# CHAPTER – 1 INTRODUCTION

#### 1.1 Background of the study:

Nepal is landlocked country with agro-based economy. More than 80% of Nepalese people are involved in agriculture sector. The country is divided into three parts Mountains, hills and Terai region with its geographical nature. More than 90% of the people of the people are live in rural areas. The annual per capital income of Nepal is US \$ 210. It contributes more than 40% of total GDP and major suppliers of raw materials to industries. The emergence and expansion of productive industries are necessary for the all round development of the country. However the share of industries in Nepal's GDP consist of only around 10% and limited portion of labour forced is involved in industry, consequently more than 80% of the total population depends on agriculture for their livelihood.

Agriculture is still not sufficient to feed the growing population in Nepal because of lack of implementation of modern technology, proper education, financial institution and basic infrastructure like irrigation, transportation and communication etc. in the rural areas. Therefore, the manpower and resources from agricultural sector must be transferred to other industrial sector for economic development, industrial development will play key role for stable economic development. Till now industrial sectors have contributed to the national economy less than 56% of the GDP.

"Industrialization is the most essence element of rapid economic development for a developing country like Nepal; therefore these countries should be well informed about the need and significance of industrialization. So, for the rapid development of developing nations, like Nepal, development in agriculture sector alone is not sufficient; it is essential to develop industrial sector too. Thus industries have an important role to play in accelerating the rate of economic development. What are the ultimate objectives of economic development? Different government may have different objectives in mind and still certainly disagree about the weight to be attached to them. Generally however they will include faster growth of national income, alleviation of poverty reduction of incomes inequalities". <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> World Bank Report – 1998.

<sup>&</sup>lt;sup>2</sup> World Bank Report – 1998.

Capital accumulation plays an important role in accelerating the economic growth of a nation, which in turn is basically determined, among others by saving and investment propensities. But the capacity of saving in the developing countries is quite low with a relatively higher marginal propensity of consumption. As result such countries are badly entrapped into the various circle of poverty. So, the basic problems for the developing countries are raising the level of saving and thus investments.

"Banking institutions are inevitable for the resource mobilization and all-round development of the country. It is resource for economic development. It maintains economic confidence of various segments and extends credit to people".

"Banking concept existed even in the ancient period then the goldsmiths and the rich people used to issue the common people against the promise of safe keeping of their valuable items on the presentation of the receipt; the depositors would get back their gold and valuables after paying a small amount for safe keeping and saving".

In ordered to collect the saving and put them into productive channels, financial institutions like banks are a necessity. In the absence of such institution the saving will not be safely and profitably utilized within the economy and will either be diverted abroad or used for unproductive consumption or speculative activities. Commercial banks can play a vital role in giving a direction to economic development by financing the requirement of trade and industries in the economy. They draw the community saving into organized sector that can then be allocated among the different economic activities according to the priorities laid down by planning authorities in the country.

"In the overall development of the banking system in Nepal, the Tejarath Adda may be regarded as the father of modern banking institution and for a quite a long time it tendered a good service to government servants as well as to the general public. However the concept of modern financial institution in Nepal was introduced when the first commercial bank the Nepal Bank Limited was established in 1937 A.D. under the Nepal Bank act 1936 A.D. during the Prime Minister Juddha Samser Janga Bahadur Rana. Before that the credit needs of the people for commercial and other purpose were met mostly by the unorganized market of the private money lenders".

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<sup>&</sup>lt;sup>3</sup> Grywinshki Ronald May-June 1993.

<sup>&</sup>lt;sup>4</sup> Paul A Samuelson.

<sup>&</sup>lt;sup>5</sup> Bankers Handbooks for Asia 1976.

#### 1.1.1 Concept of Commercial Banks:

The commercial banks are those who pool together the saving of community in the firm of various deposits and arrange for their productive use by giving loans and financial the trade of country. In general banks are those financial institutions that offer the widest range of financial services especially credit, savings and payment services and perform the widest range of financing functions of any business firm in the economy.

"Commercial banks are the heart of the financial system. They hold the deposits of many persons, government establishments and business units. They make funds available through their lending and investing activities to borrowers, individuals, business firms, and government units. For doing so they assist both the flow of goods and services from the producers to consumers and the financial activities of government. They dispense the large portion of medium through which monitory policy is affected. This shows that the commercial banking system of any nation plays consequential role in the smooth functioning of economy".

Commercial banks play the most important role in modern economic organization. Mainly their businesses consist of receiving deposits, giving loans and financing the trade of a country. They provides short-term credit i.e. lend money for short periods. This is their special feature.

According to American Institution of Banking, "Commercial banks are a corporation which accepts demand deposits subject to cheek and makes short term loans to business enterprise regardless of the scope its other services".

"A single institution can't fulfill all the services demanded by the customers, different types of banks e.g. commercial banks, development banks, Exchange banks, industrials banks, central bank, co-operative banks etc. Emerged in the banking industry specialized in different functional areas. Commercial banks are those, which perform all kind of banking functions as accepting deposits, advancing loans, credit creation and agency functions. They provide short-term loan, medium term loan and long-term loans to trade and industry they also operate off balance sheet functions such as issuing guarantees bonds, letter of credit etc." <sup>8</sup>

<sup>&</sup>lt;sup>6</sup> Edward W. Red, Richard V. Coeffer, Edward K. Gill and Richard K. Smith, 1976.

<sup>&</sup>lt;sup>7</sup> American Institution of Banking, 1972.

<sup>&</sup>lt;sup>8</sup> Vaidya Shakespeare, 1997.

In the Nepalese context, Nepal commercial bank act, 2031 B.S. define, "a commercial bank as one which exchanges money, deposits money, accepts deposits grants loans and performs commercial banking function".

Like this way, different writers on banking have defined the bank in various ways, since a modern bank performs number of functions. So it has become very difficult to give appropriate definition.

#### 1.1.2 Function of Commercial Banks:

Receiving deposits and giving loans are the two main functions of commercial banks.

Commercial banks generally perform following function:

- a) Accepting deposits: Accepting deposits by banks is the basic and most important function. A bank accepts deposit in three forms namely saving, current and fixed deposits. The bank is free to make use of fixed deposits for granting loans and advances, as it is aware of the repayment of such fixed deposits.
- **b)** Advancing loans: After collecting money by way of deposits, a bank invests it or lends it out. Money is lent to business persons and traders usually for short periods only. This is so because the bank must keep it self ready to meet the demand of the depositors, who have deposited money for short period. Money is advanced by the banks in the form of allowing on overdrafts creating a deposit of cash credit and discounting bills.
- c) Extension of credit: They are extending credits to the worthy borrowers. Bank lending contributes a lot to the economy in term of financing agricultural, commercial and industrial activities of the nation.
- **d) Facilities for the financing of foreign trade:** The commercial banks arrange for foreign exchanges required by business organizations and travelers, moreover, foreign trade transactions have been facilitating by the issuance of commercial letter of credit.
- e) Creating money: As per the directive of the central bank, commercial banks should have ability to create and dispose money. The power of the commercial banking system to create money is of great economic significance as it helps to create and elastic credit system that is necessary for the economic progress.
- **f) Payment mechanism:** Commercial banks perform this function to transfer the fund by means of checks and credit cards facilities and efficient transaction.
- **g) Safe custody:** Banks arrange for the safekeeping of ornaments, jeweler, securities important documents etc, of its customers in secure vaults.

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<sup>&</sup>lt;sup>9</sup> Commercial Bank Act, 2031 B.S.

- **h) Reference:** They provide references about the financial position of their customers when required. They supply this information confidentially. This done when their customers want to establish business connections with some new firms within or out side the country.
- i) Agency function: The bank works as an agent of their constituents. They receive payments on their behalf. They collect rent, dividends on shares etc. they pay insurance premium and make other payments as instructed by their depositors. They accept bill of exchange on behalf of their customers. They pass bill of lading or railway receipts to the purchases of goods when they pay them. This amount is passed on to the suppliers of goods.

Besides all these facilities, in case of commercial banks, they issue credit cards and arrangement for issue of Visa international card. Some of them have priority to lend educated and unemployed youth for small projects.

# 1.1.3 Private Commercial Banks in Nepal:

The bank, which is operated, by general public or non government financial institution under commercial bank act 2031 B.S. is called private commercial bank. It should follow the rules and regulation according to commercial bank act. Commercial bank should comply the directives and policy of Nepal Rastra bank (NRB), which is the central bank of Nepal. Currently there are 15 private investments and general people's investment is called foreign participated private commercial bank. At present there are four foreign participated private commercial banks in Nepal Among the foreign participated banks; NABIL and SCBNL are fast growing and successful banks.

Since the government has taken initiative for the growth and development of the industrial sector, it has provided suitable environment to enable foreign investors to undertaken joint venture operation with Nepalese investors, the government has encouraged private participation in several infrastructure activities such as private airlines, hydro power, computer software, textiles, readymade garments and carpets, telecommunication, radio services, pharmaceutical, medical companies etc. so to enable to meet the needs of capital and resources, role of the private commercial banks has been emerging day by day.

Nepal government has formed the policy to make easy to establish the private commercial bank to meet the demand of capital and resource for the development of economy and to give the impetus to existing government owned commercial banks since late eighty. At the beginning, private commercial banks were opened as a joint venture banks getting financial and technical support with different foreign banks. They enhanced the bankable capacity through competition, modernization, efficiency, and mechanization, via computerization. Consequently traditionally operated banks were compelled to improve their service system to survive in the competition age.

Currently operating private commercial banks are as follows:

- a. Nepal Arab Bank Limited (NABIL)
- b. Nepal investment Bank Limited
- c. Standard Chartered Bank Nepal Limited (SCBNL)
- d. Himalayan Bank Limited
- e. Nepal SBI Bank Limited
- f. Nepal Bangladesh Bank Limited
- g. Everest Bank Limited
- h. Bank of kathmandu Limited
- i. Nepal Credit and Commercial Bank Limited
- j. Lumbini Bank Limited
- k. Nepal Industrial and Commercial Bank Limited
- 1. Kumari Bank Limited
- m. Machhapuchre Bank Limited
- n. Laxmi Bank limited
- o. Siddarth Bank Limited

Among the private commercial banks there are four foreign participated private commercial banks, which are as bellows:

- a. Nepal Arab Bank Limited (NABIL)
- b. Standard Chartered Bank Nepal Limited (SCBNL)
- c. Himalayan Bank Limited (HBL)
- d. Nepal Bangladesh Bank Limited

Out of the foreign participated private commercial banks, only NABIL and SCBNL are being selected in this research. Because these two bank's financial position is too sound which shows by the continuous profit and distribution of bonus to its shareholders.

# 1.1.4 Brief introduction of Nepal Arab Bank Limited and Standard Chartered Bank Nepal Limited:

# NABIL (Nepal Arab Bank Limited):

This is first joint venture bank in Nepal. It was established in 1984 under a technical service agreement with Dubai Bank Limited, Dubai, which was later merged with Emirates Bank Limited, Dubai. It has 18 branches in Nepal. From their very inception over 24 years ago in 1984, as the first joint venture banks to commence operations in Nepal, they have been a leader in the market.

Today they are a leader in the financial industry and are committed to their mission, to be the "*Bank of 1*<sup>st</sup> *Choice*" to all their stakeholders. To achieve this mission they live by a set of core value, *C.R.I.S.P*; Customer Focused, Result Oriented, Innovative, Synergistic and Professional. They are committed to live their values everyday in everything they do, for it is these values that make them uniquely NABIL Bank.

The Bank realizes that today they stand as leaders in the market because of the partnerships they have built over the past two decades. Partnerships with all their stakeholders: Customers, Shareholders, Regulators, Communities and Staff. The bank is only bank issuing Master Card in Nepal. The bank has changed its name from Nepal Arab Bank Limited to NABIL, bank limited from 1<sup>st</sup> January 2002. Initially the bank had 100 million rupees authorized capital, 50 million rupees issued capital, and 30 million rupees paid up capital.

NABIL bank has following capital structure (As at 2006 -2007)

❖ Authorized Share Capital: Rs. 500 Million.

❖ Issued Capital: Rs. 492 Million.

❖ Paid Capital (4916544 Shares of Rs. 100 each): Rs. 492 Million.

Shareholdings are distributed as follows:

- > 50% is owned by N.B. International Limited, Ireland.
- > 20% by local financial institution:

Nepal Industrial Development Corporation (10%)

Nepal Stock Exchange Limited (0.33%)

Rastriya Bima Shansthan (9.67)

> 30% by the Nepalese public.

It provides a complete range of personal, commercial and corporate banking related financial services through its 18 branches. The largest number of branches amongst any private commercial bank in Nepal. It has 372 employees as of 15<sup>th July</sup> 2006. All operation takes place

from Kamaladi, Kathmandu. NABIL bank is handling its daily operation by using modern banking techniques that exists in international; banking circle such as computer system, credit card, master card, visa international card, NABIL bank is trying to make its staff efficient by conducting trainings, seminars, conference, so that they can perform better than the staffs of local bank and can face the competition with the other local and private commercial bank in Nepal.

The bank is a major player in facilitating import export activities with modern and efficient trade finance, and international as well as established business conglomerates in the private sector. NABIL bank ranks among the top three financial institutions in Nepal in term of its market share of handling Nepal's trade.

Services have been providing by NABIL bank limited are as follows:

- a) Accepting deposits from it customer in various account like current, fixed and saving account,
- b) Granting loan and advance in terms of overdraft, demand loan, time loan, making investment in treasury bills, foreign bills and indigenous bill.
- c) Discounting bills
- d) Providing bank guarantee
- e) Opening facility of letter of credit
- f) Remittance service
- g) Issuing traveler cheques
- h) Safety locker's facility
- i) ATM facilities and credit cards.

#### Standard Chartered Bank Nepal Ltd. (SCBNL):

This bank was initially established as a joint venture of Grindlays Bank PLC and Nepal Bank Ltd. In 2043 (1987) with the shareholding ratio on ANZ Grindlays bank Limited 50% Nepal Bank Limited 33.34% and general public 16.66% along with the change of ownership to Standard Chartered, the banking area of SCBNL saw the rise of a new dawn changing the general image of the bank. The bank enjoys the status the largest international bank currently operating in Nepal.

# SCBNL bank has following capital structure (As at 2006 -2007)

1. Authorized capital

1, 00, 00,000 ordinary shares @ Rs. 100 each

1,00,00,00,000

2. Issued capital

50, 00,000 ordinary shares @ Rs. 100 each

50, 00, 00,000

3. Paid up capital

41, 32,548 ordinary shares @ Rs. 100 each

41, 32, 54,800

Shareholdings are distributed as follows:

➤ 75% is owned by Standard Chartered Group.

> 25% is owned by Nepalese public.

Standard Chartered Group employs 30000 people in over 500 locations in more than 50 countries in the Asia pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the USA. It is one of the world's most international banks. With a management team comprising 79 nationalities. The bank is trusted across its network for its standard of governance and its commitment to making a difference in the communities in which it operates.

Economy, various commercial banks have played vital role by accepting deposits and providing various types of loans. Loan affects overall development of the country. The development of the country is directly related to the volume of loan, which is also obtained from commercial banks. The problem of lending has become very serious for developing country like Nepal. This is due to lack of sound policy of commercial banks.

Establishment of private commercial banks has been continued in response to the economic liberalization policies of the government. The tendency to concentrate these banks only in urban areas like Kathmandu, Biratnagar etc. has raised certain question. This state of affairs cannot contribute much to the socio-economic development of the country. Private commercial banks are reluctant to extend their operation in rural areas. Despite the circular of NRB, the Central Bank of Nepal, regarding compulsory investment of 10% of their total investment in the rural areas, these banks are inclined to pay fines rather than directing their resources to such less profitable sector. This problem remains to be solved, so that even the small investor in the rural areas will benefit from the services of such banks. Moreover, even the existing branches of the commercial banks in the rural areas do not seem to have been able to mobilize the local resources effectively.

Commercial banks are found to be making loan only on short-term basis against movable merchandise. There is hesitation to investment on long-term projects as they are much more safety minded. So, they follow conservative loan policy, which is based on strong security, they

do not consider the profit potential of the project. There are criticism that commercial banks have served only richer communities and not the poor. This has directly had negative impact on economic growth. Nowadays commercial banks do not seem to be capable to invest their funds in more profitable sector. They are found to be more interested in investment in less risky and highly liquid sector i.e. treasury bills, development bonds and other securities. They keep high liquid position and flow lower funds to the productive sectors; this result in lower profitability to commercial banks and ignorance to the national economic growth process. This is the main reason of crisis in the commercial banks and in the whole national economy as well.

Delivering efficient services to the common people by enhancing efficiency of the commercial banks and improving their management style pose a challenge to the banks and financial institutions. The existing condition of the liquidity of the banking and financial institution also needs to be reduced through and appropriate investment policies. Equally important is the challenge to minimize the margin of interest rate these institution charge by minimizing their intermediation cost.

Among the private commercial banks NABIL bank Ltd. And SCBNL have achieved tremendous success in terms of market share and profitability due to their strength on service and professionalism. It has been distributing constantly bonus to their shareholders despite of bad economic condition and unstable social environment in Nepal. However, it cannot always predict that these banks will continue to maintain profitability and stability of earnings. Thus, the management of these banks acquires rational evaluation of the financial performance of the3 banks to prepare sound financial policies.

#### 1.2 Statement Of The Problem

There are various joint ventures banks operating their activities in the different part of the country. Banks are not to be considered merely as dealers of money but also the leaders in development. They are not only the store house of country's wealth but also the reservoirs necessary for economic development. After Government of Nepal adapted the open, liberal and market oriented economic policy. The establishments of private joint venture banks have continued in response to this. Consequently, they are facing tough competition. The financial sector may not be enough from them to meet the growing the resources need to the economy as expected before. Why the financial institution of Nepal is performing well and effectiveness of these institutions should be analyzed. This study will seek the reasonable reasons on the following concentration areas of NABIL bank and SCBNL banks,

- a) Identifying the liquidity, profitability and capital structure ratio and market position of joint venture banks.
- b) Identifying the growth ratios level of joint venture banks in term of net profit and earning
- c) Identifying the relationship between debt and return of joint venture banks.
- d) Identifying, how efficiently do the banks use their capital.
- e) Identifying, which bank performing better and efficiency?
- f) Examine the trend of Total deposits, Investments, Net profit, Loan & Advances, Total Assets, EPS and MPS.
- g) Find the position of income and expenditure.

In conclusion, this study aims to find out the areas of difference between NABIL and SCBNL in term of deposits collection, resources mobilization, liquidity and others. Fact efficient financial performance is helped to measure the weakness and strength of the bank. This study will predict their strength and weakness, fluctuations of ratios, trend and correlation between relevant variables. A strong financial performance of joint venture can contribute to national economy and also attract foreign investor to invest his or her investable fund in the financial sector. This may be exemplary lesion to the newcomer joint venture bank. Therefore financial statement of the bank should be fully examined to find out whether the bank are economically and financial strong or weakness.

## 1.3 Need of Study

Economic development of any nation is highly influenced by the growth of trade, commerce and industry. In Nepal, there are number of financial institution catering the banking need of the country. The success and failure of such financial institution is of great importance to the growth and development of nation.

Currently, there are 15 private commercial banks operating in Nepal. Out of them, Standard Charted Bank Nepal Limited and NABIL Bank Limited are the leading commercial bank in banking industry in terms of the market share and profitability in comparison to the rests of the commercial banks due to their strength in service and professionalism. So it is of high importance to analyze their financial performance by means of various financial tools in order to know their capability of making profit and contribution to the nation.

#### 1.4 Focus of the Study:

The study is focused on the comparative study on financial performance of NABIL and SCBNL. Financial analysis tries to analyze profitability and source and use of funds of these institutions. Financial ratios are evaluated with the help of accounting data and financial statements like balance sheet and profit and loss account with the help of these tools we can measure the liquidity, leverage, activity and profitability in rational way. Financial analysis is the process of determining the significant operating and financial characteristics of a firm from accounting data and financial statement.

A ratio helps the analyst to make a qualitative judgment about the banks financial position and performance. Therefore, the comparative judgment and financial position between two banks help to analyze strengths and weakness of the banks.

This study wills focuses on,

- 1) Ratio Analysis
- 2) Income and Expenditure analysis
- 3) Correlation analysis
- 4) Trend analysis

Main focus of this study will be on aspect such as liquidity, profitability activity, and income and expenditure patterns. The trend analysis is an indication about the future operation. So, this study aims to have a comparative analysis as regard to the past performances as well as future operation. "Financial analysis is the process of determining the significant operating and financial characteristic of a firm from various accounting data and financial statement. Financial ratio analysis is a widely use tool of financial analysis and its performance. The goal of such analysis is to determine the efficiency and the performance of the firm's management as reflected in the financial records and reports.

#### 1.5 Importance of Study:

Banking sectors has been one of the major contributors to national providing variety of disbursement to different sectors, enabling to boost the GDP. Hence, the performance of this sector needs to be above the par to any other field. The financial performance of commercial banking sector should be very much capable in enhancing the capital market as well. This research is a conclusion-oriented research. This thesis will help to know the financial performance of NABIL bank and SCBNL bank. This study will also helpful as a literature for the

future study about the relating topics. A part from this, the institution and firm can allow the suggestion of this study to make their policy and strategy more practical and scientific.

The accounting figures presented in the financial statements do not convey any meaningful understanding, it need to be analyzed and interpreted to know the financial position and performance of the banks. This study will be beneficial to different parties concerned with two banks as well as other interested parties.

This study has much significance, which are follows:

- **I.** Significance to the shareholders: The study will helpful to aware the shareholders regarding the financial performance of their banks. The comparison will help them to identify the productivity of their funds in each of those two banks.
- II. Significance to the outsiders: The customers (depositor and debtors) Financing agencies, stock exchanges and stockbrokers are interested in the performance of banks. The financial agencies can identify to which bank they should go and stockbrokers and stock exchanges can find out the relative wroth of the stocks of each bank.
- **III. Significance to the management:** The study will helpful to analyze success and failure of these banks comparison to competitors.
- **IV. Significance to policy makers:** Policy makers at the macro level that is government and Nepal Rastra bank will also benefit regarding the formulation of further policies in regard to economic development through banking institutions.

#### 1.6 Objectives of the Study:

The main objectives of this study are to analyze, examine and interpret the financial position of SCBNL and NABIL with the help of ratio analysis and other financial tools.

Specific objectives are as follows:

J	To find out operational efficiency of SCBNL and NABIL Bank Limited.
J	To analyze the different types of the risk associated in SCBNL and NABIL
	Bank Limited.
J	To analyze the financial strengths and weakness of the sample financial
	institution.
J	To find out the compliance of NRB directives.
J	To aware foreign participated banks, by giving precise suggestions and showing

right ways to maximize the value of their shareholders.

# 1.7 Limitation of the Study:

This research explains and analysis the subject matter with the help of well known or already established analytical method and techniques, therefore as a conclusion oriented research. It does not much concern with the fundamental and decision oriented research. This research depends upon only five-year annual report of both banks as well as some primary data of the both banks.

Following are the limitation of this study:-

- ➤ It only focuses on NABIL Bank Limited and SCBNL Bank Limited covering the period of Eight years (i.e. 1999/2000 to 2006/2007).
- The whole study is based on secondary data such as financial statement and financial reports of both banks.
- This study is concerned with the financial performance of both banks.
- ➤ The data published from various sources differ, they do not tally total in many place is not equal. However in this research, reports of NABIL Bank Limited and SCBNL Bank limited are taken valid source of data.
- Time and resource constraint may limit the area cover by study.

This study attempt to evaluate comparative financial performance of two foreign participated private commercial banks.

#### 1.8 Scheme of the Study:

The study has been organized into five chapters each devoted to some aspect of the study on "Financial performance of joint venture banks".

The titles of these chapters are as follows.

Chapter-1 : Introduction

Chapter-2 : Review of Literature

Chapter-3 : Research Methodology

Chapter-4 : Presentation and Analysis of Data

Chapter-5 : Summary, Conclusion & Recommendations

The rational behind this kind of organization is to follow a simple research methodology approach. The contents of each of the chapters of this study are briefly mentioned below.

**Chapter-1** Contains the introductory part of the study. As already mentioned, this

chapter describes the major issues to be investigated along with the general background and objective of the study.

- Chapter-2 Confines the review of literature of related studies in journals (literature) and review of related studies in Nepal with reference to previous thesis and policies of the government.
- Chapter-3 Describes the research methodology employed in the study. It includes research design, nature and sources of data, selection of enterprises, method of analysis, statistical and financial tools used.
- Chapter-4 Deals with the presentation and analysis of the data. It consists of analysis of relevant ratios to evaluate the financial position of both banks followed by their interpretation. The cash flow analysis; hypothesis testing of different ratios used in the study and trend analysis of different measures are calculated and interpreted. This chapter also presents the major finding of the research.
- **Chapter-5** Contains summary and conclusions of the study. It also offers recommendations on the basis of findings.

# CHAPTER – II

#### **Review of Literature:**

Review of literature means the study of relevant topics in the related field of research or reviewing related research studies and finding such that all past studies, their conclusion and deficiencies may by known and further research be able to be done. In the course of research, review of the existing literature would help to check the chances of duplication in the present study. Thus, one can find what studies have been conducted and what remains to go with.

This chapter basically is divided into two sections. The first section is conceptual review. This covers the topics such as concept of financial performances, meaning, objectives, and limitations of financial analysis. Along with this meaning, history, and functions of commercial banks, evolutions of joint venture banks and their functions are also presented. The Second section is related about the books articles and the pre done thesis related to the subject matter. This chapter highlights upon the literature that have been already conducted by some thesis researchers in this particular topic of joint venture bank. Some of them, as are supposed to be relevant for this research purpose. The review of literature is arranged in the following order.

#### 2.1 **Review of Supportive Text:**

#### **Financial Statement Analysis:** 2.1.1

Financial statement analysis is helpful to the decision maker for finding out favorable or unfavorable situation of a business concern. Therefore, financial analysis reflects the financial position of a firm, which is the process of determining the operational and financial characteristics of a firm. Different types of financial statement analysis can be used on the basis of our objectives.

According to J.N. Myer, financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by the single set of statement and study of the trend of these factors as shown in a series of statement. 10

It is the process of determining the significant operating and financial statements. The goal of such analysis is to determine the efficiency and performance of the firm's management, as reflected in the financial records and reports. 11

<sup>&</sup>lt;sup>10</sup> Myer J.N 1961, P.4. <sup>11</sup> Hampton 1998, P.98.

The main function of financial analysis is the pinpointing of the strengths and weaknesses of a business undertaking by regrouping and analysis of figures contained in financial statements, by making comparison of various components and by examining their content. This can by used by financial managers as the basis to plan future financial requirements by means of forecasting and budgeting procedures.<sup>12</sup>

Weston, Besley and Brigham have stated that financial statement analysis involves a comparison of firm's performance with that of other firms in the same line of business, which often is identified by the firm's industry classification. Generally speaking, the analysis is used to determine the firm's financial position in order to identify its current strengths and weaknesses and to suggest actions that might enable the firm to take advantage of the strengths and correct its weaknesses.<sup>13</sup>

# 2.1.2 Significance of Financial Analysis:

Significance of analysis lies on the objectives of financial analysis of any firm. Different groups associated with the concern perceive the facts discovered by the analysis differently. The facts and the relationships concerning managerial performance, corporate efficiency, financial strengths and weaknesses and credit worthiness are interpreted based on objective in the hand. Such an analysis leads management of an enterprise to take crucial decisions regarding operative policies, investment value of the firm, inter-financial control system and bargaining strategy for funds form external sources.<sup>14</sup>

The parties that are benefited by the results or conclusion drown from the analysis of financial performance can be enumerated as:-

Top management
Creditors
Shareholders
Economist
Labour union

#### **Top Management**

The responsibility of the top management is to evaluate

- Are the resources of the firm used effectively and efficiently?
- ➤ Is the financial condition of the firm sound enough?

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<sup>&</sup>lt;sup>12</sup> Goyl and Mana Mohan, 1997, P.356.

<sup>&</sup>lt;sup>13</sup> Weston and Brigham, 1996, P.193.

<sup>&</sup>lt;sup>14</sup> Agrawal, 1993, P.582.

Based on past facts firms can anticipate their future. Hence, top management can measure the success or otherwise of a company's operations, determine the relative efficiency of various departments; process and products appraise the individual's performance and evaluate the system of internal audit.

#### **Creditors**

The creditors can find out the financial strengths and capacity of the borrower to meet their claims. Trade creditors are interested in the firm's ability to meet their claims over a short span of time, the suppliers of long-term debt focus upon the firm's long-term solvency and survival. A lending bank through and analysis of these statements can decide whether the borrower retains the capacity of refunding the principle and paying interest in time or not.

#### **Shareholders**

The shareholders, who have interested their money in the firm's shares, are most concerned about the firm's earning. They evaluate the efficiency of the management and determine about the necessity for the change. In large company, the shareholder's interest is top decide whether to buy, sell or hold the shares. They wish to buy the shares in cash of sound performance of the firm where as they simply intend to hold the shares in the condition of satisfactory performance. However, they are hurries to sell the shares in case of poor performance.

#### **Economist**

To diagnose the prevailing status of business and economy, economists analyze the financial statements of any firm. The government agencies analyze them for the purpose of price regulation; rate setting and similar other purpose.

#### Labor union

Productivity is the synonym of well-motivated labors. Labor unions are interested in rights and benefits of labour to enhance the moral of labors. To motivate the laborers they expect increase in wages, fringe benefits and so on. These benefits are affected by the company's profitability condition. Therefore, the union assesses the financial condition of the firm to determine whether the firm is in the situation or not to make such facilities available.<sup>15</sup>

#### 2.1.3 Objectives of Financial Analysis:

Financial analysis enables us to explore various facts related to the past performance of business and predict about the potential for achieving expected results. Major objectives of analysis of

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<sup>&</sup>lt;sup>15</sup> Srivastav R.M. 1993.

financial statement are to assess various factors in relation to the business firm, which are as follows:

- a. The present and future earning capacity or profitability of the concern.
- b. The operational efficiency of the concern as a whole and of its various parts or department.
- c. The short term and long term solvency of the concern
- d. The possibility of developments in the future making future forecasts and preparing budgets
- e. The comparative stud regarding to one firm with another firm.
- f. The financial stability of business concern.
- g. The long-term liquidity of its funds.
- h. The real meaning and significance of financial data.

# 2.1.4 Types of Financial Analysis:

The nature of financial analysis differs according to the purpose of the analyst. A distinction may be drawn between various types of financial analysis either on the basis of material used for the same or according to the modus operandi of the analysis.

# 1) According to Material Used

- i. External Analysis: Those people who are not concerned with the enterprises make this type of analysis they do not have access to the enterprises investor; credit agencies, governmental agencies and researcher make this type of analysis.
- ii. Internal Analysis: Internal Analysis is made by those persons who have to the books of accounts. They are member of the organization. Analysis of financial statement is other financial data for managerial purpose the internal type of analysis.

#### 2) According to Modus Operandi of Analysis

- i. Horizontal Analysis: when financial statements for a number of years are reviewed and analyzed, the analysis is called horizontal analysis. As it is on data from year to year, rather than on one data or period as a whole, this is also known as dynamic analysis.
- **ii.** Vertical Analysis:- it is frequently used for referring to ratios developed for one data for one accounting period. It is also called static analysis.

Besides, the types of financial analysis on the basis of material used and modus operandi S.P. Jain and K.L. Narang have categorized this on the basis of objective of the study.

#### 3) According to Objectives

i. Long Term Analysis:- Long term analysis is made in order to study the long term financial stability, solvency, liquidity, profitability and earning capacity of business

firm. This type of analysis helps the long term financial planning. This is essential for continues success of a business firm with the help of this analysis the business can be known whether in the long run. The business wills enable to earn a minimum amount, which will be sufficient to maintain a reasonable rate of return on the investment.

ii. Short Term Analysis:- short term analysis is made to determine the short-term solvency, stability, liquidity and earning capacity of the business. This analysis is helpful for short term financial planning.

# 2.1.5 Process of financial Analysis:

Financial analysis basically financial statement analysis is a technique of answering various questions regarding the performance of a firm in the past, present and the future. The analysis enables financial managers to recommend steps to be taken for the correction of faults.<sup>16</sup>

The question, that as elucidate above that create the need of this analysis, suggest following steps such as first identification an analysis of problems in order to come up with appropriate recommendations, and them to project the expected results and examine them if there are improvement before implementing such recommendations. The following chart presents the process to be followed in the analysis of financial statement.

Figure 2.1
Process of the Analysis of Financial Statement

<sup>&</sup>lt;sup>16</sup> Pandey I. M.

(Source: Pandey I.M. "Financial Analysis")

## **2.1.6** Limitation of Financial Analysis:

According to S.P. Jain and K.L. Narang, financial performance analysis is of great significance for investor, creditors, management, economist and other parties having interest in business. It helps management to evaluate its efficiency in past performance and take decision relating to the future. However, it is not free from drawbacks. Its limitations are listed below.

## a) Historical nature of financial statements

The basis nature of statement is historical. Past can never be a precise and infallible index of the future and can never be perfectly helpful for the future forecast and planning.

#### b) No Substitute for Judgment

Analysis of financial analysis is a tool to be used by expert analyst to evaluate the financial performance of a firm. That's why: it may lead to faculty conclusion it used by unskilled analyst.

#### c) Reliability of figures

Reliability of analysis depends on reliability of the figures of the financial statement under scrutiny. The entire working of analysis will be vitiated by manipulation in the income statement, window dressing in the balance sheet, questionable procedures adopted by the accountant for the valuation of fixed assets and other facts.

#### d) Single Year Analysis is not much valuable

The analysis of these statements relating to single year only will have limited use and value. From this one cannot draw meaningful conclusion.

#### e) Results may have different interpretation

Different usurers may differently interpret the result derived from the analysis. For example, a high current ratio may suit the banker but it may be the index of insufficiency of the management due to under utilization of fund.

#### f) Change in accounting method

Analysis will be effective if the figures derived from the financial statements are comparable. Due to chare in accounting methods the figures of current period may have no comparable base, and them the whole exercise of analysis will become futile.

#### g) Pit fall in inter-firm comparison

When different firms adopting different procedures, records, objectives, policies and different items under similar heading, comparison will be more difficult. If done, it will not provide

reliable basis to assets the performance, efficiency, profitability and financial condition of the firm as compared to whole industry.

# h) Price level change reduces the validity of analysis

The continuous and repaid changes in the value of money, in the present day, economically also reduces the validity. Acquisition of assets at different levels of prices make comparison useless as no meaningful conclusion can be drawn from a comparative analysis of such items relating to several accounting period.

#### i) Selection of appropriate tool

There are different tools of analysis available to the analyst. The tools be used in a particular situation depend on skill, training, intelligence and expertise of the analyst. if wrong tool is used, it may give misleading results and may lead to wrong conclusion, which may be harmful to the interest of business.<sup>17</sup>

# 2.1.7 Financial Performance Analysis of Bank:

The users of financial statements of bank require relevant, reliable and comparative information to evaluate the financial performance and position and hence make economic decision regarding the bank.

According to N.P. Poudel, traditionally, banks act as financial intermediaries to channel funds from surplus units to deficit units. Unlike other non-banking financial companies, commercial banks do not produce any physical goods. They produce loans and financial innovations to facilitate trade transactions. Because of special role they play in the economy, concerned authorities heavily regulate them. Analysis of banks financial statement is different from threat of other companies due to the special nature of assets and liabilities. 18

Balance sheet, profit and loss account and the accompanying notes are the most widely aspects of financial statements of the bank. The bank's B/S includes financial claims as liabilities in the form of deposit and as assets in the form of loan. Fixed assets appear in small portion out of the total assets. Financial innovations, which are generally contingent in nature, are considered as off balance sheet item. Interest received on loans, advances, and investment and paid on deposit liabilities re major components of profit and loss account. The other sources of income are fee, commission and discounts, foreign exchange income, dividend on investment, other service charge etc.

<sup>&</sup>lt;sup>17</sup> Jain and Narang 1989, P.33-35.<sup>18</sup> Poudel, 2053, P. 66.

Following factors affect the evaluation of bank's overall performance.

- ➤ The structure of B/S and P/L account.
- > Operating efficiency and internal management system.
- ➤ Managerial decision taken by the top management regarding interest rate lending policy, exchange rates etc.
- ➤ Environment changes such as changes in technology, government, competition and economy etc.

Ratio analysis is one of the most frequently used tools to evaluate the financial health operating result and growth of these banks. Banks overall performance can be shown under various headings.

Figure 2.2
General risk return framework for bank's overall performance

(Source: Weston, J. fred and Copland Thomas E. "Managerial Financial")

Here,

ROE = ROA\*EM = Net Income/ Average Equity

ROA = PM\*AU = Net Income/Average Assets

EM = Average Assets/Average Equity

PM = Net Income/Total Income

AU = Total Income/Average Assets

As loans account a substantial portion of bank's total assets, poor quality of loans would subject bank to higher risk of default or non-payment. Classifying total loans and advances into performing assets and non-performing category can assets the quality of loans of a bank. In our context, commercial banks are required to classify their total loan portfolio into different categories. The bases of classification are aging, overdue, repayment position, and quality of collateral and financial position of borrowers. Capital adequacy of the bank is assessed on the basis of risk-weighted assets. It indicates bank's financial strengths and solvency. Bank facing capital adequacy problem may increase capital or reduce the existing assets stricture in order to maintain the desired level of capital base, liquidity is measured by the speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations. A bank is subject to a minimum cash reserve requirement imposed by central bank to ensure that minimum amounts of total assets are held in liquid form to meet unexpected withdrawal.

#### 2.1.8 Technique of Analysis:

The fundament of the analytical technique is to simplify or reduce the data under review to the understandable term. There are various tools and techniques of financial statement analysis, each of which is used according to purpose for which the analysis is carried out.

The widely used techniques are as follows:-

- a) Ratio analysis
- b) Dupont system of financial statement analysis
- c) Common size analysis
- d) Funds flow analysis

e) Cash flow analysis

# a. Ratio Analysis

This topic is explained in chapter third

# b. Dupont system of financial statement analysis

The financial exports of the Dupont Company develop the Dupont system of financial statement analysis by putting together the effects of profitability, investment and the equity ratios. The approach is based on the relationship among the three basic area of the firm such as:-

- i) Cost Controlling Area
- ii) Assets Management Area and
- iii) Financial Leverage Area.

The analysis is directed to address the concern of the shareholders. Hence, its focus is on the return on equity (ROE). The ROE is analyzed in terms of the factor that directly affects the ROE. The factors such as cost, assets utilization and leverage ratio are directly related to ROE and the grounds on which several tests are made to see how the ROE is affected by such factors.

The following Dupont chart presents the relationship among these factors and ROE.

Figure 2.3

Dupont Chart (modified)

(Source: Pandey I.M. "Financial Analysis")

For a business firm, the return on investment (ROI) is the rate of return of the total investment that included both equity and debt. Capital. The ROI does not reflect the actual rate of return to equity holders. What reflects the return for stockholders is the return on their money (i.e. ROE), which is generally higher than the ROI. Thus ROI is and overall measure and reflects the overall performance of the company. The Dupont system addresses the concerns of stockholder and focuses on ROE.

The Dupont equations are as follows.

We Know,

ROE = Neat/Equity

ROI = Neat/Assets

As defined under Dupont System,

ROE = ROI\*Equity Multiplier

ROI = Profit Margin\*TATR

Equity Multiplier = 1/ (1-debt ratio)

= 1/equity ratio

= 1/ (equity/assets)

= Assets/Equity

Further,

Profit Margin = Neat/Sales

TATR = Sales/Assets

Therefore,

ROE = ROI\*EM

= PM\*TATR\*EM

= (Neat/Sales)\*

(Sales/Assets)\* (Assets/Equity)

=

#### = Neat/Equity

#### c. Common size analysis

The common size analysis (CSA) is another technique of analyzing the items of financial statement on relative terms. Under this method, the percentage of every item in the income statements and balance sheets is carried out for past several years to determine the performance trend of each item during the period under analysis. After analyzing the rising, falling or constant trend of efficiency in the business operation one can make comparison this with the industry coverage or competitors.

The CSA is carried out for a period of one or more years. The income statement items are divided by sales and expressed as percentage of sales. The balance sheet items are divided by total assets and expressed as percentage of total assets. These percentages for a company are compared with the standard measures such as percentage calculated in the same manner for the industry and the competitors. Thus, the comparison shows the company's performance relative to industry, competitors, as well as compared to its own past record.

#### d. Funds flow analysis

Funds flow analysis is the statement of changes in financial position of any organization that determines only the sources and used of fund between two dates of balance sheet. It describes the sources from which these funds were put. The statement is prepared to summarize the changes in assets and liabilities resulting from financial and investment transactions during the period as well as those changes occurred due to the changed in owner's equity. It also uncovers the way of using financial resources during the period of the firm.

Methods of preparing funds flow statement depend essentially upon the sense in which the term 'fund' is used. There are three concepts of fund:- Cash concept, Total resources concept and working capital concept. According to cash concept, the word fund is synonymous with cash. Total resources concept refers totals assets and resources as fund. The term 'fund' represents only to working capital on the stated last concept. However, working capital concept of fund has gained wide acceptance as compared to the other concepts. Therefore, any transaction that increases the amount of working capital is taken as sources of fund while conducting funds flow analysis. Any transaction that decreases working capital is treated as application. However any transaction that affects current liabilities or current assets without resulting any changes in working capital is not taken as sources or use.

#### e. Cash flow analysis

This statement to carried out to know clearly the various items of inflow and out flow of cash. It is different from funds flow analysis in the sense the analysis related to the movement of cash rather than the in flow of working capital.

It deals the cause of changes in cash position for the period of two balance sheets date in brief. At the time of preparing cash flow statement, only cash receipts from debtors against credit deals are considered as the sources of cash. Similarly, cash purchases and cash payments to suppliers for credit purpose are regarded as the uses of cash. The same holds true for expenses and incomes outstanding and prepaid expenses are not to be considered under this analysis.

#### 2.2 **Review of books:**

In this section, effort has been made to examine and review of some related books. Various studies have been conducted on the financial performance of commercial banks in Nepal. Most of them are concentrated to commercial bank and few are in joint venture banks.

"Premila Jain has said that financial appraisal is a scientific evaluation of profitability and financial strength of any business concern. Financial appraisal is the process of scientifically making a proper, critical and comparative evaluation of the profitability and financial health of a given concern through the application of the techniques of financial statement analysis. A complete financial analysis and interpretation of financial statement involves the assessment of past business performance, an evaluation of the present condition of the business and the predication about the future potential for achieving expected or desired results.<sup>19</sup>

E.A. Helfert has stated in his book "Technique of Financial Analysis" that, it is both an analytical and judgmental process that helps answer questions that have been posed. Therefore, it is means to end. Apart from the specific analytical answer, the solutions to financial problem and issues depend significantly on the views of the parties involved in the related importance of the issue and on the nature and reliability of the information available.<sup>20</sup>

S.M. Bajracharya and R. Bhattarai have said that in their book "Corporate Financial Management" effective planning and control are to enhancing enterprise value. Financial plans may take many forms. But any good plan must be related to the firm's existing strengths and weaknesses. The strengths must be understood if they are to be used to proper advantage, and the weaknesses must be recognized if corrective action is to be taken. For example, are inventories

<sup>&</sup>lt;sup>19</sup> Jain, 1996, P. 36-37 <sup>20</sup> Helfert, 1992, P.2

adequate to support the projected level of sales? Does the firm have too heavy an investment in accounts receivable, and does this condition reflect a tax collection policy? For efficient operation, does the firm have too much or too little invested in plant and equipment? The financial manager can plan future financial requirements in accordance with the forecasting and budgeting procedures, but the plan must begin with the type of financial analysis.<sup>21</sup>

According to Surendra Pradhan, in his book entitled "Basic of Financial Management" Financial Analysis is to analyze the achieved statements to see if the results meet the objectives to identify the problems, if any in the past or present and likely to be in the future, and to provide recommendation to solve the problem.<sup>22</sup>

I.M. Pandey have stated in his book entitled "Financial Management" Financial analysis is the Process of Determining financial strengths and weaknesses of a company by establishing strategic relationship between the components of a balance sheet and other operative data.<sup>23</sup>

Radhe Shyam Pradhan has found in his study entitled "Financial Practices in Nepal" among the several finance functions, the most important finance function appears to be working capital management. While, the least important one appeared to be maintaining good relations which stockholders. The finding reveals that banks and retained earning are the two most widely used financing sources. Most enterprises do not borrow from one bank only and they do switch between banks to whichever offers best interest rates. Most enterprises find that banks are flexible in interest rates. He further found that among the bank loan, bank loan of less than one year are more popular in public sector where as bank loans of 1-5 years are more popular in private sector. In periods of tight money, the majority of private sector enterprises fell that bank will treat all firms equally while public sector doesn't feel so. Similarly he concluded that the majority of enterprises in tread sector find that banks, interest rate is just right while the majority in non traded sector find the same are one higher side.<sup>24</sup>

# 2.3 Review of NRB's Directives:

Since Nepal Rastra Bank (NRB) is the central bank, which has a responsibility of making fiscal policy, monetary policy, and rules regarding the commercials banks to maintain the sustainable economic growth of the nation. So that, it formulate the policy, and rules time to time according to domestic and international economic and social environment. To mobilize the banks deposit in

<sup>&</sup>lt;sup>21</sup> Bajracharya and Bhattarai, 2004, P.16

<sup>&</sup>lt;sup>22</sup> Pradhan, 2000, P.120

<sup>&</sup>lt;sup>23</sup> Pandey, 1994, P.500

<sup>&</sup>lt;sup>24</sup> Pradhan, 1994, P.89

different sectors of the different parts of the nation and to prevent them from the financial problem. Nepal Rastra Bank makes various rules and regulation in terms of capital fund, cash reserve requirement provision for priority sectors, loan loss provision and interest spread etc.

A commercial bank are directly related to the fact that how much fund must be collected as paid up capital while being established at a certain place of the nation, how much fund is needed to expand the branch and counters, how much, flexible and helpful the NRB rules are also important. Here we discuss only those, which are related to investment function, some rules and regulation.

# a. Provision for credit to the priority sector

NRB requires commercial banks to extend loan and advances at least 12% of their total outstanding credit to the priority sector. Commercial bank's credit to the deprived sector is also a part of priority sector credit. Under priority sector, credit to agriculture, credit to the cottage and small industries and credit to service are counted. Commercial bank's loan to the cooperatives institution licensed by the NRB is also to be computed as the priority sector credit. But according to NRB's directives in fiscal year 2002/03, commercial banks are required to invest their capital to the priority sectors are as bellows:

Investment required by commercial banks to priority sectors of total outstanding credit:

Table 2.1

Fiscal Year	In Percentage (%)
2002/03	7
2003/04	6
2004/05	4
2005/06	2
2006/07	2

After fiscal year of 2006/07, commercial banks will not oblige to invest in priority sector.

#### b. Provision for investment in the deprived sector

To enhance the living standard of deprived sector, NRB has formulated some rules, which affect areas of credit and investment of commercial banks. According to the provision with effect from F.Y. 1998/99, investment in share of the rural development bank investment in rural area for employment and income sources, credit to the cooperative institution, NGO, and small agricultural cooperative institution which are registered and operating under NRB are counted as the deprived sector lending.

In this provision, Nepal Bank Ltd. (NBL), Rastriya Banijya Bank (RBB), NABIL bank Ltd. (NABIL), Standard Chartered Bank Ltd. (SCBNL), Nepal Investment Bank Ltd. (NIBL), are required to invest 3%, Himalayan Bank Ltd. (HBL), Nepal SBI Bank Ltd. (NSBI), Nepal Bangladesh Bank Ltd. (NBBL), Everest Bank Ltd. (EBL), are required to invest 2%, Bank Of Kathmandu (BOK), is required to investment 1.75%, NBCL is required to invest 0.75%, while new commercial bank are required to invest 0.25% of their total loans and advances to the deprived sector.

#### c. Provision for the single borrower credit limit

With the objective of minimizing the risk of over concentration of bank loans to a few big borrowers and also to increase the access of small and middle size borrower to the bank loans, NRB directed commercial banks to set an upper limit on the amount of loans financed to an individual, firm, company or group of companies. According to this, commercial banks are required not to exceed the single borrower limit of 25% in the case of fund-based credit and 50% in the case non-fund based credit of core capital

## d. Regarding Capital Fund

The commercial bank under operation and having low capital base have been directed to raise their capital funds at minimum level of Rs. 500 million by the end of F.Y.2000/01. the latest directives of NRB is that commercial bank which are going to be opened, required Rs. 1 billion paid up capital in Nepal. This rule is effective from F.Y. 200/03. Commercial banks are not allowed to distribute the dividends until the minimum capital are maintained.

NRB has directed commercial banks to maintain its capital adequacy ratio as follows:

Table 2.2

(Required capital on the basis of Risk Weighted Assets in Percentage)

Fiscal Year	Core Capital (%)	Capital Fund (%)
From 1998/99 to 2000/01	4	8
2001/02	4.5	9
2002/03	5	10
2003/04	5.5	11
2004/05	5.5	11
2005/06	5.5	11
2006/07	5.5	11

In this way, NRB has changed time to time its directives regarding the capital adequacy ratio according to the national and international financial situation. All the commercial banks are required to classify capital fund into two groups. One is coring capital and another is supplementary capital.

Core capital contents these items:

- ➤ Paid up capital
- > Share premium
- ➤ Non redeemable preference share
- > General reserve fund
- > Profit retained

But amount of goodwill should not be included while calculating the core capital. Supplementary capital should not be excess than core capital.

Supplementary capital contents these items:

- ➤ General loan loss provision
- > Exchange equalization reserve
- > Assets revaluation reserve
- > Hybrid capital instruments
- > Subordinated term debt
- > Free reserve

Capital fund are calculated on the basis of total risk weighted assets. Commercial banks are required to separate total risk weighted assets into two groups:

- ❖ On Balance Sheet Risk weighted assets.
- Off Balance Sheet Risk weighted items.

#### I) Risk Weighted on On-Balance Sheet

While calculating the Total Risk Weighted Assets on On-Balance Sheet Assets. Different assets are multiplied by different allocated risk weight percentage and all the amount of Risk Weighted Assets will be added, that amount is the total risk weighted assets on On-Balance Sheet Assets.

Table 2.3

On-Balance Sheet Assets and Risk Weight Percentage are as follows:

On-Balance Sheet Assets	Risk Weight In (%)
Cash balance	0
Cash	0
Cash balance in NRB	0
Investment in Government securities	0
Investment in NRB's securities	0
Loans on collateral of government securities	0
Balance in domestic and financial institution	20
Balance in foreign banks	20
Money at call	20
Loan on the guarantee of international rated bank	20
Investment in international rated bank	20
Investment in share, debenture and bond	100
Other investments	100
Loan and advances, bills purchase and discount	100
Fixed assets	100

# II) Risk Weighted on Off-Balance Sheet

All below items are allocated the Risk Weight percentage so accumulation amount of all risk weighted percentage will be the risk weighted on off-balance sheet assets.

Table 2.4

Off-Balance Sheet Assets and Risk Weight Percentage are as follows:

Off-Balance Sheet Assets	Risk Weight In (%)	
Bills collection	0	Capit
Forward foreign exchange contract	10	Сари
Letter of Credit with maturity less than 6 month	20	al
Counter guarantee on the foreign rated bank	20	fund
Letter of credit with maturity more than 6 month	50	
Bid Bond	50	ratio
Performance bond	50	is
Advance payment guarantee	100	1
Financial guarantee	100	calcu
Other guarantee	100	lated
Irrevocable loan commitment	100	1
Contingent liability from income tax	100	by
Other contingent liability	100	this

formula:

Capital Adequacy Ratio X 
$$\frac{Capital}{Total\ Risk\ Weighted\ Assets}$$
 | 100

Where.

Capital fund = Core Capital + Supplementary Capital

Total Risk Weighted Assets = On-Balance Sheet Assets + Off-Balance Sheet items

# e. Provision for Cash Reserve Requirement (CRR)

The cash reserve requirement is most important to control the commercial banks credit. This ratio is not only the means of credit control but also influence the investment portfolio of the commercial banks. How much cash should be kept in NRB and what amount of cash is to be deposited in their own bank by commercials banks of the total deposits is determined by NRB. Cash reserve ratio has been changed again and again by the central bank (NRB).

Table 2.5

Cash Reserve Requirement (CRR)

Fiscal Year	With NRB (%)	With concerned commercial banks (vault cash) (%)
From 1998/99 to 2000/01	7	3
2001/02	6	3
2002/03	6	2
2003/04	6	0
2004/05	5	0
2005/06	5	0
2006/07	5	0

# f. Loan and Loss Provision (LLP)

With a view of improving the quality of assets of commercial banks. NRB has directed commercial banks to classify their outstanding loan and advances and investment into four categories. The classification is done on the basis of repayment situation, financial conditions of borrowers, management efficiency, and quality of collateral and maturity period. NRB has directed commercial banks to maintain certain reserves for loan loss provision, which is as bellows:

Table 2.6
Loan Loss Provision (LLP) in %

Loan Classification	Loan Loss Provision

Pass (Gold)	1
Substandard	25
Doubtful	50
Loss (Bad)	100

LLP has affect banks capability to extend loans and make them risk averts in issuing newer loans, particularly to the private sector and priority sector where the loan default rate is high.

# g. Interest Spread Rate

Since commercial banks were free to interest spread rate they could not success to achieve the expected result by the NRB. That's why NRB imposed the rules to maintain 5% interest spread rate, which was being effected from F.Y. 1998/99. Again NRB had changed some rules in F.Y. 2000/01; in the new provision interest spread rate should be flexible between 4.5% to 5% on the mutual understanding between lenders and borrowers. But NRB had cancelled the provision of interest-spread rate of commercial banks from the F.Y. 2002/03. So that commercial banks were become free to implement the interest spread rate regulation from fiscal year 2002/03 onwards.

#### **2.4** Review Thesis:

Sunil Chopra in his article "Role of foreign banks in Nepal" published in Nepal Rastra Bank Samachar, undoubted conducted that the joint venture banks are playing an increasingly dynamic and vital role in the economic development of country. That will undoubtedly increase with time.<sup>25</sup>

A study conducted by Ramji Poudel entitled, "A comparative Analysis of Financial Performance between NBL and NGBL" for the period of F.Y. 2047/48 to 2051/52. The researcher has predefined his objectives as comparative study of NBL and NGBL in term of functions, growth developments, and financial performance. Finally, he has concluded that current assets of the both banks are adequate to meet the current liabilities. However, NGBL is better in term of utilization of resources in short-term resources and is fast growing, the over all profitability are higher where as, NBL has better turnover but low profit making capability and gradually decreasing.<sup>26</sup>

The article entitled "Capital Adequacy of Bank, the Nepalese Context" by R.L. Shrestha have suggested the banks that deal in highly risky transactions to maintain strong capital base. He concluded that the capital base should neither be too much leading to inefficient allocation of

<sup>26</sup> Paudel Ramji, 1997

<sup>&</sup>lt;sup>25</sup> Chopra Sunil, "Role of foreign banks in Nepal," Nepal Rastra Bank Samachar NBR Baishakh 2049, P.1-2

scarce resources nor so weak to expose to extreme risk. The study accepts that the operations of banks and the degree of risk associated with them are subject to changes country wish, bank wish and time period wise.<sup>27</sup>

Bishnu Dev Pandey has conducted another study entitled "A study of financial analysis on HBL" to ascertain, analyze and evaluate the financial position of HBL for the period of 1994/95 to 1998/99. in the study, researcher has tried to examine the growth of the sampled bank. In his research, he concluded that overall liquidity and capital structure position of the bank is not satisfactory. Overall profitability condition was highly appreciable profit generating capability through loans and advances appeared satisfactory. Trend of deposit collection showed that the bank was in a higher risk with respect to saving deposits as against the fixed deposits.<sup>28</sup>

Keshav Raj Joshi performed a research on the topics of "Financial performance of commercial banks" have stated that the liquidity position of commercial banks is highly leveraged than those of joint venture commercial banks. Loan and advances are the major form of investment. Two third of the assets have used for earning purpose. Profitability position of NABIL is stronger than of other commercial banks.<sup>29</sup>

Similarly, Mr. Bhoj Raj Bohara in his thesis entitle "A comparative study of the financial performance of NABIL" performed research to the period of 5 years from F.Y. 1986/87 to 1990/91 has define that the aim of the study is to high light on the functions and policies of JVBs and to evaluate the comparative financial performance of NABIL and NIBL. In terms of liquidity, activity and profitability of among with other various indicators including some suggestive frame work. With regard to the finding to the study "NABIL is better in case of liquidity, regarding the turnover and capital adequacy position. NABIL is more aggressive liquidity, investment and borrowing policy to generate profit out of all other indicators (D?P and P?E ratios, MVPS, EPS, Cash DPS, TPS, except EPS indicate the better performance of NIBL than that of NABIL.<sup>30</sup>

L.N. Ghimire conducted research on the subject of "A comparative study of Financial Performance of HBL and NSBIBL" and stated that the major uncovered facts of this research was that the overall liquidity, earning and growth position of HBL was stranger than that of NSBIBL's capital adequacy, quality of assets as well as turnover position was found to be superior to that of HBL. HBL was more efficient in creating credit in comparison to NSBIBL.<sup>31</sup>

<sup>&</sup>lt;sup>27</sup> Shrestha R.I, 2046

<sup>&</sup>lt;sup>28</sup> Pandey Bishnu Dev, 2000

<sup>&</sup>lt;sup>29</sup> Joshi Keshav Raj, 1989

<sup>&</sup>lt;sup>30</sup> Bohara Bhojraj, 1992

Another study entitle "A Financial study of Joint Venture Banks in Nepal: A comparative study of NGBL and NIBL" analyze assets, liabilities, debt and equity, profit and loss etc. for the period of 1986/87 to 1992/93. In his study he found that profitability records of both the banks have registered an increasing trend during the first half of the study period and have decrease thereafter. He found that the liquidity, profitability and dividend payout ratio of both the banks seem to favorable and both the banks have been able to manage satisfactory level of capital adequacy ratio in the subsequent years, which is above the required adequacy norm.

He recommended that both the banks are required to maintain improved capital structure by increasing equity base i.e. issuing more capital, expanding general reserve and retaining more earning and wide range of fluctuation the cash/ bank to deposit ratio of the bank should be stabilized after proper diagnosis of the root cause. He had suggested further that both banks should try hard to earn operational profit by increasing their operational efficiencies, mobilizing resources more efficiently or by minimizing operating expenses as far as possible or the both, he has focused mainly on Return on deposit of NGBL and NABIL in his study.<sup>32</sup>

A study conducted by Bindeshwore Mahato on the subject of "A Comparative study of the financial performance of NABIL and NIBL" for the period of five years from 1989/90 to 1994/95 has set the primary objectives as to analyze and compare the financial performance of two JVBs namely NABIL and NIBL in term in term of liquidity, activity, leverage and profitability ratio. From the study researcher concluded that NABIL is utilizing more deposits (in percentage term) and is better regarding the liquidity. It is performing well regarding roc, cops, ers and P/E per have, multiple mnps, than NIBL. The later is following conservative and safer deposits and selective lending policy than NABIL and has better performance in d/p ratio, MV to BVPS, ROA, return on deposit. Researcher has finally concluded NABIL as a much better performance than nibil and from the point of view of shareholders and government.<sup>33</sup>

Unpublished master's thesis entitled "Evaluating the financial performance of Nepal bank limited" has calculated and analyzed the different ratios by observing figures of balance sheet of Nepal bank limited for the period of F.Y 2038/39 to 2046/47. He remarked that the bank is not found to have been able to utilize its fund effectively and efficiently for the upliftment of the economy. He also stated in his report that the bank has been unable to utilize its resources (i.e. deposit) on high yielding investment portfolio to maximize returns. Operational efficiency of the bank is indicate by the operational loss has been found unsatisfactory. Hence, bank has been suggested to manage its investment portfolio efficiently. He recommended that the bank should

<sup>&</sup>lt;sup>32</sup> Gurung Bikram Chandra, 1995

<sup>33</sup> Mahato Bindeswori, 1997

try to mobilize its resource efficiently by creating new business and service ideas, which will certainly helps for the better utilization of ideal resources and for the economic development of the country. He has focused on utilization and mobilization of funds and resources of Nepal bank limited. His study especially concentrated on the deposit collection of the bank and disbursement of the fund as loan and advances. Therefore, his main study areas are uses and sources of income and expenses trends of the bank.<sup>34</sup>.

Mr. Bishnu Prasad Kishi, in his thesis paper, "A comparative study on the financial performance of Nepal Indosuez bank Ltd. (NIBL) and Nepal Grindlays bank Ltd (SCBNL)" has mainly found that SCBNL's loan and advance to total deposits ratios are significantly lower than that of NIBL. SCBNL is recommended to follow liberal lending policy to invest more portions of deposits in loan and advances.

He has further stated that both the banks should not highly prefer the government securities to invest their funds because of low interest rate on such securities but they are recommended to boost up their campaign of deposit mobilization and credit disbursement in rural areas preferring sector, too.<sup>35</sup>

The general objectives of the next research carried out by Shreedhar Adhikari entitled "A comparative study of financial performance of NSBIBL and EBL" for the period of five years (from 1994/95 to 1998/99) examine and evaluated the financial performance of the two JVBs (EBL and NSBIBL). For the study researcher has set null hypothesis as; there is no significant deference between the financial performance of EBL and NSBIBL. According to the findings derived from Mr. Adhikari, EBL is found superior regarding the liquidity, quality assets they possessed and capital adequacy. Overall capital structure of NSBIBL is found superior in terms of profitability and turn over. Comparatively, interest remained more dominant in the total income and expenses of NSBIBL than that of EBL. Regarding the test of hypothesis is (at 5% level of significance), the performance of the sampled banks significantly different with respect to the ratio loans and advances to saving deposit. Loan loss provision on total deposit, interest earned to total assets, and tax per share. Correlation analysis signifies that EBL is successful to utilize its resources more efficiently than NSBIBL.<sup>36</sup>

Another study has conducted by Sangita Shakya entitled "Comparative analysis of financial performance of selected JVBs, a case study of NGBL and HBL" for the period from year

<sup>&</sup>lt;sup>34</sup> Adhikari Devraj, 1993

<sup>35</sup> Kishi Bishnu Prasad, 1998

<sup>&</sup>lt;sup>36</sup> Adhikari S., 2001

1993/94 to 1998/99. the major finding drawn from the study are HBL is more efficient in case of liquidity as well as it is more levered than NGBL where as HBL is in better condition from the aspect of capital adequacy, activity and profitability ratios. Study showed positive correlation between loans and advances to total debt of both banks. According to the trend analysis, profit before tax of NGBL has been increasing at the higher rate than that of HBL.<sup>37</sup>

Promod Dhungana has conducted another study to analyze the "Profits trend of NABIL, NIBL, and NGBL" since their establishment to 1991. The study revealed that profitability ratio of all the joint venture banks i.e. NABIL, NIBL and NGBL have been satisfactory over the study period exhibiting their better efficiency in utilizing their deposits. However, they have been unable to mobilize saving from different parts of the country. The profit as indicated in their financial statements is an inflated one, fluctuation the foreign currency being the main reason. He recommended that joint venture banks are earning more profit from non-operational; sources so these banks try to earn profit from operational sources by increasing their operational efficiency. He has conducted only the profitability aspects of JVBs. So he has calculated profit related ratios and analyzed on the basis of these ratios.<sup>38</sup>

The study carried out by Pramesh K.C. entitled "Dividend Policy of Joint Venture Banks in Nepal" has analyzed the different policies formulated and implemented by NABIL, NIBL and NGBL regarding the dividend since their establishment in 1990. He remarked that" JVBs in Nepal are growth bank: their market value per share are significantly fluctuated and traded on high price. They are less risk. Dividends per share of these banks are correlated with their earning per share. Retained earning ratios of these banks are raised at the satisfactory level. Price earning ratio and earning yield ratios is inconsistent. These banks are declaring higher dividend return on paid up capital." He has focused only in the dividend policy formulated and implemented by joint venture banks. His study concerned with dividend policy and other dividend related matters.<sup>39</sup>

Mr. Mahendra Mandal in his thesis paper, "Comparative Financial performance appraisal of joint venture banks" has studied mainly three banks i.e. Nepal Arab Bank Ltd. (NABIL), Nepal Grindlays Ltd. (SCBNL) and Nepal Indosuez Bank Ltd. (NIBL). His main finding is that both SCBNL and NABIL have mobilized the debt funds in proper way for generating more return but NIBL couldn't do as good as NABIL and SCBNL. He has recommended enhancing banking

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<sup>&</sup>lt;sup>37</sup> Shakya Sangita, 2000

<sup>38</sup> Dhungana Promod.

<sup>&</sup>lt;sup>39</sup> K.C. Pramesh, 1991

facilities is rural areas by encouraging small entrepreneurs' development programmers, to play merchant banking role, to mobilize the deposit funds in productive sectors and to grant more priority to the local manpower.<sup>40</sup>

Number of researcher have studies and published many articles on the financial performance of commercial banks and JVBs. Some researchers have studies about profitability aspects, income and expenditure, used of fund, sources of funds and dividend policy of joint venture banks. But this study is focused on all aspects such as capital adequacy ratio, analysis of different types of risk associated, earning capacity and operational efficiency of NABIL and SCBNL for Six years period from 1998/99 to 2003/04. Therefore the objectives of this study are different than others. This study will support and supplement the existing literature.

# 2.5 Review of Journals and Magazines:

Narayan Prasad Poudel have said that, the users of the financial statements of a bank need relevant, reliable and comparable information which assists them in evaluating the financial position and performance of the bank and which is useful to them in making economic decisions. Bank regulating bodies, stock analysis banks, shareholders, directors and government have needs of different users of financial statement. The purpose of the analysis of financial statements depends on the needs of the user. The bank regulators seek to analyze the financial statements from safety and stability point of view and there by protecting the economic interest of depositors and general public whereas the bank analyses from shareholders point of view.<sup>41</sup>

B.N. Rimal stated in his article entitled "Building effective financial system" poor management has contributed to banks difficulties. Excessive branching and staffing, poor assets and liability management and inexact accounting and management account systems have all been a source of weakness. Financial institution in developing countries is plagued by portfolio problem, which in many cases was the result of the poor management. Lending to insiders, excessive concentration of lending in one geographic area, or in industry have been important sources of trouble.<sup>42</sup>

Shiba Raj Shrestha has given a short glimpse on the "Portfolio management in commercial banks, theory and practice" the portfolio management becomes very important both fore

<sup>41</sup> Poudel Narayan Pd, 2053

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<sup>&</sup>lt;sup>40</sup> Mandal Mahendra, 1998

<sup>&</sup>lt;sup>42</sup> Rimal B.N., 2053

individuals as well as institutional investors. Investors would like to select a best mix of investment assets subject to following aspect:

- 1) Higher return which is comparable with alternative opportunities available according to the risk class of investor.
- 2) Certain capital gains.
- 3) Good liquidity with adequate safety of investment.
- 4) Maximum tax concession.
- 5) Flexible investment.
- 6) Economic, efficient and effective investment mix.

In a view of above aspect, following strategies are adopted:

- 1) Do not hold any single security i.e. try to have a portfolio of different securities.
- 2) Do not put all the eggs in the basket i.e. to have a diversified investment.
- 3) Choose such a portfolio of securities, which ensures maximum return with minimum risk or lower of return but added objective of wealth maximization.

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

- 1) To find out the investable assets (generally securities) having scope for better returns depending upon individual characteristics like age, health, need, disposition, liquidity, tax liability etc.
- 2) To find out the risk of the securities depending upon the altitude of investor towards risk.
- 3) To develop alternative investment strategies for selecting a better portfolio, which will ensure a trade off between risks and return so as attach the primary objectives of wealth maximization at lower risk.
- 4) To identify securities for investment to refuse volatility of return and risk.

Mr. Shrestha has presented two types of investment analysis technique i.e. fundamental analysis and technical analysis to consider any securities such as equity, debentures, or bond and other money and capital market instruments. He has suggested that the banks having international network can also offer access to global financial markets. He has pointed out the requirement of skilled manpower, research and analysis team and proper management information system in any commercial bank to get success in portfolio management and customer's confidence.<sup>43</sup>

<sup>&</sup>lt;sup>43</sup> Shrestha Shiba Raj, 2055

F. Morris, in his discussion paper, "Latin America's banking system in the 1980" concluded that most of the banks concentrated on compliance with central bank rules reserve requirements, credit allocation and interest rate s. while analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked. The huge losses now found in the bank's portfolio in many developing countries are testimony to the poor quality of this oversight investment function.

He further adds that mismanagement in financial institutions has involved inadequate and overoptimistic loan appraisal, tax loan recovery, high risk diversification of landing and investments, high risk concentration, connected and insider lending, loan mismatching. This has led many banks of developing countries to the failure in 1980s.<sup>44</sup>

Manohar Krishna Shrestha, in his article, "Commercial banks comparative performance evaluation" concludes that JVBs are new, operationally more efficient, having superior performance comprisals with local banks. Better performance of JVBs is due to their sophisticated technology, modern banking method, and skill. Their better performance is also due to the government's branching policy is rural areas and financing pees. Local banks are efficient in rural sector. Deposit having number of deficiencies, local bank have to face growing constraints of social economic political system on the bank spectrum and that of issues and challenges of JVBs commanding significant banking business of other spectrum.<sup>45</sup>

Dr. 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 the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending viz. agriculture industrial, commercial, service and general and social sectors as independent variables. A 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 on GDP by the lending of commercial banks in various sector of economy, except service sector investment.46

<sup>44</sup> Morris F, 1980

<sup>45</sup> Shrestha M.K., 2047

<sup>&</sup>lt;sup>46</sup> Shrestha Sunity, 2055

Bishwombar Pyakuryal in his article, "Workshop on Banking and National Development" the present changing context of the economy calls, for a substantial revitalization of the resources. How much they have gained over the years depends chiefly on how far they have been able to utilize their resources in an efficient manner therefore, the task of utilization of resources is as much crucial as the mobilization. The under utilization of resources not only results in loss of income but also goes further to discourage the collection of deposits.<sup>47</sup>

Mr. Dev Lal Kishi, in his article "The changing face of the banking sector and the HMG Nepal's recent Budgetary Policy" concludes that following an introduction of the reform in the banking sectors as an integrate part of the liberal economic policy, more banks and financial companies have come up as a welcome measure of competition. Slowly and steadily, the two government controlled banks, Nepal bank limited and Rastriya Banijya Bank have also shown an improvement of non-performing loans and are taking steps to adopt improved technology. However, higher economic growths with social justice bringing a significant benefit to the poor are yet to achieve as envisaged by the HMG/N. 48

 <sup>&</sup>lt;sup>47</sup> Pyakuryal Bishwombar, 1987
 <sup>48</sup> Kishi Dev Lal, 1996

# CHAPTER - III

# RESEARCH METHODOLOGY

## Introduction

Research methodology refers to the overall research process, which a researcher conducts during his/her study. And it refers to the various steps to be undertaken by a researcher in studying a problem with certain objectives in view. It describes the method and process applied in the entire study. Research can be conducted on the basis of primary and secondary data.

This study will seek the conclusion to the point that what position NABIL and SCBNL has got in the whole commercial banks of Nepal and recommended the useful and meaningful points to that all concerned can achieve something from this study. To accomplish the goal, the study follows the research methodology described in this chapter.

## 3.1 Research Design:

A research design is the arrangement of conditions for collection and analysis of data that aims to combine relevance to the research purpose with economy in procedure research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variances. To achieve the objective of this study, descriptive and analytical research design has been used.

Some financial and statistical tool has also been applied to examine facts and descriptive techniques have been adopted to evaluate financial performance of NABIL and compare it with SCBNL.

## 3.2 Source of Data:

Mainly the study is conducted on the basis of the secondary data. The data required for analysis are directly obtained from the balance sheet and the p/l account of concerned banks annual reports. Supplementary data and information are collected from number of institutions like NRB, Nepal stock exchange Ltd. Central library of T.U. and some important documents are collected from head office of the banks (Standard Chartered Bank Nepal Limited, New Baneshwore and NABIL Bank Limited, Kamaladi) and internet as well as concerned teacher.

## 3.3 Data Gathering Process:

Most of the secondary data and information is collected from concerned banks and concerned teacher. In ordered to process the data financial statement and other necessary data will be computed, processed in appropriate from. Then the consolidated financial statement will be translated in to percentage figure. All the collected data will be computed processed and tabulated according to the study.

# 3.4 Populations and Sample:

The limitation of time unavailability of the relevant data has forced to take research on the few commercial banks, even though there are seven commercial banks and nine JVBs functioning in Nepal. There stocks are traded actively in the stock market. In this study NABIL's financial performance have been compared with SCBNL, which are selected from population. Eight years data are taken to conduct the study from 1999/2000 to 2006/07.

## 3.5 Presentations and Analysis of Data:

In this study, various financial, accounting and statistical tool have been used to achieve the objective of the study. The analysis of data will be done according to the pattern of data available. Due to limited time and resources, simple analytical statistical tool such as the method of least square is used in this study. Likewise, some financial tools such as ratio analysis and trend analysis have also been used for financial analysis.

## 3.6 Technique of Data Analysis:

## 3.6.1 Financial Tools

## 3.6.1.1 Ratio Analysis

Financial ratio is the mathematical relationship between two accounting figures. "Ratio analysis is a part of the whole process of analysis of financial statements of any business or industrial concern especially to take out put and credit decision". <sup>49</sup> Thus ratio analysis is used to compare a firm's financial performance and status to that of other firm's or to overtime. The qualitative judgment regarding financial performance of a firm can be done with the help of ratio analysis.

Even though, there are many ratios, only those ratios have been covered in this study, which are related to the performance of the bank. "Ratio analysis is one of the most frequently used tools to evaluate the financial health, operating result and growth. Financial ratios by themselves do not indicate position of the institution. A standard or norms is needed against which to judge them. It

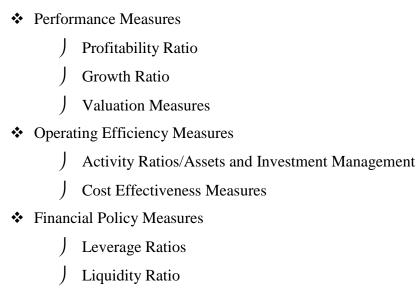
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<sup>&</sup>lt;sup>49</sup> Kothari K.C. 1984

is powerful tool of financial analysis. A ratio is defined as the indicated quotient of two mathematical expressions and as relationship between or more things".<sup>50</sup>

Among the large numbers of financial ratio existing they have been categorized into three broad grouping such as performance measures, operating efficiency measures and financial policy measures for the sequential study starting with over all results and then analyzing their determinants. They have further been divided into three, two and two subgroup respectively. There exists various financial ratios under each sub group and out of them some selected ratios have been used in this study.

An overview of financial ratio analysis is as follows:



## 3.6.1.1.1 Performance Measures

Performance measures reflect strategic, operating and financial decision. Under this three major groups are analyzed as mentioned previously.

## 3.6.1.1.1 Profitability ratios

Profit is different between total revenues and expenses over a period of time. Profit is the ultimate out put of a commercial bank and it will have no future if it fails to make sufficient profits. Therefore the financial manager continuously evaluates the efficiency of the banks in terms of profits. The profitability ratios in this study are calculated to measure the operating efficiency and performance of two banks comparatively. Some major profitability identifying ratios used in this study are:

Interest earned to total assets ratio

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<sup>&</sup>lt;sup>50</sup> Websters Dictionary, 1975

- ❖ Net profit to total deposit ratio
- ❖ Net profit to total assets ratio
- \* Return on net worth
- \* Return on risk assets

#### 1. Interest earned to total assets ratio:

Interest earning is the major source of a commercial bank. This ratio is calculated to find out percentage of the interest earned in comparison to total assets in order to calculate the total assets of the banks divide this ratio interest earned amount. Higher the ratio indicates higher efficiency in the mobilization of resources and ability of interest earning and vice-versa.

Here, interest earned included interest earned from commission and discount, exchange income, dividend and other resources and total assets refer to total assets show on balance sheet. This ratio is calculated with the help of following formula.

Interest earned to total assets = 
$$\frac{Interest Earning}{Total Assets}$$
 | 100

## 2. Net profit to total deposit ratio:

The collected deposits are mobilized in investment and loans to get profit. This ratio indicated the percentage of profit earned by using the total deposit. This ratio is mirror for bank's overall financial performance as well; as its success in profit generation, the reason being that the deposits made by its customer's is the major source of earning of the commercial banks as the earning is made by the efficient and effective utilization of these deposits. It is calculated by dividing the amount of net profit by the amount of total deposits, which is presented below.

Net Profit to total deposit = 
$$\frac{Net \operatorname{Pr} ofit}{Total \ Deposit} \mid 100$$

Here, net profit calculated from profit and loss a/c and total deposit refers to all kinds of deposits. (i.e. current, saving, fixed, other, margin and call at short notice).

## 3. Net profit to total assets ratio:

This ratio is a useful measurement of the profitability of all financial resources invested in the banks assets. This ratio provides the foundation necessary for company to deliver a need of return on equity. Higher return on assets (ROA) ratio indicates higher efficiency in the utilization

of total assets and vice-versa. The return on assets (ROA) or profit to assets ratio is calculated by dividing the amount of net profit by the amount of total assets.

Net Profit to Total Assets = 
$$\frac{Net \ profit}{Total \ Assets} \mid 100\%$$

#### 4. Return on net worth:

Net worth or shareholders equity refers to the owners claim on the assets of the bank. It can be found by deducting total assets (excluding intangible assets and accumulated losses). This ratio measures the profit earned by the commercial banks by utilizing owners equity and there by generating return to satisfy the owners.

Higher the ratio indicates sound management and efficiency and wealth maximization of the banks, which in turn is the wealth maximization of the banks. It is calculated by dividing net profit after tax by net worth, which is as follows:

Net Profit to Net Wroth = 
$$\frac{Net \operatorname{Pr} ofit}{Net Worth} \mid 100$$

Here, NPAT refers to net profit after tax from profit and loss a/c and net worth refers to paid up capital, reserve and surplus and undistributed profit.

#### 5. Return on risk assets:

Risk assets refer to those assets, which are invested in loans, advances, bill purchased and discounted and other assets, which is associated with risk. This ratio is calculated to find out percentage of net profit after taxes in comparison to risk assets. This ratio is calculated by dividing the amount of profit by the amount of risk assets which is presented below:

Return on risk assets 
$$X = \frac{Net \ profit \ after \ and \ tax}{Risk \ assets}$$
 | 100

## 3.6.1.1.1.2 Growth Ratio

This ratio has been measured to know how well the firm is maintaining its economic position as compared to the comparable bank. In this study growth have been calculated by dividing the last period figure by the first period figure that provide the compound sum interest factor from which researcher have calculated growth rates by using end point method. Under this growth ratio of operating profit, net profit after tax, EPS, DPS, BVPS and MVPS have been tested for the most recent five years period.

## 3.6.1.1.1.3 Market Ratio

Valuation ratios are the most comprehensive measures of performance for the firm is that they reflect the combined influence of return and risk ratio. Naturally, the decisions that management makes in the day-to-day operations of the business inevitably affect the value of the firm and its worth to its owners, the common shareholders. Besides the ratios mentioned above evaluate the company from an operational perspective, these ratios evaluate the company largely in terms of market values. Out of these the most important ones are as follows.

- Market to book ratio
- Dividend yield ratio
- Price earning ratio

## 1. Market to book ratio M/B):

To find out M/B ratio, market value per share is (MVPS) is divided by book value per share (BVPS).

For the calculation of market to book ratio (M/B), BVPS is derived by dividing shareholders equity by the number of shares outstanding. The market to book value ratio is a relative measure of how the growth option (for company is being valued) Vis a Vis is physical assets.

The greater the expected growth and value place on such, the higher this ratio M/B ratios for established companies range from as little as 0.5 to as high as 8.01.

## 2. Dividend yield ratio:

To find out M/B ratio, market value per share is (MVPS) is divided by book value per share (MVPS). This ratio evaluates the shareholders return in relation to the market value of the share. So relationship of annual dividend to share price denotes the ratio of dividend yield. That is as follows:

Dividend yield ratio 
$$X \frac{Dividend\ per\ share\ (DPS)}{Market\ value\ per\ share\ (MVPS)}$$

# 3. Price earning ratio (P/E):

This ratio of a company is simply obtained by dividing the market value price per share by earning per share, "as its name indicates, this ratio established the number of times the price of stock exceeds the earning per share".<sup>51</sup>

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<sup>&</sup>lt;sup>51</sup> Schwartzman Sylvan D., 1984

Price Earning Ratio 
$$X \frac{Market\ value\ per\ share}{Earning\ per\ share}$$

This ratio is widely used by the security analysis to evaluate the firm's performance as accepted by investors. It indicates investor's judgment for expectations about the firm's performance. This ratio reflects investor's expectations about the growth in the firm's earning.

## **3.6.1.1.2** Operating Efficiency Measures

One of the factors for the performance of any organization is their operating efficiency. That's why the measures have been examined to diagnose how well the management doing to maintain checks on the important factors that contributes to success. Under this measure, two major categories of financial ratios are performed as follows:

- Activity ratio
- Cost management measures ratio

## 3.6.1.1.2.1 Activity ratio/Assets and investment management

Now a day these relations are also know as assets investment management. Activity or turnover ratios employed to evaluate the efficiency with which the firm manages and utilized its assets. They indicate the speed with which assets are being converted or turned over. Thus, these ratios are used to measure the banks ability to utilize their available resources. Various activity ratios are used to predict the effectiveness of asset utilization. Some selected ratios for this research can be illustrated as follows:

- Loans and advances to fixed deposit ratio
- > Loans and advances to saving deposit ratio
- ➤ Loans and advances to total deposit ratio
- Performing assets to total debt ratio
- Performing assets to total assets ratio
- ➤ Investment to total deposit ratio

## 1. Loans and advances to fixed deposit ratio:

This ratio measures how many times the amount is used in loan and advances in comparison to fixed deposits. Fixed deposits are high interest bearing obligation where as loan and advances are the major source of investment to generate income for the commercial banks. This ratio is calculated by dividing the amount of loans and advances by fixed deposits that is given bellows:

Loans and advances to fixed deposit 
$$X = \frac{Loans \ and \ Advances}{Fixed \ Deposit} \mid 100$$

## 2. Loan and advance to saving deposit ratio:

This ratio measures how many times the second high interest bearing deposit is utilized for income generating purpose. This ratio can be calculated by dividing the amount of loans and advances by the amount of saving deposits. The ratio is calculated as follows:

Loans and advances to saving deposit 
$$X \frac{Loans\ and\ Advances}{Saving\ Deposit} \mid 100$$

## 3. Loan and advances to total deposits ratio:

This ratio measures the extent to which the banks are successful to utilized the outsiders fund (total deposits) for the profit generating purpose on the loans and advance generally, a high ratio reflects higher efficiency to the utilization of outsiders fund and vice-versa. It can be calculated by dividing the amount of loans and advances the amount of total deposits, which is given bellows:

Loans and advances to total deposit 
$$X \frac{Loans\ and\ Advances}{Total\ Deposit} \mid 100$$

Here, loan and advances refers to total of loan, advances and overdraft (i.e. in local current plus convertible foreign currency) and total deposits refer to total of all kinds of deposits.

# 4. Performing assets to total debt ratio:

This ratio measures the extent to which the outsider's fund is invested in performing assets. This ratio is calculated dividing the amount of performing assets by the amount of total debt which is calculated by follows:

Perfor min g assets to total debt ratio 
$$X \frac{Perfor \min g \ Assets}{Total \ Debt} \mid 100$$

## 5. Performing assets to total assets ratio:

Performing assets refer to those assets, which are used for income generating purposes, these assets are invested in loans and advance, bill purchased and discounted, invested in government securities and other and money on the short call or placement. This ratio is calculated by dividing the amount of performing assets by the amount of the total assets. The ratio is calculated as below:

Perfir min g assets to total assets 
$$X \frac{Perfor \min g \ Assets}{Total \ Assets} \mid 100$$

Generally, higher ratio reveals higher efficiency of proper utilization of assets and vice-versa.

Here, total assets refer to total assets of balance sheet.

# 6. Investment to total deposit ratio:

This ratio is derived by dividing investment by the amount of total deposit in the bank.

Investment to total deposit ratio 
$$X \frac{Investment}{Total\ Deposit} \mid 100$$

Investment comprised investment in Nepal Government Treasury bill, development bond, company shares and other type of investment.

The ratio shows the efficiency of mobilization of the major resources of the bank. High ratio indicates managerial efficiency regarding the utilization of deposits, when low ratio is the result of less efficiency in use of funds.

#### 3.6.1.1.2.2 Cost effectiveness measures

For the efficient operations of firm management should focus their critical eyes upon the two main areas. One of them is concerned with the well management of investment and another one is to control cost effectively. The ratio is must important since this ratio measures how individual elements of costs are controlled. Some major ratios regarding commercial banking sectors under this ratio can be examines as follows:

- > Personnel expenses to total income ratio
- ➤ Office operating expenses to total operating income ratio

## 1. Personnel expenses to total income ratio:

This ratio is measured as total personnel expenses divided by total income. It is of interest to determine company policies in another important aspect of managing a company's personnel relationships. Calculation is drawn by using the formula as:

Personnel expenses to total income ratio 
$$X \frac{Personnel\ Expenses}{Total\ Income} \mid 100$$

In the ratio personnel expenses includes expensed related with personnel as salary and allowance, training expenses, uniforms and liveries, contribution to provident fund etc. since this ratio represent the percentage expenses made to personnel out of the firms total income. They desire high ratio. However, in addition, high ratio is unfavorable to the bank through it functions as catalyst for employees working spirit.

## 2. Office operating expenses to total operating income ratio:

This ratio is simply derived by dividing total office operating expenses by total operating income. The ratio can be presented as:

Office operating expenses to total operating income ratio 
$$X \frac{Office\ Operating}{Total\ Operating\ Income} \mid 100$$

The ratio depicts ratio of office operating expenses regarding total operating income that affects the further cost decisions of the firm.

Higher ratio is the indicator of higher level of operating expenses. So, low ratio is favorable to bank as it reflects the operational; efficiency.

# **3.6.1.1.3** Financial Policy Measures

To diagnose the comparative financial strengths and weakness of any organization, researcher must focus their study upon the financial policy decisions adopted by the performance of the sampled banks with regard to strategic decisions as well as to investment management and cost management. For the study two major types of financial policy ratios have considered. They are:

- Leverage Ratios
- Liquidity Ratios

## 3.6.1.1.3.1 Leverage or Capital structure ratio

The use of finance is refers by financial leverage. These ratios are also called solvency ratios or capital structure ratio. To judge the long-term financial position of the firm, these ratios help to measure the financial contribution of owners and creditor comparatively. These ratios indicate the situation of the capital structure, which is calculated to measure the company's ability of using debt for the benefit of shareholders. The leverage ratios show how much of an enterprise fund are financed by debt and equity and examine the prospects for the future financing. Also leverage ratios are used to measure the firm's ability to meet long-term obligation generally, assets of the firm age financed by both equity and debt.

- Total debt ratio
- ❖ Leverage factor ratio
- Capital adequacy ratio
- Coverage ratio

## 1. Total debt ratio:

This ratio exhibits the relationship between creditors funds and owners capital. This ratio shows the proportion of outsiders fund used in financing total assets. It also provides security to outsider to pay their regular interest, dividend and principle with in prescribed time. Generally creditor prefers the components to use low debts and owners the contrary prefer high debt ratio to earn return. This ratio is similar as debt to equity ratio. Higher debt ratio indicates higher financial risk as well as increasing claims of outsiders in total assets and lower ratio indicates lower financial risk as well as decreasing claims of outsiders over the total assets of the firm. Generally 1:2 ratios are considered good but however no hard and fast rule is prescribed. This ratio is calculated by dividing the total debt of the bank by their total assets, which is presented below:

Total debt ratio 
$$X \frac{Total\ Debt}{Total\ Assets}$$

## 2. Leverage factor ratio:

Leverage factor ratio referred tot the ratio of total assets to shareholder's equity. It can be calculated by dividing the shareholder's equity by total assets which is given bellows:

## 3. Capital adequacy ratio:

Capital adequacy ratio measures the ratio between capital fund and risk weighted assets. Capital fund refers the core capital and supplementary capital. Which includes the paid up capital, share premium, non-redeemable preference share, general reserve, profit retained, general loan loss provision, exchange equalization reserve, assets evaluation reserves, hybrid capital instruments and free reserves.

Similarly risk weighted assets refers to on balance sheet and of balance sheet items which includes balance in domestic and financial institution, balance in foreign banks, money at call, loan on the guarantee of international rates bank, investment in share debenture and bond, other investment, loan and advances, fixed assets, letter of credit, bid bond, advance payment guarantee and contingent liabilities.

According to NRB's directives, commercial banks are required to maintain the certain level of capital fund against the risk-weighted assets. 8% capital adequacy ratio was in 1998/99 to 2000/01, 9% was in 2001/02, 10% was in 2002/03, and 11% was in 2003/04, 2004/05, 2005/06 &2006/07. Commercial banks are not allowed to distribute the dividends and bonus unless this directive is complied.

To measure the capital adequacy ratio (CAR), capital fund is dividing by the total risk weighted assets.

# 4. Coverage ratio:

Coverage ratios are designed to relate the financial charge of a firm to its ability to service them. It measures the relationship between what is normally available from operation of the banks and the claim of the outsiders. Under this, following ratios are calculated.

a) Provision for possible losses to loans and advances ratio

# a) Provision for possible loan losses to loans and advances ratio:

Always loans and advances consist of risk. To minimize the risk to some extent commercial banks are required to put some percentage of amounts for loan loss provision against loans and advances. So that bank would not fact disaster consequences in case of bad debt problem.

 $Provision \ for \ possible loan \ losses \ to \ loan \ and \ advances \ ratio \ X \frac{Provision \ for \ possible loan \ losses}{Loans \ and \ Advances}$ 

# **3.6.1.1.3.2** Liquidity ratio

Liquidity ratios measure the ability of the firm to meet its current obligations. In fact analysis of liquidity needs the preparation of case budgets and cash and fund, but liquidity ratios, by establishing a relationship between cash and other current assets to current obligation, provide a guide measure of liquidity. Liquidity ratio gives insight into the present cash solvency of the firm and its ability to remain solvent in the event of adversities. It is the comparison between the short-term obligation and the short firm resources. In case of bank, liquidity management is widely used to analyze liquidity position of banks.<sup>52</sup>

A bank should ensure that it does not suffer from lack of liquidity and it does not have excess liquidity. Both conditions of liquidity are unfavorable for a bank. Banks can experience lack of liquidity when cash outflows (due to deposit withdraws, loans, etc.) exceed cash inflows (new deposits loan repayment etc.). They can resolve any cash deficiency either by creating additional liabilities or by selling assets.<sup>53</sup>

To analyze the ability of banks, the following selected ratios are calculated.

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<sup>&</sup>lt;sup>52</sup> Pandey I.M.

<sup>53</sup> Madhura Jeff

- Current ratio
- > Investment on Government securities to current assets
- ➤ Loan and advance to current assets
- > Saving deposit to total deposit
- > Fixed deposit to total deposit
- > Cash and bank balance to total deposit
- > Cash and bank balance to current assets

#### 1. Current ratio:

The current ratio is the ratio of total current to total current liabilities. It is calculated by dividing current assets by current liabilities, which is presented as follows:

Current ratio 
$$X \frac{Current\ Assets}{Current\ Liabilities}$$

Current assets represent those assets which can be converted into cash and bank balance within an accounting period such as cash and bank balance, investment in treasury bills, money at call or placement, loans and advances, bills purchased and discount, inter branch account, other short term loans, receivable and prepaid expenses etc.

Current liabilities refer to the short term maturing obligations. This includes all deposit liabilities, intra bank reconciliation account, bills payable, tax provision, staff bonus, dividend payable, bank overdrafts, provisions, and accrued expenses etc.

## 2. Investment on Government securities to current assets:

This ratios is calculated in order to find out the percentage of current assets invested in government securities i.e. treasure bill. It can be calculated by dividing investment on government securities by current assets as follows.

Investment on government securities to current assets 
$$X \frac{Investment \ on \ Teasury \ bill}{Current \ Assets} \mid 100$$

#### 3. Loan and advances to current asset:

Loans and advances refer to bill purchased and discounted, local and foreign currencies, loan, advances, and overdrafts. Bank loans and advance is the main assets used for income generating purpose in commercial banks. This ratio is calculated to find out the percentage of current asset, invested in loans and advances by following formula:

Loan and advances to current assets 
$$X = \frac{Loan \ and \ advances}{Current \ assets} \mid 100$$

## 4. Saving deposit to total deposit:

Saving deposits to stand midway between current and fixed accounts. These deposits are not as freely withdrawal as current accounts. This ratio is calculated in order to find out the proportion of total deposit, which is interest bearing and short term. It can be calculated by dividing the amount of saving deposits by the amount of the deposits which is given below:

Saving deposit to total deposit 
$$X = \frac{Saving \ to \ Deposit}{Total \ Deposit} \mid 100$$

Lesser the saving deposit is more efficient and vice versa.

# 5. Fixed deposit to total deposit:

Fixed deposit is the high interest charge bearing deposits and can be with drawn only after the expiry of the period for which these deposits have been made. This ratio is calculated in order to find out the proportion of total deposit in fixed deposit. It is calculated by dividing the amount of fixed deposits by the amount of total deposits which is given below:

Fixed deposit to total deposit 
$$X \frac{Fixed\ Deposit}{Total\ deposit} \mid 100$$

## 6. Cash and Bank balance to total deposit (Cash Reserve Ratio):

The cash reserve requirement in most of the developed and developing countries has been used extensively as a means to control commercial banks credit. Especially in those countries, where capital market is not well developed, cash reserve requirement can be used not only to control. The commercial bank credit but also to influence the investment portfolio of the commercial banks.

Reading cash reserve, Nepal Rastra Bank had guided all the commercial banks to maintain at least 10% in 1998/99 to 2000/01, 9% in 2001/02, 8% in 2002/03and only 6% in fiscal year 2003/04. Cash reserve ratio (CRR) is calculated by dividing the cash and bank balance by the amount of total deposits, which is presented below:

$$CRR \ X \frac{Cash \ and \ Bank \ Balance}{Total \ Deposit}$$

#### 7. Cash and Bank Balance to Current Assets:

Since cash and bank balance is the most liquid assets, a financial analyst may examine the ratio of cash and balance to current assets. This ratio shows the percentage of readily available fund with in the banks. It is calculated by dividing cash and bank balance by current assets which is as follows:

# 3.6.1.2 Income and expenditure analysis

This tool has been selected to compare the components of income and expenditure between the sampled firms. By this analysis, researcher can concludes which sources of income and expenditure is a dominant in the related concerns. For this purpose overall income under the income analysis is spit up into major heading interest income, commission and discount, foreign exchange income and other income. Under expenditure analysis entire operating expenses are spit up in to four major heading interest expenditure, staff expenditure, office operation expenses and bonus facility.

#### 3.6.2 Statistical Tools

Various statistical tools can be used in research in order to draw the reliable conclusion according to the financial data available to the researcher. For this purpose, the researcher in this study uses following statistical tools.

## 3.6.2.1 Arithmetic Mean

Averages are statistical constants, which enable us to comprehend in a single effort the significant of the whole. Out of the different measures of averages, arithmetic mean is the most popular one.

Arithmetic mean of a set of observation is their sum divided by the number of observations, e.g. the arithmetic mean X of N observation  $X_1, S_2, \dots, X_N$ 

$$\overline{X} X \frac{1}{N} f X_{\perp} \Gamma X_{2} \Gamma \dots X_{n} A X \frac{1}{N} \int_{x \neq 0}^{N} X i$$

It can be simply presented as

$$\overline{X} \times \frac{X}{N}$$

# 3.6.2.2 Coefficient of Variation (C.V.)

According to Karl Person who suggested this measure, C.V. is the percentage variation in the mean, standard deviation being considered as the total variation in the mean.

Simply, it is 100 times the co-efficient of dispersion based upon standard deviation and is calculated as:

C.V. X100 
$$\frac{1}{X}$$
 Where,  $\uparrow$  X S tan dard Deviation

$$\dagger X \sqrt{\frac{X^2}{N} Z \frac{X^2}{N}}$$

By the calculation of C.V. we can make comparison of the variability of series dates of two sampled books. The series having greater C.V. is said to be more variable than the other and the series having lesser C.V. is said to be more consistent for homogenous than the other C.V. can be used in our analysis for risk management.

## 3.6.2.3 Correlation Analysis

Correlation analysis is equally important. Correlation analysis is the statistical tool generally used to the degree to which one variable is related to another. There are several methods under correlation analysis but in this research, Karl Person's coefficient of correlation has been used. it is simply denoted by " $T_{XY}$ " or "r" has been calculated in this study for two purposes, first to check the calculation if the obtained value of "r" is beyond the limit of -1 to +1, it is implies that there is some mistake in the calculations. Second, to know the degree direction of the relationship between two variables, if the value of r is +1, there is perfect positive correlation, if the value of r is -1, there is perfect negative correlation and if the value of r is "0" there is perfect co variation (i.e. no relationship) between the variables, in practice, perfect correlation cannot be found.

$$r_{xy} \times \frac{N \times Y \times Z(X \mid Y)}{\sqrt{N \times X^2 (X)^2} \sqrt{N \times Y^2 \times Z(Y)^2}}$$

## 3.6.2.4 Probable Error of Correlation coefficient

The probable error determines the reliability of an observed correlation coefficient. It is obtained by

$$P.E.(r) \times 0.6745 \mid \frac{1Zr^2}{\sqrt{N}}$$

Where,

r = Correlation coefficient between given variables

N = No of pair of observation

If r < P.E. (r), there is no evidence of correlation i.e. value of re is not at all significant.

If r<P.E. (r), the coefficient of correlation is practically certain i.e. value of r is definitely significant.

If (P.E. r 6 P.E) the coefficient of correlation will be inconclusive, so that we cannot make any decision.

# 3.6.2.5 Regression/Trend Analysis

Statistical tool used for this study is the trend analysis. Mostly trend is used for forecasting in practice. Amongst the various methods to determine trend, the least square is one of the best method used in the analysis.

## The method of least square:

In most cases, we try to fit a straight line to the given data. The line is known as "Line of best fit" as we try to minimize the sum of the square of deviation between the observed and the fitted values of the data. The basic assumption here is that the relationship between the various factors remains unchanged in future period also. It is a mathematical method and with its help, a trend line is fitted to the data in manner, that the following two conditions are satisfied:

1) 
$$\phi(Y-Y_C) = 0$$

i.e. the sum of deviations of the actual values of Y and the computed of Y<sub>C</sub> is zero,

2) 
$$\phi(Y-Y_C)^2$$
 is least

i.e. the sum of the squares of the deviations of the actual and computed values is least from this line and hence the name method of least square. The line obtained by this method is the "line of the best fit".

The method of least squares may be used either to fit a straight-line trend or a parabolic trend.

The straight-line trend is represented by the equation.

$$Y_C = a + bx$$

Where,  $Y_C$  is used to designate the trend values to distinguish them from the actual Y values, 'a' is the Y intercept or the computed trend figure of the Y variable when X = 0, 'b' represents the slop of the trend or the amount of change in Y variable that is associated with a change of one unit in X variable in trend analysis represents time.

In order to determine the values of the constants 'a' and 'b' the following two normal equations are to be solved:

$$\phi Y = Na_+ b \phi X \dots (i)$$

$$\phi XY = a\phi X + b\phi X^2 \dots (ii)$$

Where,

N represents number of year.

We can measure the variable X from any point of time, such as the first. But the calculations are very much simplified when the mid point in time is taken as the origin because in that case the

negative values in the first half of the series balances out the positive values in the second half so that  $\phi X = 0$ . in other words the time variable is measured as a deviation from its mean. Since  $\phi X = 0$  the above two normal equations

$$\phi Y = N_a \dots (i)$$

$$\phi XY = b\phi X^2 \dots (ii)$$

The values of 'a' and 'b' can now be determined as follows:

Since 
$$\phi Y = N_a$$

$$a \times \frac{Y}{N} or \overline{Y}$$

Since 
$$XYXb X^2$$
 therefore,  $bX - \frac{XY}{X^2}$ 

The constant 'a' is simply equal to the mean of Y values (Y intercept) and the constant 'b' gives the rate of change or the slope of the trend line.

The straight line trend is represent by the equation  $Y_C = a + bx$ 

Where, Y<sub>C</sub> is used to designate the trend values to distinguish them from the actual Y values.

# 3.6.2.6 Diagrammatic and Graphical Representation

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

# **CHAPTER-IV**

# PRESENTATION AND ANALYSIS OF DATA

This chapter covers presentation and analysis of all related information about selected banks which also covers presentation and analysis of primary and secondary data, an attempt has been made to analyze the financial performance of SCBNL and NABIL for its operational period of eight years that is from 1999/2000 to 2006/07. This chapter of thesis presents the data, facts, figures relating to different aspects of NABIL and SCBNL. These available data are tabulated analyzed and interpreted sop that financial forecast of banks can be done easily. Hence, the financial ratios have been taken for this. However, there are many ratios but due to some sore coming and constraints, only selected ratios have been taken for analyzing the strength and weakness of the sample foreign participated private commercial banks.

Here, both, primary data and secondary data are analyzed. First primary data are analyzed and then secondary.

- A. Primary Data Analysis
- **B.** Secondary Data Analysis

## A. Primary Data Analysis

To meet the objectives of the study primary data have been taken, analyzed and then conclusions drawn on the basis of the finding. Questionnaire was formulated, approved by the study guide, distributed to the customers who were available within 11 am to 1pm at main branches of each banks under study. NABIL bank (Kantipath, Kathmandu, Darbarmarga, Kathmandu & SCBNL (New Baneshwore, Kathmandu).

A sample of questionnaire is given under annex A.

## 1. Do you know all the products and services provided by this bank?

Data collected from this question is summarized in table 4.1 (a).

**Table 4.1 (a)** 

Bank		NABIL		SCBNL
Option				
Yes	36	72%	41	82%
No	14	28%	09	18%
Total	50	J	50	-1

The tabulated resulted is shown figure 4.1 (a)

Table 4.1(a) with fig 4.1(a) shows 82% customers found aware about all the products and services provided by the SCBNL which score highest whereas NABIL scores 72% only.

Customers available at the time of data collection in each banks found aware below 90% about their respective bank's products and services which seem whether they are not interested about products and services provided by their bank's or awareness program conducted by these banks is not so effective.

# 2. Do you have opened deposit account at this bank? If yes, why?

Data collected for this question is given in table 4.2(a) and 4.3(a).

**Table 4.2 (a)** 

Bank	NA	BIL	SCBNL		
Option					
Yes	44	88%	46	92%	
No	06	12%	04	08%	
Total	50	1	50	,	

The tabulated data in percentage is shown in figure 4.2(a)

Table 4.2(a) with fig. 4.2(a) shows the percentage of customers present in side the bank at the time of data collection are having deposit account with bank or not. Those having the deposit accounts are asked as: if yes,

**Table 4.3 (a)** 

Option							
	Market B	rand	Nearnes	SS	Other	S	Total
NABIL	36	82%	03	7%	05	11%	44
SCBNL	40	87%	03	7%	04	6%	46

The data collected and converted into percentage are shown in figure 4.3 (a)

Table 4.2(a) with fig. 4.2(a) shows eighty-eight percentages at NABIL and ninety-two percentages at SCBNL related customers have found with deposit account with their respective banks. SCBNL scores high, means eighty-seven percentage of them have opened due to its market brand. Similarly NABIL stands then the SCBNL.

# 3. Service provided by the front line employees of this banks is,

The collected data are presented in table 4.4(a)

**Table 4.4(a)** 

	Excelle	ent	Very G	ood	Fair		Not	Total
Option							Good	
NABIL	10	20%	21	42%	19	38%	-	50
SCBNL	08	16%	19	38%	23	46%	-	50

The data converted into percentage are shown in figure 4.4(a)

Figure No.4.4 (a)

Figure 4.4(a) shows majority of customers responds for service provided by the front life employees found very good and fair. It means all the banks under study have been maintaining their operations.

Service provided by the employees depends more or less on motivation, job organization's management philosophy too. So, on the basis of data collection and analysis employees are found well motivated and satisfied with their jobs.

## 4. Loan approval procedure applied by this bank is:

This collected data are presented in table 4.5(a).

**Table 4.5 (a)** 

Option					Total
	Very	Difficult	Easy	No	
Bank	Difficult			Experience	
NABIL	21	10	-	19	50
SCBNL	13	9	-	28	50

The tabulated data in table 4.5 (a) are presented by figure 4.5 (a).

Figure No.4.5 (a)

Figure: Loan approve procedure applied by this bank (Response in Number)

Figure 4.5(a) reflects loan approval applied by the banks under study found not easy. It reveals credit policies of banks by which NPL get controlled. However, majority of customers shoes no experience of loan approval from these banks.

Since, this question is formulated to analyze the risk assessment credit policy and sensitivity to risk of banks. Loan approval procedures applied by banks work as an effective tool to stand a bank in a financial strength position.

# 5. As bank's regular customer what would you like to suggest to its top management?

Respondents views tabulated in table 4.6(a).

**Table 4.6 (a)** 

Option	Extend	Maintain	Decrease	<b>Increase Interest</b>	Total
	Branches	Hospitality	Min. Bal.	On Deposit	

Bank					
NABIL	05	06	11	28	50
SCBNL	3	3	13	31	50

Data of table 4.6 (a) are presented by figure 4.6 (a).

Figure No.4.6 (a)

Figure 4.6(a) seems majority of response found focused on increase in interest on deposit and than decrease in minimum balance requirement to open a deposit account. Above fifty-five percentage of response shows banks need to increase interest on deposit make and then for NABIL and SCBNL it shows to decrease minimum balance requirement to open deposit account.

# **B.** Secondary Data analysis

- > Ratio Analysis
- ➤ Income and Expenditure Analysis
- > Correlation Analysis
- ➤ Least Square Linear Trend Analysis

# 4.1 Ratio Analysis

Ratio analysis involves the method of calculating and interpreting financial ratios in order to assets the firm's performance and status. In order to analysis and interpret the tabulated data the following measures have been used.

- > Performance Measures
- Operating Efficiency Measures
- > Financial Performance Measures

#### **4.1.1 Performance Measures**

The measures have been applied to evaluate the performance of the selected banks regarding their strategies, operating and financing decisions. Under these following ratios have been tested.

- Profitability Ratio
- > Valuation Ratio

# 4.1.1.1 Profitability Ratio

There are many measures of profitability. Each relates the returns of the firm to its sales, assets, equity, or share value. As a group, these measures allow the analyst to evaluate firm's earnings with respect to given level of sales, a certain level of assets, the owner's investments, or share value.

Profit is difference between total revenue and total expenses over a period. Profit is the ultimate out put of a commercial bank and it will have no future if it fails to make sufficient profits. Therefore, the financial manager continuously evaluates the efficiency of the banks in terms of profits. The profitability ratios in this study are calculated to measure the operating efficiency and performance of two banks comparatively. Some major profitability identifying ratios used in this study are:

- ➤ Net profit to total deposit ratio
- ➤ Net profit to total asset ratio
- > Return on net worth

## 1. Net profit to total deposit ratio

Net profit to total deposit 
$$X \frac{Net\ profit}{Total\ Deposit} \mid 100$$

# Net profit to total deposit

**Table 4.1** 

Rs. In Million

Bank		NABIL		SCBNL		
Year	Net Profit Total R		Ratio (%)	Net Profit	Total	Ratio (%)
		Deposit			Deposit	
1999/00	329.10	12779.51	2.58	392.59	12568.49	3.12
2000/01	291.38	15839.01	1.84	430.83	15430.05	3.79
2001/02	271.64	15506.43	1.74	479.21	15835.75	3.03
2002/03	416.24	13447.60	3.10	506.93	18755.63	2.70

2003/04	455.31	14119.03	3.22	537.80	21161.44	2.54	
2004/05	520.10	14586.08	3.56	539.20	19336.09	2.79	
2005/06	635.03	19347.40	3.28	658.76	23061.03	2.86	
2006/07	673.96	23342.28	2.89	691.67	24647.02	2.81	
Mean	2.76			2.96	2.96		
S.D.	0.67			0.38	0.38		
C.V	24.10			12.84			
1	1						

The above table shows that the ratio of NABIL bank has ranged between 1.74% in 2001/02 to 3.56% in 2004/05. The lower of 1.74% in 2001/02 and the highest of 3.56% in 2004/05 with the mean being 2.78% where as the ratio of SCBNL bank has ranged between 2.54% in 2003/04 to 3.79% in 2000/01. The highest ratio of 3.79% in 2000/01 and lowest ratio of 2.54% in 2003/04 with mean of 2.96%. The mean ratio of SCBNL is higher than that of NABIL bank and SCBNL has more consistency than NABIL bank with C.V. of 12.84% and 24.45% respectively.

Figure 4.1

## 2. Net profit to total assets ratio

Net profit to total asset ratio  $X = \frac{Net \ profit}{Total \ Assets}$  | 100

Net profit to total assets
Table 4.2

Bank		<b>NABIL</b>		SCBNL		
Year	Net Profit	Total	Ratio (%)	Net Profit	Total	Ratio (%)
		Assets			Assets	
1999/00	329.10	15314.74	2.15	392.59	17154.96	2.29
2000/01	291.38	17770.65	1.64	430.83	19082.94	2.26
2001/02	271.64	17629.25	1.54	479.21	18443.11	2.60
2002/03	416.24	16562.60	2.51	506.93	20910.97	2.42
2003/04	455.31	16745.49	2.72	537.80	23642.06	2.28
2004/05	520.10	17186.33	3.03	539.20	21893.58	2.46
2005/06	635.03	22329.79	2.85	658.76	25776.33	2.56
2006/07	673.96	27253.39	2.47	691.67	28596.68	2.42
Mean	2.36			2.41		
S.D.	0.54			0.13		
C.V	22.88			5.20		

The above table shows that this ratio of NABIL bank has ranged between 1.54% in 2001/02 to 3.03% in 2004/05. The lowest is 1.54% in 2001/02 and highest is 3.03% in 2004/05 with mean being 2.36% where as this ratio of SCBNL has ranged between 2.26% in 2000/01 to 2.60% in 2001/02. The highest ratio of 2.60% in 2001/02 and lowest ratio of 2.26% in 2000/01 with mean of 2.41%. The mean ratio of SCBNL is higher than that of NABIL bank and SCBNL has more consistency than NABIL bank with C.V. of 22.88% and 5.20% respectively. But however, this of both the banks is not that satisfactory level the reason for which may not the optimum utilization of deposits and lower interest rate of loans extended.

Figure 4.2

## 3. Return on net worth

Return on net worth  $X \frac{Net \ profit}{Net \ Worth}$  |100

**Return on Net Worth** 

Table 4.3

Rs. In Million

Bank		NABL		SCBNL			
Year	Net Profit	Net	Ratio (%)	Net Profit	Net	Ratio (%)	
		Worth			Worth		
1999/00	329.10	1046.92	31.44	392.59	1014.85	38.68	
2000/01	291.38	1062.84	27.42	430.83	1112.02	38.74	
2001/02	271.64	1146.42	23.69	479.21	1235.49	38.79	
2002/03	416.24	1314.18	31.67	506.93	1368.91	37.03	
2003/04	455.31	1481.68	30.73	537.80	1495.74	35.96	
2004/05	520.10	1522.53	34.16	539.20	1582.42	34.07	
2005/06	635.03	1874.99	33.88	658.76	1754.14	37.55	
2006/07	673.96	2057.05	32.76	691.67	2116.35	32.68	
Mean	30.72			36.69			
S.D.	3.54			2.30			
C.V	11.52			6.27			

The above table shows that this ratio of NABIL bank has ranged between 23.69% in 2001/02 to 34.16% in 2004/05. The lowest is 23.69% in 2001/02 and highest is 34.16% in 2004/05 with mean being 30.72% where as this ratio of SCBNL has ranged between 32.68% in 2006/07 to 38.79% in 2001/02. The highest ratio of 38.79% in 2001/02 and lowest ratio of 32.68% in 2006/07 with mean of 36.69%. The mean ratio of SCBNL is higher than that of NABIL bank (i.e. mean of SCBNL is 36.69% and of NABIL is 30.72%) and SCBNL has more consistency than NABIL bank i.e. C.V. of SCBNL is 6.27% and C.V. of NABIL bank is 11.52%.

Figure 4.3

## **4.1.1.2 Valuation Measures**

Valuation ratios are the most comprehensive measures of performance for the firm in that they reflect the combined influence of return and risk ratios (Weston, J. Fren and Copeland Thomas

E. "Managerial Finance" P 197). Naturally, the decision that management makes in the day-to-day operation of the business inevitable affect the value of the firm and its worth to its owners, the common shareholders. Besides the ratios mentioned above evaluate the company from an operational perspective, these ratios evaluate the company largely in terms of market values. Out of these the must important ones are as follows.

- Price Earning Ratio
- ➤ Market to Book Ratio
- Dividend Yield Ratio

# 1. Price Earning Ratio

The reciprocal of the earning yield is the price-earning ratio.

Price Earning Ratio  $X \frac{MVPS}{EPS}$ 

# Price Earning Ratio Table 4.4

Rs. In Million

Bank		<b>NABIL</b>			SCBNL	
Year	MVPS	EPS	Ratio	MVPS	EPS	Ratio
			(times)			(times)
1999/00	1400.00	83.79	16.71	1985.00	115.62	17.17
2000/01	1500.00	59.26	25.31	2144.00	126.88	16.90
01/02	730.00	55.25	13.21	1550.00	141.13	10.98
2002/03	740.00	84.66	8.74	1640.00	149.30	10.99
2003/04	1000.00	92.61	10.80	1745.00	143.55	12.16
2004/05	1505.00	105.49	14.27	2345.00	143.93	16.29
2005/06	2240.00	129.21	17.35	3775.00	175.84	21.49
2006/07	5050.00	137.08	36.84	5900.00	167.37	35.25
Mean	17.90			17.65		
S.D.	9.14			7.98		
C.V	51.06			45.23		

The above table shows that this ratio of NABIL bank has ranged between 8.74 time in 2002/03 to 36.84 time 2006/07 is the increasing trend for first two years then in decreasing trend there after for two years and again increased for the rest of the years where as this ratio of SCBNL has ranged between 10.98 time in 2001/02 to 35.25 times 2006/07 with decreasing trend for first three years and then increasing trend for the rest of the period. The mean ratio of NABIL bank is higher than of SCBNL with mean of 17.90 times and 17.65 times respectively. Similarly, NABIL bank has more consistency than SCBNL with C.V. of 51.06% and 45.23% respectively.

Figure 4.4

#### 2. Market to Book Ratio

Market to Book Ratio  $X \frac{MVPS}{BVPS}$ 

#### **Market to Book Ratio**

#### **Table 4.5**

Rs. In Million

Bank		NABIL			SCBNL		
Year	MVPS	BVPS	Ratio	MVPS	BVPS	Ratio	
			(Times)			(Times)	
1999/00	1400.00	250.53	5.59	1985.00	298.88	6.64	
2000/01	1500.00	216.18	6.94	2144.00	327.50	6.55	
2001/02	730.00	233.18	3.13	1550.00	363.86	4.26	
2002/03	740.00	267.30	2.77	1640.00	403.15	4.07	
2003/04	1000.00	301.00	3.32	1745.00	399.25	4.37	
2004/05	1505.00	337.00	4.47	2345.00	422.38	5.55	
2005/06	2240.00	381.00	5.88	3775.00	464.91	8.12	
2006/07	5050.00	418.00	12.08	5900.00	506.57	11.65	
Mean	5.52	5.52			6.40		
S.D.	3.03			2.55			
C.V	54.94			39.81			

The above table shows that this ratio of NABIL bank has ranged between the highest of 12.08 times in 2006/07 and lowest of 2.77 times in 2002/03 with increasing trend for two years periods then decreasing trend for two years and again increased for the rest of the years where as this ratio of SCBNL has ranged between the highest of 11.65 times in 2006/07 and lowest of 4.07 times 2002/03 mean value of SCBNL bank that indicates comparatively stronger management

and expectation of higher growth in the market. Lesser value of C.V. of SCBNL clarifies that the indicators are less varied over the periods.

Figure 4.5

#### 3. Dividend Yield Ratio

This ratio is the dividend per share dividend by market value per share. This ratio evaluates the shareholder return in relation to the market value of the share

$$\textit{Dividend Yield Ratio} \times \frac{\textit{Dividend Per Share (DPS)}}{\textit{Market Value Per Share (MVPS)}} \mid 100$$

#### **Dividend Yield Ratio**

Table 4.6

Rs. In Million

Bank		NABIL		SCBNL			
Year	DPS	MVPS	Ratio (%)	DPS	MVPS	Ratio (%)	
1999/00	55.00	1400.00	3.93	100.00	1985.00	5.04	
2000/01	40.00	1500.00	2.67	100.00	2144.00	4.66	
2001/02	30.00	730.00	4.08	100.00	1550.00	6.45	
2002/03	50.00	740.00	6.76	110.00	1640.00	6.71	
2003/04	65.00	1000.00	6.50	110.00	1745.00	6.30	
2004/05	70.00	1505.00	4.65	120.00	2345.00	5.11	
2005/06	85.00	2240.00	3.79	130.00	3775.00	3.44	
2006/07	140.00	5050.00	2.77	80.00	5900.00	1.35	
Mean	4.39	4.39			4.88		
S.D.	1.53			1.79			
C.V	34.86			36.68			

The above table shows that this ratio of NABIL bank has ranged between 2.67% in 2000/01 to 6.76% in 2002/03 with fluctuating trend. Similarly, this ratio of SCBNL has ranged between 1.35% in 2006/07 to 6.71% in 2002/03 with decreasing trend for first two years and then increasing trend for two years, again it is decreasing trend for the rest of the period. The mean ratio of SCBNL bank has higher return in relation to the MVPS than that of NABIL bank.

Similarly, NABIL bank has more consistency than SCBNL bank with C.V. of 34.86% and 36.68% respectively. It shows that NABIL has better performance regarding Yield.

**Figure** 

4.6

#### **4.12 Operating Efficiency Measures**

Under the measure, two major categories of financial ratios are performed as follows.

#### 4.1.2.1 Activity Ratios/Assets and Investment Management

Now a day these relations are also known as assets and investment management. Activity or turnover ratios employed to evaluate the efficiency with which the firm manages and utilizes its assets. They indicate the speed with which assets are being converted or turned over. Thus, these ratios are used to measure the banks ability to utilize their available resources. Various activity ratios are used to predict the effectiveness of asset utilization. Some selected ratios for this research can be illustrated as follow.

- ➤ Loans and Advances to Total Deposit Ratio
- ➤ Loans and Advances to Fixed Deposit Ratio
- ➤ Loans and Advances to Saving Deposit Ratio
- ➤ Investment to Total Deposit Ratio

#### 1. Loans and Advances to Total Deposit Ratio

This ratio is calculated by using the following formula.

 $Loans \ and \ Advance \ to Total \ Deposit \ Ratio X \frac{Loans \ and \ Advances}{Total \ Deposit} \mid 100$ 

# Loans and Advances to Total Deposit Ratio Table 4.7

Rs. In Million

Bank		NABIL		S	CBNL		
Year	Loans and	Total	Ratio (%)	Loans and	Total	Ratio	
	Advances	Deposit		Advances	Deposit	(%)	
1999/00	7334.76	12779.51	57.39	4857.17	12568.49	38.65	
2000/01	8324.44	15839.01	52.56	5407.09	15430.05	35.04	
2001/02	7801.85	15506.43	50.31	5364.00	15835.75	33.87	
2002/03	8113.68	13447.60	60.34	5695.82	18755.63	30.37	
2003/04	8548.66	14119.03	60.55	6410.24	21161.44	30.29	
2004/05	10586.66	14586.08	72.58	8143.21	19336.09	42.11	
2005/06	13278.78	19347.40	68.63	8935.42	23061.03	38.75	
2006/07	15903.02	23342.28	68.13	10502.63	24647.02	42.61	
Mean	61.31			36.46			
S.D.	7.94			4.84			
C.V	12.95			13.27			

The above table shows that this ratio of NABIL bank has ranged between 50.31% in 2001/02 to 72.58% in 2004/05 with decreasing trend for first three year then increasing trend for three years, again it is decreased for last two year over the study period with mean of 61.31% where as SCBNL has ranged between 30.29% in 2003/04 to 42.61% in 2006/07 with decreasing trend for first five year then it increased for the year of 2004/05, again it is decreased for the 2005/06 and again it increased last year over the study period with mean of 36.46% which is less than NABIL bank. And, NABIL bank has C.V. of 12.95% and SCBNL with C.V. of 13.27%. The above table shows that SCBNL bank is successfully utilizing its resource in profit generation field than NABIL. Lower ratio of NABIL represents lower deposits portion being invested in loan and advance. So it will be better for NABIL to increase the portion of loan and advance to earn more interest.

Figure 4.7

#### 2. Loans and Advances to Fixed Deposit Ratio

This ratio measures how many times the amount is used in loans and advances in comparison to fixed deposits. Fixed deposits are high interest bearing obligation where as loans and advances are the major sources of investment to generate income for the commercial banks. This ratio is calculated by dividing the amount of loans and advances by fixed deposits that are given below.

Loans and Advances to Fixed Deposit Ratio 
$$X = \frac{Loans \ and \ Advance}{Fixed \ Deposit} \mid 100$$

# Loan and Advance to Fixed Deposit Ratio Table 4.8

Rs. In Million

Bank	NABIL SCBNL						
Year	Loans and	Fixed	Ratio	Loans and	Fixed	Ratio	
	Advances	Deposit	(Times)	Advances	Deposit	(Time)	
1999/00	7334.76	5278.27	1.39	4857.17	2651.65	1.83	
2000/01	8324.44	3719.20	2.24	5407.09	3236.03	1.67	
2001/02	7801.85	2446.85	3.19	5364.00	2264.77	2.37	
2002/03	8113.68	2252.54	3.60	5695.82	1948.60	2.92	
2003/04	8548.66	2310.57	3.70	6410.24	1428.50	4.49	
2004/05	10586.66	2678.53	3.95	8143.21	1416.38	5.75	
2005/06	13278.78	3449.09	3.85	8935.42	2136.31	4.18	
2006/07	15903.02	5435.19	2.92	10502.63	3196.49	3.29	
Mean	3.11			3.31			
S.D.	0.90			1.41			
C.V	28.93	·	·	42.74	·		

The above table shows that this ratio of NABIL bank is increasing trend except the last year over the study period. In case of NABIL bank this ratio has ranged between 1.39 times in 1999/00 to

3.95 times in 2004/05. The mean ratio is 3.11 times where as SCBNL has ranged between 1.67 times in 2000/01 to 5.75 times in 2004/05 and mean ratio is 3.31 times.

The above table clearly indicates that loan and advances to fixed deposit ratio are being efficiently and properly utilized by NABIL bank than SCBNL bank. So, SCBNL bank requires utilizing fixed deposits in loans and advances more efficiently.

**Figure** 

4.8

#### 3. Loans and Advances to Saving Deposit Ratio

This ratio measures how many times the second high bearing deposit is utilized for income generating purpose. This ratio can be calculated by dividing the amount of loans and advances by the amount of saving deposits. The ratio is calculated as follows.

Loans and Advances to Saving Deposit 
$$X \frac{Loans \ and \ Advances}{Saving \ Deposit} \mid 100$$

Loan and Advance to Saving Deposit Ratio
Table 4.9

Bank		NABIL			SCBNL	
Year	Loans and Advances	Saving Deposit	Ratio (Times)	Loans and Advances	Saving Deposit	Ratio (Time)
1999/00	7334.76	4150.19	1.77	4857.17	6632.70	0.73
2000/01	8324.44	4917.14	1.69	5407.09	8404.61	0.64
2001/02	7801.85	4972.06	1.57	5364.00	9441.91	0.57
2002/03	8113.68	5229.72	1.55	5695.82	10633.16	0.54
2003/04	8548.66	5994.12	1.43	6410.24	12771.83	0.50
2004/05	10586.66	7026.33	1.51	8143.21	13030.93	0.62
2005/06	13278.78	8770.76	1.51	8935.42	14597.67	0.61
2006/07	1590.02	10187.35	1.56	10502.63	15244.38	0.69
Mean	1.57			0.61		
S.D.	0.1			0.05		
C.V	6.37			8.20		

This ratio of NABIL bank has ranged between 1.43 times in 2003/04 to 1.77 times in 1999/00 with mean ratio of 1.57 times the highest being 1.77 in 1999/00 and the lowest being 1.43 times in 2003/04. Similarly, SCBNL has ranged between 0.50 times in 2003/04 to 0.73 times in 1999/00 with mean ratio 0.61 times. The highest being 0.73 times in 1999/00 and the lowest being 0.50 times in 2003/04. In short the mean ratio of NABIL bank is more than the mean ratio of SCBNL. Which can consider better and NABIL bank has more consistency in this ratio with C.V. of 6.37 times and SCBNL with C.V. of 8.20. It also means that NABIL bank is utilizing its saving deposits properly than SCBNL.

Figure 4.9

#### 4. Investment to Total Deposit Ratio

This ratio is derived by dividing investment by the amount of total deposits in the bank.

## Investment to Total Deposit Ratio $X \frac{Investment}{Total Deposit}$ | 100

# Investment to Total Deposit Ratio Table 4.10

Rs. In Million

Bank		NABIL		S	CBNL	
Year	Investment	Total	Ratio (%)	Investment	Total	Ratio
		Deposit			Deposit	(%)
1999/00	1250.94	12779.51	9.79	3349.87	12568.49	26.65
2000/01	7704.31	15839.01	48.64	9559.18	15430.05	61.95
2001/02	8199.51	15506.43	52.88	9275.88	15835.75	58.58
2002/03	6031.18	13447.60	44.85	10216.20	18755.63	54.47
2003/04	5835.95	14119.03	41.33	11360.33	21161.44	53.68
2004/05	4267.23	14586.08	29.26	9702.55	19336.09	50.18
2005/06	6180.69	19347.40	31.95	12847.54	23061.03	55.71
2006/07	8956.31	23342.28	38.37	13553.23	24647.02	54.99
Mean	37.13			52.03		
S.D.	13.60			10.82		
C.V	36.64			20.80		

The above table reflects that this ratio of NABIL bank is fluctuating in between the range of 9.79% in 1999/00 to 52.88% in 2001/02 with mean being 37.13%. Similarly, this ratio of SCBNL has ranged between 26.65% in 1999/00 to 61.95% in 2000/01 with mean being 52.03%. In brief SCBNL's ratio is following increasing trend in first two years and decreasing trend for four years, after that it increased for one year and again it decreased the last year of the study period. Remarkably, higher mean ratio of SCBNL signifies that SCBNL has more successfully allocated its deposits in investment portfolio. Conversely, NABIL bank has given less importance in this issue. In other words, it shows the efficiency of SCBNL in mobilization the major resources of the bank and C.V. analysis showed the high consistency of ratios in SCBNL than that of NABIL.

#### Figure 4.10

#### **4.1.2.2 Cost Effectiveness Measures**

For the efficient operations of a firm management should focus their critical eyes upon the two main areas. One of them is concerned with the well management of investments and another one is to control cost effectively. The ratio is important since this ratio measures how individual elements of costs are controlled. Some major ratios regarding commercial banking sectors under this ratio can be examines as follows:

- Personnel Expenses to Total Income Ratio
- ➤ Office Operating Expenses to Total Operating Income Ratio

#### 1. Personnel Expenses to Total Income Ratio

This ratio is measured as total personnel expenses divided by total income. It is of interest to determine company policies in another important aspect of managing a company's personnel relationships. Calculation is drawn by using the formula as:

Personnel Expenses to Total Income Ratio  $X \frac{Personnel\ Expenses}{Total\ Income} \mid 100$ 

Table 4.11

Rs. In Million

Bank	NABI	L		SCBNL		
Year	Personnel	Total	Ratio (%)	Personnel	Total	Ratio (%)
	Expenses	Income		Expenses	Income	
1999/00	97.97	1309.11	7.48	87.55	1372.79	6.38
2000/01	147.36	1540.25	9.57	102.12	1662.43	6.14
2001/02	144.88	1639.12	8.84	126.51	1446.81	8.74
2002/03	210.58	1427.45	14.75	128.33	1504.56	8.53
2003/04	180.84	1426.44	12.68	134.69	1584.01	8.50
2004/05	199.52	1510.68	13.21	148.59	1576.27	9.43
2005/06	219.80	1725.14	12.74	168.23	1775.97	9.47
2006/07	240.16	2052.07	11.70	199.78	2000.71	9.99
Mean	11.37			8.40		
S.D.	2.49			1.40		
C.V	21.90			16.67		

Over the study period, ratios in NABIL bank depicted fluctuating trend. It reached to 14.75% in the year of 2002/03 from 7.48% in the beginning of the period. But in SCBNL it shows decrease in the first two years. It again slightly increased in the year of 2001/02 and again started to decreasing trend for the two years of period but again started increasing trend for the rest of the periods of the study. Mean ratio appeared significantly higher in NABIL. From the result conclusion can be drawn that considerably and comparatively large portion of the income was spent for the personnel, which might have affected the profitability position of the bank adversely. From the other side, it seems more satisfactory for the employees and success of the organization to attract the efficient manpower from outside and utilize their talent. It might have maintained higher ratio to build the well employees management relationship reduce the employee's absenteeism and turnover C.V. with 21.90% of NABIL bank is less consistency than the SCBNL of 16.67%.

#### 2. Office Operating Expenses to Total Operating Income Ratio

The ratio is simply derived by dividing total office operating expenses by total operating income. The ratio can be presented as:

Office Operating Expenses to Total Operating Income Ratio X Office Operating Expenses | 100

# Office Operating Expenses to Total Operating Income Ratio Table 4.12

Rs. In Million

Bank		NABIL			SCBNL	
Year	Office	Total	Ratio	Office	Total	Ratio
	Operating	Operating	(%)	Operating	Operating	(%)
	Expenses	Income		Income	Income	
1999/00	151.83	1309.11	11.60	124.51	1366.92	9.11
2000/01	122.80	1538.34	7.98	224.85	1653.88	13.60
2001/02	136.87	1639.12	8.35	190.94	1441.72	13.24
2002/03	166.20	1340.51	12.40	311.97	1499.21	20.81
2003/04	150.76	1333.65	11.30	279.69	1578.35	17.72
2004/05	190.30	1194.89	15.93	256.65	1285.54	19.96
2005/06	210.11	1359.51	15.45	221.09	1418.59	15.59
2006/07	130.83	1480.16	8.84	228.45	1558.00	14.66
Mean	11.48			15.59		
S.D.	3.06			3.84		
C.V	26.66			24.63		

The ratio in NABIL bank showed declining trend for first two years and it increased in year 2001/02 and 2002/03. Again decreases in the year of 2003/04 but increased in the year of 2004/05 and decreased in year of 2005/06 to 2006/07. The ratio in SCBNL bank also seemed fluctuating. Lower mean ratio of NABIL suggests that the bank be in much better condition regarding operational efficiency than SCBNL bank. Similarly, C.V. analysis showed the more consistency in ratios of SCBNL as compared to NABIL bank.

**Figure** 

4.12

#### **4.1.3 Financial Performance Measures**

Financial performance measures relate to strategic decisions as well as investment management and cost management. Under this, two major types are analyzed.

#### 4.1.3.1 Leverage or Capital Structure Ratio

The use of finance is refers by financial leverage. These ratios are also called solvency ratios or capital structure ratio. To judge the long-term financial position of the firm, these ratios help to measure the financial contribution of owners and creditor comparatively. These ratios indicate the situation of the capital structure, which is calculated to measure the company's ability of using debt for the benefit of shareholders. The leverage ratios show how much of an enterprise fund are financed by debt and equity and examine the prospects for the future financing. Also leverage ratios are used to measure the firm's ability to meet long-term obligation. Generally, assets of the firm are financed by both equity and debt.

- Leverage Factor
- ➤ Capital Adequacy Ratio
- Coverage Ratio

#### 1. Leverage Factor

This ratio is calculated by using the following formula.

**Leverage Factor** 

**Table 4.13** 

Rs. In Million

Bank		NABIL			SCBNL	
Year	Total	Net	Ratio	Total	Net	Ratio
	Assets	Worth	(Times)	Assets	Worth	(Time)
1999/00	15314.74	1046.92	14.63	17154.96	1014.85	16.90
2000/01	17770.65	1062.84	16.72	19082.94	1112.02	17.16
2001/02	17629.25	1146.42	15.38	18443.11	1235.49	14.93
2002/03	16562.60	1314.18	12.60	20910.97	1368.91	15.28
2003/04	16745.49	1481.68	11.30	23642.06	1495.74	15.81
2004/05	17186.33	1522.53	11.29	21893.58	1582.42	13.84
2005/06	22329.79	1874.99	11.91	25776.33	1754.14	14.69
2006/07	27253.39	2057.05	13.25	28596.68	2116.35	13.51
Mean	13.39			15.27		
S.D.	2.01			1.32		
C.V	15.01			8.64		

The above table shows that this ratio of NABIL bank has ranged between 11.29 times in 2004/05 to 16.72 times in 2000/01 with the mean of 13.39 time where as the SCBNL has ranged between 13.51 times in 2006/07 to 17.16 times 2000/01 with mean of 15.27 times. The analysis shows that the capital structures of both banks are highly levered since the average ratios for both the banks are less than 20 times. SCBNL seems ahead of NABIL in raising the capital through debt as per the higher mean ratio. Similarly, lower C.V. of SCBNL indicates the higher consistency in the ratios than that of NABIL bank.

**Figure** 

4.13

#### 2. Capital Adequacy Ratio

This ratio is calculated by using the following formula.

Capital Adequacy Ratio X 
$$\frac{Capital\ Fund}{Total\ Risk\ Weighted\ Assets}$$
 | 100

#### **Capital Adequacy Ratio (%)**

#### **Table 4.14**

Banks	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
NABIL	12.30	10.46	13.86	13.05	13.56	12.44	12.31	12.04	12.50	1.05	8.4
SCBNL	9.56	14.00	17.38	14.14	15.57	15.85	14.93	15.71	14.64	2.32	15.85

The table shows that capital adequacy ratio of NABIL bank has ranged between 10.46% in 2000/01 to 13.86% in 2001/02 with decreasing trend for first two years and increased in third year then slightly decreased and again increased in 2003/04. Again it decreased in 2004/05 and slightly decreased 2005/06 to 2006/07 with the mean of 12.50%. Similarly, this ratio of SCBNL has ranged between 9.56% in 1999/00 to 17.38% in 2001/02 with fluctuating trend with mean of 14.64%. This ratio of SCBNL bank has always higher than that of NABIL bank. NABIL bank has more consistency in this ratio with C.V. of 8.4% than that of SCBNL with C.V. of 15.85%.

#### Figure 4.14

#### 3. Coverage Ratio

Coverage ratios are designed to relate the financial charge of a firm to its ability to service them. It measures the relationship between what is normally available from operation of the banks and the claim of the outsiders. Under this, following ratios are calculated.

#### i) Provision for possible loan losses to loans and advances ratio

Provision for possible loans losses to loans and advances ratio  $X = \frac{Provision for possible loan losses}{Loans and Advances}$ 

Provision for Possible Loan Losses to Loans and Advance Ratio
Table 4.15

Rs. In Million

Bank		NABIL			SCBNL	
Year	Provision for Loan	Loan and Advances	Ratio (%)	Provision For Loan	Loan and Advance	Ratio (%)
	Losses			Losses	Deposit	
1999/00	74.17	7334.76	1.01	180.41	4857.17	3.71
2000/01	591.80	8324.44	7.11	274.26	5407.09	5.07
2001/02	363.95	7801.85	4.66	332.18	5364.00	6.19
2002/03	357.73	8113.68	4.41	304.34	5695.82	5.34
2003/04	358.66	8548.66	4.20	283.62	6410.24	4.42
2004/05	360.57	10586.66	3.41	277.66	8143.21	3.41
2005/06	356.24	13278.78	2.68	270.86	8935.42	3.03
2006/07	357.25	15903.02	2.25	287.51	10502.63	2.74
Mean	3.72			4.24		
S.D.	1.84			1.22		
C.V	49.46			28.77		

The above table shows that this ratio of NABIL bank over the study period has ranged between 1.01% in 1999/00 and 7.11% in 2000/01 where as this ratio of SCBNL has ranged between 2.74% in 2006/07 and 6.19% in 2001/02. NABIL bank has less consistency with C.V. 49.46% than SCBNL with C.V. 28.77. It shows that NABIL bank provides loan in less risky project than that of SCBNL. Because NABIL bank has less mean ratio than SCBNL.

#### *Figure 4.15*

#### 4.1.3.2 Liquidity Ratio

Liquidity of a firm refers to the sound solvency position of a firm to meet its obligations, liquidity ratios measures the ability of a firm to meet its short-term obligations. Various ratios come under this category.

To analyze the ability of banks, the following selected ratios are calculated.

- > Current Ratio
- > Cash and Bank Balance to Total Deposit
- > Cash and Bank Balance to Current Assets
- > Investment on Government Securities to Current Assets
- ➤ Loans and Advance to Current Assets
- > Fixed Deposit to Total Deposit
- > Saving Deposit to Total Deposit

#### 1. Current Ratio

It is the ratio of total current assets to total current liabilities calculated by dividing the company's current assets by current liabilities.

Current Ratio X 
$$\frac{Current\ Assets}{Current\ Liabilities}$$
 | 100

Current Ratio Table 4.16

Rs. In Million

Bank		NABIL			SCBNL	
Year	Current	Current	Ratio	Current	Current	Ratio
	Assets	Liabilities	(Times)	Assets	Liabilities	(Times)
1999/00	15079.45	14159.39	1.06	16650.32	16045.56	1.04
2000/01	12550.63	16707.81	0.75	18949.94	17871.28	1.06
2001/02	13312.39	16482.83	0.81	18330.83	17076.76	1.07
2002/03	13868.30	15248.45	0.91	20708.06	19326.07	1.07
2003/04	14582.05	15263.81	0.96	23494.62	21928.72	1.07
2004/05	15284.42	16425.32	0.93	24525.08	19447.32	1.26
2005/06	15979.25	16875.25	0.95	25155.35	21816.40	1.15
2006/07	19494.69	18777.53	1.04	27922.44	22817.99	1.22
Mean	0.93			1.12		
S.D.	0.10			0.07		
C.V	10.75			6.25		

The table shows that the current ratio of both banks has been below the standard 2:1. The ratio of NABIL bank over the study period has ranged between 0.75 times in 2000/01 to 1.06 times in 1999/00 with mean of 0.93 times where as SCBNL has ranged between 1.04 times in 1999/00 to 1.26 times in 2004/05 with mean of 1.12 times. However SCBNL has more consistency in its current ratio with C.V. of 6.25% than that of NABIL bank with C.V. of 10.75%.

Current ratio of both banks is below the required standard but we cannot conclude the liquidity position of both banks to be poor. As this ratios shows the quantity and not the quality of assets and second reason is that it does not distinguish between the types of current assets. However, lower assets ratio implies that both the sample banks current assets are either declining in value or being utilized in some other profit generating investment. Both banks should cut off the investment of such assets from the viewpoint of working capital policy and utilization of current fund both the sample banks are following the aggressive working capital policy and better utilization of current fund.

Figure 4.16

#### 2. Cash and Bank Balance to Total Deposit (Cash Reserve Ratio)

$$CRR~X \frac{Cash~and~Bank~Balance}{Total~Deposit} \mid 100$$

The following table shows the comparative cash and bank balance to total deposits ratio of NABIL bank and SCBNL.

#### Cash and Bank Balance to Total Deposit Table 4.17

Rs. In Million

Bank		NABIL		SCBNL			
Year	Total Katio		Cash and Bank Balance	Total Deposit	Ratio (%)		
1999/00	1088.75	12779.51	8.52	1020.46	12568.49	8.12	
2000/01	812.90	15839.01	5.13	961.05	15430.05	6.23	
2001/02	1051.82	15506.43	6.78	825.26	15835.75	5.21	
2002/03	1144.77	13447.60	8.51	1512.30	18755.63	8.06	
2003/04	970.49	14119.03	6.87	2023.16	21161.44	9.56	
2004/05	559.38	14586.08	3.84	1111.12	19336.09	5.75	
2005/06	630.24	19347.40	3.25	1246.24	23061.03	5.40	
2006/07	1399.83	23342.28	6.00	2021.02	24667.02	8.20	
Mean	6.11			7.08			
S.D.	1.96			1.60			
C.V	32.08			22.60			

The above table shows that the ratio of NABIL bank over the study period has ranged between 3.25% in 2005/06 to 8.52% in 1999/00 with the mean of 6.11% where as SCBNL has ranged between 5.21% in 2001/02 to 9.56% in 2003/04 with mean of 7.08%. However SCBNL has more consistency in its current ratio with C.V. of 22.60% than that of NABIL bank with C.V. of 32.08%.

Figure 4.17

#### 3. Cash and Bank Balance to Current Assets

Cash and Bank Balance to Current Assets  $X \frac{Cash \ and \ Bank \ Balance}{Current \ Assets} \mid 100$ 

## Cash and Bank Balance to Current Assets Table 4.18

Rs. In Million

Bank	NABIL			SCBNL			
Year	Cash and Bank Balance	Current Ratio Cash and Bank Balance		Current Assets	Ratio (%)		
1999/00	1088.75	15079.45	7.22	1020.46	16650.32	6.13	
2000/01	812.90	12550.63	6.48	961.05	18949.94	5.07	
2001/02	1051.82	13312.39	7.90	825.26	18330.83	4.50	
2002/03	1144.77	13868.30	8.25	1512.30	20708.06	7.30	
2003/04	970.49	14582.05	6.66	2023.16	23494.62	8.61	
2004/05	559.38	15284.42	3.66	1111.12	24525.08	4.53	
2005/06	630.24	15979.25	3.94	1246.24	25155.35	5.07	
2006/07	1399.83	19494.69	7.18	2021.02	27922.44	7.24	
Mean	6.41			6.06			
S.D.	1.71			1.52			
C.V	26.68			25.08			

The above table shows that the cash and bank balance to current assets ratio of NABIL bank has ranged between 3.66% in 2004/05 to 8.25% in 2002/03 and average of 6.41% where as this ratio of SCBNL has ranged between 4.50% in 2001/02 to 8.61% in 2003/04. The average ratio is

6.06% in SCBNL which is less than that of NABIL bank's 6.41%. So in short this ratio for NABIL bank is higher than SCBNL. But SCBNL bank has high consistency ratio than NABIL with C.V. of 25.08% and 26.68% respectively. Thus it revels that the liquidity position of NABIL bank is better but it is holding idle cash where as SCBNL is utilizing cash in profit generating fields. However, holding less cash and bank balance can have negative impact on the goodwill and reputation of the bank to fulfill the demand of the profit holder. Hence, SCBNL should maintain required and sufficient cash and bank balance so that there is no shortage of highly liquid assets.

*Figure 4.18* 

#### **4. Investment on Government Securities to Current Assets**

Investment on government securities to current assets  $X \frac{Investment\ on\ Teasury\ bill}{Current\ Assets} \mid$  100

## **Investment on Government Securities to Current Assets Table 4.19**

Rs. In Million

Bank		NABIL	SCBNL				
Year	Investment on Government Securities	Government Assets (%)		Investment on Government Securities	Current Assets	Ratio (%)	
1999/00	1233.82	15079.45	8.18	3338.67	16650.32	20.05	
2000/01	2732.96	12550.63	21.78	4811.01	18949.94	25.39	
2001/02	4120.29	13312.39	30.95	5784.72	18330.83	31.56	
2002/03	3588.77	13868.30	25.88	6581.35	20708.06	31.78	
2003/04	6372.63	14582.05	43.70	7948.22	23494.62	33.83	
2004/05	2413.94	15284.42	15.79	7203.07	24525.08	29.37	
2005/06	2301.46	15979.25	14.40	8644.86	25155.35	34.37	
2006/07	4808.35	19494.69	24.66	7107.94	27922.44	25.46	
Mean	23.17			28.98			
S.D.	11.02			4.96			
C.V	47.56			17.12			

The above table shows that ratio of NABIL bank has ranged between 8.18% in 1999/00 to 43.70% in 2003/04 while this ratio of SCBNL has ranged between 20.05% in 0999/00 to 34.37%

in 2005/06. The mean ratio of NABIL bank is lesser than SCBNL. Similarly, SCBNL has more consistency than NABIL bank with C.V. of 17.12% and 47.56% respectively which shows that SCBNL is more efficient in using government securities. But lower the investment on government securities means higher the risk and higher the income and vice-versa.

Figure 4.19

#### 5. Loans and Advances to Current Assets Ratio

This ratio is calculated by using the following formula.

Loan and advances to current assets 
$$X \frac{Loan \ and \ advances}{Current \ assets} \mid 100$$

### Loans and Advances to Current Assets Table 4.20

Rs. In Million

Bank	NABIL			SCBNL			
Year	Loan and	d Current Ratio		Loans and	Current	Ratio	
	Advances	Assets	(%)	Advances	Assets	(%)	
1999/00	7334.76	15079.45	48.64	4857.17	16650.32	29.17	
2000/01	8324.44	12550.63	66.33	5407.09	18949.94	28.53	
2001/02	7801.85	13312.39	58.61	5364.00	18330.83	29.26	
2002/03	8113.68	13868.30	58.51	5695.82	20708.06	27.51	
2003/04	8548.66	14582.05	58.62	6410.24	23494.62	27.28	
2004/05	10586.66	15284.42	69.26	8143.21	24525.08	33.20	
2005/06	13278.78	15979.25	83.10	8935.42	25155.35	35.52	
2006/07	15903.02	19494.69	81.58	10502.63	27922.44	37.61	
Mean	65.58			31.01			
S.D.	12.02			3.92			
C.V	18.33			12.64			

The above table shows that the loan and advances to current assets ratio of NABIL bank is 48.64% in 1999/00 and 83.10% in 2005/06. Similarly, the ratio of SCBNL is 27.28% in 2003/04 and 37.61% in 2006/07.the mean ratio is 31.01% of SCBNL that is less than that of NABIL

bank's 65.58%. Similarly, NABIL bank has less consistency than SCBNL with C.V. of 18.33% and 12.64% respectively.

This table shows that SCBNL is not so efficient in utilizing its current assets in terms of loan and advance than NABIL bank. So, SCBNL should increase the utilization of its current assets by providing loan and advances.

#### Figure 4.20

#### 6. Fixed Deposit to Total Deposit

This ratio is calculated by using the following formula.

Fixed deposit to total deposit 
$$X \frac{Fixed\ Deposit}{Total\ deposit} \mid 100$$

#### Fixed Deposit to Total Deposit Table 4.21

Rs. In Million

Bank		<b>NABIL</b>		SCBNL			
Year	Fixed	Total	Total Ratio		Total	Ratio	
	Deposit	Deposit	(%)	Deposit	Deposit	(%)	
1999/00	5278.27	12779.51	41.30	2651.65	12568.49	21.10	
2000/01	3719.20	15839.01	23.48	3236.03	15430.05	20.97	
2001/02	2446.85	15506.43	15.78	2264.77	15835.75	14.30	
2002/03	2252.54	13447.60	16.75	1948.60	18755.63	10.39	
2003/04	2310.57	14119.03	16.36	1428.50	21161.44	6.75	
2004/05	2678.53	14586.08	18.36	1416.38	19336.09	7.33	
2005/06	3449.09	19347.40	17.83	2136.31	23061.03	9.26	
2006/07	5435.19	23342.28	23.28	3196.49	24647.02	12.97	
Mean	21.64			12.88			
S.D.	8.97			5.64			
C.V	41.46			43.79			

The above table shows that the ratio of NABIL bank has ranged between 15.78% in 2001/02 to 41.30% in 1999/00. Mean of the ratios computed 21.64% and C.V. is 41.46%. Similarly, the ratio of SCBNL bank has ranged between 6.75% in 2003/04 to 21.10% in 1999/00. Mean and C.V. of the ratios were 12.88% and 43.79% respectively.

The ratios for NABIL bank are in fluctuating trend. In SCBNL, the ratio is in declining trend for the first five years period and then after it increased up to study period. Mean of the ratios is greater in NABIL bank than that of SCBNL. From the result, it is clear that in NABIL bank fixed deposit has occupied greater portion of total deposit in contrast to SCBNL. Bank can experience high profit by investing the fund in long-term loans since the fund available from fixed deposit is higher. If the investment decision is not taken properly they may face the problem of high interest charge for the fixed deposit. On the other hand, SCBNL has the opportunity to invest in current assets so as to strengthen its liquidity position. C.V. of the ratios appears greater in SCBNL bank that clarifies the higher inconsistency in the ratios over the study period.

#### Figure 4.21

#### 7. Saving Deposit to Total Deposit

This ratio is calculated by using the following formula.

Saving deposit to total deposit  $X = \frac{Saving \ to \ Deposit}{Total \ Deposit} \mid 100$ 

#### Saving Deposit to Total Deposit Table 4.22

Rs. In Million

Bank		<b>NABIL</b>		SCBNL			
Year	Saving	Total Ratio		Saving	Total	Ratio	
	Deposit	Deposit	(%)	Deposit	Deposit	(%)	
1999/00	4150.19	12779.51	32.48	6632.70	12568.49	52.77	
2000/01	4917.14	15839.01	31.04	8404.61	15430.05	54.47	
2001/02	4972.06	15506.43	32.06	9441.91	15835.75	59.62	
2002/03	5229.72	13447.60	38.89	10633.16	18755.63	56.69	
2003/04	5994.12	14119.03	42.45	12771.83	21161.44	60.35	
2004/05	7026.33	14586.08	48.17	13030.93	19336.09	67.39	
2005/06	8770.76	19347.40	45.33	14597.67	23061.03	63.30	
2006/07	10187.35	23342.28	43.64	15244.38	24647.02	61.85	
Mean	39.26			59.56			
S.D.	6.67			4.80			
C.V	16.99			8.06			

The above table shows that this ratio of NABIL bank has fluctuating over the study period. The ratio of NABIL bank has ranged between 31.04% in 2000/01 to 48.17% in 2004/05 while this ratio of SCBNL has ranged between 52.77% in 1999/00 to 67.39% in 2004/05 with increasing trend for first three years and decrease in year 2002/03 then again it increased for the period of two years and it decreased up to study period. The mean ratio of NABIL bank is lesser than SCBNL. It means SCBNL is more efficient in utilization of its total deposits. Similarly, SCBNL has more consistency than NABIL bank.

Figure

#### 4.2 Incomes and Expenditure Analysis

This analysis depicts the major sources of income and expenses of any organization. The analysis guides the analyst to conclude the areas to be focused for investment and the possibilities for effective control over expenses. . It covers the followings.

- ➤ Income Analysis
- > Expenses Analysis

#### 4.2.1 Income Analysis

Commercial banks generate income from the investment made in various sectors and services provided by them. The banks, being service oriented organization, do not produce physical goods. They produce loans and advances and innovations and sell the same. In the course of carrying out their functions, they receive income from various sources, which have been split up into the following major four headings.

- > Interest Income
- Commission and Discount
- > Exchange Income
- > Other Income

#### 4.2.1.1 Interest Income

Interest is the main and major sources of income for the commercial banks. They receive interest from various heads of investment title i.e. loan and advances, overdraft investment on government securities, investment on debenture, money and short call and inter bank loans. This ratio of bank reflects the operational efficiency. So, higher the ratio indicates higher efficiency and vice-versa.

#### 4.2.1.2 Commission and Discount

Commission and discount include received as commission. Commercial banks render various types of service to their customers. They provide remittance, guarantees, transfer, standing instructions, letter of credit, purchase and discount of bill of exchange facilities along with other agency and merchant banking function. For making such facilities available, they receive certain commission, which also holds a significant portion of the total income.

#### 4.2.1.3 Foreign Exchange Income

One of the major functions of commercial banks is transaction of foreign currency. Both of the sampled banks are authorized by Nepal Rastra Bank to deal with foreign currencies. Income under this heading encompasses not only gain from sale of foreign currency, but gain from revaluation of our currency i.e. foreign exchange fluctuation income also.

#### 4.2.1.4 Other Income

Incomes not included in any of the above headings are the components of this heading. Other income comprises various titles of incomes i.e. revaluation gains, and net income from safe of investment and assets, on-banking assets, fixed assets written back and other.

Income Analysis
Table 4.23

Banks		NA	BIL			SCB	NL	
Year	Interest Income	Commission and Discount	Foreign Exchange	Other Income	Interest Income	Commission and Discount	Foreign Exchange	Other Income
	1015.00	120.50	Income	0.21	107225	17101	Income	2.1.1
1999/00	1047.03	139.59	122.19	0.31	1052.36	154.34	157.08	3.14
	79.97%	10.66%	9.33%	0.02%	76.99%	11.29%	11.49%	0.13%
2000/01	1266.70	97.14	159.51	14.98	1227.22	187.28	214.86	32.73
	82.34%	6.32%	10.37%	0.97%	73.84%	11.27%	12.93%	1.97%
2001/02	1120.18	114.34	154.22	250.37	1013.64	163.46	228.10	41.62
	68.34%	6.98%	9.41%	15.27%	70.06%	11.30%	15.77%	2.88%
2002/03	1017.87	144.41	144.00	34.15	1001.36	215.20	232.52	55.48
	75.94%	10.77%	10.74%	2.55%	66.56%	14.30%	15.45%	3.69%
2003/04	1001.62	135.96	157.32	38.75	1042.18	198.95	273.05	69.83
	75.10%	10.20%	11.80%	2.91%	65.82%	12.52%	17.25%	4.41%
2004/05	1069.00	128.88	184.88	55.93	1058.68	178.65	266.86	62.94
	74.30%	8.96%	12.85%	3.89%	67.55%	11.10%	17.03%	4.02%
2005/06	1310.00	138.29	185.48	91.36	1189.60	222.93	283.47	79.97
	75.94%	8.02%	10.75%	5.30%	66.98%	12.55%	15096%	4.50%
2006/07	1587.76	150.61	209.93	103.78	1411.98	221.21	309.09	58.44
	77.37%	7.34%	10.23%	5.06%	70.57%	11.06%	15.45%	2.92%
Mean	79.16	8.66	10.69	4.50	69.80	11.92	15.17	3.07
S.D.	4.14	1.75	1.18	4.72	3.93	1.14	1.98	1.47
C.V.	5.44	20.20	11.04	104.96	5.63	9.56	13.05	47.88

Interest income of NABIL bank is in fluctuating. The mean ratio of NABIL bank is higher than SCBNL i.e. 76.16% and 69.80% respectively. It has more consistency than SCBNL with C.V. of 5.44% and 5.63% respectively. Commission and discount of NABIL bank has ranged between the ratios highest of 10.77% in 200/03 to the lowest of 6.32% in 2000/01. Similarly, this ratio of SCBNL has ranged between 14.30% in 2002/03 to 11.06% in 2006/07. The mean ratio of SCBNL is higher than of NABIL bank i.e. 11.92% and 8.66% respectively and it has more consistency than NABIL bank with C.V.9.56% and 20.20%.

The above table shows that foreign exchange income of NABIL bank ranged between 9.33% in 1999/00 to 12.85% in 2004/05. Similarly, this ratio of SCBNL has ranged between 11.49% in 1999/00 to 17.25% in 2003/04. The mean ratio of SCBNL is higher than NABIL bank with i.e. 15.17% and 10.69% respectively and it has less consistency than NABIL bank with C.V. of 13.05% and 11.04% respectively.

The above table shows that other income has a very nominal contribution out of the total income incase of both the sample banks. The mean ratio of NABIL bank has higher percentage than SCBNL i.e. 104.96% and 47.88% respectively.

#### Figure 4.23

#### **4.2.2** Expenses Analysis

Expenses are the cost incurred in course of operation of various activities. The bank needs to pay interest in deposit, borrowing and inter branch transaction. They should pay salaries and other facilities for the actual work performer i.e. team of personnel. Certain Portion of their income is spent for the day-to-day operation. Besides all these expenses they should make provision for

bonus, loan loss and tax out of their total income. For the study purpose, four major categories of expenses have been analyzed.

- ➤ Interest Expenses
- > Staff Expenses
- ➤ Office Operating Expenses
- ➤ Bonus facilities

#### **4.2.2.1 Interest Expenses**

Expenses analysis depicts that interest payment for both banks occupy the major proportion of operating expenses. Interest expenses are composed with interest paid on various types deposits, loans and borrowing and inter branch transaction. Since transfer of the money from surplus spending units to the deficit spending units is the significant function of the commercial banks, interest generally occupies more than half of the total operation expenses.

#### 4.2.2.2 Staff Expenses

Organization itself does nothing but their success or failure is mainly based upon their employees. Efficient and well-motivated staffs are the ornaments of organization. For all these, organization needs to make some expenses in return to the service provided by them in this way, staff expenses include all the expenses madder upon their employees such as salary and allowance, training uniform, contribution to provident fund, incentives, fringe benefits etc.

#### **4.2.2.3** Office Operating Expenses

In the context of Nepalese CBS, office expenses occupy second major portion in the composition of total expenses. These include those expenses incurred for the routine operation of the CBS, such as house rent, lighting, water power, building repair and maintenance, insurance, postage, telex, telephone, advertisement publicity, stationery and printing, remittance fee and expenses, traveling expenses, bank commission, board meeting and expenses, audit fee and expenses, depreciation, amortization expenses for AGM etc.

#### **4.2.2.4 Bonus Facility**

Out of the operating profit of the bank, they need to make some further provisions like provisions for staff bonus, loan losses and income tax. In this way, they distribute certain sum of their profit to their staff as a bonus on reward for their well performance. It plays vital role for motivating their employees in their work and to attract potential outsiders.

#### Expenses Analysis Table 4.24

Banks	NABIL				SCBNL			
Year	Interest	Staff Expenses	Office	Bonus	Interest	Staff Expenses	Offices	Bonus

	expenses		Operating Expenses	Facility	Expenses		Operating Expenses	Facility
1999/00	432.96	97.97	151.83	54.97	427.85	87.55	124.51	72.78
	58.69%	13.28%	20.58%	7.05%	60.03%	12.28%	17.47%	10.21%
2000/01	578.36	147.36	122.80	52.60	474.40	102.12	224.85	85.48
	64.18%	16.35%	13.61%	5.84%	53.49%	11.51%	25.35%	9.64%
2001/02	462.08	144.88	136.87	44.12	299.86	126.51	190.94	72.15
	58.64%	18.39%	17.37%	5.60%	43.49%	18.35%	27.69%	10.46%
2002/03	317.35	210.58	166.20	66.36	255.15	128.33	311.97	76.08
	41.73%	27.69%	21.85%	8.73%	33.07%	16.63%	40.44%	9.86%
2003/04	282.95	180.84	150.76	71.94	275.81	134.69	279.69	85.95
	41.22%	26.34%	21.96%	10.48%	35.54%	17.35%	36.04%	11.07%
2004/05	244.00	199.52	190.30	84.20	354.13	148.59	256.65	88.68
	33.98%	27.79%	26.50%	11.73%	33.97%	19.86%	34.31%	11.85%
2005/06	357.16	219.80	210.11	89.80	303.20	168.23	221.09	93.94
	40.73%	25.07%	23.96%	10.24%	38.55%	21.39%	28.11%	11.94%
2006/07	555.21	240.16	130.83	99.50	413.06	199.78	228.45	101.61
	54.13%	23.41%	12.76%	9.70%	43.81%	21.19%	24.23%	10.78%
Mean	49.16	22.29	19.82	8.67	42.74	17.32	29.21	10.73
S.D.	11.02	5.56	4.86	2.27	9.68	3.75	7.37	0.85
C.V.	22.452	24.94	24.52	26.18	22.65	21.65	25.23	7.92

The above table shows that NABIL Bank is paying comparatively more interest than SCBNL mean of 49.16% and 42.74% and it has more consistency than SCBNL C.V. of 22.42% and 22.65, which indicates that is not using more outsider fund.

Staff expenses of NABIL bank are more i.e. 22.29% than of SCBNL i.e. 17.32% and it has less consistency than SCBNL with C.V. of 24.94% and 21.65% respectively. Office operating expenses during the study period is following a fluctuating trend i.e. decreasing and increasing in case of both banks. This ratio of NABIL bank has ranged between 12.76% in 2006/07 to 26.50% in 2004/05 and SCBNL has ranged between 17.47% in 1999/00 to 40.44% in 2002/03. however the mean ratio of SCBNL has higher than NABIL bank 29.21% and 19.82% which indicates the firm is paying more in office operating expenses but NABIL is more consistency than SCBNL bank with C.V. of 24.52% and 25.23% respectively.

The mean percentage of bonus distributed by SCBNL is higher than NABIL bank 10.73% and 8.67% respectively with C.V. of 7.92% and 26.18% respectively.

However, higher bonus payment reduces the degree of dividend payment to the shareholders because both are distributed from profit. So this controversial issue and relationship between bonus and dividend is conflicting.

Comparatively, NABIL bank has higher interest expenses and staff expenses than NABIL but bonus & office operating expenses are higher in SCBNL than NABIL banks. More payment in bonus and staff expenses creates the motivation of the employees towards the firm. So that it helps to achieve the goal of organization.



4.24

#### **4.3 Correlation Analysis**

The analysis has been made to measure the degree of linear relationship between two variables in the bank. The Karl Pearson's Correlation Coefficient (r) between two random variable X and Y obtained by using the formula as follows.

$$r_{xy} \times \frac{N \times Y \times Z(X \mid Y)}{\sqrt{N \times X^2 (X)^2} \sqrt{N \times Y^2 \times Z(Y)^2}}$$

Where,

N = No. of observation in series X and Y

 $\phi X = \text{Sum of observation in series } X$ 

 $\phi Y = \text{Sum of observation in series } Y$ 

 $\phi X^2$  = Sum of square observation in series X

 $\phi Y^2 = \text{Sum of square observation in series } Y$ 

 $\phi XY = Sum \text{ of product of observations in series } X \text{ and } Y$ 

#### Here,

r = 1 implies, positive and perfect correlation between the variables.

r = -1 implies, negative and perfect correlation between the variables.

r = 0 implies, no linear relationship between the variables.

However, there may be relationship in some other form e.g. quadratic, cubic or trigonometric.

Under the correlation analysis, the intensity of linear relations between the following variables has been measured.

- > Total Deposit and Net Profit
- ➤ Net Worth and Net Profit
- ➤ Total Deposits and Total Investments
- > Total Deposits and Loan and Advance
- > EPS and MVPS
- > DPS and MVPS

#### 4.3.1 Correlation Analysis between Total Deposit and Net Profit (NABIL)

Annex A -2, highlights that correlation coefficient and probable error of correlation coefficient between total deposits and net profit in NABIL bank appears 0.73 and 0.11 respectively for the study period. Correlation coefficient appears higher than six times the probable error i. e. 0.73>6x0.11. It means total deposits and net profit of the bank are positively correlated. Net profit seems to increase with the increase in the value of total deposits.

# Correlation Analysis between Total Deposit and Net Profit (SCBNL)

Annex A- 3 shows that coefficient of correlation between the total deposits and net profit in SCBNL remains 0.97 where as the probable error of coefficient remained 0.01. Correlation coefficient comes greater than six times the probable error i.e. 0.97>6x0.01. It signifies that there exist positive and higher correlation between the total deposits and net profit of the bank. In other words, it depicts the potentiality of increasing net profit by accumulating more deposits.

Between the two banks, as revels by the greater coefficient of correlation, SCBNL seems more efficient in utilizing the deposits for income generating purpose. In the review period, net profit of SCBNL seems to increase in line with increase in deposits. That's why SCBNL bears the

higher potentiality as compared to NABIL bank in increasing net profit inline with the rise in its deposit.

#### 4.3.2 Correlation Analysis between Net Worth and Net Profit (NABIL)

Annex A -4, depicts that in NABIL bank correlation coefficient and probable error of the correlation coefficient between Net Worth and Net Profit for the period of immediate past seven years were 0.98 and 0.01 respectively. Analysis showed coefficient of correlation appeared six times greater than the probable error i.e. 0.98>6x0.01. It shows that there are positive correlation between net worth and net profit. In this case net profit increases with the increase in net worth.

## Correlation Analysis between Net Worth and Net Profit (SCBNL)

Annex A -5, correlation coefficient and probable error between net worth and net profit in SCBNL seemed 0.98 and 0.01 respectively for the same period as mentioned previously. Correlation coefficient i.e. 0.98 appeared greater than six times the probable error i.e. 0.98>6x0.01. It indicates the positive correlation between two variables. Further more, the net profit of the bank is in increase of value of net worth.

Form the analysis there seemed similarity in the value of correlation of the two banks. There are high degree of correlation between net worth and net profit in SCBNL and NABIL bank. Both banks are in favorable condition regarding the net worth and net profit because of its relationship between net worth and net profit are positively correlated.

#### 4.3.3 Correlation Analysis between Total Deposit and Investment (NABIL)

Annex A -6, shows that the coefficient of correlation between total deposits and investment in NABIL bank remained 0.64 and probable error remained 0.14. Since the correlation coefficient is lesser than six times the probable error i.e. 0.64<6x0.14. The relationship between total deposits and investment is negatively correlated so that we cannot make concrete decision about the relationship between total deposit and investment.

# Correlation Analysis between Total Deposit and Investment (SCBNL)

Annex A -7, the coefficient of correlation and probable error between total deposits and investment in SCBNL for the study period appeared 0.91 and 0.04 respectively. Coefficient of correlation seems greater than six times the probable error i.e. 0.91>6x0.04. It signifies that total deposits and investment of the bank are positively correlated.

In the analysis, higher degree of positive correlation seemed deposits and investment in SCBNL bank.

#### 4.3.4 Correlation Analysis between Total Deposit and Loan and Advances (NABIL)

Annex A-8 depicts that correlation coefficient between total deposits and loans and advances in NABIL remained 0.93 where as probable error of the correlation coefficient remained 0.03. Since the correlation coefficient is higher than six times the probable error i.e. 0.93>6x0.03. It signifies that the total deposits and loan and advance of the bank are positively correlated.

# Correlation Analysis between Total Deposit and Loan and Advances (SCBNL)

Annex A-9, highlights that the coefficient of correlation and probable error between total deposits and advances in SCBNL for the period of 1999/00 to 2006/07 appeared 0.88 and 0.05 respectively. Since the correlation coefficient is greater than six times the probable error i.e. 0.88>6x0.05. It signifies that the total deposits and loans and advances of the bank are positively correlated to each other. It means the volume of loans and advances seem to increases with the rise in the volume of total deposits

In the above analysis, there occur positive correlations between the total deposits and loans and advances in the both banks. That's why, both banks should maintain their present condition till the future.

#### 4.3.5 Correlation Analysis between EPS and MVPS (NABIL)

Annex A-10 depicts that 0.75 and 0.10 respectively appeared the value of correlation coefficient and probable error between EPS and MVPS in NABIL bank. Correlation coefficient appeared higher than six times the probable error i.e. 0.75>6x0.10. It means MVPS and EPS of the bank are positively correlated. It can be said that MVPS seems to increase with increase in the EPS.

# Correlation Analysis between EPS and MVPS (SCBNL)

Annex A-11 shows that in SCBNL the coefficient of correlation and probable error of the correlation coefficient between EPS and MVPS remained 0.67 and 0.13 respectively. Since, the correlation coefficient appeared lesser than six times the probable error i.e. 0.67<6x0.13. The correlation between the stated variable is highly negative. The shareholder cannot enjoy the gain in the MVPS with the increase in EPS of the bank.

MVPS and EPS of both the banks are not negatively correlated. It means NABIL bank is positively correlated and SCBNL are negatively correlated. That's why market price of the share of the SCBNL bank gear up with higher rate with respect to the increase in EPS by borrowing equity capital from cheapest cost and retain earning is to be invested internally and interest rate of various deposits should be readjusted.

#### 4.3.6 Correlation Analysis between DPS and MVPS (NABIL)

Annex A-12 depicts that coefficient of correlation and probable error of coefficient between DPS and MVPS in NABIL bank were 0.93 and 0.03 respectively. Coefficient of correlation appeared higher than the probable error i.e. 0.93>6x0.03. It signifies that DPS and MVPS of the bank are positively correlated. It means DPS of the bank seems to increase with increase in MVPS.

#### **Correlation Analysis between DPS and MVPS**

(SCBNL)

Annex A-13 highlights that SCBNL correlation coefficient and probable error between DPS and MVPS for the study period stood 0.39 and 0.20 respectively. Coefficient of correlation came lesser than the probable error i.e. 0.39<6x0.20. It means DPS of the bank seems to decrease with increase in MVPS.

#### 4.4 Regression / Trend Analysis

Trend analysis based on lest square method, is very useful since it predicts the future values of dependent variable on the basis of past tendencies of the variable. It is based on the assumption has past tendencies continues in the future.

The line of regression of Y on X that gives future trend of Y for a given value of X is:

Y=a+bx

Where,

Y= dependent variable

a= Y intercept

b= the slope of trend line

x = year (regarding the use in the study)

The normal equations for estimating a and b is:

 $\phi Y = Na - b\phi X$ 

 $\phi XY = a\phi X + b\phi X^2$ 

By using the trend equation as mentioned above, future values of the following variable for coming years have been predicted.

- > Total Deposits
- > Investments
- ➤ Loans and Advances
- ➤ Net Profit
- ➤ Net Worth
- > EPS
- > MVPS

#### **4.4.1 Least Squire Liner Trend of Total Deposit (NABIL)**

Anne4x A-14 highlighted a i.e. Y intercept and b i.e. slop of trend line of the total deposits in NABIL bank remained Rs. 15588.82 and 1064.19 millions respectively. Total deposit of the bank showed increasing trend through out the study period. Average rate of increase per year in the amount of total deposit was Rs. 1064.19 millions. Hence, trend equation of total deposit is,

Y = 15588.82 + 1064.19x

## Least Square Linear Trend of Total Deposits (SCBNL)

Annex A 15 depicts that a and b of total deposit in SCBNL appeared Rs.18042.33 and Rs.1614.42 millions respectively. During the study period total deposit showed increasing trend and increasing at the rate of Rs.1614.42 millions per year.

According value calculated above, trend equation of total deposit for SCBNL is,

Y = 18042.23 + 1614.42x

On focusing the past trend, higher the (Y intercept) greater the risk in unfavorable situation and vice-versa.

#### **4.4.2** Least Square Linear Trend of Investment (NABIL)

Annex A 16 depicts that the value of a and b of investments for NABIL bank stood Rs.5848.94 and Rs.408.66 millions respectively. Total investment of the bank showed increasing trend through out the study period. Average rate of the increase in the amount of investment was 408.66 millions rupees per annum.

Therefore, trend equation of total investment is,

Y = 5848.94 + 408.66x

#### **Least Square Linear Trend of Investment**

(SCBNL)

Annex A 17 highlights that Rs.9444.81 and 1074.34 millions we calculated as values of a and b respectively in SCBNL. Over the review period, total investment was in increasing trend and increased at the rate of Rs.1074.34 millions per year.

As per calculated values of a and b trend equation of total investments can be written as,

Y = 9444.81 + 1074.34x

#### 4.4.3 Least Square Linear Trend of Loan and Advances (NABIL)

Annex A 18 highlights the value of a and b loans and advances in NABIL bank were 9429.70 and 1113.56 millions respectively. Loans and advances revealed increasing trend over the review period. On an average it grew up by Rs.1113.56 millions per annum.

Hence, trend equation of the loans and advances is,

Y = 9429.70 + 1113.56x

# Lest Square Linear Trend of Loan and Advances (SCBNL)

Annex A 19 depicts that a and b of loans and advances in SCBNL were 55315.59and Rs788.24 millions respectively. Loans and advances were in increasing trend through out the study period and increase with 788.24 millions per year.

Therefore, the trend equation of loans and advance is,

Y = 55315.59 + 788.24x

Between these two banks, both average loans and advances and amount of increase per year appeared higher in NABIL. It means loans and advances will increase with higher rate in NABIL for the future, if the past trend continues.

#### **4.4.4 Least Square Liner Trend of Net Profit (NABIL)**

Annex A 20 depicts that a and b of net profit in NABIL bank appeared Rs.419.83 and Rs.58.53 millions respectively. Throughout the period of study, the net profit showed increasing trend. On an average, net profit increased by Rs.58.53 millions per year in the past period.

Therefore, the trend equation of the profit is,

Y = 419.83 + 58.53x

## Least Square Liner Trend of Net Profit

(SCBNL)

Annex A 21 depicts that intercept a and slope of trend line b of net profit in SCBNL were Rs.509.12 and Rs.41.00 millions respectively. Through out the period of study, the net profit showed increasing trend. It increased by Rs.41.00 millions each year.

Therefore, trend equation of the net profit is,

Y = 509.12 + 41.00x

As guided by the trend equation, forecasted net profit and rate of the increase in net profit both seemed higher in SCBNL. In other words, net profit will increase with higher rate in SCBNL for the forecasting period if the past trend continues.

#### 4.4.5 Least Square Linear Trend of Net Worth (NABIL)

Annex A 22 shows that a (Y intercept) and b (slop of trend line) for NABIL bank were Rs.1364.35 and 147.95 millions respectively. In the study period net worth revealed increasing trend. On an average, it increased by Rs.147.95 per annum.

Therefore, trend equation of net worth is,

Y = 1364.35 + 147.95x

## **Least Square Linear Trend of Net Worth**

(SCBNL)

Annex A 23 shows that Rs.1388.04 and 143.91 millions were the values of a and b in SCBNL respectively. Net worth showed increasing trend during the study period. It increased by Rs.143.91 millions per year in the past.

According, trend equation of net worth is,

Y = 1388.04 + 143.91x

Between two banks, average increment in net worth and rate of increment in net wort seems higher in SCBNL than NABIL bank.

#### 4.4.6 Least Square Linear Trend of EPS (NABIL)

Annex A 24 depicts that in NABIL bank Rs.88.17 and Rs.10.49 millions came as the value of a and b respectively. EPS of NABIL bank was in rising trend through out the reviewed six years period. Annually increased by Rs.10.49 millions.

Therefore, trend equation of EPS is,

Y = 88.17 + 10.49x

#### **Least Square Linear Trend of EPS**

(SCBNL)

Annex A 25 shows that value of a and b in SCBNL was Rs.141.82 and 7.26 millions respectively. EPS of the bank showed decreasing trend during the study period. It decreased by the amount of Rs.7.26 millions each year.

Therefore, trend equation for EPS is,

Y = 141.82 + 7.26x

Between NABIL bank and SCBNL, both average and amount of annual increase are more in SCBNL. That's why, if this trend continues, EPS of SCBNL will increase at higher rate for the future than that of NABIL bank.

#### 4.4.7 Least Square Linear Trend of MVPS (NABIL)

Annex A 26 shows that a (Y intercept) and b (slop of trend line) of MVPS were Rs. 1581.13 and 378.99 respectively MVPS of the bank showed increasing trend for study period. It increased by Rs.378.99 per year on average.

As per the above statement, trend equation of MVPS is,

Y = 1581.13 + 378.99x

## **Least Square Linear Trend of MVPS**

(SCBNL)

Annex A 27 shows that the value of a and b of MVPS of SCBNL were respectively Rs. 2409.01 and Rs.452.98 millions. It showed increasing trend during the review period and has grown up by Rs.452.98 million each year.

Therefore, the trend equation of MVPS is,

Y = 2409.01 + 452.98x

From the least square trend analysis of both bank. NABIL's MVPS will be increased for the forecasting period. At the same time SCBNL's MVPS will be increased per year. But it shows that SCBNL has much better future than that of NABIL bank.

#### 4.5 Major Finding

The major findings of the study are presented between (As per Annex-B)

#### 1. Unsatisfactory Profitability

Profitability ratio indicates the degree of success in achieving desired profit by the companies. According to the study both the banks under study have been able to earn positive profit but not to the satisfactory level. Among the various profitability ratios, Net profit to total deposit ratio, Net profit to total asset ratio, and return on net worth ratio and return on risk assets of SCBNL are greater on an average than that of NABIL bank. But NABIL bank has higher interest earned to total assets ratio than SCBNL. This figure shows that SCBNL is more successful in generating profit than NABIL bank with high consistency. It concludes that SCBNL has efficiently operated its long-term fund and deposits to generate more profit.

#### 2. Satisfactory Management of Assets

Analysis of activity ratio reveals that both the banks have able to utilize or manage the resources or assets satisfactorily. Comparatively, loans and advance to total deposit ratio, loans and advances to saving deposit ratio, loans and advances to fixed ratio of NAQBIL bank is more efficiency utilizing the out side funds in extending credit for profit generation

Similarly, performing assets to total assets ratio, performing assets to total debt ratio and investment to total deposit ratio of SCBNL is higher than that of NABIL bank and shows that SCBNL is also efficiently utilizing its assets on profit generation activities.

#### 3. Low Leveraged Capital Structure

Most of the capital structure ratios show that the capital structure of both banks is low leveraged. Following findings clarify this situation.

- a) Total debt to total assets ratio of both banks are not in satisfactory position which indicates both banks need to utilize more capital to the debt financing. So that more profit generation would happen in the future. Comparatively NABIL bank has used more debt financing than SCBNL bank.
- b) The total assets to net worth ratio of NABIL bank are lesser than that of SCBNL as per mean ratio. But the investment of owner's equity in total assets for both the banks are minimum as is commonly seen in various financial institutions.
- c) Capital adequacy ratio of NABIL bank is lesser than SCBNL bank during the study period on average. This refers that SCBNL is always capable of meeting windfall. From the analysis shows that, both banks are successful to comply the NRB directives regarding the capital adequacy ratio of commercial banks for the study period.

#### 4. Unsatisfactory Liquidity Position

The study reveals that the current ratios of both the banks are below the normal standard 2:1, which indicates unsatisfactory liquidity position. In other words from the working capital point of view both the sample banks are following an aggressive working capital policy. The cash and bank balance to current ratio, loan and advance to current assets ratio and fixed deposit to total deposit ratio of NABIL bank is higher than that of SCBNL as per mean ratio. Investment on government securities of SCBNL is higher than the NABIL bank, which indicates that the SCBNL is more efficient in using government securities. But lower the investment on government securities, higher the risk and higher the income and vice versa. Saving deposit to total deposit ratio, cash and bank balance to total deposit ratio of SCBNL is higher than the NABIL bank. It means, SCBNL is more efficiency in utilization of its total deposit. Thus, the study indicates better liquidity position of SCBNL bank than NABIL bank. From the result of

cash and bank balance to total deposit ratio, which is considered as a cash reserve ratio, both banks are unable to meet the NRB directives so they have to raise the cash and bank balance.

#### 5. Compliancy of NRB directives

a) **Priority Sector Loan:** All commercial banks are required to comply the NRB's directives. Deprived sector loan is the part of priority sector loan. Commercial banks are required to provide priority sector loan 12% in fiscal year 1998/99 to 2001/02, 7% in 2002/03, and 6% in 2003/04 out of their total loan. From the study of annual report of SCBNL bank, priority sector loan was 11.21% in F.Y. 1999/2000, 11.18% in 2000/2001, 12.67% in 2001/02, 12.04% in 2002/03 12.96% in 2003/04, 13.05% in 2004/05, 13.82% in 2005/06 and 13.97% in 2006/07. These figure shows that SCBNL have complied the NRB directives except the fiscal year 1999/2000 and 2000/01 regarding the priority the priority sector loan.

Similarly, in the case of NABIL bank they have not provided data about priority sector loan. NABIL bank has showed only the payment of penalty amount for not being complied the NRB's directives for F.Y. 1999/2000. So NABIL bank have not complied the directives

- b) **Deprived Sector Loan:** According to NRB directives, SCBNL and NABIL banks are required to provide 3% deprived sector loan out of their total loan throughout the study period. In the case of SCBNL bank they have not showed the figure separately of deprived sector loan and priority sector loan except the F.Y 1999/2000. they have fulfilled the requirement of NRB directives in F.Y. 1999/2000 but rest of the fiscal year's compliance is not available. In the case of NABIL bank data about deprived sector loan is not available.
- c) Capital Adequacy Ratio: Regarding the capital adequacy ratio NRB's requirements was 8% in F.Y. 1999/200 to 2000/01, 9% in F.Y. 2001/02, 9% in F.Y.2002/03, 10% in F.Y. 2003/04, 11% in F.Y. 2004/05, 11% in F.Y. 2005/06,11% in F.Y. 2006/07. Capital adequacy ratio of SCBNL was 9.56%, 14.00%, 17.38%, 14.14%, 15.57%, 15.85%, 14.93 and 15.71% in F.Y. 1999/2000 to 2006/07 respectively. So SCBNL has perfectly complied the NRB's directives

Similarly, NABIL bank's capital adequacy ratio was 12.30%, 1046% 13.86%, 13.05%, 13.56%, 12.44%, 12.31% and 12.04% from F.Y. 1999/2000 to 2006/07 respectively. So NRB's directives regarding the capital adequacy ratio is completed.

d) Cash Reserve Ratio: Regarding cash reserve ratio, NRB's directives was 10% in 1999/2000 to 2000/01, 9% in 2001/02, 8% in 2002/03, 6% in 2003/04, 5% in 2004/05, 5% in 2005/06 5% in 2006/07. Since cash reserve ratio was 8.52%, 5.13%, 6.78%, 8.51%, 6.87%, 3.84%, 3.25% and 6.00% from F.Y. 1999/2000 to 2006/07 respectively of NABIL bank. This bank has not fulfilled the requirement of NRB directives except the F.Y. 2002/03 and 2003/04.

Similarly SCBNL has 8.12 %, 6.23 %, 5.21%, 8.06%, 9.56%, 5.75%, 5.53 % and 8.20 % CRR from F.Y. 1999/2000 to 2006/2007 respectively. This bank also has not fulfilled the standard of NRB's directives accepts the F.Y. 2002/03 and 2003/04. But however after the adjustment of Treasury bill investment as cash balance these bank have fulfilled the required C.R.R. as per the direction of NRB.

#### 6. Others Findings

From the analysis of other financial ratio, following findings are extracted:

- a) Market to book ratio, dividend yield and office operating expenses to total operation income ratio of SCBNL on mean is grater except price earning ratio and personnel expenses to total income ratio of NABIL bank.
- b) Similarly operating income analysis shows that SCBNL on average has lower income in interest income and other income but higher in commission and discount and foreign exchange income than that of NABIL Bank with less consistency in foreign exchange income except the interest income, commission and discount and other income during the study period.
- c) Similarly, operating expenses analysis shows that SCBNL on mean however has lower expenses in interest expenses and staff expenses but higher in office operating expenses and provision for bonus than that of NABIL bank with less consistency in interest expenses and office operating expenses. But high consistency in staff expenses and bonus expenses during the study period.

Thus the study shows that capital structure is not highly leveraged. However, the analysis on the basis of activity ratios and profitability ratios shows that both of these sample banks have been unable to earn satisfactory profits. Mean ratio of provision for loan loss to loans and advances ratios in NABIL are lower than SCBNL banks means, there are less risk investment providing by the NABIL banks than that of SCBNL. So that the fear of bad debt is lower in

NABIL bank than SCBNL. Comparatively, SCBNL banks have good and higher liquidity position.

### CHAPTER - V

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Summary**

Economic development of a country cannot be imagined without the development of commerce and industry. No doubt, banking promotes the development of commerce to its extreme, as banking itself is the part of commerce. Though the economic growth was as snail speed in earlier year, it had caught its full sailing with the restoration of democracy in the country. These days Nepal has been facing sever economic problem due to the unrest condition. At present, political instability is hampering the economic development of Nepal.

In this study the objective, function, policies and strategies of foreign participated private commercial banks have been emphasized and analyze of their financial performance. Here the main finding of the study is the financial performance of these two sample banks has been presented. The financial data, statement of eight consecutive years i.e. 1999/2000 to 2006/07 has been examined for the purpose of the study. The study is mainly based on the primary and secondary data, which have been processed first and analyzed comparatively. From this analysis of financial performance of both the banks the following findings are made.

#### 5.2 Conclusion

In conclusion, uncontrollable growth in number of banks within a short span of time has raised reasonable doubts to the common people. Banks, insurance companies and other companies are directly playing parts in the country to establish their banking with fully or partly repatriation facilities. Banks help to mobilize the small saving collectively to the huge capital investment through banking is considered as the platform of money market and capital markets, commercial banks basically help to promote the money market. Because of qualitative managerial skills, at most customers satisfaction, objective to use advanced technology, private commercial banks have been able to attain their objectives within short span of time.

#### 5.3 Recommendations

On the basis of findings of the study done, following suggestions are given to the NABIL bank and SCBNL to improve their future financial performance.

- a) Profit is essential for the survival and growth of banks. But over the study period both the banks are seen unable to earn a satisfactory level of profit. In this context, both the banks are recommended to earn more operational profit either by increasing their operational efficiency, or by decreasing their operational expenses as far as possible. Because the financial statement has reflected that a large portion of profit is on account due to the fluctuation in the value of local currency, cannot be regarded as operating profit.
- b) SCBNL should be more serious to improve the efficiency in utilizing its deposits in loan and advance for generating the profits. But however, both the banks should keep up their efforts in utilizing their assets in performing assets at their best level.
- c) Keeping in mind the leverage rations, both the banks are suggested to increase their debt financing so that profit will be generated through the utilization of deposits.
- d) Both the banks should be stabilized after proper diagnosis to the root cause of unsatisfactory liquidity.
- e) Earning per share and dividend per share attract the investors. NABIL bank pays profit less EPS and DPS than SCBNL. So it is suggested that NABIL bank should increase the market price of the share so that the value of EPS should be increase.
- f) Above finding show that SCBNL has paid more dividends and NABIL bank has retained higher portion of earning and distributed less dividend. So it is suggested that NABIL bank should increase dividend payout ratio by distributing more dividend to the shareholder. However an idea dividend pay out ratio is base upon shareholders expectation and the growth requirements of the banks. So it is slightly difficult to give any suggestion on the basis of the present study made, as dividend payout ratio is still a controversial issue.
- g) Operating income level does not seem to be satisfactory for both the banks. Thus both the banks should increase their operational efficiency by mobilizing their resources maximum in profit generating field/sectors.
- h) Operating expenses level of both the banks seem to be high. So it is preferable to minimize such expenses by them.
- i) Majority of private commercial banks have been found to be profit oriented, ignoring their social responsibility, which is not a proper strategy to sustain in long run. So, both the banks are suggested to render their services even in the rural areas providing special loans to the deprived and priority sectors, which might further intensify the good will of the banks in future.

- j) The economic liberalization policy adopted by HMG has created an environment of strict competition even in the banking sectors. In this context, both the banks are suggested to formulate and implement some sound and effective financial and non-financial strategies to meet required level of profitability as well as the social responsibility.
- k) Especially, cash reserve ratios (CRR) of the both banks are below the standard of NRB directives. So to face the shortage of cash in cash of withdrawal and to give guarantee to the customer both banks need to increase the level of CRR.

### **Suggestion Regarding NRB Compliancy**

Both banks should mention clearly about the priority sector loan and deprived sector loan in their annual report which could help to general people and researcher to know their contribution to the nation. These two sample banks have to raise the cash reserve ratio at least up to the NRB's requirement level. So that bank can face in the uncertainty situation of withdrawal and assured to depositors and lenders.

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#### Annex A

## **A Sample of Questionnaire**

Please Tick ( ) an option which you favor most. 1. Do you know all the products and services provided by this bank? a. Yes [ ] b. No [ ] 2. Do you have opened deposit account at this bank? a. Yes [ b. No [ ] 3. Service provided by the from line employees of this bank is, a. Excellent [ b. Very Good [ ] c. Fair [ d. Not Good [ ] 4. Loan approved procedure applied by this bank is, a. Very difficult [ ] b. Difficult [ ] c. Easy [ ] d. No experience [ ] 5. As bank's regular customer what would you like to suggest to its top management? a. Extend Branches [ b. Maintained Hospitality [

c. Decrease minimum Balance [

d. Increase Interest on Deposit [

1

Annex A-1 Calculation of Mean and Coefficient of variation between Net Profit to Total Deposit of NABIL and SCBNL

Year	Ratio of NABIL (X)	$X \mathbf{Z} \overline{X}$	$(X \mathbf{Z} \overline{X})^2$	Ratio of SCBNL	$(Y \mathbf{Z} \overline{Y})$	$(Y \overline{ZY})^2$
	NADIL (A)			(Y)		
1999/00	2.58	-0.2	0.04	3.12	0.16	0.03
2000/01	1.84	-0.94	0.88	3.79	0.83	0.69
2001/02	1.74	-1.04	1.08	3.03	0.07	0.00
2002/03	3.10	0.32	0.10	2.70	-0.26	0.07
2003/04	3.22	0.44	0.19	2.54	-0.42	0.18
2004/05	3.56	0.78	0.61	2.79	-0.17	0.03
2005/06	3.28	0.5	0.25	2.86	-0.1	0.01
2006/07	2.89	0.11	0.01	2.81	-0.15	0.02
N=8						
Mean	2.78			2.96		
S.D	0.67			0.38		
C.V	24.10			12.84		

Here,

Arithmetic Mean 
$$(\overline{X}) = \frac{X}{N_1} \times \frac{22.21}{8} = 2.78$$

Arithmetic Mean 
$$(\overline{Y}) = \frac{Y}{N_2} = \frac{23.64}{8} = 2.96$$

Standard Deviation (SD) 
$$\uparrow_1 X \sqrt{\frac{(X Z \overline{X})^2}{N_1 Z 1}} = 0.67$$

Standard Deviation (SD) † 
$$_2$$
 X $\sqrt{\frac{(Y \overline{ZY})^2}{N_2 Z1}} = 0.38$ 

Coefficient of Variation (CV)<sub>1</sub> 
$$X = \frac{1}{X} | 100 = 24.10$$

Coefficient of Variation (CV)<sub>2</sub> 
$$X = \frac{1}{\overline{Y}} |100| = 12.84$$

Annex A-2 Calculation of Karl Person's Coefficient of Correlation and probable error of coefficient Of correlation between Total Deposit and Net Profit (NABIL)

Year	<b>Total Deposits (X)</b>	Net Profit (Y)	
1999/00	12779.51	329.10	φXY =60663201.35
2000/01	15839.01	291.38	
2001/02	15506.43	271.64	
2002/03	13447.60	416.24	$\phi X^2 = 2166762091$
2003/04	14119.03	455.31	
2004/05	14586.08	520.10	
2005/06	19347.40	635.03	$\phi Y^2 = 1775549.53$
2006/07	23342.28	673.96	
N = 8	φX =128967.34	φY =3592.76	
r = 0.73	'		
P.E.(r) = 0.11			

Karl Person's Coefficient of Correlation,

$$r_{XY} \underset{\textstyle X}{\underbrace{\qquad \qquad N \quad XYZ \quad X \quad Y}} \sqrt{N \quad X^2 Z \quad X^2} \sqrt{N \quad Y^2 Z \quad Y^2}$$

$$X \frac{8 \mid 60663201.35 \, Z(128967.34)(3592.76)}{\sqrt{8 \mid 2166762091 \, Z(128967.34)^2} \, \sqrt{8 \mid 1775549.53 \, Z(3592.76)^2} }$$

$$X\frac{21956910.3}{30158050.22}$$

= 0.73

P.E(r) = 
$$0.6745 \frac{1Zr^2}{\sqrt{N}}$$
  
=  $0.6745 \frac{1Z(0.73)^2}{\sqrt{8}}$   
=  $0.11$ 

Since r>6P.E. So the calculated value of r is significant.

Annex A-3 Correlation Analysis between Total Deposit and Net Profit (SCBNL)

Year	<b>Total Deposits (X)</b>	Net Profit (Y)	
1999/00	12568.49	392.59	φXY =82724363.81
2000/01	15430.05	430.83	-
2001/02	15835.75	479.21	
2002/03	18755.63	506.93	$\phi X^2 = 2959575638$
2003/04	21161.44	537.80	
2004/05	19336.09	539.20	
2005/06	23061.03	658.76	$\phi Y^2 = 2318699.25$
2006/07	24647.02	691.67	-
N = 8	φX =150795.50	φY =4236.99	
r = 0.97	·	·	•
P.E.(r) = 0.01			

Annex A-4 Correlation Analysis between Net Worth and Net Profit (NABIL)

Rs. In million

Year	Net Worth (X)	Net Profit (Y)	
1999/00	1046.92	329.10	φXY =5556701.64
2000/01	1062.84	291.38	
2001/02	1146.42	271.64	_
2002/03	1314.18	416.24	$\phi X^2 = 17527533.67$
2003/04	1481.68	455.31	
2004/05	1522.53	520.10	
2005/06	1874.99	635.30	$\phi Y^2 = 1775892.52$
2006/07	2057.05	673.96	
N = 8	φX =11506.61	φY =3593.03	
r = 0.98	·	<u>'</u>	
P.E.(r) = 0.01			

Annex A-5 Correlation Analysis between Net Worth and Net Profit (SCBNL)

Year	Net Worth (X)	Net Profit (Y)	
1999/00	1014.85	392.59	$\phi XY = 6440535.16$
2000/01	1112.02	430.83	
2001/02	1235.49	479.21	
2002/03	1368.91	506.93	$\phi X^2 = 17964094.8$
2003/04	1495.74	537.80	
2004/05	1582.42	539.20	
2005/06	1754.14	658.76	$\phi Y^2 = 2318699.25$
2006/07	2116.35	691.67	
N = 8	φX =11679.92	φY =4236.99	
r = 0.98			
P.E.(r) = 0.01	·		·

Annex A-6 Correlation Analysis between Total Deposit and Investment (NABIL)

Year	<b>Total Deposits (X)</b>	Investment (Y)	
1999/00	12779.51	1250.94	φXY =819546156.1
2000/01	15839.01	7704.31	
2001/02	15506.43	8199.51	
2002/03	13447.60	6031.18	$\phi X^2 = 2166762091$
2003/04	14119.03	5835.95	
2004/05	14586.08	4267.23	
2005/06	19347.40	6180.69	$\phi Y^2 = 335212321.9$
2006/07	23342.28	8956.31	
N = 8	φX =128967.34	$\phi Y = 48426.12$	
r = 0.64			
P.E.(r) = 0.14			

Annex A-7 Correlation Analysis between Total Deposit and Investment (SCBNL)

Rs. In million

Year	<b>Total Deposits (X)</b>	Investment(Y)	
1999/00	12568.49	3349.87	$\phi XY = 1586230687$
2000/01	15430.05	9559.18	
2001/02	15835.75	9275.88	
2002/03	18755.63	10216.20	$\phi X^2 = 2959575638$
2003/04	21161.44	11360.33	
2004/05	19336.09	9702.55	
2005/06	23061.03	12838.56	$\phi Y^2 = 864727484$
2006/07	24647.02	13553.23	
N = 8	$\phi X = 150795.50$	$\phi Y = 79855.8$	
r = 0.91			
P.E.(r) = 0.04			

Annex A-8 Correlation Analysis between Total Deposit and Loan and Advance (NABIL)

Year	<b>Total Deposits (X)</b>	Loan and Advance (Y)	
1999/00	12779.51	7334.76	$\phi XY = 1358913162$
2000/01	15839.01	8324.44	
2001/02	15506.43	7801.85	
2002/03	13447.60	8113.68	$\phi X^2 = 2166762091$
2003/04	14119.03	8548.66	
2004/05	14586.08	10586.66	
2005/06	19347.40	13278.78	$\phi Y^2 = 864184673.3$
2006/07	23342.28	15903.02	
N = 8	φX =128967.34	$\phi Y = 79891.85$	

r = 0.93	
P.E.(r) = 0.03	

Annex A-9 Correlation Analysis between Total Deposit and loan and Advance (SCBNL)

Year	<b>Total Deposits (X)</b>	Loan and Advance (Y)	
1999/00	12568.49	4857.17	φXY= 1094277134
2000/01	15430.05	5407.09	
2001/02	15835.75	5364.00	
2002/03	18755.63	5695.82	$\phi X^2 = 2959575638$
2003/04	21161.44	6410.24	
2004/05	19336.09	8143.21	
2005/06	23061.03	8935.42	$\phi Y^2 = 411593807.7$
2006/07	24647.02	10502.64	
N = 8	$\phi X = 150795.50$	$\phi Y = 55315.59$	
r = 0.88			
P.E.(r) = 0.05			

Annex A-10 Correlation Analysis between EPS and MVPS (NABIL)

Rs. In million

Year	EPS (X)	MVPS (Y)	
1999/00	83.79	1400.00	$\phi XY = 1542233.75$
2000/01	59.26	1500.00	
2001/02	55.25	730.00	
2002/03	84.66	740.00	$\phi X^2 = 75943.29$
2003/04	92.61	1000.00	
2004/05	105.49	1505.00	
2005/06	129.21	2240.00	$\phi Y^2 = 39075625.00$
2006/07	137.08	5050.00	
N = 8	$\phi X = 747.35$	$\phi Y = 14165.00$	
r = 0.75		, ,	
P.E.(r) = 0.10			

Annex A-11 Correlation Analysis between EPS and MVPS (SCBNL)

Year	EPS (X)	MVPS (Y)	
1999/00	115.62	1985.00	$\phi XY = 3204429.52$
2000/01	126.88	2144.00	
2001/02	141.13	1550.00	
2002/03	149.30	1640.00	$\phi X^2 = 171929.55$
2003/04	143.55	1745.00	
2004/05	143.93	2345.00	
2005/06	175.84	3775.00	$\phi Y^2 = 71233736.00$
2006/07	167.37	5900.00	

N = 8	$\phi X = 1163.62$	$\phi Y = 21084.00$	
r = 0.67			
P.E.(r) = 0.13			

## Annex A-12 Correlation Analysis between DPS and MVPS (NABIL)

Rs. In million

Year	DPS (X)	MVPS (Y)	
1999/00	55.00	1400.00	$\phi XY = 1263650.00$
2000/01	40.00	1500.00	
2001/02	30.00	730.00	
2002/03	50.00	740.00	$\phi X^2 = 43975.00$
2003/04	65.00	1000.00	
2004/05	70.00	1505.00	
2005/06	85.00	2240.00	$\phi Y^2 = 39075625$
2006/07	140.00	5050.00	
N = 8	$\phi X = 535.00$	$\phi Y = 14165.00$	
r = 0.93			
P.E.(r) = 0.03			

## Annex A-13 Correlation Analysis between DPS and MVPS (SCBNL)

Year	DPS (X)	MVPS (Y)	
1999/00	100.00	1985.00	$\phi XY = 2184400$
2000/01	100.00	2144.00	
2001/02	100.00	1550.00	
2002/03	110.00	1640.00	$\phi X^2 = 91900$
2003/04	110.00	1745.00	
2004/05	120.00	2345.00	
2005/06	130.00	3775.00	$\phi Y^2 = 71233736$
2006/07	80.00	5900.00	
N = 8	$\phi X = 740.00$	$\phi Y = 21084.00$	
r = 0.39			
P.E.(r) = 0.20			

Annex A-14 Least Square Linear Trend of Total Deposits (NABIL)

Year	Total Deposit	Year – 4	$\mathbf{X}^2$	XY	Trend Value
	<b>(Y)</b>	( <b>X</b> )			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	12779.51	-3	9	-38338.50	12396.25
2000/01	15839.01	-2	4	-31678.02	13460.44
2001/02	15506.43	-1	1	-15506.40	14524.63
2002/03	13447.60	0	0	0	15588.82
2003/04	14119.03	1	1	14119.03	16653.01
2004/05	14586.08	2	4	29172.16	17717.20
2005/06	19347.40	3	9	58042.20	18781.39
2006/07	23342.28	4	16	93369.12	19845.58
N = 8	$\phi$ Y= 28967.34	$\phi X = 4$	$\phi X^2 = 44$	φXY= 109179.61	
a = 15588.82			b = 1064.19		

Here,

The normal equation for estimating a and b are,

$$\phi Y = Na + b\phi X \dots (i)$$

$$\phi XY = a\phi X + b\phi X^2 \dots (ii)$$

By substituting the values of the table in normal equating we get,

$$8a + 4b = 128967.34$$
 .....(i)

$$4a + 44b = 109179.61$$
 .....(ii)

Solving the equation,

b = 89391.88/84

= 1064.19

Again, putting the value of b in (i) and we get the value of a.

a = 124710.58/8

= 15588.82

Annex A-15 Least Square Linear Trend of Total Deposits (SCBNL)

Year	<b>Total Deposit</b>	Year – 4	$\mathbf{X}^2$	XY	Trend Value
	<b>(Y)</b>	<b>(X)</b>			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	12568.49	-3	9	-37705.47	13198.97
2000/01	15430.05	-2	4	-30860.10	14813.39
2001/02	15835.75	-1	1	-15835.75	16427.81
2002/03	18755.63	0	0	0	18042.23
2003/04	21161.44	1	1	21161.44	19656.65
2004/05	19336.09	2	4	38672.18	21271.07
2005/06	23061.03	3	9	69183.09	22885.49
2006/07	24647.02	4	16	98588.08	24499.91
N = 8	φY= 150795.5	$\phi X = 4$	$\phi X^2 = 44$	φXY=143203.47	
a = 18042.23			b = 1614.42	2	

Annex A-16 Least Square Linear Trend of Investment (NABIL)

Year	Investment	Year –	$\mathbf{X}^2$	XY	Trend Value
	<b>(Y)</b>	4 (X)			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	1250.94	-3	9	-3752.82	4622.96
2000/01	7704.31	-2	4	-15408.62	5031.62
2001/02	8199.51	-1	1	-8199.51	5440.28
2002/03	6031.18	0	0	0	5848.94
2003/04	5835.95	1	1	5835.95	6257.60
2004/05	4267.23	2	4	8534.46	6666.26
2005/06	6180.69	3	9	18542.07	7074.92
2006/07	8956.31	4	16	35825.24	7483.58
N = 8	$\phi Y = 48426.12$	$\phi X = 4$	$\phi X^2 = 44$	φXY= 41376.77	
a = 5848.94			b = 408.66		

Annex A-17 Least Square Linear Trend of Investment (SCBNL)

Rs. In Million

Year	Investment	Year – 4	$X^2$	XY	Trend Value
	<b>(Y)</b>	( <b>X</b> )			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	3349.87	-3	9	-10049.61	6221.79
2000/01	9559.18	-2	4	-19118.36	7296.13
2001/02	9275.88	-1	1	-9275.88	8370.47
2002/03	10216.20	0	0	0	9444.81
2003/04	11360.33	1	1	11360.33	10519.15
2004/05	9702.55	2	4	19405.10	11587.49
2005/06	12838.56	3	9	38515.68	12667.83
2006/07	13553.23	4	16	54212.92	13742.17
N = 8	φY=79855.80	$\phi X = 4$	$\phi X^2 = 44$	$\phi$ XY= 85050.18	
a = 9444.81			b = 1074.34		

Annex A-18 Least Square Linear Trend of Loans and Advances (NABIL)

Year	Loan and	Year – 4	$\mathbf{X}^2$	XY	Trend Value
	Advance (Y)	<b>(X)</b>			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	7334.76	-3	9	-22004.28	6089.02
2000/01	8324.44	-2	4	-16648.88	7202.58
2001/02	7801.85	-1	1	-7801.85	8316.15
2002/03	8113.68	0	0	0	9429.70
2003/04	8548.66	1	1	8548.66	10543.26

2004/05	10586.66	2	4	21173.32	11656.82
2005/06	13278.78	3	9	39836.34	12770.38
2006/07	15903.02	4	16	63612.08	13883.94
N = 8	φY= 79891.85	$\phi X = 4$	$\phi X^2 = 44$	φXY= 86715.39	
a = 9429.70			b = 1113.56		

## Annex A-19 Least Square Linear Trend of Loans and Advances (SCBNL)

Rs. In Million

Year	Loans and	Year – 4	$\mathbf{X}^2$	XY	Trend
	Advances (Y)	<b>(X)</b>			Value
					$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	4857.17	-3	9	-14571.51	4155.61
2000/01	5407.09	-2	4	-10814.18	4943.85
2001/02	5364.00	-1	1	-5364.00	5732.09
2002/03	5695.82	0	0	0	6520.33
2003/04	6410.24	1	1	6410.24	7308.57
2004/05	8143.21	2	4	16286.42	8096.81
2005/06	8935.42	3	9	26806.26	8885.05
2006/07	10502.64	4	16	42010.56	9673.29
N = 8	$\phi Y = 55315.59$	$\phi X = 4$	$\phi X^2 = 44$	$\phi XY = 60763.79$	
a = 6520.33			b = 788.24		

## Annex A-20 Least Square Linear Trend of Net Profit (NABIL)

Rs. In Million

Year	Net Profit	Year – 4	$\mathbf{X}^2$	XY	Trend
	<b>(Y)</b>	<b>(X)</b>			Value
					$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	329.10	-3	9	-987.30	244.24
2000/01	291.38	-2	4	-582.76	302.77
2001/02	271.64	-1	1	-271.64	361.30
2002/03	416.24	0	0	0	419.83
2003/04	455.31	1	1	455.31	478.36
2004/05	520.10	2	4	1040.20	536.89
2005/06	635.03	3	9	1905.09	595.42
2006/07	673.96	4	16	2695.84	653.95
N = 8	$\phi Y = 3592.76$	$\phi X = 4$	$\phi X^2 = 44$	$\phi XY = 4254.74$	
a = 419.83			b = 58.53		

Annex A-21 Least Square Linear Trend of Net Profit (SCBNL)

Year	Net Profit	Year – 4	$\mathbf{X}^{2}$	XY	Trend Value
	<b>(Y)</b>	<b>(X)</b>			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	392.59	-3	9	-1177.77	386.12
2000/01	430.83	-2	4	-861.66	427.12
2001/02	479.21	-1	1	-479.21	468.12
2002/03	506.93	0	0	0	509.12

2003/04	537.80	1	1	537.80	550.12
2004/05	539.20	2	4	1078.40	591.12
2005/06	658.76	3	9	1976.28	632.12
2006/07	691.67	4	16	2766.68	673.12
N = 8	$\phi Y = 4236.99$	$\phi X = 4$	$\phi X^2 = 44$	$\phi XY = 3840.52$	
a = 509.12		b = 41.00			

## Annex A-22 Least Square Linear Trend of Net Worth (NABIL)

Rs. In Million

Year	Net Worth	Year – 4	$\mathbf{X}^2$	XY	Trend Value	
	<b>(Y)</b>	<b>(X)</b>			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$	
1999/00	1046.92	-3	9	-3140.76	920.50	
2000/01	1062.84	-2	4	-2125.68	1068.45	
2001/02	1146.42	-1	1	-1146.42	1216.40	
2002/03	1314.18	0	0	0	1364.35	
2003/04	1481.68	1	1	1481.68	1512.30	
2004/05	1522.53	2	4	3045.06	1660.25	
2005/06	1874.99	3	9	5624.97	1808.20	
2006/07	2057.05	4	16	8228.2	1956.15	
N = 8	$\phi Y = 11506.61$	$\phi X = 4$	$\phi X^2 = 44$	$\phi XY = 11967.05$		
a = 1364.35			b = 147.95			

Annex A-23 Least Square Linear Trend of Net Worth (SCBNL)

Rs. In Million

Year	Net Worth	Year – 4	$\mathbf{X}^2$	XY	Trend Value	
	<b>(Y)</b>	( <b>X</b> )			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$	
1999/00	1014.85	-3	9	-3044.55	956.31	
2000/01	1112.02	-2	4	-2224.04	1100.22	
2001/02	1235.49	-1	1	-1235.49	1244.13	
2002/03	1368.91	0	0	0	1388.04	
2003/04	1495.74	1	1	1495.74	1531.95	
2004/05	1582.42	2	4	3164.84	1675.86	
2005/06	1754.14	3	9	5262.42	1819.77	
2006/07	2116.35	4	16	8465.40	1963.68	
N = 8	$\phi Y = 11679.92$	$\phi X = 4$	$\phi X^2 = 44$	$\phi XY = 11884.32$		
a = 1388.04			b = 143.91			

Annex A-24 Least Square Linear Trend of EPS (NABIL)

Year	EPS	Year – 4	$\mathbf{X}^2$	XY	Trend Value
	<b>(Y)</b>	<b>(X)</b>			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	83.79	-3	9	-251.37	56.70
2000/01	59.26	-2	4	-118.52	67.19
2001/02	55.25	-1	1	-55.25	77.68
2002/03	84.66	0	0	0	88.17

2003/04	92.61	1	1	92.61	98.66	
2004/05	105.49	2	4	210.98	109.15	
2005/06	129.21	3	9	387.63	119.64	
2006/07	137.08	4	16	548.32	130.13	
N = 8	$\phi Y = 747.35$	$\phi X = 4$	$\phi X^2 = 44$	$\phi XY = 814.40$		
a = 88.17			b = 10.49			

## Annex A-25 Least Square Linear Trend of EPS (SCBNL)

Rs. In Million

Year	EPS	Year – 4	$\mathbf{X}^2$	XY	Trend Value	
	<b>(Y)</b>	<b>(X)</b>			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$	
1999/00	115.62	-3	9	-346.86	120.04	
2000/01	126.88	-2	4	-253.76	127.30	
2001/02	141.13	-1	1	-141.13	134.56	
2002/03	149.30	0	0	0	141.82	
2003/04	143.55	1	1	143.55	149.08	
2004/05	143.93	2	4	287.86	156.34	
2005/06	175.84	3	9	527.52	163.60	
2006/07	167.37	4	16	669.48	170.86	
N = 8	$\phi Y = 1163.62$	$\phi X = 4$	$\phi X^2 = 44$	$\phi XY = 886.66$		
a = 141.8	32		b = 7.26			

## Annex A-26 Least Square Linear Trend of MVPS (NABIL)

Rs. In Million

Year	MVPS	Year – 4	$\mathbf{X}^2$	XY	Trend Value	
	<b>(Y)</b>	( <b>X</b> )			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$	
1999/00	1400.00	-3	9	-4200.00	444.16	
2000/01	1500.00	-2	4	-3000.00	823.15	
2001/02	730.00	-1	1	-730.00	1202.14	
2002/03	740.00	0	0	0	1581.13	
2003/04	1000.00	1	1	1000.00	1960.12	
2004/05	1505.00	2	4	3010.00	2339.11	
2005/06	2240.00	3	9	6720.00	2718.10	
2006/07	5050.00	4	16	20200.00	3097.09	
N = 8	$\phi Y = 14165.00$	$\phi X = 4$	$\phi X^2 = 44$	$\phi XY = 23000.00$		
a = 1581.	a = 1581.13					

## Annex A-27 Least Square Linear Trend of MVPS (SCBNL)

Year	MVPS	Year – 4	$\mathbf{X}^2$	XY	Trend Value
	<b>(Y)</b>	( <b>X</b> )			$\mathbf{Y}\mathbf{c} = \mathbf{a} + \mathbf{b}\mathbf{x}$
1999/00	1985.00	-3	9	-5955.00	1050.07
2000/01	2144.00	-2	4	-4288.00	1503.05
2001/02	1550.00	-1	1	-1550.00	1956.12
2002/03	1640.00	0	0	0	2409.01

2003/04	1745.00	1	1	1745.00	2861.99
2004/05	2345.00	2	4	4690.00	3314.97
2005/06	3775.00	3	9	11325.00	3767.95
2006/07	5900.00	4	16	23600.00	4220.93
N = 8	$\phi Y = 21084$	$\phi X = 4$	$\phi X^2 = 44$	φXY = 29567	
a = 2409.01		b = 452.98			

Annex B
Comparative Financial position of NABIL and SCBNL Bank

2.   Valuation Measures	S.N.	List of Ratio	NAI	BIL%	SCBNL%	
Net Profit to Total Deposit Ratio   2.78   24.10   2.96     ii) Net Profit to Total Assets Ratio   2.36   22.88   2.41     iii) Return on Net Worth   30.72   11.52   36.69     2. Valuation Measures     i) Price Earning Ratio   17.90   51.06   17.65     iii) Market to Book Ratio   5.52   54.94   6.40     iii) Dividend Yield Ration   4.39   34.86   4.88     3. Activity Ratio       i) Loans and Advances to Total Deposits Ratio   61.31   12.95   36.46     iii) Loans and Advances to Fixed Deposit Ratio   3.11   28.93   3.31     iii) Loans and Advance to Saving Deposit Ratio   1.57   6.37   0.61     iv) Investment to Total Ratio   37.13   36.64   52.03     4. Cost Effective Measure   1.37   21.90   8.40     ii) Office Operating Expenses to Total Operating Income Ratio   11.48   26.66   15.59     5. Leverage or Capital Structure Ratio   13.39   15.01   15.27     ii) Capital Adequacy Ratio   12.50   8.4   14.64     iii) Provision for Possible Loan Loss Ratio to Loan and advance   3.72   49.46   4.24     6. Liquidity Ratio   1.00   1.00   1.00   1.00     iii) Cash and Bank Balance to Total Deposit Ratio (CRR)   6.11   32.08   7.08     iii) Cash and Bank Balance to Total Deposit Ratio (CRR)   6.11   32.08   7.08     iii) Cash and Bank Balance to Total Deposit Ratio (CRR)   6.11   32.08   7.08     iii) Cash and Bank Balance to Total Deposit Ratio (CRR)   6.11   32.08   7.08     iii) Cash and Bank Balance to Operating Income Ratio   65.58   18.33   31.01     v) Fixed Deposit to Total Deposit Ratio   21.64   61.99   59.56     7. Income Analysis   1.00   1.00   1.00   1.00   1.00   1.00     iii) Foreign Exchange income to Operating Income Ratio   4.50   104.96   3.07     8. Expenses Analysis   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00     iii) Office Operating Expenses Ratio   49.16   22.42   42.74     iii) Office Operating Expenses Ratio   49.16   22.42   42.74     iii) Office Operating Expenses Ratio   49.16   22.42   42.74     iiii) Office Operating Expenses Ratio   49.16   22.42   42.74     iiii) Office Ope			Mean	C.V.	Mean	C.V.
iii) Net Profit to Total Assets Ratio   2.36   22.88   2.41     iiii) Return on Net Worth   30.72   11.52   36.69     2. Valuation Measures   17.90   51.06   17.65     ii) Market to Book Ratio   5.52   54.94   6.40     iii) Dividend Yield Ration   4.39   34.86   4.88     3. Activity Ratio   10.20   1.25   36.46     iii) Loans and Advances to Total Deposits Ratio   61.31   12.95   36.46     iii) Loans and Advances to Fixed Deposit Ratio   3.11   28.93   3.31     iii) Loans and Advances to Fixed Deposit Ratio   3.11   28.93   3.31     iii) Loans and Advance to Saving Deposit Ratio   3.71   36.64   52.03     4. Cost Effective Measure   1.57   6.37   0.61     iv) Investment to Total Ratio   37.13   36.64   52.03     4. Cost Effective Measure   11.37   21.90   8.40     ii) Office Operating Expenses to Total Operating Income Ratio   11.48   26.66   15.59     5. Leverage or Capital Structure Ratio   13.39   15.01   15.27     ii) Capital Adequacy Ratio   13.39   15.01   15.27     iii) Capital Adequacy Ratio   12.50   8.4   14.64     iii) Provision for Possible Loan Loss Ratio to Loan and advance   3.72   49.46   4.24     6. Liquidity Ratio   1.250   8.4   14.64     iii) Cash and Bank Balance to Total Deposit Ratio (CRR)   6.11   32.08   7.08     iii) Cash and Bank Balance to Total Deposit Ratio (CRR)   6.11   32.08   7.08     iii) Cash and Bank Balance to Total Deposit Ratio (CRR)   6.11   32.08   7.08     iv) Investment on Government Securities to Current Assets   23.17   47.56   28.98     v) Loan and Advance to Ourrent Assets Ratio   65.58   18.33   31.01     iv) Fixed Deposit to Total Deposit Ratio   21.64   41.46   16.98     ii) Commission and Discount to Operating Income Ratio   8.66   20.20   11.92     iii) Foreign Exchange income to Operating Income Ratio   4.50   104.96   3.07     8. Expenses Analysis   10.00   1	1.	Profitability Ratio				
iii) Return on Net Worth   30.72   11.52   36.69	i)	Net Profit to Total Deposit Ratio	2.78	24.10	2.96	12.84
2.   Valuation Measures	ii)	Net Profit to Total Assets Ratio	2.36	22.88	2.41	5.20
i) Price Earning Ratio	iii)	Return on Net Worth	30.72	11.52	36.69	6.27
ii)         Market to Book Ratio         5.52         54.94         6.40           iii)         Dividend Yield Ration         4.39         34.86         4.88           3.         Activity Ratio         1         Loans and Advances to Total Deposit Ratio         3.11         28.93         3.31           iii)         Loans and Advances to Fixed Deposit Ratio         3.11         28.93         3.31           iii)         Loans and Advance to Saving Deposit Ratio         1.57         6.37         0.61           iv)         Investment to Total Ratio         37.13         36.64         52.03           4.         Cost Effective Measure         37.13         36.64         52.03           4.         Cost Effective Measure         37.13         36.64         52.03           4.         Cost Effective Measure         37.13         36.64         52.03           5.         Leverage Sector         11.37         21.90         8.40           ii)         Office Operating Expenses to Total Operating Income Ratio         11.48         26.66         15.59           5.         Leverage Factor         13.39         15.01         15.27           ii)         Capital Adequacy Ratio         12.50         8.4         14.64     <	2.	Valuation Measures				
iii)         Dividend Yield Ration         4.39         34.86         4.88           3.         Activity Ratio         3.         Activity Ratio           ii)         Loans and Advances to Fixed Deposit Ratio         3.11         28.93         3.31           iii)         Loans and Advance to Saving Deposit Ratio         1.57         6.37         0.61           iv)         Investment to Total Ratio         37.13         36.64         52.03           4.         Cost Effective Measure         1         1.57         6.37         0.61           ii)         Office Operating Expenses to Total Income Ratio         11.37         21.90         8.40           iii)         Office Operating Expenses to Total Operating Income Ratio         11.48         26.66         15.59           5.         Leverage or Capital Structure Ratio         11.33         15.01         15.27           ii)         Capital Adequacy Ratio         12.50         8.4         14.64           iii)         Capital Adequacy Ratio         12.50         8.4         14.64           iii)         Current Ratio         0.93         10.75         1.12           ii)         Current Ratio         0.93         10.75         1.12           iii)	i)	Price Earning Ratio	17.90	51.06	17.65	45.23
3.   Activity Ratio   1	ii)	Market to Book Ratio	5.52	54.94	6.40	39.81
i)         Loans and Advances to Total Deposits Ratio         61.31         12.95         36.46           ii)         Loans and Advances to Fixed Deposit Ratio         3.11         28.93         3.31           iii)         Loans and Advance to Saving Deposit Ratio         1.57         6.37         0.61           iv)         Investment to Total Ratio         37.13         36.64         52.03           4.         Cost Effective Measure         1         1.37         21.90         8.40           ii)         Office Operating Expenses to Total Income Ratio         11.37         21.90         8.40           ii)         Office Operating Expenses to Total Operating Income Ratio         11.48         26.66         15.59           5.         Leverage Factor         13.39         15.01         15.27           ii)         Capital Adequacy Ratio         12.50         8.4         14.64           iii)         Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6.         Liquidity Ratio         1         2.50         8.4         14.64           iii)         Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iii)         Cash and Bank Balance	iii)	Dividend Yield Ration	4.39	34.86	4.88	36.68
ii)         Loans and Advances to Fixed Deposit Ratio         3.11         28.93         3.31           iii)         Loans and Advance to Saving Deposit Ratio         1.57         6.37         0.61           iv)         Investment to Total Ratio         37.13         36.64         52.03           4.         Cost Effective Measure           i)         Personnel Expenses to Total Income Ratio         11.37         21.90         8.40           ii)         Office Operating Expenses to Total Operating Income Ratio         11.48         26.66         15.59           5.         Leverage or Capital Structure Ratio         13.39         15.01         15.27           ii)         Capital Adequacy Ratio         12.50         8.4         14.64           iii)         Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6.         Liquidity Ratio         12.50         8.4         14.64           iii)         Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iiii)         Cash and Bank Balance to Current Ratio         6.41         26.68         6.06           iv)         Investment on Government Securities to Current Assets         23.17         47.56         2	3.	Activity Ratio				
iii)         Loans and Advance to Saving Deposit Ratio         1.57         6.37         0.61           iv)         Investment to Total Ratio         37.13         36.64         52.03           4.         Cost Effective Measure              i)         Personnel Expenses to Total Income Ratio         11.37         21.90         8.40           ii)         Office Operating Expenses to Total Operating Income Ratio         11.48         26.66         15.59           5.         Leverage or Capital Structure Ratio                i)         Leverage Factor         13.39         15.01         15.27                 4		Loans and Advances to Total Deposits Ratio	61.31	12.95	36.46	13.27
Investment to Total Ratio   37.13   36.64   52.03	ii)	Loans and Advances to Fixed Deposit Ratio	3.11	28.93	3.31	42.74
4.         Cost Effective Measure           i) Personnel Expenses to Total Income Ratio         11.37         21.90         8.40           ii) Office Operating Expenses to Total Operating Income Ratio         11.48         26.66         15.59           5. Leverage or Capital Structure Ratio         13.39         15.01         15.27           ii) Leverage Factor         13.39         15.01         15.27           ii) Capital Adequacy Ratio         12.50         8.4         14.64           iii) Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6. Liquidity Ratio         0.93         10.75         1.12           ii) Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iii) Cash and Bank Balance to Current Ratio         6.41         26.68         6.06           iv) Investment on Government Securities to Current Assets         23.17         47.56         28.98           v) Loan and Advance to Current Assets Ratio         65.58         18.33         31.01           vi) Fixed Deposit to Total Deposit Ratio         21.64         41.46         12.88           vii) Saving Deposit to Total Deposit Ratio         39.26         16.99         59.56           7. Income Analysis	iii)	Loans and Advance to Saving Deposit Ratio	1.57	6.37	0.61	8.20
i)         Personnel Expenses to Total Income Ratio         11.37         21.90         8.40           ii)         Office Operating Expenses to Total Operating Income Ratio         11.48         26.66         15.59           5.         Leverage or Capital Structure Ratio         1         13.39         15.01         15.27           ii)         Capital Adequacy Ratio         12.50         8.4         14.64           iii)         Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6.         Liquidity Ratio         1         2.50         8.4         14.64         4.24           6.         Liquidity Ratio         0.93         10.75         1.12         1.12         10	iv)	Investment to Total Ratio	37.13	36.64	52.03	20.80
ii)         Office Operating Expenses to Total Operating Income Ratio         11.48         26.66         15.59           5.         Leverage or Capital Structure Ratio           i)         Leverage Factor         13.39         15.01         15.27           ii)         Capital Adequacy Ratio         12.50         8.4         14.64           iii)         Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6.         Liquidity Ratio         10.93         10.75         1.12           ii)         Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iii)         Cash and Bank Balance to Current Ratio         6.41         26.68         6.06           iv)         Investment on Government Securities to Current Assets         23.17         47.56         28.98           v)         Loan and Advance to Current Assets Ratio         65.58         18.33         31.01           vi)         Fixed Deposit to Total Deposit Ratio         21.64         41.46         12.88           vii)         Saving Deposit to Total Deposit Ratio         39.26         16.99         59.56           7.         Income Analysis           i)         Interest Income to Operating I	4.	Cost Effective Measure				
5. Leverage or Capital Structure Ratio           i) Leverage Factor         13.39         15.01         15.27           ii) Capital Adequacy Ratio         12.50         8.4         14.64           iii) Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6. Liquidity Ratio         0.93         10.75         1.12           ii) Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iii) Cash and Bank Balance to Current Ratio         6.41         26.68         6.06           iv) Investment on Government Securities to Current Assets         23.17         47.56         28.98           v) Loan and Advance to Current Assets Ratio         65.58         18.33         31.01           vi) Fixed Deposit to Total Deposit Ratio         21.64         41.46         12.88           vii) Saving Deposit to Total Deposit Ratio         39.26         16.99         59.56           7. Income Analysis         i) Interest Income to Operating Income Ratio         76.16         5.44         69.80           ii) Commission and Discount to Operating Income Ratio         10.69         11.04         15.17           iv) Other Income to Operating Income Ratio         4.50         104.96         3.07	i)	Personnel Expenses to Total Income Ratio	11.37	21.90	8.40	16.67
i)         Leverage Factor         13.39         15.01         15.27           ii)         Capital Adequacy Ratio         12.50         8.4         14.64           iii)         Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6.         Liquidity Ratio         0.93         10.75         1.12           ii)         Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iii)         Cash and Bank Balance to Current Ratio         6.41         26.68         6.06           iv)         Investment on Government Securities to Current Assets         23.17         47.56         28.98           v)         Loan and Advance to Current Assets Ratio         65.58         18.33         31.01           vi)         Fixed Deposit to Total Deposit Ratio         21.64         41.46         12.88           vii)         Saving Deposit to Total Deposit Ratio         39.26         16.99         59.56           7.         Income Analysis         i)         Interest Income to Operating Income Ratio         76.16         5.44         69.80           ii)         Foreign Exchange income to Operating Income Ratio         4.50         104.96         3.07           8. <td>ii)</td> <td>Office Operating Expenses to Total Operating Income Ratio</td> <td>11.48</td> <td>26.66</td> <td>15.59</td> <td>24.63</td>	ii)	Office Operating Expenses to Total Operating Income Ratio	11.48	26.66	15.59	24.63
ii)         Capital Adequacy Ratio         12.50         8.4         14.64           iii)         Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6.         Liquidity Ratio              49.46         4.24           6.         Liquidity Ratio	5.	Leverage or Capital Structure Ratio				
iii)         Provision for Possible Loan Loss Ratio to Loan and advance         3.72         49.46         4.24           6.         Liquidity Ratio  .	i)	Leverage Factor	13.39	15.01	15.27	8.64
6.         Liquidity Ratio           i)         Current Ratio         0.93         10.75         1.12           ii)         Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iii)         Cash and Bank Balance to Current Ratio         6.41         26.68         6.06           iv)         Investment on Government Securities to Current Assets         23.17         47.56         28.98           v)         Loan and Advance to Current Assets Ratio         65.58         18.33         31.01           vi)         Fixed Deposit to Total Deposit Ratio         21.64         41.46         12.88           vii)         Saving Deposit to Total Deposit Ratio         39.26         16.99         59.56           7.         Income Analysis         Interest Income to Operating Income Ratio         76.16         5.44         69.80           ii)         Commission and Discount to Operating Income Ratio         8.66         20.20         11.92           iii)         Foreign Exchange income to Operating Income Ratio         10.69         11.04         15.17           iv)         Other Income to Operating Expenses Ratio         4.50         104.96         3.07           8.         Expenses Analysis           i)	ii)	Capital Adequacy Ratio	12.50	8.4	14.64	15.85
i)         Current Ratio         0.93         10.75         1.12           ii)         Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iii)         Cash and Bank Balance to Current Ratio         6.41         26.68         6.06           iv)         Investment on Government Securities to Current Assets         23.17         47.56         28.98           v)         Loan and Advance to Current Assets Ratio         65.58         18.33         31.01           vi)         Fixed Deposit to Total Deposit Ratio         21.64         41.46         12.88           vii)         Saving Deposit to Total Deposit Ratio         39.26         16.99         59.56           7.         Income Analysis         Interest Income to Operating Income Ratio         76.16         5.44         69.80           ii)         Commission and Discount to Operating Income Ratio         8.66         20.20         11.92           iii)         Foreign Exchange income to Operating Income Ratio         4.50         104.96         3.07           8.         Expenses Analysis           i)         Interest Expenses to Operating Expenses Ratio         49.16         22.42         42.74           ii)         Staff Expenses to Operating Expenses Ratio         <	iii)	Provision for Possible Loan Loss Ratio to Loan and advance	3.72	49.46	4.24	28.77
i)         Current Ratio         0.93         10.75         1.12           ii)         Cash and Bank Balance to Total Deposit Ratio (CRR)         6.11         32.08         7.08           iii)         Cash and Bank Balance to Current Ratio         6.41         26.68         6.06           iv)         Investment on Government Securities to Current Assets         23.17         47.56         28.98           v)         Loan and Advance to Current Assets Ratio         65.58         18.33         31.01           vi)         Fixed Deposit to Total Deposit Ratio         21.64         41.46         12.88           vii)         Saving Deposit to Total Deposit Ratio         39.26         16.99         59.56           7.         Income Analysis         Interest Income to Operating Income Ratio         76.16         5.44         69.80           ii)         Commission and Discount to Operating Income Ratio         8.66         20.20         11.92           iii)         Foreign Exchange income to Operating Income Ratio         4.50         104.96         3.07           8.         Expenses Analysis           i)         Interest Expenses to Operating Expenses Ratio         49.16         22.42         42.74           ii)         Staff Expenses to Operating Expenses Ratio         <	6.	Liquidity Ratio				
iii) Cash and Bank Balance to Current Ratio  iv) Investment on Government Securities to Current Assets  v) Loan and Advance to Current Assets Ratio  vi) Fixed Deposit to Total Deposit Ratio  vii) Saving Deposit to Total Deposit Ratio  7. Income Analysis  i) Interest Income to Operating Income Ratio  ii) Commission and Discount to Operating Income Ratio  iii) Foreign Exchange income to Operating Income Ratio  7. Other Income to Operating Income Ratio  7. Other Income to Operating Income Ratio  10.69  11.04  15.17  10.05  10.496	i)		0.93	10.75	1.12	6.25
iv) Investment on Government Securities to Current Assets v) Loan and Advance to Current Assets Ratio 65.58 18.33 31.01 vi) Fixed Deposit to Total Deposit Ratio 21.64 21.64 21.64 21.88 vii) Saving Deposit to Total Deposit Ratio 39.26 16.99 59.56  7. Income Analysis i) Interest Income to Operating Income Ratio ii) Commission and Discount to Operating Income Ratio 8.66 20.20 11.92 iii) Foreign Exchange income to Operating Income Ratio v) Other Income to Operating Income Ratio 8.66 20.20 11.92 iv) Other Income to Operating Income Ratio 9.00 8. Expenses Analysis i) Interest Expenses to Operating Expenses Ratio 22.29 24.94 17.32 iii) Office Operating Expenses to Total Operating Expenses 19.82 24.52 29.21	ii)	Cash and Bank Balance to Total Deposit Ratio (CRR)	6.11	32.08	7.08	22.60
iv) Investment on Government Securities to Current Assets v) Loan and Advance to Current Assets Ratio 65.58 18.33 31.01 vi) Fixed Deposit to Total Deposit Ratio 21.64 21.64 21.64 21.88 vii) Saving Deposit to Total Deposit Ratio 39.26 16.99 59.56  7. Income Analysis i) Interest Income to Operating Income Ratio ii) Commission and Discount to Operating Income Ratio 8.66 20.20 11.92 iii) Foreign Exchange income to Operating Income Ratio v) Other Income to Operating Income Ratio 8.66 20.20 11.92 iv) Other Income to Operating Income Ratio 9.00 8. Expenses Analysis i) Interest Expenses to Operating Expenses Ratio 22.29 24.94 17.32 iii) Office Operating Expenses to Total Operating Expenses 19.82 24.52 29.21	iii)	Cash and Bank Balance to Current Ratio	6.41	26.68	6.06	25.08
vi)Fixed Deposit to Total Deposit Ratio21.6441.4612.88vii)Saving Deposit to Total Deposit Ratio39.2616.9959.567.Income Analysis76.165.4469.80ii)Commission and Discount to Operating Income Ratio8.6620.2011.92iii)Foreign Exchange income to Operating Income Ratio10.6911.0415.17iv)Other Income to Operating Income Ratio4.50104.963.078.Expenses Analysisi)Interest Expenses to Operating Expenses Ratio49.1622.4242.74ii)Staff Expenses to Operating Expenses Ratio22.2924.9417.32iii)Office Operating Expenses to Total Operating Expenses19.8224.5229.21		Investment on Government Securities to Current Assets	23.17	47.56	28.98	17.12
vii)Saving Deposit to Total Deposit Ratio39.2616.9959.567.Income Analysisi)Interest Income to Operating Income Ratio76.165.4469.80ii)Commission and Discount to Operating Income Ratio8.6620.2011.92iii)Foreign Exchange income to Operating Income Ratio10.6911.0415.17iv)Other Income to Operating Income Ratio4.50104.963.078.Expenses Analysisi)Interest Expenses to Operating Expenses Ratio49.1622.4242.74ii)Staff Expenses to Operating Expenses Ratio22.2924.9417.32iii)Office Operating Expenses to Total Operating Expenses19.8224.5229.21	v)	Loan and Advance to Current Assets Ratio	65.58	18.33	31.01	12.64
7. Income Analysis i) Interest Income to Operating Income Ratio ii) Commission and Discount to Operating Income Ratio 8.66 20.20 11.92 iii) Foreign Exchange income to Operating Income Ratio 10.69 11.04 15.17 iv) Other Income to Operating Income Ratio 4.50 104.96 3.07 8. Expenses Analysis i) Interest Expenses to Operating Expenses Ratio 49.16 22.42 42.74 ii) Staff Expenses to Operating Expenses Ratio 22.29 24.94 17.32 iii) Office Operating Expenses to Total Operating Expenses	vi)	Fixed Deposit to Total Deposit Ratio	21.64	41.46	12.88	43.79
i) Interest Income to Operating Income Ratio 76.16 5.44 69.80 ii) Commission and Discount to Operating Income Ratio 8.66 20.20 11.92 iii) Foreign Exchange income to Operating Income Ratio 10.69 11.04 15.17 iv) Other Income to Operating Income Ratio 4.50 104.96 3.07  8. Expenses Analysis i) Interest Expenses to Operating Expenses Ratio 49.16 22.42 42.74 ii) Staff Expenses to Operating Expenses Ratio 22.29 24.94 17.32 iii) Office Operating Expenses to Total Operating Expenses 19.82 24.52 29.21	vii)	Saving Deposit to Total Deposit Ratio	39.26	16.99	59.56	8.06
ii) Commission and Discount to Operating Income Ratio  8.66 20.20 11.92  11.93  11.94	7.		1			II.
iii) Foreign Exchange income to Operating Income Ratio  10.69 11.04 15.17  iv) Other Income to Operating Income Ratio 4.50 104.96 3.07  8. Expenses Analysis  i) Interest Expenses to Operating Expenses Ratio 49.16 22.42 42.74  ii) Staff Expenses to Operating Expenses Ratio 22.29 24.94 17.32  iii) Office Operating Expenses to Total Operating Expenses 19.82 24.52 29.21		·	76.16	5.44	69.80	5.63
iv) Other Income to Operating Income Ratio  8. Expenses Analysis  i) Interest Expenses to Operating Expenses Ratio 49.16 22.42 42.74  ii) Staff Expenses to Operating Expenses Ratio 22.29 24.94 17.32  iii) Office Operating Expenses to Total Operating Expenses 19.82 24.52 29.21	ii)	Commission and Discount to Operating Income Ratio	8.66	20.20	11.92	9.56
8.Expenses Analysisi)Interest Expenses to Operating Expenses Ratio49.1622.4242.74ii)Staff Expenses to Operating Expenses Ratio22.2924.9417.32iii)Office Operating Expenses to Total Operating Expenses19.8224.5229.21	iii)	Foreign Exchange income to Operating Income Ratio	10.69	11.04	15.17	13.05
i) Interest Expenses to Operating Expenses Ratio 49.16 22.42 42.74 ii) Staff Expenses to Operating Expenses Ratio 22.29 24.94 17.32 iii) Office Operating Expenses to Total Operating Expenses 19.82 24.52 29.21	iv)	1 0	4.50	104.96	3.07	47.88
ii)Staff Expenses to Operating Expenses Ratio22.2924.9417.32iii)Office Operating Expenses to Total Operating Expenses19.8224.5229.21	8.	<b>Expenses Analysis</b>				
iii) Office Operating Expenses to Total Operating Expenses 19.82 24.52 29.21	i)	Interest Expenses to Operating Expenses Ratio		22.42	42.74	22.65
		<u> </u>	22.29	24.94	17.32	21.65
Ratio	iii)	Office Operating Expenses to Total Operating Expenses Ratio	19.82	24.52	29.21	25.23
iv) Provision for Bonus Expenses to Operating Expenses Ratio 8.67 26.18 10.73	iv)	Provision for Bonus Expenses to Operating Expenses Ratio	8.67	26.18	10.73	7.92