255.04)$$

$$= 69.004$$

Now,

$$t = \frac{22.342 - 10.97}{\sqrt{69.004\left[\frac{1}{5} + \frac{1}{5}\right]}}$$

$$= 2.165$$

The calculated of t = 2.165

Tabulated value of 't' (two-tailed test) at 5% level of (n_1+n_2-2) d.f. i.e. 8d.f. is 2.165.

the calculated value of t = 2.165

tabulated value of 't' (two-tailed test) at 5% level of (n_1+n_2-2) d.f. i.e. 8d.f. is 2.306.

Decision:

Since the calculated value of t i.e. 2.165 is lower than its tabulated value i.e. 2.3-06 at 5% LOS for two tailed test. Null hypothesis is accepted. i.e. there is no significant difference between mean ratios of government securities to current assets ratio of Nabil bank and SBI bank.

iv. Test of hypothesis on Loan and Advances to Current Assets between Nabil and SBI Bank

Here, mean ratios of loan and advances to current assets of Nabil and SBI bank are taken and carried out under t-test of significant difference.

Table No. 4.31

Test of hypothesis on Loan and Advances to Current Assets between Nabil and SBI Bank

S.N.	Nabil	SBI
1	$\Sigma X_1 = 282.15$	$\Sigma X_2 = 315.07$
2	$\overline{X}_1 = 56.43$	$\overline{X}_2 = 63.014$
3	$\overline{X}_1^2 = 94.87$	$\overline{X}_2^2 = 98.413$

Source: Appendix 7.

Test of significance of difference between Nabil and SBI Bank

Setting of hypothesis

Null hypothesis: (H_0): $\overline{X}_1 = \overline{X}_2$

i.e., there is no significant difference between the mean ratios loan and advances to current assets of Nabil and SBI bank.

Alternative hypothesis (H): $\overline{X}_2 \neq \overline{X}_2$ (Two tailed test)

i.e., there is significant difference between the mean ratios of loan and advances to current assets of Nabil and SBI bank.

Test of statistics under H_0,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}}$$

Where,

$S^2 = \frac{1}{n_1 + n_2 - 2} (\Sigma X_1^2 + \Sigma X_2^2)$

$= \frac{1}{5+5-2}(94.87 + 98.413)$

= 24.160

Now,

$t = \frac{56.43 - 63.014}{\sqrt{24.160\left[\frac{1}{5} + \frac{1}{5}\right]}}$

= -2.118

The calculated of |t| = 2.118

Tabulated value of 't' (two-tailed test) at 5% level of (n_1+n_2-2) d.f. i.e. 8d.f. is 2.306.

The calculated value of t = 2.118

Decision: Since the calculated value of t i.e. 2.118 is lower than its tabulated value i.e. 2.306 at 5% LOS for two tailed test. Null hypothesis is accepted, i.e. there is no significant difference between mean ratios of loan and advances to current assets ratio of Nabil bank and SBI bank.

v. Test of hypothesis on return on loan and advances ratio between Nabil and SBI bank

Here, mean ratios of return on loan and advances of Nabil and SBI bank are taken and carried out under t-test of significant difference.

Table 4.32

Test of Hypothesis on Return on Loan and Advances Ratio between Nabil and SBI Bank

S.N.	Nabil	SBI
1	ΣX_1 = 22.57	ΣX_2 = 4.93
2	$\overline{X}_1$ = 4.514	$\overline{X}_2$ = 0.986
3	$\overline{X}_1^2$ = 3.602	$\overline{X}_2^2$ = 0.702

Source: Appendix 7

Test of significance of difference between Nabil and SBI Bank

Setting of hypothesis

Null hypothesis: (H_0): $\overline{X}_1 = \overline{X}_2$

i.e., there is no significant difference between the mean ratios of return on loan and advances of Nabil and SBI bank.

Alternative hypothesis (H): $\overline{X}_2 \neq \overline{X}_2$ (Two tailed test)

i.e., there is significant difference between the mean ratios of return on loan and advances of Nabil and SBI bank.

Test of statistics under H_0,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}}$$

Where,

$$S^2 = \frac{1}{n_1 + n_2 - 2}\ (\Sigma X_1^2 + \Sigma X_2^2)$$

$$= \frac{1}{5 + 5 - 2}(3.602 + 0.702)$$

$$= 0.538$$

Now,

$$t = \frac{4.514 - 0.986}{\sqrt{0.538\left[\frac{1}{5} + \frac{1}{5}\right]}}$$

$$= 7.603$$

The calculated of t = 7.603

Tabulated value of 't' (two-tailed test) at 5% level of (n_1+n_2-2) d.f. i.e. 8d.f. is 2.306.

Decision: Since the calculated value of t i.e. 7.603 is higher than its tabulated value i.e. 2.306 at 5% LOS for two-tailed test. Null hypothesis is rejected, i.e. there is significant difference between mean ratios return on of loan and advances ratio of Nabil bank and SBI bank.

vi. Test of Hypothesis on Return on Total Interest Earned to Total Outside Assets Ratio between Nabil and SBI Bank

Here, mean ratios of return on total interest earned to total outside assets ratio of Nabil and SBI bank are taken and carried out under t-test of significant difference.

Table 4.33

Test of Hypothesis on Return on Total Interest Earned to Total Outside Assets Ratio between Nabil and SBI Bank

S.N.	Nabil	SBI
1	$\Sigma X_1 = 41.78$	$\Sigma X_2 = 44.81$
2	$\overline{X}_1 = 8.356$	$\overline{X}_2 = 8.962$
3	$\overline{X}_1^2 = 18.846$	$\overline{X}_2^2 = 12.68$

Source: Appendix 7.

Test of significance of difference between Nabil and SBI Bank

Setting of hypothesis

Null hypothesis: (H_0): $\overline{X}_1 = \overline{X}_2$

i.e., there is no significant difference between the mean ratios of return on total interest earned to total outside assets ratio of Nabil and SBI bank.

Alternative hypothesis (H): $\overline{X}_2 \neq \overline{X}_2$ (Two tailed test)

i.e., there is significant difference between the mean ratios of return on interest earned to total outside assets ratio of Nabil and SBI bank.

Test of statistics under H_0,

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{S^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}}$$

Where,

$$S^2 = \frac{1}{n_1 + n_2 - 2}\ (\Sigma X_1^2 + \Sigma X_2^2)$$

$$= \frac{1}{5 + 5 - 2}(18.846 + 12.68)$$

$= 3.941$

Now,

$$t = \frac{8.356 - 8.962}{\sqrt{3.941\left[\frac{1}{5} + \frac{1}{5}\right]}}$$

= -0.482

The calculated of |t| = 0.482

Tabulated value of 't' (two-tailed test) at 5% level of (n_1+n_2-2) d.f. i.e. 8d.f. is 0.482.

Decision: Since the calculated value of t i.e. 0.482 is lower than its tabulated value i.e. 2.306 at 5% LOS for two-tailed test. Null hypothesis is accepted, i.e. there is no significant difference between mean ratios of total interest earned to total outside assets ratio of Nabil bank and SBI bank.

4.3 Major Findings of the Study

The main findings of the study are derived with the help of analysis of financial data of Nabil and SBI bank.

1. Liquidity Ratio

The liquidity position of Nabil and SBI bank reveals that:

- The mean ratio of cash and bank balance to total deposit of Nabil bank is less than that of SBI bank. It states that liquidity position of SBI bank is better than that of Nabil bank.
- The mean ratio of cash and bank balance to current assets ratio of Nabil is less than that of SBI bank. But, Nabil bank has higher consistency than SBI bank, which indicates that Nabil has utilized its funds more efficiently.
- From the analysis of current ratio, it is found that Nabil bank has maintained lower current ratio than that of SBI bank, which indicates that liquidity position of SBI is better than that of Nabil bank.
- The mean ratio of loan and advances to current assets of Nabil bank are lower than that of SBI bank but its ratios are more consistence that of SBI bank. It reveals that Nabil provides less loan and advances in comparison to the SBI bank.

The above result shows that the liquidity position of Nabil is comparatively lower than SBI bank. It has lower cash and bank balance to total deposit, cash and bank

balance to current assets ratio and loan and advances to current assets but it has average consistency. IT has maintained highest ratio on investment on government securities to current assets.

2. Asset Management Ratio

The asset management of Nabil and SBI bank shows that:

- The mean ratio of total investment to total deposit of Nabil is higher than that of SBI bank, which indicates that Nabil is successful in utilizing its deposit in a better way.
- The mean ratio of loan and advances to working fund ratio of Nabil is lower than that of SBI bank, which indicates that it is utilizing its fund lower than the SBI bank.
- The mean ratio of loan and advances to total deposit of Nabil is lower than that of SBI bank. But Nabil has less CV than the SBI bank, which indicated that loan and advances of Nabil bank are stable and consistent.
- The mean ratio of investment on shares and debentures to total working fund of Nabil is lower than that of SBI bank. But, its investment on shares and debentures seems to be consistent that the SBI bank.
- In case of investment on government securities to total working fund ratio, Nabil has higher mean ratio than the SBI bank. It indicates that the investment policy of Nabil is better to utilize its working fund in comparison to the other bank.

From the above analysis, we can conclude that Nabil bank has highest investment in government securities and lower into shares and debentures. And, Nabil bank has stable and consistent ratios than the other bank.

3. Profitability Ratio

The analysis of profitability ratio of Nabil and SBI bank shows that:

- The mean ratio of return on loan and advances of Nabil is higher than that of SBI bank. There is consistency in return of Nabil than that of SBI bank.
- The mean ratio of total interest earned to total outside assets of Nabil is lower than SBI bank. It indicates that Nabil has lower position in income earned form total outside assets in comparison to SBI bank.

- The mean ratio of return on total working fund ratio of Nabil is higher than that of SBI bank and it is more consistent. Nabil bank is successful to maintain higher ratio investment return on total working fund.
- The mean ratio of total interest paid to total working fund of Nabil is lower than SBI bank which means that Nabil has paid low interest than the SBI bank.

4. Risk Ratio

The risk ratios of Nabil and SBI bank reveal that:

- Nabil has maintained higher mean ratio of capital risk than SBI bank. The ratio of Nabil bank is more consistent than the other.
- The mean ratio of liquidity risk of Nabil is lower than that of SBI bank.
- The mean ratio of credit risk of Nabil is lower than that of SBI bank. This ratio of Nabil bank is less variable than that of SBI bank.

From the above findings, we can conclude that Nabil has average risk ratio. The bank should maintain risk against credit fund to earn high profit.

5. Growth ratio

The growth ratio of Nabil and SBI bank shows that:

- The growth ratio of total deposit of Nabil bank is lower than the SBI bank, which indicates that the performance of SBi bank to collect deposit is better than that of Nabil bank. But, the deposit amount of Nabil bank is still high when compared to the SBI bank.
- The growth ratio of loan and advances of Nabil is lower that SBI bank, which indicates that the performance of Nabil to grant loan and advances is not satisfactory.
- The growth ratio of total investment of SBI bank is better than Nabil bank, but still the total investment of Nabil is higher than SBI bank.
- The growth ratio of net profit of Nabil is higher than SBI bank , which indicates that Nabil is successful to earn more profit and SBI bank.

From the above findings, it can be concluded that SBI bank has maintained high growth ratios in total deposit, loan and advances and investment. Nabil bank has higher position in net profit.

6. Trend Analysis and Projection for Next Five Years

The trend analysis and projection for next five years of Nabil and SBI bank reveals that:

- The trend analysis of loan and advances to total deposit ratio of Nabil bank has increasing trend but that of SBI bank has decreasing trend. Nabil's increasing trend ratio 0.70 and SBI bank has decreasing trend ratio by (0.80). The increasing trend ratio of Nabil bank shows the better future of Nabil bank.
- The trend analysis of total investment to total deposit ratio of these two banks have increasing trend. Nabil's increasing trend ratio is 5.929 and that of SBI bank is 5.696. The increasing trend ratio of Nabil bank shows its better future condition for utilizing the total deposit towards investment.

From the above findings, it can be concluded that, Nabil may use relatively large portion of their deposit to investment in the potential sectors of the country. If it is able to do so, Nabil may have better position in the banking sector.

7. Coefficient of correlation analysis

Coefficient of correlation analysis between different variables of Nabil and SBI bank shows that:

- Coefficient of correlation between deposit and loan and advances of these two banks have positive relationship between the variables. Nabil has the lower value of coefficient of correlation between deposit and loan and advances than the SBI bank. This indicates that SBI bank's position is better than Nabil bank in mobilizing the deposit as loan and advances.
- Coefficient of correlation between deposit and total investment of Nabil is higher than that of SBI bank. It shows the positive relationship between the variables.
- Coefficient of correlation between outside assets and net profit of Nbail bank has negative relationship whereas, that of SBI bank has positive relationship. It reveals that Nabil bank is not capable to earn profit by mobilizing its total outside assets.

From the above findings, we can observe that there is significant relationship between deposit and total investment and deposit and loan and advances but negative

relationship between outside assets and net profit of Nabil bank. All the variables of SBI bank have positive relationship with each other.

8. Test of Hypothesis

By analyzing the test of significant difference regarding the parameter of the population, it has been found that:

- There is significant difference between mean ratios of loan and advances to total deposit of Nabil and SBI bank.
- There is significant diference between and mean ratios of total investment to total deposit of Nabil and SBI bank.
- There is no significant difference between the mean ratios of investment on government securities to current assets of Nabil and SBI bank.
- There is no significant difference between the mean ratios of loan and advances to current ratio of Nabil and SBI bank.
- There is no significant difference between the mean ratios of total interest earned to total outside assets of Nabil and SBI bank.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

In this chapter we present the summary and conclusions flown form the analysis in the preceding chapter. Then, based on the finding and our conclusion we recommend certain measures for further improvement. With the help of some important financial as well as statistical tools, the researcher has tried to make a comparative analysis of various of the investment of the concerned commercial banks.

After completing the basic analysis required for the study, the researcher has tried to point out some problems and errors and also has some suggestions for further improvement. This study may be helpful for the management of concerned bank to initiate the action and achieve the desired result.

5.1 Summary

The economic development of a country depends upon the development of the commerce and industry. There is no doubt that banking promotes the development of commerce because banking sector itself is the part of commerce. The process of economic development depends upon various factors. However, economists are now convinced that capital formation and its proper utilization plays a paramount role for rapid economic development.

The economic growth was quite sluggish during the first three and a half decade during the Maoist insurgency and later on, the growth rate has been quite dismal. At present, overall economic growth rate is still declining year by year. Reasons behind such decline are insecure economic condition, decrease in the tourist arrival decreasing production and export of carpet, garment and pashmina industry and political situation of the country.

The evolution of the organized financial system in Nepal has recent history than in any other countries of the world. In Nepalese context, the history of banking is hardly seven decade. However, after the announcement of liberal and free market economy based policy, Nepalese banks and financial sectors started having greater network and access to national markets. Commercial banks play a vital role, which deals with other

people's money, and stimulate saving by mobilizing idle resources to those sectors where the objectives opportunities as available. Modern banks provide various services to their customers in view of facilitating their economic and social life.

The objective of the commercial banks is always to earn more profit by investing or granting loan & advances to the profitable, secured and marketable sectors. But they should be careful while performing the credit creation function; the banks should never invest its funds in those securities, which are of fluctuating nature. And, commercial banks must follow the rules and regulations as well as different directions issued by central bank and ministry of finance while mobilizing the funds. For the purpose of the present study two commercial banks namely Nabil and SBI, were taken.

In this study, the word investment covers analysis wide range of activities i.e. the investment of income, saving or any other collected fund. If there is no savings, there is no existence of investment. Saving and investment are inter-related. Investment policy is a facet of the overall spectrum of policies that guides banks' investment operations and it ensures efficient allocation of funds to achieve the economic development of the nation. A sound and viable investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposit, loan and investment. Therefore, the investment policy should be carefully planned and analyzed.

Some sources of funds for the investment of bank are capital, general reserves, accumulated profit, deposits and internal & external borrowings. Similarly, some important banking terms, which are frequently used investment this study are loan and advances, investment on government securities, shares and debentures, deposits, etc.

For the analysis and interpretation of the data of this study, different financial & statistical tools are used. In the financial tools liquidity ratios, asset management ratios, profitability ratios, risk ratios and growth ratios have been used. The statistical tools such as mean, standard deviation, co-efficient of variation, mainly; the secondary data are used for the analysis in this study. The data are obtained annual report of concerned banks; likewise, the financial statement of five years i.e. 2005/2006 to 2009/2010 was selected for the purpose of evaluation.

5.2 Conclusion

The above-mentioned major findings led this study to the following conclusions:

- The liquidity position of Nabil is comparatively lower than SBI bank but it has the highest investment in government securities to current assets ratio.
- Nabil bank has highest ratio in investment to total deposit and government securities to total working fund but lower into shares and debentures to total working fund.
- Analyzing the profitability of these two banks, we found that return on total working fund and return on loan and advances of Nabil is higher than that of SBI bank. But, total interest paid to total working fund of Nabil is lower than that of SBI bank.
- From the viewpoint of the risk ratio, liquidity risk and credit risk of Nabil is lower than that of SBI bank whereas it is higher in case of capital risk.
- From the analysis of growth ratio we found that, Nabil has lower growth rate in total deposit, loan & advances and total investment but it has average growth rate in net profit.
- Through the help of the trend analysis we come to know that, loan and advances to total deposit and total investment to total deposit ratios of Nabil bank are greater than that of SBI bank. It suggests that the position of Nabil bank may be higher than the other bank.
- Through the analysis and findings we can summarize that investment policy of Nabil bank is better in every sector and profitability ratio is good. Similarly, trend analysis of loan &advances and total investment to total deposits show that the position of Nabil will be better in the future. However, liquidity position and growth rate is not satisfactory and it has average risk ratio.
- SBI bank has good liquidity position and risk ratio.

5.3 Recommendations

On the basis of above analysis and conclusion, following recommendations are made;

- Besides giving priority on government securities, Nabil bank is recommended to invest its fund investment purchase of shares and debentures of other financial companies. government securities offer lower interest rate than others. So investment in shares and debentures helps to maintain the sound portfolio of the bank.

- Profitability is the main indicator of the financial performance financial institutions. In this study, we can see that profitability ratio of Nabil is good form the angle of return but it is not able to earn higher interest through the use of outside assets and working fund. So, Nabil is recommended to increase its interest earning capacity by investing more and more fund in loan and advances and different types of securities.

- A commercial bank must maintain its satisfactory liquidity position to meet the credit need of its customers; however, internal as external factors affect the liquidity position of the banks. As Nabil has maintained lower ratio of cash and bank balance to total deposit and current assets than SBI bank, Nabin is recommended to increase cash and bank balance to meet the requirement of cash for various purposes. SBI bank is able to maintain higher liquidity ratio but it should be enough careful that it's more than required level.

- If a bank expects high return on its investment, it has to accept risk. The risk taken by Nabil, from the angle of capital risk is an average whereas liquidity risk and credit risk is lower than that of SBI bank. Its consistency is highly volatile which may result in higher loss. The bank should not take high risk. Nabil should carefully analyze the above risks to achieve higher returns.

- The growth ratios represent how well the commercial banks are maintaining their economic and financial position; it is directly related to the fund mobilization and investment. SBI bank's growth ratio is better than that of Nabil bank. Nabil bank has very fluctuating growth rate. Nabil is

recommended to increase its growth ratio into deposits, loan & advances, investment and net profit.

- Co-efficient of correlation analysis interprets the relationship between two or more variables. Co-efficient of correlation between outside assets and net profit of Nabil is negative, which shows that there is negative relationship between these two variables. It reveals that Nabil is not able to earn net profit by mobilizing its total outside assets. So Nabil should innovate new strategy to improve its present conditions.

- In the light of growing competition in banking sector, the business of the bank should be customer oriented. The bank is recommended to adopt new technology and services. All most all commercial banks in Nepal are providing various facilities such as financial switch system (SWIFT), automatic teller machine (ATM) cards, visa electron debit card, international credit card, locker services, lending against gold and silver services, parking services, 24-hour services etc. Beside these facilities bank should be involved in different kind of social and community development activities. The bank should be able to provide more personalized services and a better environment for its customers.

- To get success in the competitive banking environment, depositor's money must be utilized as loan and advances. The largest item of bank in the must be utilized as loan and advances. If it is neglected, then it would be the main cause of liquidity crisis in the bank. Nabil's loan and advances to total deposit ratio and loan and advances to total working fund ratio of lower than that of SBI bank. To overcome this situation, Nabil is strongly recommended to follow liberal lending policy and invest more and percentage of total deposit and total working fund in loan and advances.

- In order to collect more funds, Nabil is suggested not to be surrounded and limited only by big clients i.e. multination companies, large industries, manufacturer companies, NGO's and INGO's etc. It should give emphasis to general people also. It should be able to collect small savings of people too to meet its needs for cash.

5.4 Direction for Future Researcher

This thesis has not covered all investment policy. Because of various limitations this study has covered only two bank's comparative investment policy. This study is simply a partial study for the fulfillment of MBS degree. Following research topics may provide for further researcher:

1. Investment theory and practices adopted by commercial banks.
2. Investment management of commercial banks.
3. Investment analysis and management.

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Appendix-1

Liquidity Ratio

A. Current Ratio

Calculation of current ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Current assets	13161.68	13313.40	13868.30	14244.04	14788
Current liabilities	17226.21	16384.73	15135.42	15153.13	15405.11
Ratio (times)	0.76	0.81	0.92	0.94	0.96
SBI Bank					
Current assets	7166.11	6787.57	740457	8345.34	20921.81
Current liabilities	7043.64	5459.41	6992.43	7808.29	19194.31
Ratio (times)	1.02	1.05	1.06	1.07	1.09

B. Cash and Bank Balance to Total Deposit Ratio

Calculation of cash and bank balance to total deposit ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Cash and bank balance	812.90	1051.82	1144.77	970.49	3441.2
Total deposit	15839.01	15506.44	13447.65	14119.03	63963.94
Ratio (times)	5.13	6.78	8.51	6.87	5.38
SBI Bank					
Cash and bank balance	1945.14	1619.96	1333.54	864.42	3874
Total deposit	6612.29	5572.47	6522.82	7198.32	37142.85
Ratio (times)	29.42	29.07	20.44	12.01	10.43

C. Cash and Bank Balance to Current Assets Ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Cash and bank balance	812.90	1051.82	1144.77	1070.49	970.49
Current assets	13161.68	13313.40	13868.30	13706.65	15729.17
Ratio (times)	6.18	7.90	8.25	7.81	6.17
SBI Bank					
Cash and bank balance	1945.14	1619.96	1333.54	1864.42	864.42
Current assets	7166.11	6787.45	7404.57	12138.15	9186.185
Ratio (times)	27.14	23.87	18.01	15.36	9.41

D. Investment on Government Securities to Current Assets Ratio

Calculation of government securities to current assets ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Government securities	2732.96	4120.29	3588.77	3672.63	3264.36
Current assets	13161.68	13313.40	13868.30	14244.04	13124.25
Ratio (times)	20.76	30.95	25.88	25.78	24.87
SBI Bank					
Government securities	364.69	503.17	1189.39	1871.46	3856.23
Current assets	7166.11	6787.45	7404.57	8345.34	15128.40
Ratio (times)	5.09	7.41	16.06	22.43	25.49

E. Investment on Loan and Advances to Current Assets Ratio

Calculation of Loan and Advances to Current Assets Ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Loan and advances	8324.44	7437.90	7755.95	8189.99	9857.43
Current assets	13161.68	13313.40	13868.30	14244.04	16547.64
Ratio (times)	63.25	55.87	55.93	57.50	59.57
SBI Bank					
Loan and advances	4188.41	4299.25	4468.72	5143.66	8234.45
Current assets	7166.11	6787.45	7404.57	8345.34	13183.55
Ratio (times)	58.45	63.34	60.35	61.64	62.46

Appendix-2

Asset Management Ratio (Activity Ratio)

A. Loan and Advances to Total Deposit Ratio

Calculation of loan and advances to total deposit ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Loan and advances	7334.76	8324.44	7437.90	7755.95	8189.99
Total deposit	12779.51	15839.01	15506.44	13447.65	14119.03
Ratio (times)	57	53	48	58	58
SBI Bank					
Loan and advances	3559.41	4188.41	4299.25	4468.72	5143.66
Total deposit	4335.73	6612.29	5572.47	6522.82	7198.32
Ratio (times)	78	63	77	69	71

B. Total Investment to Total Deposit Ratio

Calculation of total investment to total deposit ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Total investment	7704.31	8199.51	6031.17	5836.07	4963.81
Total deposit	15839.01	15506.44	13447.65	14119.03	12572.97
Ratio (times)	48.64	52.88	44.85	41.33	39.48
SBI Bank					
Total investment	373.63	599.06	1207.28	1907.52	2172.23
Total deposit	6612.29	5572.47	6522.82	7198.32	7082.589
Ratio (times)	5.65	10.75	18.51	26.50	30.67

C. Loan and Advances to Working Fund Ratio

Calculation of Loan and advances to working fund ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Loan and advances	8324.44	7437.90	7755.95	8189.99	8259.67
Working fund	18367.15	17629.25	16562.61	167745.61	16394.74
Ratio (times)	45.32	42.19	46.83	48.91	50.38
SBI Bank					
Loan and advances	3559.410	4188.41	4299.25	4468.72	5143.66
Working fund	5106.57	7284.79	7021.14	7566.33	8440.40
Ratio (times)	69.70	57.50	61.23	59.06	60.94

D. Investment on government securities to working fund ratio

Calculation of investment on government securities to working fund ratio of Nabil and SBI bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Government securities	2732.96	4120.29	3588.77	3672.63	3988.34
Working fund	18367.15	17629.25	16562.61	167745.61	17852.91
Ratio (times)	14.88	23.37	21.67	21.93	22.34
SBI Bank					
Government securities	364.69	503.17	1189.39	1871.46	2151.64
Working fund	7284.79	7021.14	7566.33	8440.40	8159.42
Ratio (times)	5.01	7.17	15.72	22.17	26.37

E. Investment on shares and debentures to working fund ratio

Calculation of investment on shares and debentures to working fund ratio of Nabil and SBI bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Investment on shares and debenture	18.82	22.22	22.22	22.22	22.22
Working fund	18367.15	17629.25	16562.61	167745.61	167745.61
Ratio (times)	0.10	0.13	0.13	0.13	0.13
SBI Bank					
Investment on shares and debenture	8.94	8.94	17.89	17.89	16.21
Working fund	7284.79	7284.79	7021.14	8440.40	8531.52
Ratio (times)	0.12	0.12	0.25	0.21	0.19

Appendix-III

Profitability Ratios

A. Return on Total Working Fund Ratio

Calculation of return on working fund ratio of Nabil and SBI bank

Particular	Fiscal Year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Net profit	291.37	271.63	416.25	455.32	513.36
Working fund	18367.15	17629.25	16562.61	167745.63	162971.4
Ratio (Times)	1.59	1.54	2.51	2.72	3.15
SBI bank					
Net profit	12.51	40.85	48.75	60.86	68.15
Working fund	7284.79	7021.14	7566.33	8440.40	7098.96
Ratio (Times)	0.17	0.58	0.64	0.72	0.96

B. return on Loan & Advances Ratio

Calculation of return on loan & advances ratio of Nabil and SBI bank

Particular	Fiscal Year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Net profit	291.37	271.63	416.25	455.32	465.73
Working fund	8324.44	7437.90	7755.95	8189.99	7780.704
Ratio (Times)	3.50	3.65	5.37	5.56	5.96
SBI bank					
Net profit	12.51	40.85	48.75	60.86	68.36
Working fund	4188.41	4299.25	4468.72	5143.66	4193.86
Ratio (Times)	0.30	0.95	1.09	1.18	1.63

C. Total Interest Earned to Total Outside Assets Ratio

Calculation total interest earned to total outside ratio of Nabil and SBI bank

Particular	Fiscal Year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Net profit	1266.70	1120.18	1017.87	1001.62	987.64
Working fund	16028.75	15637.41	13787.12	14026.06	13930.04
Ratio (Times)	7.90	7.16	7.38	7.14	7.09
SBI bank					
Net profit	444.56	399.63	469.74	493.60	412.47
Working fund	4562.04	4898.31	5676.00	7051.18	5986.502
Ratio (Times)	9.74	8.16	8.28	7.00	6.89

D. Total Interest Earned to Total Working Fund Ratio

Calculation of total interest earned to total working fund ratio of Nabil and SBI bank.

Particular	Fiscal Year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Net profit	1266.70	1120.18	1017.87	1001.62	989.61
Working fund	18367.15	17629.25	16562.61	167745.61	19792.2
Ratio (Times)	6.90	6.35	6.15	5.98	5.00
SBI bank					
Net profit	444.56	399.63	437.32	393.60	291.67
Working fund	6243.82	7021.14	5106.57	3995.93	5833.4
Ratio (Times)	7.12	5.69	8.65	6.85	5.00

E. Total Interest Paid to Total Working Fund Ratio

Calculation of total interest paid to total working fund ratio of Nabil and SBI bank.

Particular	Fiscal Year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Net profit	578.36	462.08	417.35	282.94	228.49
Working fund	18367.15	17629.25	18970.45	14435.71	13932.31
Ratio (Times)	3.15	2.62	2.20	1.96	1.64
SBI bank					
Net profit	271.79	388.58	291.82	255.92	215.22
Working fund	7284.79	7604.31	6316.45	8440.40	7270.95
Ratio (Times)	3.73	5.11	4.62	3.03	2.96

Appendix-4

Risk Ratio

A. Liquidity Risk Ratio

Calculation of liquidity risk ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Cash and bank balance	1088.75	812.90	1051.82	1144.77	970.49
Total deposit	12779.51	15839.01	15506.44	13447.65	14119.03
Ratio (times)	8.52	5.13	6.78	8.51	6.87
SBI Bank					
Cash and bank balance	1945.14	1619.96	1333.54	864.42	746.43
Total deposit	6612.29	5572.47	6522.82	7198.32	6810.49
Ratio (times)	29.42	29.07	20.44	12.01	10.96

B. Credit Risk Ratio

Calculation of Credit Risk ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Loan and advances	8324.44	7437.90	7755.95	8189.99	9819.41
Total assets	18367.15	17629.25	16562.61	16745.61	19580.079
Ratio (times)	45.32	42.1	46.83	48.91	50.15
SBI Bank					
Loan and advances	4188.41	4299.25	4468.72	5143.66	5234.67
Total assets	7284.79	7021.14	7566.33	8440.40	8543.61
Ratio (times)	57.50	61.23	59.06	60.94	61.27

C. Capital Risk Ratio

Calculation of capital risk ratio of Nabil and SBI Bank

Particular	Fiscal year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Nabil Bank					
Capital	1062.83	1146.42	1314.18	1481.68	1531.67
Risk weighted assets	8324.44	7437.90	7755.95	8189.99	7932.0
Ratio (times)	12.77	15.41	16.95	18.09	19.31
SBI Bank					
Capital	238.55	560.34	569.86	626.64	537.34
Risk weighted assets	4188.41	4299.25	4468.72	5143.66	5262.87
Ratio (times)	5.60	13.03	12.75	12.18	10.21

Appendix-5

Calculation of mean, standard deviation and coefficient of variation of current ratio of Nabil and SBI Bank

FY	Nabil bank		SBI bank	
	X_1	X_1^2	X_2	X_2^2
2005/06	1.06	1.13	1.02	1.04
2006/07	0.76	0.58	1.02	1.04
2007/08	0.81	0.65	1.05	1.10
2008/09	0.92	0.85	1.06	1.12
2009/10	0.94	0.88	1.07	1.16
N = 5	4.49	4.087	5.022	5.48

Where,

X_1 = Total current ratio of Nabil

X_2 = Total current ratio of SBI bank

Calculation of mean of current ratio of Nabil bank

Mean = $\frac{\sum X_1}{N} = \frac{4.49}{5}$ = 0.898

Calculation of standard deviation of current ratio of Nabil bank

S.D. = $\sqrt{\frac{\sum (X_1)^2}{N} - \left(\frac{\sum X_1}{N}\right)^2}$

= $\sqrt{\frac{4.087}{5} - \left(\frac{4.49}{5}\right)^2}$

= 0.105

Calculation of coefficient of variation (C.V.)

C.V = $\frac{\sigma}{\bar{X}} \times 100\%$

= $\frac{0.105}{0.898} \times 100$

= 11.69%

Calculation of mean, S.D. and CV of SBI bank is done similarly.

Appendix-6

Calculation of coefficient of correlation between Deposit and Loan and Advances of Nabil

FY	Deposit (X)	Loan and advances (Y)	$x = X - \overline{X}$	x^2	$y = Y - \overline{Y}$	y^2	xy
2005/06	12779.51	7334.76	(1558.82)	2429913.56	(473.85)	224531.91	738642.79
2006/07	15839.01	8324.44	1500.68	2252046.46	515.83	266082.65	774099.80
2007/08	15506.44	7437.90	1168.11	1364485.64	(370.71)	137424.42	(433028.46)
2008/09	13447.65	7755.95	(890.68)	793307.30	(52.66)	2772.86	46901.32
2009/10	14119.03	8189.99	(219.30)	48091.61	381.38	145452.23	(83636.31)
n = 5	ΣX = 71691.64	ΣY = 39043.04	$\Sigma x = 0$	Σx^2 = 6887844.58	$\Sigma y = 0$	Σy^2 = 776264.09	Σxy = 1042979.14
Mean	14338.33	7808.61					

Now

Coefficient of correlation (r) = $\frac{N\sum xy - \sum x.\sum y}{\sqrt{N\Sigma x^2 - (\Sigma x)^2}\sqrt{N\Sigma y^2 - (\Sigma y)^2}}$

$= \frac{5 \times 1042979.14 - 0 \times 0}{\sqrt{5 \times 6887844.58 - (0)^2}\sqrt{5 \times 776264.094 - (0)^2}}$

$= 0.45$

$r^2 = 0.2025$

Probable Error (PEr) $= 0.6745 \text{ x } \frac{1 - r^2}{\sqrt{n}}$

$= 0.6745 \text{ x } \frac{1 - 0.20}{5}$

$= 0.11$

Coefficient of correlation of SBI bank is calculated accordingly.

Appendix-7

Calculation of coefficient of correlation between Deposit and Loan and Advances of Nabil

FY	Nabil			SBI		
	X_1	$x_1 = X_1 - \overline{X}_1$	x_1^2	X_2	$x_2 = X_2 - \overline{X}_2$	x_2^2
2005/06	57.00	2.20	4.84	78.00	6.40	40.96
2006/07	53.00	-1.80	3.24	63.00	-8.60	73.96
2007/08	48.00	-6.80	46.24	77.00	5.40	29.16
2008/09	58.00	3.20	10.24	69.00	-2.60	6.76
2009/10	58.00	3.20	10.24	-2.40	0.60	0.36
n = 5	$\Sigma X_1 = 274$	$\Sigma x_1 = 0$	$\Sigma X_1^2 =$ 74.80	$\Sigma X_2 = 358$	$\Sigma x_2 = 0$	$\Sigma x_2^2 =$ 131.20

Now

$\overline{X}_1 = \frac{\sum X_1}{n}$ $\overline{X}_2 = \frac{\sum X_2}{n}$

$= \frac{274}{5}$ $= \frac{358}{5}$

$= 54.80$ $= 71.60$

Test of significance of difference between (other ratios) Nabil and SBI bank are calculated accordingly.