

CHAPTER ONE

INTRODUCTION

1.1 GENERAL BACKGROUND

The term Investment means spending or setting aside money for future financial gain. For an individual, investment might include the purchase of financial assets such as stocks, bonds, mutual funds, or life insurance. Investment can also include the purchase of durable goods, such as housing or a car. For an economist, investment refers to the increase in real capital in an economy such as an increase in factories and machinery or in its human capital i.e. a skilled and educated labor force.

In general sense, investment means to pay out money to get more. But in the broad sense, investment means the sacrifice of money today in expectation to generate additional money in the future. Investment takes place in the present and is certain but the return occurs in the future which is an uncertain that's why it involves time and risk. In some cases the element of time predominates. In other cases risk is the dominant attribute. In yet others both time and risk are important. In the study investment conceptualizes the use of income, saving or other collected fund. The term investment covers a wide range of activities. It is a commonly known fact that an investment is possible only when there is adequate saving. Therefore, both saving and investment are interrelated. Investment is one of the decisions of finance functions. It involves the decisions of capital or commitment of funds to long term assets that would yield benefit in future. The features of investment decisions are.

- a) The exchange of current funds for future benefits.
- b) The funds are invested in long term assets.
- c) The future benefits will occur to the firm over a series of year.

Future benefits of investment are difficult to measure and cannot be predicted with certainty. Because of the uncertain future, investment decision involves risk. Investment analysis should, therefore, be evaluated in terms of both expected return and risk. Besides the decision to commit funds in new investment analysis, capital budgeting also involves decision of recommitting of funds when an asset becomes less productive or non profitable.

"Investment promotes economic growth and contributes to a nation's wealth. When people deposit money in the account of the bank, the bank may invest by lending the funds to various business companies. These firms in return may invest the money in new factories and equipment to increase their production. In addition to borrowing from banks, most companies issue stock and bonds that they sell to

investors to raise capital needed for business expansion. Government also issues bonds to obtain funds to invest in different projects, such as, the construction of dams, bridges, roads, schools and colleges. All such investment by individuals, businessman and groups involves a present sacrifice of income to get an expected future benefits. As a result of which investment raises a nation's standard living" (*Encyclopedia, 2003*).

Investment policy is an important element of overall national economic development because it ensures efficient allocation of funds to achieve the material and economic well being of the society as a whole. In this regards, commercial banks investment policy is also a push drive to achieve priority of industries in the context of Nepal's economic development. Investment policy is one fact of the overall spectrum of policies that guide banks investment operation. A healthy development of any bank depends upon its investment policy. A sound and viable investment policy can be effective one for the economy to attain the economic objectives directed towards the acceleration of the pace of the development. A good investment policy attracts both borrowers and lenders, which help to increase the volume and quality of deposits, loans and investments. The loan provided by the commercial bank is guided by several principles such as length of time, their purpose, profitability, safety etc. These fundamental principles of commercial banks investment are considered while making investment policy. In the context of our country there is high liquidity in the market but there is no profitable place to invest. Flowing of money hundred times more than required when the banks and financial institutions called them in the example of high liquidity in the money market. At the same time the banks and financial institutions are offering very low deposit interest rate. In this situation Nepalese commercial banks are required to explore new opportunities to make investment if they want to survive in the competitive situation. The prosperity of industry and trade is essential and more important for the country to step into development. Therefore the bank must consider national interest and government emphasis for the economic growth of the country. Since, the prosperous economic condition of country is represented by the development of the industry, trade and business, which is main ground to the banks to conduct its activities and to fulfill its objectives of profit making.

As financial institutions for an instance "commercial bank" is one of the essential supporting structures of every economic transaction for the reason they collect saving as a deposit and invest for development of trade, business and industry. Thus, they help to bring about the economic growth of the nation as a whole. A key factor in the development of an economy is the mobilization of domestic resources. As intermediaries, the financial institution helps the process of resources mobilization. The importance of financial institution in the economy has of late grown to an enormous extent. The government in turn is required to regulate their activities so that

the financial policies are implemented as per the requirements of the country. Policies such as lending to the priority sectors, lending to the educated unemployed people, creation of entrepreneurship in the society are certain examples, which the government in developing economies try to implement with the help of financial institutions.

Financial institutions transfer the resources by mobilizing them from surplus units and in turn lend these funds to deficit units. In this way, the financial institutions provide savers highly liquid, divisible assets at a lower risk while the investors receive a large pool of resources. Satisfaction of both lenders and borrowers preferences determines the success of intermediary function of an economy. The importance of financial institutions has been stressed by R. C. Bryant in these words: “Economists and historians agree that the process of modern economic growth has been closely associated with the expansion and increasing diversification of financial intermediation”.

The development of a country is always measured by its economic indices. Therefore every country has given emphasis on up liftment of its economy. Nowadays the financial institutions are viewed as catalyst in the process of the economic growth. The mobilization of domestic resources is one of the key factors in the economic development of a country. The financial institutions act as intermediaries by transferring the resources from the point of surplus to the deficit. Well-organized financial institutions including finance companies, commercial banks and other financial intermediaries play an important role for the development of the country. They collect scattered financial resources from the mass and invest them among those who associated with the social, commercial and the economic activities of the country. This will provide fuel to the development practices of the country. The economic activities of a country can hardly be carried forward without the assistance of the financial institutions. They are the indispensable part of the development process. It is the fact that the unorganized financial system leads the country nowhere. Therefore the central banks plays a major on keeping the financial system of a country organized by providing them guidance and directives.

A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out a specific operation (industrial or commercial investment and production or trade) (*Gupta, 1984*).

In order to operate a business organization under joint venture basis, there should at least two partners from two different countries. JVBs are the com banks formed by joining two or more enterprises for the purpose of carrying out specific operation, such as investment in trade, business and industry as well as in the form of negotiation between various group of industries or trade to achieve mutual exchange of goods and service for sharing competitive advantage by performing joint

investment scheme between Nepalese investors and their parent banks each supplying 50 percent of total investment. The parent banks, which have experience modern banking services in many parts of the world, have come to Nepal with latest technology and advanced management skills. JVBs are established by joining forces with ability to achieve a common goal with each of the partners. They are more efficient monetary institution in modern banking fields than other old type of banks in Nepalese context, the primary objectives of these joint venture banks is always to earn profit by investing or granting loan and advances to people associated with trade, business and industry etc.

The primary goal of any country like Nepal is rapid economic development to promote the welfare of the people and the nation as well. Nepal is trying to embrace upon the path of economic development by economic growth rate and developing the sector of economy. So the economic development depends upon capital formation and its proper utilization play a paramount role. "The increase in capital has always been a sort of primary mover in the process of material growth and the rate of capital formulation has been the principal variable in setting the overall pace of economic ." In this regard the network of well-organized financial system of the country has great bearing. It collects scattered financial resources from the masses and invests them among those engaged in economic and commercial activities of the country. In this way, financial institutions provide savers highly liquid divisible assets at a cover risk while the investors receive a large pool of resources.

Since the prosperous economic condition of a country is represented by the development of industry, trade and business, which is main grounds to the banks conduct its activities and to fulfill its objective of profit making. The proper investment policy helps the bank to make profitable investment which helps in the development of a country as well as to achieve the objective of profit making.

1.2 FOCUS OF THE STUDY

The main focus of the study is to highlight the investment analysis of joint venture bank expecting that the study can bridge the gap between deposit and analysis. On the other hand, the study would provide information to management of the banks that would help them to take corrective action. Further from this study the shareholders to get information to make decision while making investment on shares of various banks. The main focus of the study is to analyze the sound investment policies of the joint venture banks i.e Standard Chartered Bank Nepal Ltd and Himalayan Bank Ltd.

Himalayan Bank Ltd was established as a joint venture bank with Habib bank of Pakistan in 1992 A.D. under the company act 1964. This is the first joint venture bank with maximum share holding by the Nepalese private sector. The bank has five branches inside the Kathmandu valley and also has nine branches outside the Kathmandu valley. The bank will be aggressively opening new branches at different parts of the country to serve its customer better. The Bank, wherever possible, offers tailor made facilities to its clients, based on the unique needs and requirements of different clients. To further extend the reliable and efficient services to its valued customers. The Bank has adopted the latest banking technology. The Bank has already offers unique services such as SMS Banking and Internet Banking to customers and will be introducing more services like these in the near future (*source: Himalayan Bank Annual Report 2007/08*).

Standard Chartered Bank Nepal Ltd has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group who has 75% ownership in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status the largest international bank currently operating in Nepal. The Bank is a leading financial institution in the country. With 11 points of representation (12 Branches) and 9 ATMs across the nation and with over 300 local staff, SCBNL is in a position to service its customers through a large domestic network. In addition to which the global network of Standard Chartered Group gives the Bank the unique opportunity to provide truly international banking in Nepal (*Source: Standard Chartered Bank Nepal Limited Annual Report 2007/08*).

SCBNL offers a full range of banking products and services in Wholesale and Consumer banking, catering to a wide range of customers from individuals, to mid-market local corporate to multinationals and large public sector companies, as well as embassies, aid agencies, airlines, hotels and government corporations. It is the first Bank in Nepal that has implemented the Anti-Money Laundering policy and applied the 'Know Your Customer' procedure on all the customer accounts.

1.3 STATEMENT OF THE PROBLEM

Mushrooming of joint venture banks is the present situation of Nepalese financial system. There is a high flow of money in the market but less viable and invisible projects. Therefore the introduction of new bank is just sharing a cake rather than pumping new capital or new technologies. As Nepalese capital are almost felt saturated. Few joint venture banks are continuously making profit and satisfying their shareholders and returning them adequate profit. Although Nepal has adopted a planned development strategies since the implementation of its first five years plan in 1956. The financial sector has not been responsive enough to meet the growing resources need as aspired by plan. The establishment of commercial banks, the enforcement of priority sector and production sector, lending policies of Nepal Rastra Bank to financial institution does not seem to have had an appropriate impact.

Investment is the most important factor from the shareholders and banks management point of view. Though several joint venture banks have been established in Nepal within short period of time, sufficient return cannot have been earned and strong, stable and appropriate investment policy has not been followed. In one hand, these banks collect lots of deposits where as in other hand investment opportunities are comparatively low. Due to less opportunity banks used to discourage depositors by reducing the interest on deposit and increasing the minimum threshold balance. Such condition may cause the highly liquid market and can impact the condition the whole country negatively. Due to throat cut competition of financial environment, banks seem to be ready to grant much more loans, advances and other facilities against their clients in sufficient deposit. Unsecured loan and investment may cause the liquidation of those banks. If the funds are wrongly invested without thinking any financial risk, business risk and other related facts. The bank cannot obtain profitable return ad well as it should sometime loss its principle.

There fore appropriate investment analysis is necessary for all commercial banks and financial institutions.

- a. Are they maintaining sufficient liquidity position?
- b. Is the both banks' fund mobilization and investment analysis more effective and efficient?
- c. What is the relationship of investment and loan and advances with total deposits and total net profit?
- d. Does the degree of success in investment strategy successful to utilize its available fund of standard chartered bank and Himalayan bank limited?
- e. What is the customer's view and ideas regarding the existing services and adopted investment policy of joint venture banks?

1.4 OBJECTIVES OF THE STUDY

The basic objective of the study is to review the investment policies of concerned joint venture commercial banks as well as to compare it. The main objectives of the study are given below.

- a. To evaluate the investment portfolio.
- b. To analyze the investment policy.
- c. To evaluate the impact of investment on profit of the bank.
- d. To provide the various suggestions and recommendations on the basis of findings for further growth of the organization.

1.5 SIGNIFICANCE OF THE STUDY

Economic development is the first objective of our nation therefore the capital is one of the prime factors, which is necessary for the development of the country. The poor nation like Nepal rarely save a large parts of its income thus the possibilities of the domestic capital formation are very small. So the major problem of the developing countries is the capital formation and their proper mobilization. For the domestic resource mobilization and economic development of the nation, banking institution definitely contribute and play a vital and gigantic role to build up the confidence of business persons for promoting the business and industrialist for encouraging opening the new industries. Without the proper development of banking development of the country is impossible. Therefore, the study has significance in particular areas of Joint venture commercial banks. It fills the gap in literature and justifies the role of Joint venture commercial banks in the economic development of the country.

1.6 LIMITATIONS OF THE STUDY

The study has been made to evaluate the investment policy of Joint venture commercial banks. Every study has its own limitations. The following points are the limitation of the study.

- a. The study is mainly based on the secondary data (i.e. published financial documents such as balance sheet, profit and loss account, related books, journals and magazines) so the result of all the analysis depends upon the information provides by the banks.
- b. The whole study is based on the data of five years period from 2003/2004 to 2007/2008 and hence the conclusion drawn confines only to the above period.
- c. Out of the numerous affecting factors, only those factors are considered which is related to investment policy.

- d. Out of many banks, two banks (Standard Chartered Bank Nepal Limited and Himalayan Bank Limited) are taken for the study.
- e. This study may not be sufficient for depth analysis as it covers only limited financial tool and techniques.

1.7 ORGANIZATION OF THE STUDY

The study work has been divided into five chapters. They are as follows.

- a. **Introduction:** The first chapter deals with general background, focus of the study, statement of the problem, objectives of the study, limitations of the study, significance of the study and organization of the study.
- b. **Review of Literature:** The second chapter deals with the conceptual framework of investment policy, review of related books, earlier research studies and dissertations.
- c. **Research Methodology:** The third chapter includes the research design, population and sampling sources of data, data collection techniques, data analysis tools and limitation of the methodology.
- d. **Presentation and Analysis of Data:** This chapter is mainly concerned with the analysis of different financial ratios and statistical analysis related to the investment policy and major findings of the study.
- e. **Summary, Conclusion and Recommendation:** The fifth chapter summarizes the whole study, draw conclusions and provide suggestions and recommendations for the further improvement of the organization.

At the end of the study, Bibliography and Appendix are also incorporated.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

“With a selected topic and a good idea of the problem, the next step is to read what has been written concerning his or her topics. The purpose of reviewing the literature is to develop some expertise in on areas, to see what new contributions can be made and to receive some ideas for developing a research design.

Literature review is basically a stocktaking of available literature in ones field of research. The literature review thus provides the students with the knowledge of the status of their field of research.

The primary purpose of literature review is to learn, not to accumulate. It enables the research to know:

1. What research has been done in the subject?
2. What others have written about the topic?
3. What theories have been advanced?
4. The approach taken by other researchers.
5. Areas of agreement or disagreement.
6. Whether there are gaps that you can fill through the proposed research.

“The purpose of literature review is thus to find out what research studies have been conducted in ones field research studies have been conducted in ones field of study and what remained to be done. It provides the foundation for developing comprehensive theoretical framework. From which hypothesis can be developed for testing. The literature survey also minimizes the risk of pursuing the dead-ends in research and Point out of the following benefits of a good literature survey.

1. Importance variable that are likely to influence the problem situation are not left out of the study.
2. A clearer idea emerges as to what variables would be most importance to solve the problem.
3. Testability and reliability of the findings of the current research all enhanced.
4. The problem statements can be made with greater percussion and clarity.
5. One doesn't run the risk of wasting efforts on trying to rediscover something that is already known: and
6. The problem investigated is perceived by the scientific community as relevant and of significance. (Sekaran, 1992)

This chapter is basically concerned with review of literature relevant to the investment Policy of joint venture commercial banks. It is the way to discover what other research has uncovered in the area of our problem. Every research is based on previous knowledge. The past knowledge or the previous studies provide necessary information to the present study so that it cannot be ignored. The purpose of the literature review is to find out what other studies have been conducted in one's chosen field of study. It provides the foundation for developing a comprehensive theoretical framework from which hypothesis can be developed for testing. Therefore, this chapter has its own importance. This chapter is divided into following parts.

2.2 CONCEPTUAL / THEORETICAL FRAMEWORK

Commercial banks are the most important source of funds for business firms, in the aggregate. Banks acquire demand and time deposits from individuals, companies and government and in turn, make loan and investments (*Van Horne and Wachowicz, 2001*). Banks are such financial institutions, which mainly accept the deposit and create credit to outsiders. So, Com banks are major financial institution which occupy quite an important place in the framework of every economy because they provide capital for the development of industry, trade and business and other resources deficit sectors by investing the saving collected as deposit. In this way they contribute to the economic growth of the nation. Besides this, com banks render numerous services to their customer in view of facilitating their economic and social life. All the economic activities of each and every country are greatly influenced by the commercial banking business of the country. Joint venture com banks by playing active role have changed the economic structure of the world. Thus Joint venture com banks have become the heart of the financial system. Their establishment as matter of fact has been a turning point in the history of Nepalese modern banking system. Basically, banks perform the accepting of deposits and granting credit to others for adequate capital formation. The defining characteristic of banks is that most of their investments are loan to business and consumers and lost of their liabilities are account of depositors. As investors, the objective of banks is to try to match the risk of assets to liabilities while earning a profitable spread between the lending and borrowing rates (*Bodie, Kane and Marcus, 2005*).

It is undoubtedly true that the com banks are already playing as increasingly dynamic and vital role in the economic development of the country. The role of com banks in economy is obviously prime requisite in the formulation of banks policy. A key factor in the development of the country is the mobilization of domestic resources and their investment for productive use to the various sectors. To make it more effective com banks formulate sound investment and lending policies, which eventually contribute to the economic growth of a country. The sound investment and lending policy helps com banks maximize quality and quantity of investment and

there by, achieve the own objective of profit maximization and social welfare. The banking sector has to play development role to boost the economy by adopting the growth oriented investment policy and building up to the financial structure for future economic development. Formulation of sound investment policy and coordinated and planned efforts pushes forward the forces of economic growth.

Investment analysis consists of the totality of investment plans, programs, environment, constraints, structures, opportunities, performances, alternatives etc. thus, investment policy related with management of investment made and invest to be made. Investments makers like banks are ever forced for the proper management of investment. Because, without investment, more deposit can't be collected and as well as collected deposits can't be utilized without efficient investment. Banks and other financial institutions, invest the funds, which are collected as deposits and moreover, sometimes they can create credit more than the deposit. So, the investment policy of banks and other financial institutions should be analyzed for successful running of such institutions. In simple view, the banks, which are able to make more investment in productive sector with proper return can, improve themselves than others. So, investment factors play a vital role for successful operation and gaining highly financial rank, among the banks.

Commercial banks, as a financial institution perform a number of internal functions. Among them, providing credit is considered as most important one. In the words of H. D. Crosse, "Commercial banks bring to being the most important ingredient of the creation of credit in the form of loan & advances and investment" (*Crosse, 1963*). Credit being the most important functions of com banks, affect overall development of the country. So far as pace of economic development is considered. It is directly related to the quality and quantity of credit that is derived from various financial institutions especially com banks in Nepal.

Commercial bank act, 2031 has defined com bank in following way:

"Commercial bank means a bank which operates currency exchange transactions, accepts deposits, provide loan and performs dealing relating to commerce and other than those banks which have been specified for the co-operative, agriculture, industry of likely any other specific objective" (*Bank act 2031*). The com banks are established under the com bank Act 2031 in Nepal that has been amended regularly. It has been amended for six times till today.

Banking transactions carried on by any individual or firm engaged in providing financial services to consumers, businesses, or government enterprises. In the broadest sense, a bank is a financial intermediary that performs one or more functions i.e. accepts deposit, granting loan, credit creation, exchange of foreign currency, transfer

of fund, facility of remittance and overdraft. These services are provided by financial institutions such as, com banks, central banks, savings institutions, trust companies, finance companies, life insurance companies, and firms that specialize in investment banking.

2.3 REVIEW OF SOUND INVESTMENT DECISION

Investment is the means to earn for the banks. If the banks invest more funds in productive sector, it will generate higher income. So, executive always must practice best decision for the investment. Thoughtless manager and return less investment make a bank empty. The profitability created by proper investment behavior or decision accelerated the banks on the top. So, investment decision made by managers, CEO's and directors play a significant role for the banks as well as depositors. Those DMUs should always consider for the effectiveness of investment decision, because, an investment consists of risk as well as return, " higher the risk, higher the return" principle always influences the decision to make. Similarly, the objectives of investment policies, plans are also important. Availability of fund, government rules & regulation, sectors to be invested, investment alternatives, market, regional and political condition etc also influence to make investment decision.

In brief, some important considerations to be adopted by commercial banks for sound investment decisions are shortly explained below:

I. Liquidity

Liquidity influences the investment policy of banks. Here, the liquidity with investment relates with timely diversion of a security against the lending, into current assets like cash. So, the bank must invest the funds in such securities or alternatives that deserve more liquidity. Similarly, the bank must not invest all collected fund to others, so that the depositors can withdraw their fund from a banks account, currently without late. The term liquid asset is used to describe money and assets that are readily convertible into money. Different assets may be said to exhibit different degrees of liquidity. Money itself is, by definition, the most liquid assets; other assets have varying degree of liquidity, depending on the ease with which they can be turned into cash. For assets other than money, liquidity has two dimensions: 1. The time necessary to convert the assets into money 2. The degree of certainty associated with the conversion ratio, or price, realized for the assets. Although most assets have a degree of liquidity, we shall focus on the most liquid assets of the firm cash and marketable securities

II. Safety and security

As we all know that the public deposits their money at financial institutions. So that the financial institutions should never forget that the funds, which are going to

invest in various sectors is borrowed from depositors on various account. Safety from probable risks must be considered for an investment decision-making. Market risks, price risks, geographical risks, political risks and managerial risks etc always direct the investors to invest. So, proper security mechanism for investment must be cared out for fighting with such risks. The banks must, always, invest the funds in such alternatives, which contain safety and security. While, investing in different sectors, the risk and return must be analyzed thoroughly. The bank should invest in only those securities, which are commercial, durable and high market valued securities.

III. Profitability

Generally, the profit of bank depends upon the interest rate, volume of loan, tie period of loan and nature of investment in various sectors. So the bank must invest their funds, which generates maximum profit. If the banks are able to maximize the profit the shareholders will be happy because all the profit has been given to shareholders in the form of dividend. A good bank is one who invests most of its funds in different earning assets standing safely from the problem of liquidity i.e. keeping cash reserves to meet day-to-day requirements of the depositors.

IV. Investment Horizon

The length of time to invest and get return is another important consideration for investment decision. The investment horizon affects not only the return and risk characteristic of investment alternatives, but also frequently the tax- consequences associated with the return.

V. Legality

Generally, the state makes various rules and regulations, under which the commercial banks are established, operated. Investment policy made by state or central bank etc always must be considered while investing. Prior sectors, interest rates, administrative laws, rules and regulations, directions stated by government are always be considered Illegal securities will bring out many problems for the investors.

VI. Diversification (portfolio)

Diversification theory of investment also influences investment decision-making. In modern investment concept, portfolio theory helps banks or other investors to minimize such risk and maximize the return. They have to diversify it's investment in various sectors to minimize the risk. If the bank bears loss from one sector other will recover that loss. Diversification of loan should be based on the large number of borrowing customers may benefit from the banker fund. Diversification of loan helps to sustain loss according to the law of average because if securities of a company

deprived, there may be appreciation in the securities of other companies. In this way, loss can be recovered.

VII. Adoption of "STAM"

Here stability, transferability, ascertainable, marketable (STAM) principle plays a significant role in investment decision. A bank should invest its fund in such investment alternatives, which contain stability in price (no more depreciation), can be transferred one to other, deserves certainty and can be brought in market for buy -sale purpose.

Similarly suitability, purpose of investment, process of investment etc are considerations.

2.4 INVESTMENT MANAGEMENT FUNCTIONS

Making investment decision is not easy. The total management of investment consist investment decision too. Several steps, processes should be followed for proper decision. The systematic and realistic investment decision needs the following processes: (*Francis, 1998*).

I. Setting Investment Objectives

The major investment objective is to maximize the earning through investing. For so, the investing sectors, risks, returns etc should be analyzed. As a profit making organization, banks has always set investment objective so as to earn more.

II. Security Analysis

Security accepted, secures the investment to recover. Security with higher liquidity is always advantageous for banks as investors. Similarly, adequate security against each investment must be kept for best investment management.

III. Construction of Portfolio and Revision

Portfolio concepts helps to diversify the investment among investment alternatives, in such a way that to minimize the inevitable risk and maximize the return. So, the bank as an investor must analyze the alternatives of investment, so that various sectors can be invested timely, so as to maximize profit.

IV. Evaluation of Investment

Evaluation of investment, made in past, are always guidelines for future stepping. So, the decision concerned with investment alternatives, risk return, the banks should consider portfolio etc. The determination of actual performance from a

portfolio in terms of risk, return alternatives etc are major factors to make another investment decision.

2.5 OVERVIEW ON INVESTMENT ALTERNATIVES

There are various alternatives for the banks to invest on, as per the books one as follows:

Table No. 1
Overview on Investment Alternatives

S. N	Investment alternatives	Varieties of Investment Alternative
1.	Equity securities	a. Common stock b. Preferred stock
2.	Short term securities	a. Negotiable certificates of deposits b. Commercial papers c. Treasury bills d. Acceptances
3.	Long term securities	a. Government securities i. Treasury notes ii. Treasury bonds iii. Saving bonds b. Agency securities c. Corporate bonds d. Municipal securities
4.	Hybrid securities	a. Convertible preferred stock b. Convertible bonds
5.	Derivative securities	a. Options b. Right current others
6.	Real assets	a. Precious metal b. Real estate c. Collectibles
7.	International investment	a. Multinational corporations b. Foreign stocks c. Others
8.	Other investment alternatives	a. Pension funds b. Mutual funds c. Others

Source: NRB Publication, 2006

2.6 SOME IMPORTANT TERMS

I. Deposits

Deposit denotes the amount deposited in a current, saving and fixed account of bank or financial institution. Deposit is the major source of fund that a bank usually uses to generate the earnings. Therefore, the competence of the banks depends on its capability to attract deposits. Deposit being the rented amount from the depositors or from general public. It constitutes the liability of bank. The management of the bank is always influencing it through deliberate policy action. The deposits of a bank are affected by various factors.

II. Loan and Advances

Loan & advances and overdraft are the main source of income and most profitable assets to a bank, bank deposits can be crossed beyond a desired level but the level of loans and advances and overdraft will never cross it Every bank is always willing to lend as more as possible, since they constitute the larger part or revenue. But bank has to be more careful while providing loans and advances because they may not be realized at short period of time and sometimes they may turn into bad debts. Therefore, it is not sensible to take risk on them at the time of emergency for all banks a commercial bank hardly lends money for a long period of time. It lends money for a short period of time, which can be collected within short time. The commercial banks are never bounded to provide long-term loan because it has to synchronize the loans and advances the nature of deposits they receive. Loans and advances are provided against the security of the immovable properties. Banks offer the loans in the various forms: Overdraft, cash credit, direct loans and discounting bills of exchange.

III. Investment on Government Securities

Commercial banks can earn interest from the investment on government securities. It is not the major source of income. It is treated as a secondary source of banking business. A commercial bank may extend credit by purchasing government securities, bond and shares for several reasons.

- a. These are the highly marketable securities. If a bank needs liquidity immediately, it can convert into cash.
- b. Bank can fulfill its burden of expected withdrawals by depositors or large loan demands of its customers.
- c. It may also be forced to invest because the demands for loans has decreased or is not sufficient to absorb its excess reserves.

IV. Investment on Other Companies Shares and Debentures

Commercial banks also invest their excess funds to the shares and debentures of other company. They generally do so when there are excess funds than required and there is no alternative opportunity to make investment in the profitable sector. Now a day the commercial banks of Nepal have purchased shares and debentures of regional development bank and other development bank etc.

V. Bond

A bond is the source of long term financing issued by an organization in written form under which the organization or the borrowers agree to pay principal and interest to the lenders or specific date. It may be secured i.e. mortgage bond with fixed assets pledged as securities unsecured like debenture bond.

VI. Securities

These are the main source of long term financing. They consist of shares and debentures issued by government or any company. This may or may not be redeemable, with interest in future.

VII. Other Use of Funds

Commercial bank must maintain the bank balance with the central bank of the nation. Similarly they have to maintain the cash balance in local currency in the vault of the bank. Again some part of the fund has to be used for the bank balance in foreign bank.

VIII. Off Balance Sheet Activities

Off balance sheet activities involve contracts for future purchase or sale of assets and all their activities are contingent obligations. These activities are not recognized as asset and liabilities balance sheet. They are LC guarantee, commission, bills for collection etc. These activities are very important, as they are the good source of profit to the bank, through they have risk. Now a day some economists and financial specialists to expand the modern transaction of a bank stressfully highlight such activities.

2.7 AN OVERVIEW ON NRB RULES REGARDING INVESTMENT OF A COMMERCIAL BANK

Nepal Rastra Bank established in 2013 B.S is the central bank of Nepal. It's determining role in economic plans and implementation in the country is major. The main objective of the Nepal Rastra Bank is to manage the economic financial

transaction over the country. Systematical allocation management and implementation of economic factors over the state is governed by Nepal Rastra Bank, as a central bank. All the economic plans, programs, policies, strategies, implementations, evaluation made by government are performed under the direction of NRB. So, NRB is bank of government, works for the welfare of nation. Similarly, NRB directs the banks and other financial institutions too. Plans, policies, direction rules, regulations from NRB are major subject to run the commercial banks. Every step of the commercial banks is always observed by NRB, as a representative of the Nepalese government. To allocate and mobilize the deposits collected by commercial banks in different sectors of the different areas of the nation, the NRB as a central bank, formulates fundamental rules, regulations, directives, policies etc. in fact, NRB controls over the overall activities made by the commercial banks, as well as, establishment or operation or dissolution of banks. For so NRB has formulated commercial banks Act 2031 for the establishment and operation of commercial banks. Here, the directions, rules, regulations, directed by NRB in terms of investment by commercial banks are briefly mentioned below (*NRB rules, 2061*).

I. Investment on Priority Sector

NRB has pointed priority sector as agriculture sector, cottage and small industry sector, service oriented sector, cooperative sector etc, in which the commercial bank must invest 12% of their total deposits. This provision is totally based on the objective for uplifting lifestyle of people in remote and village area.

II. Direction for Raising Fund

The commercial banks are directed to raise the capital fund at minimum level of Rs 500 million. For this, commercial banks can include paid up capital and reserve deduction net loss for meeting such requirement.

III. Directive for Single Borrower Credit

NRB has barred the single borrower credit limit as 35% in the case of fund based credit and 50 % in the case of non fund based credit, such as letter of credit, acceptance letter etc.

IV. Credit for Shareholders

The individual or group, who holds more than 1% of shares of the commercial bank, can't borrow from same bank, under the directions from NRB-2061/62 B.S.

V. Fluctuation in Interest

The agreement can be made between bank and customers for making change in bank loan interest rate up to maximum limit of 0.5% is now cancelled by NRB, to be effective from 2061/62 B.S.

2.8 RISK AFFECTION ON INVESTMENT POLICY

As already known that, every investment contains some how degree of risk in return of benefits. Sometimes the investor faces big volume of risk with high volume of loss. Risks are uncertainties, which make return from investment changed. Some noticeable risks are as follows.

I. Interest Rate Risk

Interest is the return for certain amount borrowed presently but repaid in future. Interest rate risk is the potential fluctuations in return caused affect the market make the interest changed. This type of risk is depends upon demand and supply of investment in market.

II. Purchasing Power Risk

Purchasing power relates with monetary capacity. It variability in purchasing power occurs, the investor the banks are forced to do more investment for needy returns for their existence. Purchasing power risk is cause of inflation in market.

III. Management Risk

The commercial bank has been facing management risk too, since by themselves as well as the management of policy-makers. Poor decision making leads such kinds of risk. Errors made by bad managers definitely affect investment policy.

IV. Liquidity Risk

Liquidity refers the discounts and commission given to other for converting the high priced assets ion lower price due to market factors. Basically the banks accept certain security for loan and the value of security also keeps changing time by time. The changing in the value of security as liquidity risk.

V. Default Risk

Default risk is inevitable risk, which can't be ignored, whether the banks is in liquidation or in improvement position. This is the variability in return for investment made.

VI. Callability Risk

Bonds and preferred stock are one of alternatives of investment. Nepalese bank has also invested in these types of stocks, bonds. The call ability risk is concerned with the time of bonds and preferred stock with provision that allows the issues or investors or banks to call them in for repurchase. The banks some time repurchase the already sold stock using the fund from new issues. Such kind of transaction may lead call ability risk.

VII. Convertibility Risk

This is the risk while converting the bonds and preferred stock into common stocks. Convertibility risk is variability in return, if conversions are made.

VIII. Political Risk

Political affects every thing. Political systems have in Nepal changes the total policy of government. The governments, managers, directors are always secured influenced by ruling party decision. Thus the variability in benefit cause of band, jam, strikes, new appointments, school of political party etc is political risk, which has been a headache for all commercial banks in Nepal, there are two types of political risk as domestic risk and international risk.

IX. Industry Risk

This risk is considered as average risk. an industry is the group of companies with other competition. Lifecycle of industry, international tariffs, quotas, tax provision, union problems, availability of resources etc create industrial risk.

The all above mentioned risks exist in Nepalese financial markets.

2.9 REVIEW OF BOOKS

Investment management is crucial part for all the banks and financial institutions. Banking activities regarding to investment, directly influence other transactions of the bank too. Different authors of books have defined investment in various ways. But, there is no actual definition of the investment policy in any books. Thus this researcher has made self-expression about investment policy, under the basis of following definitions, given by the writers, in view of investment.

Jones (1991) has defined that "Investment is the commitment of funds to one or more assets that will be held over some future time period. Investment is concerned with the management of an investors' wealth. Which is the sum of current income and present value of all income?"

According to Crosse (1963), "Lending is the essence of commercial banking consequently the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management will conceive lending policies and careful lending practice are essential. If a bank performs its credit creating function effectively and minimize the risk in any extension of credit."

Similarly, as **Francis (1998)** defined "An investment is a commitment of money that is expected to generate additional money. Every investment entails some degree of risk. It requires a present certain sacrifice for future uncertain benefit." Likewise, "Concept of investment concerns with mobilization of money for extra earning in future". He further tells, "There is always some risk to gain each benefit"

Sharpe, Gordon & Bailey (2002), in their book "Investments". They had defined investment in this way "Investment means the sacrifice of current dollars for future dollars. Two different attributes are generally involved: time and risk. The sacrifice takes place in the present and is certain. The reward comes later, it at all and the magnitude is generally uncertain. In some cases the element of time predominates (for example, government bond). In other cases risk is the dominant attribute (for example, call option on common stock). In yet both time and risk are important."

Cheney and Moses (1973), in their opinion, "The objective of investment is to increase the individual wealth, defined as asset minus liabilities. The higher level of desired wealth the higher must be received. If an investor wants higher return, he must be willing to face higher risk."

According to **Bhalla (2004)**, in his book "Investment management: security analysis and portfolio management" has given the basic concept in three points.

- A. Economic investment - that is an economic definition of investment.
- B. Investment in a more general or extended sense which is used by the man in the street.
- C. The sense in which we are going to be very much interested namely financial investment.

"Banks are those financial institutions, which accept deposit from the depositors or public and in turn provide credit in various sectors." These types of investment plays crucial role on the economic development of a country. To collect fund and utilize it in good investment is very risky job. Ad-hoc investment decision leads the bank out of the business there by downing the economic growth of a country. Hence sound investment policy of a bank is another secret of a successful

bank. Various people have given their view regarding the investment policy of commercial banks, which has been written below.

Gupta (1999) has defined investments as, "Investments are assets held by equity for earning income by way of dividends, interests and rentals, for capital appreciation, or for benefits to the investing entity". According to Gupta, as above definition, he has focused an investment as an asset, which is held in various forms to gain dividend, interest, rentals for maximizing capital

Gupta (1991) defined in this way; "Investment is the employment of funds with aim of achieving additional income or growth in value. The essential quality of an investment is that it involves "waiting" for a reward. It involves the commitment of resources, which have been saved or put away from current consumption in the hope that some benefits will accrue in future."

In this way it is clear that an investment means to trade a known rupee amount today for some expected future stream of payments or benefits that will exceed the current outlay by an amount that will exceed the current outlay by an amount that will compensate the investors for the time the funds are committed for the expected changes of prices during the period and for the uncertainty involved in future cash flow. Thus investment is the most important function of the banks. It is long term commitment of banks in the uncertain and risk atmosphere. It is very challenging task for any banks. So a bank has to consider various precautionary steps while investing their funds in various sectors.

2.10 REVIEW OF RELEVANT STUDIES

Many researchers have conducted their research on the field Commercial Banks especially on their financial performance, and fund mobilization policy, compliance with NRB directives etc. Besides this, there are some books, articles deservations and other relevant study concerned with the Lending and Investment. Some of the relevant studies, their objectives, findings and conclusions and other literature relating to the topic have been reviewed below.

2.10.1 REVIEW OF ARTICLES

Investment policy is determinant factor for the successful existence of every bank. In the Nepalese context, modern concept and practice of investment is now to come. The decision-making units (DMUs) are steel applying traditional way of investments. Some of the multinational companies, joint venture banks are now starting to invest in modern as well as globalize view. For this study, some of the reports, articles World Bank discussion papers, magazines, newspapers etc are analyzed.

In **Meschi(2005)** study in journal of international business studies, he explains that the increasing number of joint ventures all over the world attests to the success of these organization entities. The potential advantage of joint ventures is widely recognized: they can improve economies of scope and scale, provide new technologies or competences, shares risk among partners, and facilitate inter organizational learning or give access to new markets or countries. "An equity joint ventures if formed "whenever two or more sponsors bring given assets to an independent legal entity and are paid for some or all of their contribution from the profits earned by the entity.

He Concludes That

First, the objective of this study was to assess and develop greater understanding of stock market reactions to joint ventures sell- offs. More specifically, a comparison between market reaction to joint ventures sell-off Vs market reactions to ordinary assets sales was made, second, this research sought to establish whether the reasons for sell-offs could be a determinant of the stock market valuation of the partner that sells its joint venture stake. In order to provide a theoretical framework within which to examine this question, these articles drew on the resource-based approach. Since this method offers an appropriate theory to explain why firms create joint ventures, we chose to adopt the same theory to examine why firms terminate them and also to assess the performance implications of partner's sell-off. In applying this approach to partner's sell-offs, this study finds that partners who sell their stake in a joint ventures lose the possibility of potential future benefits resulting from exploitation of Dermot or extra resource and potential learning of new expertise. The resource base view was also used to analyze how the reasons for joint ventures sell-offs affect the stock market valuation of the selling partners.

A report made by **Shrestha (1998)**, deputy chief officer of NRB, banking operation department, has concluded some specific analysis on the report " portfolio management in commercial bank, theory-practice" He has emphasized on important

of portfolio management with regards to investment behavior adopted by Nepalese banks and financial institutions. He further directs for the application and practice of portfolio management leads the economic up liftment of banks as well as individuals. Some of his conclusion for the proper investment behavior given here:

- i. Higher return comparable with investment alternative opportunities available according to the risk class of investors.
- ii. Good liquidity with adequate safety of investment.
- iii. Certain capital gains.
- iv. Flexible investments
- v. Maximum tax concession
- vi. Economic, efficient and effective investment mix.

According to Mr. Shrestha the above considerations are most useful for an effective decision. Similarly, for successful investments, he has concluded some strategies.

- i. Do not hold single security: do not rely on single investment alternative. Try to have a portfolio of different securities.
- ii. Have a diversified investment, make investment in different sectors.
- iii. Always select such combination or mix of investment alternatives, which consist of minimum but maximum profit as well.

Like wise, the approaches to adopt for beneficial investment portfolio management, pointed by Mr. Shrestha are:

- i. Find the information's about the securities and analyzes them like age of security, physiologic condition, need, liquidity, maturity, fax aspects etc.
- ii. Analysis the altitude of investors about risks.
- iii. Identity the investment and risk from the investment

As the conclusion, he further points that, the application of modern concept of investment portfolio management is like bit preferred be Nepalese commercial banks. For the best operation of Nepalese banks he has determined some specific guidelines to adopt in his own words are:

- i. The survival of banks depends upon its own financial health and other activities
- ii. In order to develop and expand the portfolio management activated successfully the manager should practice the proper investment management methodology.
- iii. The operating banks in Nepal should adopt portfolio management activities for the increment of their income as well as to enrich the customer's life style for the overall development of nation.

- iv. For the proper management of investment portfolio, the banks should have capable as well as trained manpower for investment decision-making.

Pradhan (1994) in his research, "Financial management Practices in Nepal" has studied about the major features of financial management practices in Nepal. To address his issue, a survey of 78 enterprises was carried out by distributing a multiple questionnaire that question contained on various aspects.

He found that the several finance functions, the most important finance function appeared to be working capital management. While, the least important one is appeared to be maintained good relations with stockholders. The findings reveal that banks and retained earnings are the two most widely used financing sources. Most enterprises do not borrow from one bank only and they do switch between banks to which ever offers best interest rates. Most enterprises find that banks are flexible in interest rates and covenants. He further found that among the bank loans, bank loans of less than one year are more popular in public sector where as bank loans of 1-5 years are more popular in private sectors. In periods of tight money, the majority of private sectors enterprises fell that bank will treat all firms equally while public sector does not feel so. Similarly, he concluded that the majority of enterprises in traded sector find that banks, interest rate is just right while the majority in non-traded sector find that the same is one higher side.

Bajrachara (1990) in his article, " Monetary policy & deposit mobilization in Nepal" concludes that the mobilization of domestic saving is one of the prime objectives of the monetary policy in Nepal and for this purpose commercial banks are the active financial intermediary for generating resources in the form of deposit of the private sector and providing credit to the investors indifferent sector of economy.

Morris (1990) in his discussion paper, "Latin Americas banking system in the 1980s" has concluded that most of the banks concentrated on compliance with central bank rules on reserve requirements, credit allocation and interest rates. While analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked. The huge losses now found in the banks 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 over optimistic loan appraisal, tax loan recovery, high risk diversification of lending and investment, high risk concentration, connected and insider lending, loan mismatching. This has led many banks of developing countries to the failure in 1980s.

Similarly, **Bista (2001)** in his research paper, "Nepal Adhunik Banking Byabastha" has made an attempt to highlight some of the important indicators, which have contributed to the efficiency and performance of Joint Venture Banks in the field of commercial banks. At the end of the paper he has concluded that the establishment of Joint Venture Banks a decade ago marks beginning of modern banking era in Nepal. The joint venture banks have brought in many new banking techniques such as computerization, hypothecation, consortium finance and modern fee based activities into the economy. These are indeed significant milestone in the financial development process to the economy.

Likewise, **Pyakuryal (1987)** in his article, "workshop on banking and national development" writes the present changing context of the economic 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 resource sin an efficient manner. There fore the task of utilization of resources is as much crucial as the mobilization. The under utilization of resources not only results not only results in loss of on come but also further to discourage the collection of deposits.

In the same way, **Kishi (1996)** in his article, "the changing face of the banking sector and the Nepalese government budgetary policy" has pointed that the banking sectors are important institutions for economic liberalization. The banking operation in Nepal is gradually stepping to the well-equipped management. Similarly government owned banks Nepal bank limited and Rastriya Banijya Bank are ready to come under globalization technique to operate them successfully. However, higher economic growth with social justice bringing a significant benefit to poor are yet to be achieved as envisaged by the Nepalese government.

2.10.2 REVIEW OF DISSERTATIONS

As the special guidelines are needed for this study, the researcher of this study has made a quick to several theses with view to gather knowledge part for a goal oriented and successful thesis to prepare. This researcher has found theses uniform to this form TU, NCC library, some of them are analyzed as given below.

a. A thesis made by Gautam(2000)

In her thesis entitled "investment analysis of the finance companies in context of Nepal" and conclude that every few finance companies have aggregate investment strategy as compared to most of the following conservative strategy. The main part of their lending was on customer, durable through hire purchase and housing financing. She has recommended a series of reforms such as consolidation of finance companies

good relationship between finance companies and commercial banks directing attention to venture capital financing appropriate risk and return trade off by linking credit to timely repayment schedule avoiding imperfections, allowing flexibility in lending, one window service from NRB, diversify scope of activities to see for finance companies, professional culture within finance companies are necessary to ensure better performance of the companies.

b. A thesis made by Regmi (2001)

The study entitled "A comparative study of the financial performance of Himalayan bank Ltd and Nepal Bangladesh bank Ltd ". The researcher's main objective is to examine the financial position of these banks and to analyze the comparative financial position. Through his research Mr. Regmi has found that the current assets of HBL are adequate to meet the current liabilities where as it is sufficient for NBBL. Further as per his study long term debt to net worth ratio is higher in NBBL than in HBL but both banks are following an aggressive strategy of higher than that of HBL during the study period. This refers that NBBL is always capable more to meet any windfall. According to his research both banks are utilizing their deposits fund through loan and advances to generate revenue efficiently but comparatively NBBL is doing more efficiently than HBL.

Mr. Regmi has also stated that HBL has better utilization of resources in short term investment and NBBL has more non earning idle assets as cash and bank balance and profitability position of HBL is better than that of NBBL. HBL has higher net profit to working fund ratio. Newt profit to total deposits ratio and return to newt worth is also higher than NBBL. But interest earned to working fund ratio for NBBL is higher and it has also the higher interest paid to working fund ratio. Earning per share, dividend per share, dividend pay out ratios are higher in HBL than NBBL. Price earning ratio of NBBL is higher than HBL. Ha has found that average operating income from interest and commission and discount are higher in HBL, where as foreign exchange fluctuation gain and other income are higher in NBBL

c. A thesis made by Thapa (2001)

She has conducted her study entitled. "A comparative study on investment policy of NBBL and other joint venture banks (NABIL and NGBL).the main objective of the study was to evaluate the liquidity, assets management, profitability and risk position of NBBL in comparison to NABIL and NGBL and to examine the fund mobilization and investment policy of NBBL through off- balance sheet and on-balance sheet activities in comparison to other two joint venture banks.

The researchers found that the liquidity position of NBBL is comparatively better than the NABIL and NGBL. The liquidity ratios are moderately fluctuating which means the bank has not properly formulated stable policy. As per her study NBBL is not in better position regarding its on balance sheet as well as off balance sheet activities in compare NABIL and NGBL and it does not seem to follow any definite position regarding the management of its assets. The profitability position of NBBL is comparatively worse than that of NABIL and NGBL. The mean credit risk ratio of NBBL is higher and more variable than other. The mean interest risk ratio of NBBL is slightly higher than NGBL and lower than NABIL and has mentioned lowest capital risk ratio. The researcher has stated that NBBL has maintained higher growth rates on comparison to other banks though it is not successful in increasing to make enough investment and NBBL is successful in increasing its sources of funds and its mobilization. The researcher has shown that there is significant relationship between deposits, loan & advances and outside assets and net profit if NBBL, NABIL and NGBL but there is no significant relationship between deposit and investment of NBBL only. The researcher has concluded that the position of NBBL in regards to utilization of its funds to earn profit is not better in compare to NABIL and NGBL and NBBL has collected fund in comparatively higher cost and is paying 6% - 7.5% interest in various deposits. Further NBBL does not seem to have adequate recovery rate.

d. A thesis made by Udas (2001)

He has conducted his study entitled "A comparative appraisal on financial performance of Nepal Bangladesh bank and Bank of Kathmandu Ltd". The researcher's main objective was to examine the financial performance of BOK and NBBL for five years period and to show the causes of changes in cash position of the two banks at two-balance date. Through has research Mr. Udas has found that both banks were maintaining sufficient amount of cash to meet the demand by the customers. BOK has a higher portion of cash and banks balance out of its current assets compared to NBBL. BOK has greater variability in over all liquidity ratios. As per the researcher NBBL is in better position in terms of utilizing customers deposit in the form of loan and advances. Both of these banks are utilizing their deposits funds through loan and advances but comparatively, NBBL is more efficiently than BOK.

Further as per study the profitability position of NBBL is far better than that of BOK and is in increasing trend. BOK is suffering losses in three fiscal years, showing its operational deficiencies in mobilizing the resources in productive sectors. He has concluded that the both banks were found to be extremely levered over the study periods, as the ratio was very high in both banks. However the ratio was found to be much higher in BOK than in NBBL which indicates that BOK may be paying more interest to its creditors than that NBBL. The earning per share was found to be always higher in case of NBBL than BOK as the BOK was suffering losses in three fiscal

years and NBBL was increasing its net profit at from the inception. Dividend pay out ratio of NBBL was found to be decreasing over the study period.

e. A thesis made by Lamichhane (2004)

The thesis entitled "Investment policy of joint venture banks in Nepal" is relevant proposal for this research. The researcher's main objective was to study the fund mobilization and investment policy with respect to fee based off balance sheet transactions.

He has carried out for findings that proper investment activities by joint venture banks in Nepal are performed or not. Mr. Lamichhane has found that financial position due to proper investment programmers of NABIL in higher than other JVBs. He also concluded that there is no significant relationship between deposits and total investment in case of NABIL with comparison to other JVBs, due to effective investment policy. He further recommended that before mobilizing fund well, the commercial bank must collect large amount of deposits for more investments. The JVBs must mobilize the funds in different sectors such as purchase share and debentures of the financial or non-financial companies as well as government securities. He pointed that of course; the commercial banks are playing a vital role but not as neat merchant bank. He further advised to the JVBs to keep eyes and mind over open on portfolio management practically. To get the success in banking business, every manager should consider on proper utilization and mobilization of depositors deposits effectively and efficiently.

f. A thesis made by Shrestha (2004)

The subject of the thesis is "The investment practices of joint venture banks in Nepal with special reference to Nabil Bank Limited, Standard Chartered Bank Nepal Limited and Nepal SBI Bank Limited" has figured out the problem, conclusion and recommendation as follows:

Commercial Banks are more emphasized to be making loan on short-term basis against movable merchandise. Commercial Banks have a lot of deposits but very little Investment Opportunity. They are even discouraging people by offering very low interest rate and minimum threshold balances. Commercial Bank invests their funds in limited areas to achieve higher amount of profit. This regarded as a very risky step, which may lead to lose in profit as well as principle. The credit extended by commercial Banks to agriculture and industrial sector is not satisfactory to meet the growing need of the present say.

He has concluded that since the liquidity position of Nabil and SCBNL have not found satisfactory, it is, therefore, suggested them to improve cash and bank balance to meet current obligations. SCBNL's Loans and Advances to total deposit ratio is lower at all, it is recommended to follow liberal lending policy for enhancement of fund mobilization. It is recommend to Nepal SBI bank that it have to invest its fund on share and debentures of other companies. It is suggested to enhance off balance sheet transactions, diversifying their investments, open new branches, play merchant banking role and invest their risky assets and shareholder's fund to gain higher profit margin.

The function of capital in banks and other financial institutions is substantially different from that in most other business enterprises. For example, in a manufacturing concern, the capital fund is used primarily for acquisition of fixed assets, while in a banking organization the function of capital is primarily to provide a guarantee fund, its usage in fixed assets acquisition is hardly more than 15 percent (and it should never be more than 20 percent). Capital performs a guarantee function in other enterprises too, but not so predominantly, the capital of manufacturing concern is something's of cushion for long and short-term creditors to fall back on, but this is only one its purpose. Bank capital has almost no other purpose. "Of course, one of the primary functions of development in banking is deposit mobilization. Without deposits coming as they do from the public and the saver banks will not have the resources to lend. With adequate resources, lending can have wider average to meet the credit needs of all the sectors of the economy. Deposits and credit operation always go together and each is interconnected. Unless there are advances, deposits cannot arise.

g. A thesis made by Lamichhane (2005)

A comparative study of agriculture development Bank with other relevant literatures for this proposal research. The researcher's main objectives of study was to study analyze investment policy of agriculture development bank of Nepal in comparison to Nepal Bangladesh band Ltd and Himalayan bank Ltd and to identify the investment priority sectors and also to analyze and evaluate the financial position of the banks.

Through her research Miss Lamichhane has found that the liquidity position of ADB is comparatively better than that of HBL and NBBL. The asset management of ADB is good enough as compared to that of HBL and NBBL. ADB has invented the lowest proportion of total working fund on the governmental securities as compared to that of HBI and NBBL. The interest earned to total operating income ratio of the highest in ADB among the three banks. The degree of risk is high in ADB. The trend of the total deposit, total loan an advances and total investment of ADB shows better position of

ADB than of HBL and NBL. However the most important fact is that the trend of net profit of ADB shows a negative.

She recommended that profit is a very important for the survival and stability of any organization. So ADB should look for other areas of investment with higher return and lower so that it can earn a return sufficient enough for its survival, stability and long term sustainability. The study reveals that ADB has not adopted any cost management strategy to the have control over its cost of funding. Higher interest paid to working fund higher loan loss ratio, high administrative cost and some of the reasons behind less profitability of the bank. So ADB should try to adopt cost management strategy by applying standard costing value analysis and value added statement and sound capital structure.

2.11 RESEARCH GAP

Keeping in view the fact that there is no comparative study on investment Policy of Standard Chartered Bank Nepal Limited and Himalayan Bank Limited. The previous researchers have done investigation about the investment policy of other different banks. The concerned banks are the leading joint venture banks of the country having huge market share and their investment activities and significant impact on the national economy. The above-mentioned works deal on gross concept only. To get more accuracy in result, this study has been conducted to focus on both gross and net concept. The researcher has covered five fixed years (2003/04 to 2007/08) to analyze the liquidity position, profitability position, assets management position as well as risk position also of the concerned banks. This study examines recent secondary financial data using coefficient of correlation, regression analysis and trend analysis and hypothesis test. The researcher chooses this subject to throw light on investment analysis and to suggest the possible measures for the betterment and welfare of the bank. Also researcher attempts to show the significance to the shareholders, depositors, customers and general public etc.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The research methodology is the systematic way of solving research problem. Research methodology refers to the overall research processes, which a researcher conducts during his/her study. It includes all the procedures from theoretical underpinning to the collection and analysis of the data. Research is systematic and organized effort to investigate a specific problem that needs a solution (Sekaran, 1992). This process of investigation involves a series of well thought out activities of gathering, recording, analyzing and interpreting the data with the purpose of finding answer to the problem. Thus the entire process by which we attempt to solve problems is called research. Research can be conducted on the basis of primary and secondary data. Here is the study all the data are secondary and the observed data is analyzed with using appropriate financial and statistical tools.

In this research, the research design, population and sample, nature and sources of data and data analysis tools are described serially.

3.2 RESEARCH DESIGN

The formidable problem that follows the task of defining the research problem is the preparation of the design of the research project, popularly known as the "research design". Research design can define as the plan, structure and strategy of investigation concerned so as to obtain to answer to questions and design his research in many different ways. This research is based on secondary data of five year period. How ever the collected data is analyzed with financial as well as statistical tools and interpreted.

The research design is more descriptive and analytical. Annual reports and financial statements published by related banks and other necessary information were collected form the concerned banks. The study period covers five years accordingly data were collected from the year 2003/2004 to year 2007/2008.

3.3 NATURE AND SOURCES OF DATA

The study is based on secondary data. The required data were directly obtained from financial statements, such as balance sheet and profit & loss account of the concerned banks.

The major sources of information collections are as follows:

- Annual reports of related companies and security board of Nepal.
- Financial statistics of listed companies, published by security board of Nepal.
- Journals, Government and Non-government publication other supportive books and mostly websites of the companies.
- Other related published and unpublished documents.
- Other necessary information were collected from various institutions

3.4 DATA ANALYSIS TOOLS

In order to accomplish the objectives of the study some major financial and statistical tools have been used. The analysis will be done according to potterry of available data mainly the analysis will be done by using financial and statistical tools and techniques

The relation between different variables related to study topic will be done out using financial and statistical tools. The various calculated results obtain through these analysis are tabulated. They are comparing with each other to interpret the results; here regression analysis has been used to study the influence of independent variables on dependent variables. It helps in studying the effect and magnitude effect of single independent variables on dependent variables.

The focus of financial analysis is on key figures in the financial statements and the significant relationship that exist between them. The analysis of financial statements is a process of evaluating the relationship between component parts of financial statements to obtain a better understanding the firm's position and performance. Financial analysis is the process of selection, relation and evolution. Financial tools like ratio analysis have been used in this study.

3.4.1 Financial Tools and Techniques

3.4.1.1 Ratio Analysis

Financial ratio analysis is a widely and frequently used tool of financial analysis. It establishes the numerical relationship between the two relevant accounting figures derived from the financial statement/reports in the form of quotient, proportion

or percentages and based on that, an assessment is made about the financial performance and position of an organization. Count less ratios can be formulated from financial statements/reports. A ratio reflecting a quantitative relationship should help to form qualitative judgments. It is possible only when the relationships between two figures are meaningful or some reference can be drawn from such relationship. There are many ratios, only those ratios have been covered which are related to investment operation of the banks. The study contains following ratios.

I. LIQUIDITY RATIOS

Liquidity ratios are the ratios that provide the quick measure of the liquidity position or the ability of the firm to meet its current obligations. In other words, liquidity ratios are the indicator of short-term solvency or financial strength of the firm. It is the measurement of speed with which a banks asset can be converted into cash to meet deposit withdrawal and other current obligations.

A. Current Ratio

Current ratio shows the relationship between current assets and current liabilities. It can be computed by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Current assets include all those assets which are in the form of cash can be converted in to cash in a period of one year. It comprises cash and bank balance, receivables (book debts, bills receivable), inventory or stock, prepaid expenses, marketable securities or short-term investments, short-term loan and advances, accrued income etc. Like wise current liabilities include all obligations maturing within a year and is represented by creditors, bills payable, outstanding expenses, short term loan, bank overdraft, tax payable, dividend payable and long term loan maturing during the year etc.

An organization should have enough current assets that give a promise of cash 'cash to come' to meet its commitment or to pay its current liabilities. Current ratio has a standard measure of 2:1 or that the current assets should be two times or 200% of the total current liabilities.

B. Cash and Bank Balance to Current Assets Ratio

Cash and bank balance are the most liquid current assets. This ratio measures the proportion of the most liquid assets i.e. cash and bank balance among the total

current assets of bank higher ratio shows the banks ability to meet the demand for cash. This ratio is computed by dividing cash and bank balance by current assets.

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

C. Cash and Bank Balance to Total Deposit Ratio

This ratio measures the percentage of most liquid fund with the bank to immediate payment to the depositors. This ratio is computed by dividing cash and bank balance by total deposit. This can be presented as follows.

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

D. Investment on Government Securities to Current Assets Ratio

Most of the firm has invested their fund on government securities. This ratio measures to find out the percentage of current assets invested on government securities (treasury bills, bonds) this ratio is computed by dividing investment securities by current assets.

$$\text{Investment on Government Securities to Current Assets Ratio} = \frac{\text{Investment on government securities}}{\text{Total current assets}}$$

E. Loans and advances to current assets ratio

This ratio shows the relationship between the loans & advances and current assets ratio. The ratio can be computed by dividing loans and advances by current assets. That is given below.

$$\text{Loans and advances to current assets ratio} = \frac{\text{Loans and advances}}{\text{Current assets}}$$

2. ASSETS MANAGEMENT RATIOS

The bank or any firm has to manage the resources in a good way otherwise it's very difficult to run. Assets management ratio measures how efficiency the banks manages the resources at its command. The following ratios are used under this ratio.

A. Loan and Advances to Total Deposit Ratio

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

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

B. Total Investment to Total Deposit Ratio

Investment is one of the most important factors to earn income. This implies the utilization of firm's deposit on investment on government securities and share debenture of other companies and bank. This ratio can be computed by dividing total investment by total deposit. This can be mentioned as

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

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

C. Investment on Government Securities to Total Deposit Ratio

This ratio shows the banks investment on government securities in comparison to the total assets. This ratio is calculated by dividing investment on government securities by total deposit. This can be mentioned as:

$$\begin{aligned} &\text{Investment on Government Securities to Total Deposit Ratio} \\ &= \frac{\text{Investment on government securities}}{\text{Total deposit}} \end{aligned}$$

D. Investment on Shares and Debenture to Total Deposit Ratio

This ratio shows the banks investment in shares and debenture of other companies. This ratio can be derives by dividing investment on shares and debenture by total deposit, which can be mentioned as:

Investment on Shares and Debenture to Total Deposit Ratio

$$= \frac{\text{Investment on shares and debentures}}{\text{Total deposit}}$$

E. Loan Loss Ratio

The control of loan loss is an important facet of bank operation and the bank is greatly concerned to minimize it. A poorly administered loan portfolio usually has significant negative impact on the earnings and capital of the bank. Greater loan loss provision is required to allow in income statement if high loss is expected. This leads to low profit and possible losses that produce low increases or decreases in the capital.

The loan loss ratio (garden and miller) indicates the adequacy of allowance for loan and trend in the collection of loan and the performance in loan portfolio. It is obtained by the ratio of loan loss provision to the total loan. This ratio is defined as the measure of prospective losses that are envisioned by the bank management in relation to the banks overall loan and investment. The negative sign indicates that an increase in the value of the variables is indicative of weakness of the bank.

$$\text{Loan Loss Ratio} = \frac{\text{Total loss provision}}{\text{Total loan and advances}}$$

3. PROFITABILITY RATIOS

The firm should earn profits to survive and grow over the long period of time but not at the cost of employees, customers and society. Obviously, if the firm is not able to make reasonable profits from its operation, it will not run for long time. The profitability ratios are used as a measure to judge the operating efficiency (success or failure) of any firm. Profitability ratios are usually computed by relating it either sales or investment as listed below.

I. Profitability Ratios on the basis of Sales

- i. Gross profit margin
- ii. Net profit margin
- iii. Operating expenses ratio

II. Profitability Ratios on the basis of Investment

A. Return on Loan and Advances

This ratio indicates how efficiency the bank has employed its resources in the form of loan and advances. This ratio is computed by dividing net profit by loan and advances. This can be expressed as follows:

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

B. Return on Total Deposit Ratio

This ratio measures the rate of return earned by the firm as a whole for all its investors. That is why this ratio equals net profit after tax plus interest on debt divided by total assets (exclusive of fictitious assets) are financed by the pool of funds contributed by shareholders and lenders.

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

Higher ratio indicates the higher return on assets or on amount contributed by investors on account of efficiency management of assets or capital.

C. Return on Equity Ratio

In general, common shareholders equity, preference equity and long term loan is used as capital. The firm has to pay preference dividend to preference shareholders and long-term loan is repaid by the profit from the firm. At last the remaining profit is given to the equity shareholders. Equity shareholders have right and control over the firm. They are the actual owner of the firm. This ratio judges the profitability of the firm with reference to the ordinary shareholders or the real stakeholders fund and is computed as:

$$\text{Return on Equity Ratio} = \frac{\text{Net profit}}{\text{Ordinary shareholders equity}}$$

D. Total Interest Earned to Total Deposit Ratio

This ratio shows the percentage of interest earned on total deposit. Higher ratio implies better performance of the bank its terms of interest earning on its total deposit. This ratio can calculate by dividing total interest earned by total deposit. This is expressed as

$$\text{Total Interest Earned to Total Deposit Ratio} = \frac{\text{Total interest earned}}{\text{Total deposit}}$$

E. Total Interest Earned to Total Operating Ratio

This ratio is calculated to find out the position of interest income in total operating income of the bank. It indicates how efficient the bank mobilization of its resources (fund) in interest bearing assets i.e. loan and advances investment etc. this ratio is calculated by dividing interest earned by total operating income. This ratio can be expressed as

$$\text{Total Interest Earned to Total Operating Ratio} = \frac{\text{Total interest earned}}{\text{Total operating income}}$$

F. Total Interest Earned to Total outside Assets Ratio

This ratio measures the interest earning capacity of the bank through the efficient utilization of outside assets. Higher ratio implies efficient use of out side assets to earn interest. This ratio can be computed by dividing total interest earned by total outside assets. This can be expressed as follows.

$$\text{Total Interest Earned to Total outside Assets Ratio} = \frac{\text{Total interest earned}}{\text{Total outside assets}}$$

Total interest earned comprises total interest income from loan and, advances, cash credit and overdrafts, government securities, bank and other investments. Total outside assets includes loan and advances, bills purchased and discounted and all types of investment.

G. Total Interest Paid to Total Deposit Ratio

This ratio measures the percentage of total interest expenses against total deposit. Higher ratio indicates the higher interest expenses on total deposit and vice versa. This ratio can be computed by dividing total interest paid by total deposit. This can be expressed as follows.

$$\text{Total Interest Paid to Total Deposit Ratio} = \frac{\text{Total interest paid}}{\text{Total deposit}}$$

H. Interest Income on Government Securities to Total Interest Income Ratio.

This ratio measures the percentage of income on government securities against total interest income. Higher ratio indicates the higher interest income on government securities over total interest income and vice versa. This ratio can be computed by dividing total interest income of government securities by total interest income earned.

This can be expressed as follows.

$$\text{Interest income on govt. sec. to total interest income} = \frac{\text{Interest income on govt. sec.}}{\text{Total interest income}}$$

I. Income from other investments Total Interest Income Ratio.

This ratio measures the percentage of income on other securities against total interest income. Higher ratio indicates the higher interest income on other securities over total interest income and vice versa. This ratio can be computed by dividing total interest income of other securities by total interest income earned. This can be expressed as follows.

$$\text{Interest on other securities to total interest income} = \frac{\text{Interest on other.sec}}{\text{Total interest income}}$$

4. RISK RATIOS

Risk is involved in every financial institution because a bank must have to take risk to get return; risk taking is involved in process of collecting the funds (sources) as well as in the use of funds (loans, advances and investment on securities). Therefore, one has to have idea of the level of risk that one has to have to bear while decision-making.

In this study, three major important risk ratios were computed and compared among the banks during the span of five years period.

A. Liquidity Risk Ratio

The liquidity risk of a bank refers to a comparison of a banks liquidity need for deposit. The cash and bank balance, in this study are considered as banks liquidity source and deposits as the liquidity needs. In banking funding, loans may be a major liquidity need and purchasing liabilities an important source of liquidity. This relationship is usually an indicator of banks liquidity risk.

The risk in long term security and loan is relatively higher than that of short-term securities and loans. If one shifts to long-term loan or securities from short-term securities, the return of the banks may increase but the risk will increase as well. Therefore, higher liquidity ratio indicates a less risky and less profitable bank. The ratio can be computed as.

$$\text{Liquidity risk ratio} = \frac{\text{Cash and bank balance}}{\text{Total deposits}}$$

B. Credit Risk Ratio

As the fund used in loans and advances increase the credit also increased and so does the returns. In Nepalese context, classification of high quality loans and medium quality loans are not made. According to definition, High quality loan means the loan that gives higher return. But now, Nepalese commercial banks are asked to classify their loans on the basis of direction issued by the central bank as satisfactory, not satisfactory or poor loans. But data based on types of classification is not available so far. The ratio can be computed as.

$$\text{Credit risk ratio} = \frac{\text{Loan and advances}}{\text{Total assets}}$$

5. GROWTH RATIOS

In Nepal, the financial institutions have grown very slowly in terms of numbers of bank branches. With the introduction of foreign banks in Nepal, financial intermediaries' function has been geared up to a significant extent.

The emergence of foreign banks started a few years ago. Although these institutions were originally established to serve entirely trade and commercial sector of the economy, the government now wishes to involve them also in the areas where local banks have been involved. These foreign banks have ever since opened a few branches in some cities and area also planning to open branches in other parts of the country as well. The following growth ratios are calculated to examine and analyzed the expansion and growth of the banks business.

- a. Growth ratio of total deposits.
- b. Growth ratio of loan and advances.
- c. Growth ratio of total investment.
- d. Growth ratio of net profit.

3.4.2 STATISTICAL TOOLS

Statistical tools are also very important tools for the analysis. Some important statistical tools are used in this study to achieve the objectives. Statistical tools such as standard deviation, coefficient of variation, least square linear trend and hypothesis testing have been used. They are as follows.

A. Arithmetic Mean

An average is a single value selected from a group of values to represent them in same way, which is supposed to stand for a whole group of which it is a part, as typical of all the values in the group. Out of various measures of statistical tools, arithmetic mean is one if the useful tools applicable here. It is easy to calculate and understand and based on all observations. Arithmetic mean of a given set of observations is their sum divided by the number of observations. In general, if $X_1, X_2,$ and $X_3 \dots X_n$ are the given observations. Then arithmetic mean usually denoted by \bar{X} is given by,

$$\bar{X} = \frac{X_1 + X_2 + X_3 + \dots + X_n}{n}$$

Where, n = number of observations

B. Standard Deviation

The measurement of the scatter ness of the mass of figures in a series about an average is known as dispersion. The standard deviation measures the absolute dispersion. The greater the amount of dispersion, greater the standard deviation mean of high degree of uniformity of the observation as well as homogeneity of the series a large standard deviation means just the opposite. In this study standard deviation of different ratio are calculated. The following formula is used to calculate.

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

C. Coefficient of Variation

The coefficient of variance is the relative measures of dispersion compare across distribution, which is defined as the ratio if the standard deviation to the mean expressed in percent, it is calculated as

$$C.V. = \frac{S.D.}{Mean} \times 100$$

D. Correlation of Coefficient Analysis

This analysis identifies and interprets the relationship between two or more variable in the case of the highly correlated variables. The effect on one variable may have effect on other correlated variable. Under this topic Karl Pearson's coefficient of correlation has been used to fund out the relationship between the following variable.

- i. Correlation of coefficient between deposits and loan & advances.
- ii. Correlation of coefficient between total deposit and total investments.
- iii. Correlation of coefficient between total deposit and net profit.

- iv. Correlation of coefficient between total working fund and net profit.

The tool analyzes the relationship between these variables and helps the banks to make appropriate policy regarding deposit collection, fund utilization (loan & advances and investment) and maximization of profit.

The following formulae is used to calculate,

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

Where, $x = (X - \bar{X})$ and $y = (Y - \bar{Y})$

E. Regression Analysis

Regression analysis is most power tools of statistics, which being used in the estimation of the strength of the relationship between two variables. Regression is stepping or returning back to the original position. It is a statistical device, with help of which, we can estimate or predict the value of the one variable when the value of other variable is known. The unknown variable, which we have to predict, is called dependent variable and the variable whose value is known is called independent variable. The analysis used to describe the average relationship between two variables is known as simple linear regression analysis. The following subtopic has been analyzed.

- i. Regression analysis between total investment and net profit.
- ii. Regression analysis between total deposit and net profit

F. Trend Analysis

The topic (trend analysis) analyzes the trend of deposits, loan and advances, investment and net profit of three joint venture banks from 2003/2004 to 2007/2008 and makes the forecast for the next five years from 2008/2009 to 2012/2013. The following subtopic has been presented under this topic.

- i. Trend analysis of total deposits.
- ii. Trend analysis of loan and advances.
- iii. Trend analysis of total investment.
- iv. Trend analysis of net profit.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

4.1 DATA PRESENTATION AND ANALYSIS

This is an analytical chapter, where an attempt has been made to analyze and evaluate main financial items, which have an impact on investment management and fund mobilization of SCBNL and HBL. There are many types of financial ratios. In this study those ratios are calculated and analyzed that are important in evaluating the fund mobilization of commercial banks.

4.1.1 FINANCIAL TOOLS

Financial analysis involves identifying the financial strength and weakness of the organization by presenting the relationship between items of balance sheet. Ratio analysis has been mainly used for the analysis of data to get the objectives. There are various financial ratios related to investment management and fund mobilization, have been presented and discussed in order to evaluate and analyze the performance of two joint venture banks. The ratios are designed and calculated to highlight the relationship between financial items and figures. These calculations are based on financial statements of concerned joint venture banks. The financial ratios that are calculated for the purpose of this study are as follows:

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

4.1.1.1 Analysis of Liquidity Ratios

Liquidity ratio measures the firms' capability to meet its current obligation. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community, demand for the deposit withdrawals, pay maturity in time and convert non cash assets into cash to satisfy immediate need without loss to bank and consequent impact or long -run profit The following ratios which measure the liquidity position of banks are calculated.

I. Current Ratio

This is a crude measurement of liquidity ratio. It measures the ratio between total current assets and total current liabilities. It gives only the short glimpses on the liquidity position of a firm. It indicated the extent to which the claims of short-term

creditors are covered by asset expected to cover to cash in the near future. Generally, accepted current ratio is 2:1, however, it is accepted 1:1 too for banking and seasonal business. Current ratio is calculated by dividing current assets by current liabilities. The current assets include cash and bank balance with cheques in hand, balance with NRB, money at call and short notices, Investments in government securities, bills purchased and discounted, and other current assets, Similarly, current liabilities includes borrowings from other banks, bills payable, and other current liabilities.

Table No. 2
Current Ratio (Times)

F/Y	SCBNL	HBL
2003/04	1.06	1.04
2004/05	1.08	1.05
2005/06	1.07	1.06
2006/07	1.11	1.08
2007/08	1.07	1.08
Mean	1.078	1.062
S. D.	0.0332	0.00036
C.V.	3.080	0.034

Source: Appendix A - 1

It is clear from Table-2 that SCBNL and HBL have maintained current assets more than their current liabilities. All these two banks are capable enough to pay their current obligations. SCBNL has maintained the highest ratio of 1.11% in the F/Y 2006/07 and the lowest ratio of 1.06% in the F/Y 2003/04. Similarly, HBL has recorded the highest ratio of 1.08% and the lowest ratio of 1.04% in the F/Y 2006/07, 2007/08 and 2003/04 respectively.

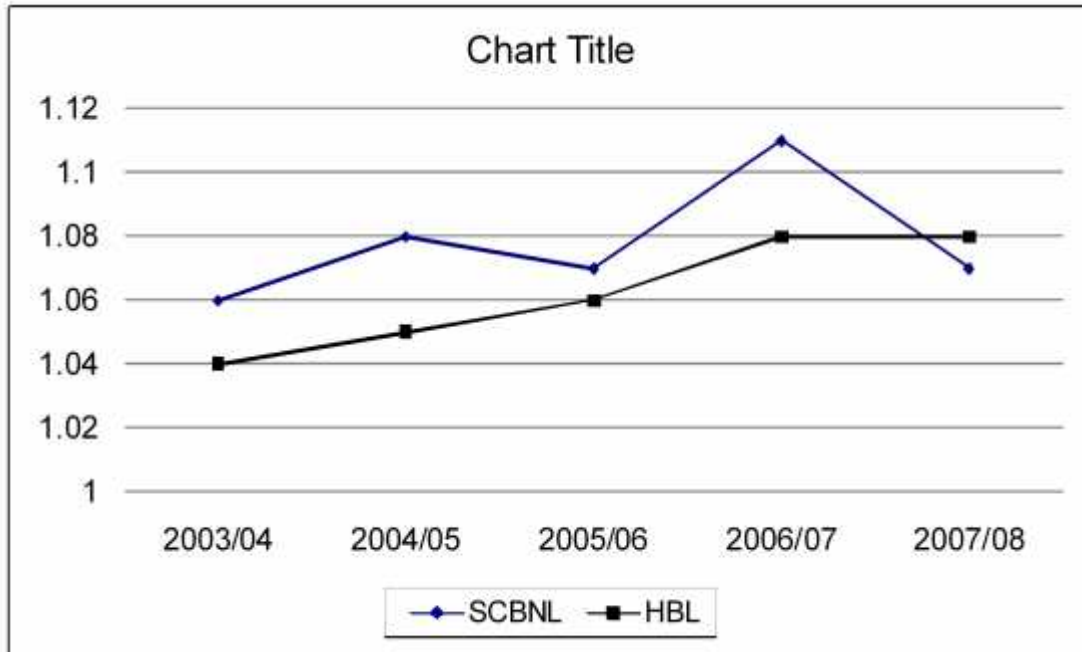
The averages mean ratio of SCBNL is slightly higher than HBL. This shows that the liquidity position of SCBNL is slightly better than that of HBL. In the point view of C.V. it suggests that SCBNL have less consistency in their ratios. HBL seems to be more consistency. Though as per the conventional rule, current ratio should be 2:1 but for banks and other financial institutions any current ratio above 1 also considered healthy and sound but the ratio of HBL is less than 1.00 in the F/Y

2003/04 which is not good. Thus, it can conclude that the liquidity position of SCBNL is satisfactory.

Current Ratio of SCBNL and HBL is graphically shown as follows:

Figure 1

Current Ratio on SCBNL and HBL



II. Cash and Bank Balance to Total Deposit Ratio

Cash and bank balance is said to be assets that represent the banks first line of defense of every bank. The ratio between the cash and bank balance and total deposit measures the ability of banks highly liquid or immediate funds to meet its unanticipated calls on all types of deposits. Higher ratio indicates the greater ability to meet the sudden demand of deposits and vice versa. But too, high ratio is undesirable since capital will be tied up and it will maximize the opportunity cost. This ratio is calculated by dividing cash and bank balance by total deposits. The cash and bank balance to total deposits ratio of SCBNL and HBL are given below.

Table No. 3
Cash and Bank Balance to Total Deposit Ratio (%)

F/Y	SCBNL	HBL
2003/04	9.56	9.09
2004/05	5.75	8.12
2005/06	5.53	6.48
2006/07	8.20	5.85
2007/08	6.89	4.55
Mean	7.186	6.818
S. D.	1.523	1.616
C.V.	21.187	23.70

Source: Appendix A - 2

Table-3 shows that the cash and bank balance to total deposits of SCBNL and HBL are in fluctuating trend. SCBNL has the highest of 9.56% in F/Y 2003/04 and the lowest of 5.53% in F/Y 2005/06. Similarly, HBL has recorded highest ratio of 9.09% and lowest ratio of 4.55% in the F/Y 2003/04 and 2007/08 respectively. The average mean ratio of SCBNL is higher than HBL. This shows SCBNL readiness to meet customer requirement better than HBL. In comparison of C.V, HBL seems to be more consistency than SCBNL.

Although the above ratio implies a slightly better liquidity position of SCBNL, a high ratio of non-earning cash and bank balance indicates the banks unavailability to invest its fund in income generation areas that might have helped it to improve its profitability.

In conclusion we can say that SCBNL is good position in maintaining cash and bank balance. Though, it has invested more funds in other sector which is quite good to earn high income.

III. Cash and Bank Balance to Current Assets Ratio

This ratio examines the banks liquidity capacity on the basis of its most liquid assets i.e. cash and bank balance. This ratio reaches the ability of the banks to make the payment of its customer deposits. High ratio indicates the sound ability to meet their daily cash requirement of their customer deposit and vice versa. But higher ratio is not desirable as the bank has to pay interest on deposits and some earning may be lost. Similarly, lower ratio is also not preferable as the bank may fail to make the payment against the cheques presented by the customers. This ratio is calculated by

dividing cash and bank balance by current assets. The cash and bank balance to current assets ratio are presented in the following table.

Table No. 4
Cash and Bank Balance to Current Assets Ratio (%)

F/Y	SCBNL	HBL
2003/04	8.61	8.19
2004/05	5.09	7.44
2005/06	4.97	5.94
2006/07	7.26	5.31
2007/08	6.43	4.08
Mean	6.472	6.192
S. D.	1.368	1.473
C.V.	21.140	23.790

Source: Appendix A - 3

Table-4 shows that the cash and bank balance to current assets of SCBNL and HBL are in decreasing trend. SCBNL has recorded the highest ratio of 8.61% in F/Y 2003/04 anticipating higher cash requirement depositors in this F/Y. It has recorded the lowest ratio of 4.97% in F/Y 2005/06. HBL has maintained the highest ratio of 8.19% and the lowest ratio of 4.08% in the F/Y 2003/04 and 2007/08 respectively.

The averages mean ratio of SCBNL is higher than HBL. The C.V. of SCBNL is lower than HBL. It shows SCBNL ratio is high consistency than that of HBL. All the banks have fared well in meeting their depositor's daily cash requirement and investing the surplus fund in other productive areas. Comparatively, SCBNL is not in good position to maintain cash and bank balance. It has invested more funds in other sectors.

IV. Investment on Government Securities to Current Assets Ratio

Every commercial bank is interested to invest their collected funds on different securities issued by government in different times to utilize their excess funds and for other purpose. Though, government securities are not so much liquid as cash and bank balance. They can be easily sold in the market or they can be converted into cash on other ways. This ratio helps to examine that portion of banks current assets, which is invested on different government securities.

This ratio is calculated by dividing investment on government securities by current assets. The investment on government securities to current assets ratio are as follows

Table No. 5
Investment on Government Securities to Current Assets Ratio (%)

F/Y	SCBNL	HBL
2003/04	33.83	14.05
2004/05	33.03	20.19
2005/06	33.67	17.80
2006/07	25.53	19.51
2007/08	25.53	21.05
Mean	30.318	18.520
S. D.	24.322	2.477
C.V.	80.222	13.373

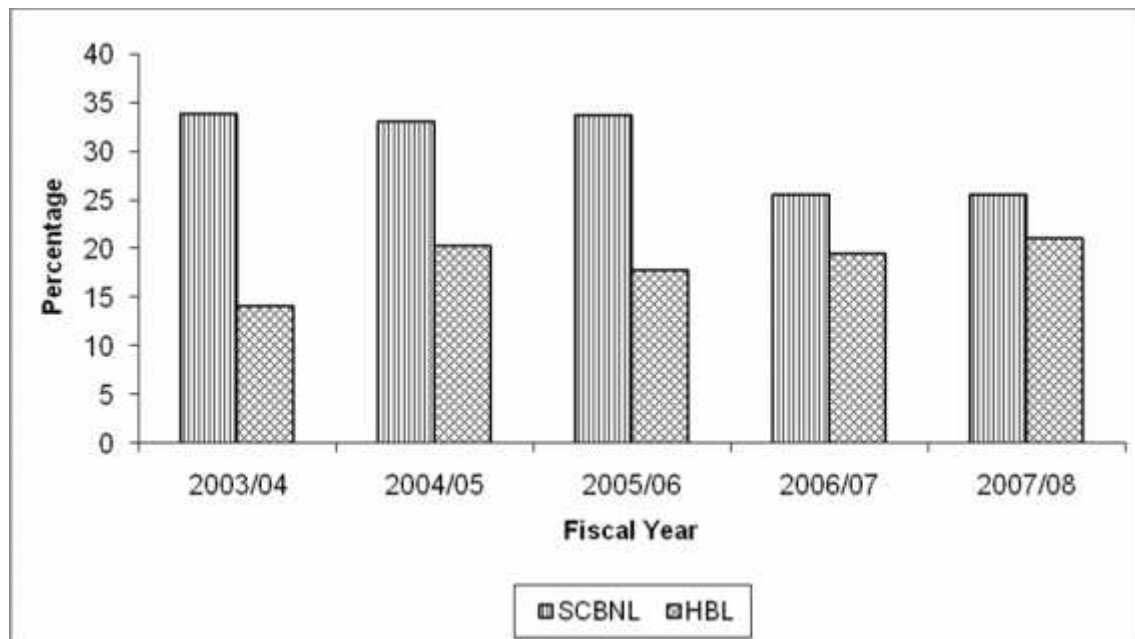
Source: Appendix A - 4

Table-5 clearly depicts that the investment on Government securities to current assets of SCBNL have in fluctuating trend. The ratio of HBL is in increasing trend up to 2004\05 and then, it is decreased in 2005/06 but again in 2006/07, it is increasing.

From the above five years picture, it is evident that the average mean ratio of SCBNL is higher than that of HBL. This shows that the greater portion of current assets of SCBNL comprises on government securities. Also, SCBNL's investments on government securities to current assets have an increasing trend over the years. From the point of view of C.V. SCBNL's ratios have been more consistency and HBL has less consistency and uniformity. From the above analysis it is clear that HBL has made lesser investment in government securities as it has injected more funds on other productive sectors. The reason behind SCBNL higher ratio could be attributed to more deposit collection and unavailability of other secured and profitable investment sectors. The balance sheet of SCBNL post 2003/04 shows that total fund invested in government securities is more than the loan & advances it has made.

In conclusion we can say that SCBNL's liquidity position from investment on government securities is better than HBL. Investment on government securities of SCBNL and HBL is graphically shown as follows:

Figure No. 2
Investment on Government Securities to Current Assets Ratio (%)



V. Loan and Advances to Total Assets Ratio

Loan and advances are the main sources of income and profitable assets for every bank. Every bank is willing to lend as more as possible. This ratio shows the relationship between loan and advances and current assets. This ratio is calculated by dividing total loan and advances by current assets. The ratios are presented in the following table.

Table No. 6
Loan and Advances to Total Assets Ratio (%)

F/Y	SCBNL	HBL
2003/04	27.28	48.93
2004/05	37.34	45.86
2005/06	34.80	50.67
2006/07	35.17	50.00
2007/08	34.63	54.03
Mean	33.844	49.898
S. D.	3.423	2.643
C.V.	10.12	5.30

Source: Appendix A - 5

HBL has decreasing trend up to 2004/05 and then it has increased SCBNL has a fluctuating trend. SCBNL has experienced the highest ratio of 37.34% in F/Y 2004/05 and the lowest of 27.28% in the F/Y 2003/04. Similarly, HBL has maintained the highest ratio of 50.67% and the lowest of 45.86% in the F/Y 2005/06 and 2004/05 respectively. In the point of view C.V, HBL seems to be more consistency and SCBNL seems to be less consistency.

The above analysis reveals that HBL has been more successful in identifying profitable investment sectors and increasing its earning. The same does not hold true for SCBNL, whose efforts seems to be more focused on investing in risk free assets, rather than increasing its loan and advances volume and subsequent earnings from it. HBL also has made successful loan and advances.

4.1.1.2 Analysis of Assets Management Ratios

A commercial bank must be able to manage its assets very well to earn high profit to satisfy its customers and for its own existence. This ratio measures how efficiently the bank manages the resources at its command. The following ratios measure the assets management ability of NABIL, SCBNL and HBL.

I. Loan and Advances to Total Deposit Ratio

This ratio shows the relationship between loans and advances which are granted and the total deposit collected by the banks. This ratio actually measures the extent to which the banks are successful to mobilize their total deposits on loan and advances. This ratio is calculated by dividing loan and advances by total deposits.

Table No. 7
Loan and Advances to Total Deposit Ratio (%)

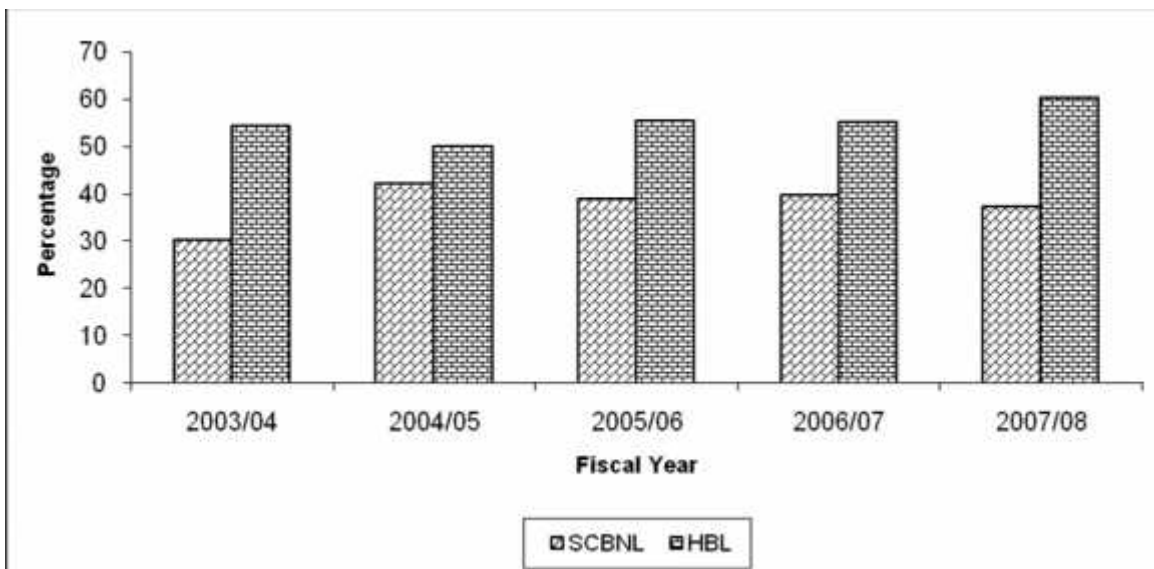
F/Y	SCBNL	HBL
2003/04	30.29	54.30
2004/05	42.12	50.07
2005/06	38.75	55.27
2006/07	39.72	55.06
2007/08	37.11	60.21
Mean	37.598	54.982
S. D.	3.998	3.225
C.V.	10.634	5.866

Source: Appendix B - 1

Table-7 shows that loan and advances to total deposit of all two banks have a fluctuating trend. SCBNL has the highest of 42.12% and the lowest of 30.29%. HBL has the highest ratio of 60.21% in the F/Y 2007/08 and the lowest ratio of 50.07% in the F/Y 2004/05. The mean ratio of HBL is higher than SCBNL. HBL seems to be strong in terms of mobilizing on its total deposits as loan and advances when compared to SCBNL.

In terms of C.V. SCBNL seems to be less consistency but HBL has the lowest ratio of all so it seems to be more consistency. It can be concluded that, SCBNL has been more successful in mobilizing its total deposit as loan and advances. On the contrary, a high ratio should not be perceived as a better state of affairs from the point of view of liquidity, as loan and advances are not as liquid as cash and bank balance and other investment. In portfolio management of bank various factors such as availability of funds, liquidity requirements, central bank norms etc. needs to be taken into account. Loan and advances to total deposit ratio of SCBNL and HBL is graphically shown as follows:

Figure No. 3
Loan and Advances to Total Deposit Ratio (%)



II. Total Investment to Total Deposit Ratio

The commercial banks are interested to invest its funds in different securities issued by government and other financial or non-financial companies. This ratio measures the extent to which the banks are able to mobilize their deposit on investment in various securities. High ratios indicate the high success in mobilizing deposit in securities and vice versa. This ratio is calculated by dividing total investments by total deposits. The data tabulated below shows the total investment to total deposit ratio

Table No. 8
Total Investment to Total Deposit Ratio (%)

F/Y	SCBNL	HBL
2003/04	53.68	42.21
2004/05	50.18	47.12
2005/06	55.71	41.10
2006/07	54.99	39.35
2007/08	46.74	41.90
Mean	52.260	42.336
S.D.	3.352	2.5898
C.V.	6.413	6.117

Source: Appendix B -

Table-8 shows a highly fluctuating trend in total investment to total deposit of HBL. SCBNL has the highest ratio of 56.58% and the lowest ratio of 47.18% in F/Y 2005/06 and 2007/08 respectively. Similarly, HBL has the highest ratio of 47.18% in the F/Y 2004/05 and the lowest ratio of 39.00% in the F/Y 2006/07. SCBNL has higher mean ratio than HBL. From mean ratio perspective, SCBNL has been more successful in mobilization of deposit on various forms of investment. From view point of C.V, SCBNL is being little better in terms of consistency than HBL.

In conclusion, we can say that SCBNL has been more successful in mobilizing its resources on various forms of investment.

III. Loan and Advances to Total Deposit Ratio

The main purpose of this ratio is to examine how broad area the bank has covered to provide its service efficiently. Each commercial banks working fund should play vital role on profit generating through fund mobilizing its total asset as loan and advances in appropriate levels. This ratio measures the extent to which the commercial banks are success in mobilizing their assets on loan and advances for the purpose of income generation. A higher ratio preferable as it includes better mobilization of fund as loan and advances and vice versa. This ratio is computed by dividing loan and advances by total working fund. The following table exhibits the ratio of loan and advances to total working fund.

Table No. 9
Loan and Advances to Total Deposit Ratio (%)

F/Y	SCBNL	HBL
2003/04	30.29	54.30
2004/05	42.12	50.07
2005/06	38.75	55.27
2006/07	39.72	55.06
2007/08	37.11	60.21
Mean	37.598	54.982
S.D.	3.998	3.225
C.V.	10.634	5.866

Source: Appendix B - 3

Table-9, the loan and advances to total deposit ratio of SCBNL is decreasing trend up to the F/Y 2004/05 and the ratio of HBL is in fluctuating trend. SCBNL has maintained the high ratio of 42.12% in the F/Y 2004/05 and the lowest ratio of 30.29% in F/Y 2003/04. HBL has the highest ratio of 60.21% and the lowest ratio of 50.07% in the F/Y 2007/08 and 2004/05 respectively.

If mean ratio is considered, HBL has the highest ratio of loan and advances to total deposit than SCBNL. It reveals the strength of HBL in mobilizing its total assets as loan and advances. According to view point of C.V, SCBNL is 10.64% which is higher than HBL. It proves that its ratios are less stable and consistent than HBL. From above analysis, it can conclude that HBL is in strong position in term of mobilizing the loans and advances with respect to total deposit in comparing to SCBNL.

IV. Investment in Government Securities to Total Deposit Ratio

Government securities are a safe medium of investment though it is not liquid as cash and bank balance. Therefore, a bank never used as its resources as loan and advances. It utilizes its funds by purchasing government securities, this ratio is very helpful to measure the extent on which the banks are successful in mobilizing their total deposit on different types of government securities to maximize the income. High ratio shows better mobilization of fund as investment on government securities and vice versa. This ratio is calculated by dividing investment in government securities to total deposit. The following table shows that ratios of concerned banks.

Table No. 10
Investment in Government Securities to Total Deposit Ratio (%)

F/Y	SCBNL	HBL
2003/04	37.56	15.59
2004/05	37.25	22.04
2005/06	37.49	19.42
2006/07	28.84	21.48
2007/08	27.36	23.46
Mean	33.70	20.398
S.D.	4.597	2.732
C.V.	13.642	13.394

Source: Appendix B - 4

Table-10 reveals that all two banks are in fluctuating trend. SCBNL has the highest ratio of 37.56% in F/Y 2003/04 and the lowest ratio of 27.36% in 2007/08. Similarly, HBL has high ratio of 23.46% and low ratio of 15.59% in the year 2007/08 and 2003/04 respectively. If mean ratio is considered, SCBNL seems to be stronger than HBL in mobilizing of total assets as investment in Government securities. According to the view point of C.V, SCBNL seems to be less consistency and HBL seems to be more consistency because SCBNL has the higher C.V. and HBL has the lower C.V.

From the above analysis, we can conclude that SCBNL has invested large portion of deposit in government securities than HBL. The ratios also indicate that the banks have no certain investment policy with regards to what percentage of total deposit to be invested in purchasing government securities.

V. Investment in Share and Debentures to Total Deposit Ratio

Commercial banks are now interested to invest its funds not only government securities but also shares and debentures of other different types of companies. The investments in government securities are safer than the investment in debenture and share of other companies. These banks are showing response on investment, the main purpose of the ratio is to measure to which extent the banks are successful to mobilize their assets on purchase of shares and debentures of other companies to generate and utilize their excess funds, a high ratio indicates greater portion of investment on shares and debentures out to total deposit funds and vice versa. This ratio is calculated by dividing investment in share and debentures by total deposit. These are as follows.

Table No. 11
Investment in Shares and Debentures to Total Deposit Ratio (%)

F/Y	SCBNL	HBL
2003/04	0.047	0.138
2004/05	0.061	0.143
2005/06	0.060	0.135
2006/07	0.182	0.244
2007/08	0.385	0.281
Mean	0.147	0.188
S.D.	0.129	0.0624
C.V.	87.54	33.218

Source: Appendix B - 5

Table-11 clearly reveals that all two banks have invested miniscule percentage of total deposit in purchasing share and debentures of other companies. In either case the ratio percentage is greater than 0.40%. In average, HBL has invested slightly higher amount of total deposit on shares and debenture than other bank. The mean ratio is also higher. It indicates that HBL has been more successful in mobilizing its fund as investment in shares and debenture. The above table shows both has a fluctuating trend through out the period of study.

From the above analysis, it can be concluded that the ratios of HBL with SCBNL as shown in the table, it has maintained the highest ratio. It means it has comparatively higher percentage of its total asset into other company's shares and debentures.

VI. Loan Loss Provision Ratio

Loss of loan is occurred when the debtors fail to pay their. Loss of loan is not only the default of debtors but it is because of the failure of recovery of loan by the bank. Negligence in its part makes a negative impact on the earning and capital of a bank very badly. Greater loan loss provision is made in income statement if high loss is expected. But this will lead to low profit and possible losses and produces low increase or decrease in capital. The loan loss ratio shows how efficiently the bank manages its loan and advance and makes effort for timely recovery of loan. This ratio is calculated by dividing loan loss provision by loan and advances.

Table No. 12
Loan Loss Provision Ratio (%)

F/Y	SCBNL	HBL
2003/04	4.42	8.10
2004/05	3.41	8.26
2005/06	3.03	8.40
2006/07	2.94	4.81
2007/08	2.22	3.56
Mean	3.204	6.626
S.D.	0.719	2.034
C.V.	22.458	30.700

Source: Appendix B - 7

Table-12, it is clearly seen that, HBL has fluctuating trend and SCBNL has decreasing from F/Y 2003/04. SCBNL has the maximum ratio of 4.42% in the fiscal year 2003/04 and the minimum ratio of 2.22% in the F/Y 2007/08. Similarly, HBL has the maximum ratio of 8.40% in the F/Y 2005/06 and the minimum ratio of 3.56% in the F/Y 2007/08.

In average, SCBNL has lowest loan loss provision ratio comparing with HBL. So, it shows that the position is better in this regard. It concludes that the performance of SCBNL in terms of recovery of loan is satisfactory in comparison to HBL.

4.1.1.3. Analysis of Profitability Ratios

The main objectives of a commercial bank are to earn profit providing different types of banking services to its customers. To meet various objectives like to have a good liquidity position, meet fixed internal obligation, over come the future contingencies, grab hidden investment opportunities, expand banking transactions in different places, and finance government in need of development funds etc. a commercial bank must have to earn sufficient profit. Of course, profitability ratios are the best indicators of overall efficiency. Here, mainly, those ratios are presented and analyzed which are related with profit as well as fund mobilization. Through the following ratios, effort has been made to measure the profit earning capacity of SCBNL and HBL.

I. Returns on Loan and Advances Ratio

Return on loan and advances ratio measures the earning capacity of commercial banks its mobilized fund - based loan and advances. The high ratio indicates the high return and vice versa. This ratio is calculated by dividing net profit by loan and

advances. The following table shows the return on loan and advances ratio of SCBNL and HBL during the study period.

Table No. 13
Return on Loan and Advances Ratio (%)

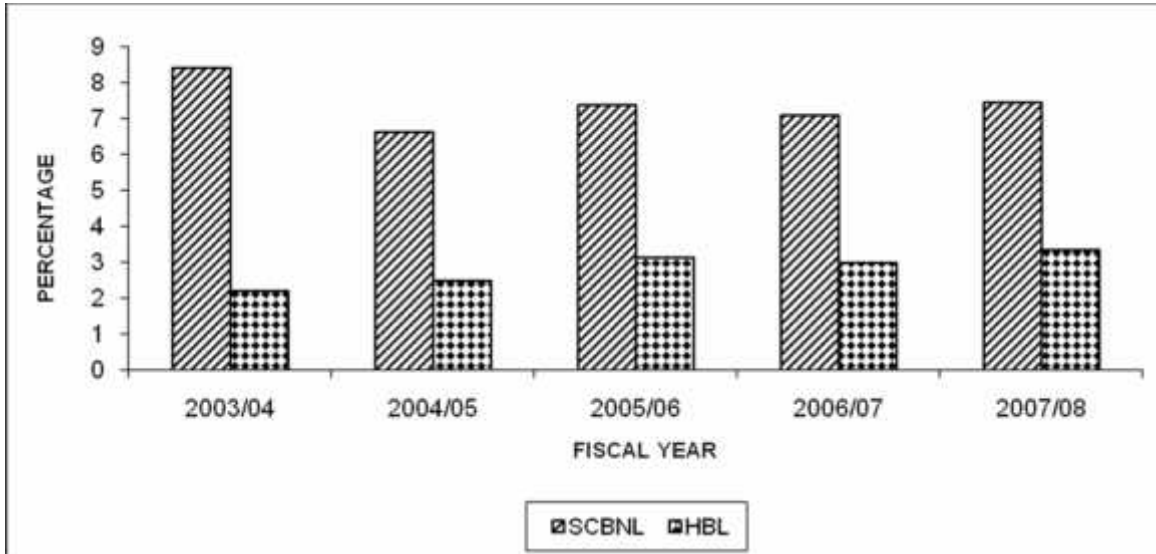
F/Y	SCBNL	HBL
2003/04	8.39	2.20
2004/05	6.62	2.48
2005/06	7.37	3.12
2006/07	7.06	2.97
2007/08	7.42	3.32
Mean	7.372	2.818
S.D.	0.584	0.4146
C.V.	7.92	14.71

Source: Appendix C - 1

Table-13 shows that the ratio of return on loan and advances of SCBNL is better than HBL in the all fiscal years, through they have a fluctuating trend. HBL's ratios have witnessed a decreasing trend up to F/Y 2003/04; there after it has an increasing trend. SCBNL has recorded the highest of 8.39% in F/Y 2003/04 and the lowest of 6.62% in F/Y 2004/05. Similarly, HBL has the highest ratio of 3.32% and the lowest ratio of 2.20% in the F/Y 2007/08 and 2003/04 respectively.

The comparison of mean ratio reveals that SCBNL has higher ratio than HBL bank. This shows that SCBNL has been more successful in maintaining its higher return on loan and advances. If C.V. is considered, HBL is significantly higher than SCBNL. It proves that HBL is more consistency and uniformity than SCBNL. Thus it can be concluded that HBL has failed to earn higher return on loan and advances then SCBNL. Returns on loan and advances ratio of SCBNL and HBL is graphically shown as follows:

Figure No. 4
Returns on Loan and Advances Ratio



II. Return on Total Deposit Ratio

Return on total deposit ratio measures the profit earning capacity by investing financial resources of the bank assets. Return will be higher if the banks working fund is well managed and efficiently utilized and vice versa. This ratio is calculated by dividing net profit by total working fund. The data tabulated below reflects the profitability position with respect to total assets of SCBNL and HBL.

Table No. 14
Return on Total Deposit Ratio (%)

F/Y	SCBNL	HBL
2003/04	2.54	1.20
2004/05	2.79	1.24
2005/06	2.86	1.73
2006/07	2.81	1.64
2007/08	2.75	2.01
Mean	2.750	1.582
S.D.	0.1118	0.1931
C.V.	4.066	12.205

Source: Appendix C - 2

Form the above listed comparative table-14, it is found that the return on total working fund is in fluctuating trend in case of all two banks. SCBNL has the highest ratio of 2.86% and the lowest ratio of 2.54% in the F/Y 2005/06 and 2003/04

respectively. Similarly, HBL has recorded the highest ratio of 2.01% and the lowest ratio of 1.20% in the F/Y 2007/08 and 2003/2004 respectively.

Among three banks, SCBNL has slightly higher mean ratio than HBL. It reveals that SCBNL has been able to earn high profit on total working fund in comparison with HBL. One point worth making here is that SCBNL has managed and utilized its assets more efficiently than HBL and its return on assets have also been higher. HBL has not managed its assets well because the return on total working fund is lower than other banks. From the viewpoint of C.V., SCBNL are more consistency than HBL.

III. Return on Equity Ratio

The objective of every bank is to earn high profit. If the banks utilize its equity capital properly then only bank can earn maximum profit. The return on equity capital shows the extent to which a bank is successful to mobilize its equity. It is measuring rod of the profitability of a bank. A high ratio indicates the success of bank in mobilizing its equity capital and vice versa. The ratio can be calculated by dividing net profit by equity capital.

Table No. 15
Return on Equity Capital Ratio (%)

F/Y	SCBNL	HBL
2003/04	143.55	49.05
2004/05	143.92	47.91
2005/06	175.84	59.24
2006/07	167.37	60.66
2007/08	131.92	62.74
Mean	152.52	55.920
S.D.	15.734	6.186
C.V.	10.32	11.063

Source: Appendix C - 3

Table-15 shows that the ratio of SCBNL has followed increasing trend from 2003/04 to 2005/06. It has the highest ratio of 175.84% and the lowest ratio of 131.92% in the F/Y 2005/06 and 2007/08 respectively. Similarly, the ratio of HBL has followed decreasing trend. It has the highest ratio of 62.74% and the lowest ratio of 47.91% in the F/Y 2007/08 and 2004/05 respectively. When mean ratios are observed, it is found that SCBNL has the highest ratio comparing with HBL. HBL has the lowest ratio. The C.V. of SCBNL is low so that it seems to be less consistency and

HBL seems to be more consistency. Thus, it can conclude that SCBNL's return on equity is better than HBL

IV. Total Interest Earned to Total Deposit Ratio

This ratio is very helpful to reveals the earning capacity of commercial banks by mobilizing its total deposit. This ratio is important to know the extent on which the banks are successful in mobilizing their total assets to generate high income as interest. Higher the ratio, higher will be the earning power of the bank on its total deposit and vice versa. This ratio is calculated by dividing total interest earned by total assets. The following table shows interest earned to total deposit ratio of SCBNL and HBL.

Table No. 16
Total Interest Earned to Total Working Fund Ratio (%)

F/Y	SCBNL	HBL
2003/04	4.41	5.03
2004/05	4.84	5.19
2005/06	4.62	5.52
2006/07	5.73	5.91
2007/08	5.35	6.17
Mean	4.99	5.564
S.D.	0.485	0.427
C.V.	9.715	7.680

Source: Appendix C - 4

Table-16 reflects a increasing trend in interest earning ratio of all the banks up to the fiscal year 2004/05. SCBNL has experienced the highest ratio of 5.73% in the F/Y 2006/07 and the lowest ratio of 4.41% in F/Y 2003/04. Similarly, HBL has the highest ratio of 6.17% and the lowest ratio of 5.03% in the F/Y 2007/08 and 2003/04 respectively.

The average interest earned ratio of SCBNL is 4.99% where as the HBL are 5.56%. This reflects that HBL has been stronger in terms of interest earning power on total deposit. According to view point of C.V, the ratio of HBL is lower than SCBNL. It can be concluded that SCBNL is more consistency than HBL.

From the above analysis, we can conclude that HBL is in better position and has been able to earn high interest on its total assets i.e., it has been more successful in mobilizing its assets to generate high income.

V. Total Interest Earned to Total Operating Income Ratio

Total interest earned to total operating income ratio helps to depict the earning capacity of a commercial bank on its total operating income, this ratio indicated the extent to which the bank has successfully mobilized its fund in interest bearing asset. This ratio is calculated by dividing total interest earned to total operating income. The following table shows interest earned to total operating income ratio of SCBNL and HBL.

Table No. 17
Total Interest Earned to Total Operating Income Ratio (%)

F/Y	SCBNL	HBL
2003/04	82.39	121.19
2004/05	82.35	120.67
2005/06	83.88	116.16
2006/07	90.63	118.88
2007/08	89.69	122.12
Mean	85.788	119.804
S.D.	3.624	2.106
C.V.	4.225	1.756

Source: Appendix C - 5

Table-17 exhibits that the ratio of all two bank follows the fluctuating trend in the study period. SCBNL has the highest ratio of 89.69% in the F/Y 2007/08 and the lowest ratio of 82.35% in the F/Y 2004/05. Similarly, HBL has recorded the highest ratio of 122.12% and lowest ratio of 116.16% in the F/Y 2007/08 and 2005/06 respectively.

If the mean ratios are observed, it is found that the HBL has the highest ratio than SCBNL. Mean ratio of HBL is 119.804%, whereas SCBNL mean ratios is 85.788% respectively. The C.V. of SCBNL is 4.225% that is comparatively higher than HBL. It indicates that the total interest earned to total operating income ratio of the SCBNL is less consistency than other banks. It means HBL more consistency and uniformity than SCBNL.

From the above analysis, it can be concluded that HBL has mobilized more of its funds in interest bearing assets.

VI. Total Interest Earned to Total Outside Assets Ratio

The main assets of a commercial bank are its outside assets, which includes loan and advances, investment on government securities, investment on shares and debentures and other all types of investments. This ratio reflects the extent on which the banks are successful to earn interest as major income on all the outside assets. A high ratio shows high earning power of total outside assets and vice versa. This ratio is calculated by dividing total interest earned by total outside asset. The following table shows interest earned to total outside assets.

Table No. 18
Total Interest Earned to Total Outside Assets Ratio (%)

F/Y	SCBNL	HBL
2003/04	5.86	5.86
2004/05	5.93	6.00
2005/06	5.46	6.37
2006/07	6.26	6.86
2007/08	6.92	7.49
Mean	6.086	6.516
S.D.	0.488	0.597
C.V.	8.026	9.166

Source: Appendix C - 6

The above comparative table-18 proves that the ratio of SCBNL has decreased up to 2005/06 and then increased during 2006/07 the study period. In case of HBL, it has followed almost increasing trend, though it has increased for the year 2003/04 to 2007/08 from 5.86% to 7.49%. Similarly, HBL has recorded highest ratio of 7.49% and lowest ratio of 5.86% in the F/Y 2007/08 and 2003/04 respectively.

If the mean ratios are observed it is found that the SCBNL has the slightly lower ratio up to 2004/05 than HBL. It has the mean ratio of 6.086%. The mean ratio of HBL is 6.516%. The C.V. of ratios of SCBNL is 8.026% that is comparatively slightly lower than HBL. HBL seems to be less consistency and SCBNL seems to be more consistency.

From the above table, it can be concluded that the ratio of total interest earned to total outside assets of HBL is satisfactory in comparing to SCBNL because high ratio is an indicator of high earning power of the banks.

VII. Total Interest Paid to Total Deposit Ratio

This ratio measures the percentage of total interest expenses against total working fund. The higher ratio is the indicator of higher interest expenses on total deposit and vice versa. This ratio is calculated by dividing total interest paid by total deposit. The following table shows the total interest paid to total deposit ratio.

Table No. 19
Total Interest Paid to Total Deposit Ratio (%)

F/Y	SCBNL	HBL
2003/04	1.29	2.23
2004/05	1.31	2.27
2005/06	1.32	2.45
2006/07	1.68	2.55
2007/08	1.59	2.59
Mean	1.438	2.418
S.D.	0.164	0.145
C.V.	11.380	5.990

Source: Appendix C - 7

Table-19 shows that the interest paid by SCBNL is in increasing trend. The ratio of SCBNL has increase from 1.29% to 1.68% in the F/Y 2003/04 and 2006/07. HBL has maximum ratio of 2.59% in the F/Y 2007/08 and minimum ratio of 2.23% in the F/Y 2003/04. When mean ratios are observed, it is found that HBL has the highest of all. It has the mean ratio of 2.418% against 1.438% SCBNL. Thus, it means HBL has paid higher interest in comparison to SCBNL. The C.V. of HBL is lower than other banks. It shows the total interest paid to total working fund ratio is more consistency than that of SCBNL.

Thus, it can conclude that the position of HBL is not better than other banks as its ratio is paying more interest against working fund. It has collected the funds from expensive sources, which may be the higher portion of fixed deposit in its total deposit. SCBNL is in better position from interest payment point of view than HBL. SCBNL seems to have collected its funds from cheaper sources than other bank.

VIII. Interest Earned on Govt.security to Total Interest Income Ratio.

This ratio measures the percentage of income on government securities against total interest income. Higher ratio indicates the higher interest income on government securities over total interest income and vice versa. This ratio can be computed by dividing total interest income of government securities by total interest income earned.

Table No. 20
Interest Earned on Govt.security to Total Interest Income Ratio (%)

F/Y	SCBNL	HBL
2003/04	18.30	14.43
2004/05	26.85	13.10
2005/06	22.03	12.34
2006/07	21.00	12.83
2007/08	18.09	12.52
Mean	21.254	13.044
S.D.	3.185	0.740
C.V.	14.985	5.677

Source: Appendix C - 8

SCBNL has higher interest earned ration in government security than that of HBL. SCBNL has higher interest earned 26.85% in the year 2004/05 and lowest interest earned 18.09% in the year 2007/08 so regarding HBL has higher interest earned 14.43% in the year 2003/04 and lowest interest earned 12.34% in the year 2005/06. This indicates that SCBNL has earned better interest in government security than that of HBL.

If mean ratio is considered, SCBNL seems to be stronger than HBL in gaining interest in Government securities. According to the view point of C.V, SCBNL seems to be less consistency and HBL seems to be more consistency because SCBNL has the higher C.V. and HBL has the lower C.V.

From the above analysis, we can conclude that SCBNL has invested large portion of deposit in government securities than HBL. The ratios also indicate that the

banks have no certain investment policy with regards to what percentage of total deposit to be invested in purchasing government securities.

IX. Interest Earned on other income to Total Interest Income Ratio

This ratio measures the percentage of income on other securities against total interest income. Higher ratio indicates the higher interest income on other securities over total interest income and vice versa. This ratio can be computed by dividing total interest income of other securities by total interest income earned.

Table No. 21
Interest Earned on other income to Total Interest Income Ratio

F/Y	SCBNL	HBL
2003/04	15.01	3.32
2004/05	16.53	3.45
2005/06	16.34	3.75
2006/07	16.17	2.70
2007/08	17.46	3.86
Mean	16.302	3.416
S.D.	0.172	0.407
C.V.	1.054	11.925

Source: Appendix C - 9

From table-21 we come to the point that SCBNL has increasing interest earning in other security than that HBL. The highest interest earned of SCBNL is 17.46% in the year 2007/08 and lowest 15.01% in the year 2003/04 where as HBL has higher interest rate 3.86% in the year 2007/08 and lowest 2.70% in the year 2006/07. This indicates that SCBNL has got higher interest earned than that of HBL, which is the clear aspect of investment in other sector than that of specific one.

If mean ratio is considered, SCBNL seems to be stronger than HBL in mobilizing of total assets as investment in Government securities. According to the view point of C.V, SCBNL seems to be more consistency and HBL seems to be less consistency because SCBNL has the lower C.V. and HBL has the higher C.V.

4.1.1.4. Analysis of Risk Ratios

The possibilities of risk make banks investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So that the banks opting for high profit have to accept the risk and manage of the level of risk that one has to bear while investing its funds. The following ratios are calculated to measure the risk.

I. Liquidity Risk Ratio

The ratio of cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposits as the liquidity needs. A higher liquidity indicates less risk and less profitable banks and vice versa. Liquidity risk is calculated by dividing cash and bank balance by total deposit. The following table shows the liquidity risk ratio of concerned banks.

Table No. 22
Liquidity Risk Ratio (%)

F/Y	SCBNL	HBL
2003/04	9.56	9.09
2004/05	5.75	8.12
2005/06	5.53	6.48
2006/07	8.20	5.85
2007/08	6.89	4.55
Mean	7.186	6.818
S.D.	1.520	1.616
C.V.	21.157	23.697

Source: Appendix D - 1

Table-22 shows that the liquidity risk ratios of all the banks have fluctuating trend. SCBNL has recorded the highest ratio of 9.56% in the fiscal year 2003/04 and the lowest ratio of 5.53% in the fiscal year 2005/06. Similarly, HBL has recorded the highest ratio of 9.09% in the fiscal year 2003/04 and the lowest ratio of 4.55% in the fiscal year 2007/08.

When mean ratios are taken it is found that SCBNL'S liquidity risk is lower than that of HBL. SCBNL has more cash & bank balance to meet its current obligations. On the other hand, too much idle cash might have an adverse impact on

profitability. A trade off between liquidity and profitability must be maintained at all times. In comparison of C.V.'s of the banks HBL seems to be less stable and consistent. SCBNL seems to be more consistency.

II. Credit Risk Ratio

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

Table No. 23
Credit Risk Ratio (%)

F/Y	SCBNL	HBL
2003/04	27.11	46.45
2004/05	37.39	43.03
2005/06	34.68	47.88
2006/07	34.24	48.21
2007/08	33.11	52.02
Mean	33.306	47.518
S.D.	3.402	2.904
C.V.	10.214	6.112

Source: Appendix D - 2

Table-23 shows that the ratios of SCBNL and HBL have a fluctuating trend. SCBNL has witnessed the highest ratio of 37.39% in F/Y 2004/05 and the lowest ratio of 27.11% in F/Y 2003/04. Similarly HBL has had a high ratio of 52.02% in the F/Y 2007/8 and low ratio of 43.03% in the F/Y 2004/05. The mean ratio of HBL is higher than that of SCBNL. This indicates that HBL has more exposure to credit risk than its counterpart.

From the point of view of C.V., HBL seems to be more consistency and uniformity because it has low C.V. SCBNL seems to be less consistency because it has high C.V.

4.1.1.5. Analysis of Growth Ratios:

Those growth ratios are analyzed and interpreted which are directly related to the fund mobilization and investment of a commercial bank. Growth ratio represents how well the commercial banks are maintaining their economic and financial position. Under this topic the following ratios directly related to fund mobilization and investment of the banks are calculated.

- I. Growth ratio of total deposits.
- II. Growth ratio of total loan and advances.
- III. Growth ratio of total investment.
- IV. Growth ratio of net profit.

The ratio can be calculated by dividing the last period figure by the first period figure there by referring to the compound interest tables. The high ratio generally indicates better performance of a bank and vice versa.

Table No. 24
Growth Ratio of Total Deposit (%)

(Rs. In million)

F/Y	SCBNL	HBL
2003/04	21161.46	22010.34
2004/05	19335.10	24814.01
2005/06	23061.03	26490.85
2006/07	24647.02	30048.42
2007/08	29744.00	31842.79
G. R. (%)	7.05	7.42

Source: Appendix E - 1

The above comparative table-24 shows that the deposit trend of SCBNL is in increasing trend. HBL has also the increasing trend. The growth ratio of SCBNL is lower (i.e.7.42%) than HBL. This indicates that HBL has good performance in collecting more deposits. Where as SCBNL has growth ratio of 7.05%

Table No. 25
Growth Ratio of Total Loan and Advances (%)

(Rs. In million)

F/Y	SCBNL	HBL
2003/04	6410.24	11951.87
2004/05	8143.21	12424.52
2005/06	8935.42	14642.56
2006/07	9790.87	16543.73
2007/08	11036.63	19172.94
G. R (%)	11.47	9.91

Source: Appendix E - 2

Table-25 shows that the loan and advances pattern of SCBNL and HBL are increasing in all the F/Y. The growth ratio of total loan and advances of SCBNL is slightly higher than HBL (i.e. 11.47% > 9.91%). Thus, it indicates that the performance of SCBNL is slightly better in compare to HBL.

Table No. 26
Growth Ratio of Total Investment (%)

(Rs. In million)

F/Y	SCBNL	HBL
2003/04	11360.33	11768.10
2004/05	9702.55	11692.34
2005/06	12847.54	10889.03
2006/07	13553.23	11822.99
2007/08	13902.82	13340.18
G. R (%)	4.12	2.54

Source: Appendix E - 3

Table-26 the investment pattern of all the banks is in fluctuating trend. SCBNL has the highest growth ratio of 4.12% and HBL has recorded the growth ratio of 2.54%.

Thus, we can conclude that the SCBNL is better in investment pattern than HBL.

Table No. 27
Growth Ratio of Net Profit (%)

(Rs. In million)

F/Y	SCBNL	HBL
2003/04	537.80	463.05
2004/05	539.20	308.28
2005/06	658.75	457.46
2006/07	691.67	491.83
2007/08	818.92	635.87
G. R. (%)	8.77	6.55

Source: Appendix E - 4

The above comparative table shows that the trend of net profit of SCBNL is increasing year by year. Similarly, HBL has increasing from the F/Y 2005/06 and it has recorded the highest growth ratio 6.55%. The growth ratio of SCBNL is 8.77%. , which is higher than HBL.

Thus, it can conclude that SCBNL is very successful to maintain growth ratio of net profit.

4.1.2 STATISTICAL TOOLS

Some statistical tools such as coefficient of correlation analysis between different variables, trend analysis of deposits, loan and advances, investment and net profit as well as hypothesis test (t- statistic) are used to achieve the objectives of the study. These statistical tools which are used to analysis are as follows.

4.1.2.1. COEFFICIENT OF CORRELATION ANALYSIS

Under this topic, Karl Pearson's coefficient of correlation is used to find out the relationship between deposit and loan and advances, deposit and total investment, outside assets and net profit, deposits and net profit, deposits and interest earned, loan and advances and interest paid, total working fund and net profit.

I. Coefficient of Correlation between Deposits and Loan & Advances

The coefficient of correlation between deposits and loan and advances measures the degree of relationship between them. In our study, we have taken deposit as an independent variable denoted by (x) and loan and advances as dependent variable (y). The main objective of calculating 'r' between these two variables is to justify whether deposits are significantly used as loan and advances or not.

The following table shows the value of 'r', r^2 , P.Er and 6P.Er. between total deposits and loan & advances of SCBNL and HBL during the study period.

Table No. 28
Correlation between Deposit and Loan and Advances

Banks	Evaluation Criteria			
	R	r^2	P.Er.	6P.Er.
SCBNL	0.9680	0.9370	0.0283	0.170
HBL	0.5851	0.3424	0.1983	1.1896

Source: Appendix F – 1 & 2

Table-28, the coefficient of correlation 'r' between deposits and loan and advances incase of SCBNL is 0.9680, which gives us an indication of a positive correlation between them. Similarly, the value of coefficient of determination (r^2) is found to be 0.9370. This shows that 93.70 % variation of dependent variable (loan and advances) has been explained by the independent variable (deposits). The value of 'r' is higher than six times P.Er. This further shows that the value of 'r' is significant. In other words, there is significant relationship between deposit and loan and advances.

In the case of HBL, the coefficient of correlation (r) is 0.5851. This indicates the positive relationship between these two variables. The calculated value of determination (r^2) is 0.3424. This means 34.24% of variation of dependent variable.

In case of HBL the value of (r^2) shows higher percentage of dependency. In case of SCBNL the relationship is significant and (r^2) shows lower percentage of dependency. It indicates HBL has been more successful in utilizing its deposits in a proper manner than SCBNL. Further, the increase in loan and advances is due to effective mobilization of deposits, and other factors have marginal role in increase in loan and advances.

II. Coefficient of Correlation between Deposit and Investment

Coefficient of correlation between deposit and investment measures the degree of relationship between these two variables. Here deposit is taken as independent variable (x) and the variable dependent on deposit on deposits is total investment, which is denoted by (y). The purpose of calculating 'r' is to judge whether deposits are significantly mobilized as investments or not.

The following table shows the value r, r^2 , P.Er and 6P.Er of SCBNL and HBL during the study period.

Table No. 29
Correlation between Deposit and Investment

Bank	Evaluation Criteria			
	R	r ²	P.Er.	6P.Er.
SCBNL	0.88018	0.7747	0.06796	0.40776
HBL	0.95518	0.91237	0.02643	0.1586

Source: Appendix F – 3 &4

The coefficient of correlation 'r' between deposits and total investment in case of SCBNL is 0.88018, which indicates a positive relationship between the two variables. The coefficient of determination (r²) is 0.7747 This indicates that 77.47% of the variation of the dependent variable has been explained by independent variable. Moreover, 'r' is greater than six times P.Er, which further states that there is a significant relationship between deposits and total investment.

The coefficient of correlation 'r' incase of HBL is 0.95518, which indicates positive relation between two variables. Here, coefficient of correlation 'r' is less than six times P.Er. It means there is no significant relationship between two variables.

In conclusion, it can be said that both SCBNL has significant relationship between total deposit and total investment and HBL shows insignificant relationship between total deposit and total investment.

III. Coefficient of Correlation between Deposit and Net Profit

The coefficient of correlation between deposit and net profit measures the degree of relationship between these two variables. Here, deposit is independent variable (x) and net profit is dependent variable (y). The main purpose of calculating between these two variables is to justify whether net profit is significantly correlated with deposits or not.

The following table shows table shows the value of r, r², P.Er and 6P.Er of SCBNL and HBL during the study period.

Table No. 30
Correlation between Deposit and Net Profit

Bank	Evaluation Criteria			
	R	r ²	P.Er.	6P.Er.
SCBNL	0.7898	0.6237	0.11351	0.6811
HBL	1.02150	1.0435	-0.01312	-0.0787

Source: Appendix F - 5 & 6

The coefficient of correlation between deposits and net profit in case of SCBNL is 0.7898, which indicates a positive relationship between these variables. The value of (r²) is 0.6237 indicates that 62.37% of the variation of the dependent variable has been explained by the independent variable. The value of (r) is greater than 6P.Er i.e. 0.7898>0.6237, which further states that these exists a significant relationship between deposits and net profit.

In the case of HBL, the value of 'r' is 1.0215. It means there is highly positive relationship between two variables. The value of 'r²' i.e. 104.35% indicates that the variation of the dependent variables has been explained by the independent variables. The value of 'r' is higher than 6P.Er. It indicates that there is significant relationship between these two variables.

From above analysis, we can conclude that SCBNL shows positive and significant relationship between deposits and net profit. The value of (r²) in case of HBL shows lower percentage of dependency and the same in case of SCBNL shows higher percentage of dependency. The increase in net profit in case of SCBNL is due to effective mobilization of deposits and other factors have a lesser role to play in increase in net profit. SCBNL has been more successful in mobilization of its deposit to yield higher profits year after year.

4.1.2.2. REGRESSION ANALYSIS

Regression analysis is mathematical measures of the average relationship between two or more variables in terms of original units of data. There are two types of variables in regression analysis- dependent variable and independent variable. The variable whose value is influenced of is to predict is called dependent variable whereas the variable, which influences the value or is used for prediction is called independent variable. The main objective of regression analysis is to predict or estimate the value of depending variable corresponding to the given value of independent variables.

The regression line of Y on X estimated the most probable values of Y for given values of X. The regression equation of Y on X expressed as

$$y = a + b x$$

Where, y = dependent variable

x = independent variable

a = intercept of line

b = the slope of the line (it measures the average change in the value of Y as a result of one unit change in value of X). It is also called regression coefficient of Y on X. To find out the exact relationship different variables simple regression analysis has been used.

I. Regression Analysis between Investment and Net Profit

In our analysis, total investment is taken as independent variable (x) and net profit is taken as dependent variable (y). The main objective of analysis is to predict the value of dependent variable i.e. net profit (y) corresponding to given value of independent variable i.e. total investment (x). The following table shows the results of the analysis between these two variables of SCBNL and HBL.

Table No. 31
Regression Analysis between Investment and Net Profit

Banks	Regression equation of net profit (y) on investments (x)	value of constant (a)	regression coefficient (b)
SCBNL	$Y = 644 + 0.00041x$	a = 644	b = 0.00041
HBL	$Y = -1102.15 + 0.13395x$	a = -1102.15	b = 0.13395

Source: Appendix No. G - 1 & 2

Table No. 31 shows that regression equation between net profit and investment of SCBNL and HBL.

In case of SCBNL there is positive relationship between two variables. According to the table, regression equation of net profit (y) on total investment (x), $Y = 644 + 0.00041x$. Value of constant (a) is 644 indicates that when the investment is zero then the expected change in the value of net profit is 644, i.e. the value is predicted by 644 million during the year. The regression coefficient (b) represents that the value of net profit is predicted to increase by 0.00041 million for each one million increase in total investment.

In case of HBL, there is negative relationship between two variables. According to the table, regression equation of net profit (y) on total investment (x), Y

= $-1102.15 + 0.13395x$. The regression coefficient is positive which indicates the positive relationship i.e. one million increase in total investment leads to average 0.13395 million increase in net profit. Value of constant (a) indicates that if total investment is zero then value of net profit is predicted to decrease by -1102.15 million.

II. Regression Analysis between Total Deposit and Net Profit

In our analysis, total deposit is taken as independent variable (x) and net profit is taken as dependent variable (y). The main objective of analysis is to predict the value of dependent variable i.e. net profit (y) corresponding to given value of independent variable i.e. total deposit (x). The following table shows the results of the analysis between these two variables of SCBNL and HBL.

Table No. 32
Regression Analysis between Total Deposit and Net Profit

Bank	Regression equation of net profit (y) on total deposit (x)	value of constant (a)	regression coefficient (b)
SCBNL	$Y = 364.19 + 0.01208x$	a= 364.19	b=0.01208
HBL	$Y = 342.68 + 0.00301x$	a= 342.68	b=0.00301

Source: Appendix No. G - 3 & 4

Table-32 that regression equation between net profit and loan and advances of SCBNL and HBL.

In case of SCBNL there is positive relationship between two variables. According to the table, regression equation of net profit (y) on total deposit (x), $Y = 364.19 + 0.01208x$. Value of constant (a) is 364.19 indicates that when the total deposit is zero then the expected change in the value of net profit is 364.19, i.e. the value is predicted to increase by 364.19 million during the year. The regression coefficient (b) represents that the value of net profit is predicted to increase by 0.01208 million for each one million increase in total deposit.

In case of HBL, there is positive relationship. According to the table, regression equation of net profit (y) on total deposit(x), $Y = 342.68 + 0.00301x$. The regression coefficient is positive which indicates the negative relationship i.e. one million increase in total deposit leads to average 0.00301 million decrease in net profit. Value of constant (a) indicates that if total deposit is zero then value of net profit is predicted to increase by 342.68 million.

4.1.2.3. TREND ANALYSIS AND PROJECTION FOR NEXT FIVE YEARS

This is known as time series analysis. The objectives of this analysis are to analyze the trend of deposit collection, its utilization and net profit of SCBNL and HBL. These topics analyzes the trend of deposits, loan and advances, total investment and net profit and its projection for next five years the basis of past performance and records available.

The projections are based on the following assumptions:

- a. The bank will run in this present position i.e. trend will repeat itself.
- b. Other things will remain constant or unchanged.
- c. The economy will remain in the present stage.
- d. Nepal Rastra Bank will not change its guidelines relating to joint venture banks.
- e. The forecast will hold true only when the limitation of least square method is carried out.

I. Analysis of Trend Value of Deposit:

The trend values of deposit from F/Y 2003/04 to 2007/08, an attempt has been made to forecast the projection for next five years i.e. up to F/Y 2012/13. The following table shows the trend value of deposits from F/Y 2003/04 to F/Y 2012/13.

Table No. 33
Trend values of Deposit of SCBNL and HBL

(Rs. in million)

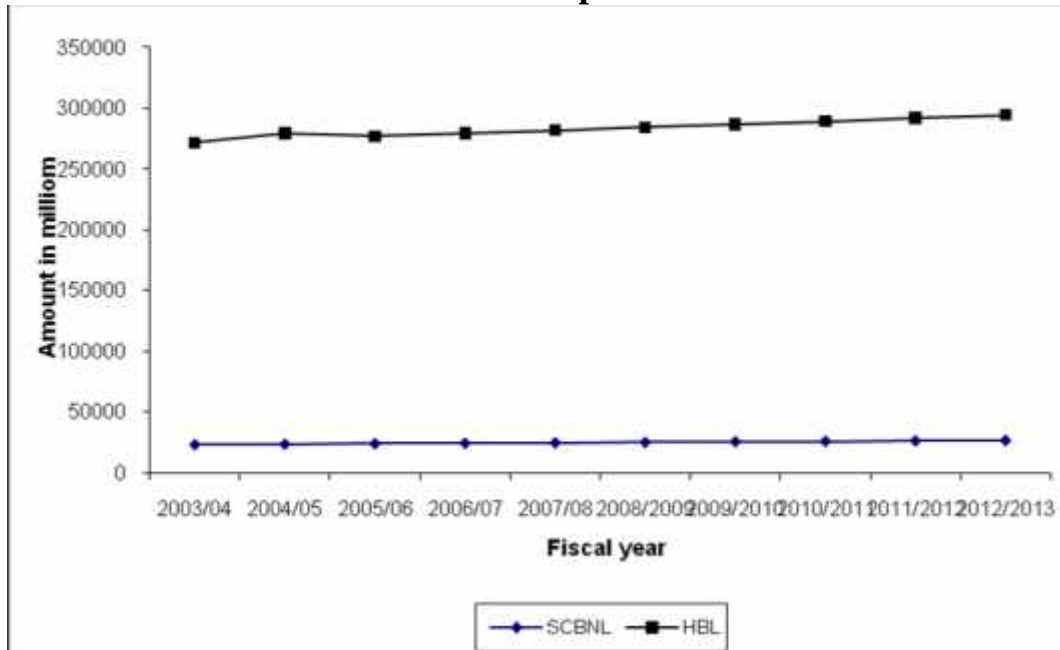
F/Y	SCBNL	HBL
2003/04	22829.89	271431.42
2004/05	23210.58	278901.21
2005/06	23589.72	276411.28
2006/07	23968.86	278901.21
2007/08	24348.00	281391.14
2008/2009	24726.72	283881.07
2009/2010	25178.28	286371.00
2010/2011	25485.42	288860.93
2011/2012	25864.56	291350.86
2012/2013	26243.70	293840.79

Source: Appendix No. H - 1

From the Table-33 it is clear that trend values of SCBNL and HBL are in an increasing trend. If other things remain unchanged the total deposit of SCBNL prescribed to be Rs. 26243.70million and that of HBL to be more than SCBNL by the end F/Y 2012/2013 i.e. Rs 293840.79million.

From the above trend analysis, it is quite obvious that HBL's deposit collection is proportionately much better than SCBNL from F/Y 2003/2004 onwards. SCBNL has to launch new strategy to collect more deposits. The trend values of total deposit of SCBNL and HBL are fitted in the following figure

Figure No. 5
Trend values of Deposit of SCBNL and HBL



II. Analysis of Trend Values of Loan and Advances:

Under this topic, the trend values of loan and advances of SCBNL and HBL has been calculated for five years from F/Y 2003/04 to, 2007/08 and the forecast for next five years from 2008/09 to 2012/13.

Table No. 34
Trend values of Loan and Advances of SCBNL and HBL
(Rs. in million)

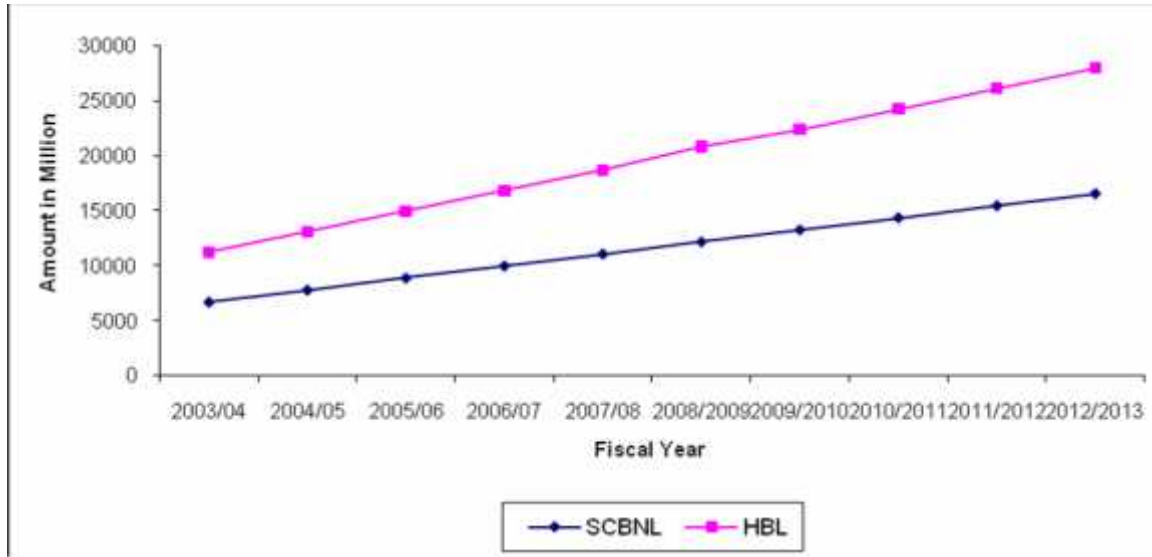
F/Y	SCBNL	HBL
2003/04	6683.18	11234.86
2004/05	7773.23	13090.99
2005/06	8863.27	14947.12
2006/07	9953.31	16803.25
2007/08	11043.35	18659.38
2008/2009	12133.39	20815.51
2009/2010	13223.43	22371.64
2010/2011	14313.47	24227.77
2011/2012	15403.51	26083.90
2012/2013	16493.55	27940.03

Source: Appendix No. H - 2

Table-34 clearly shows that the loan and advances of two sample banks are in an increasing trend. Assuming that other things will remain constant, the loan and advances of SCBNL at the end of F/Y 2012/13 is predicted to be Rs. 16493.55 and HBL is 27940.03 million.

From above trend analysis, it is quite clear that loan and advances of HBL is comparatively higher than SCBNL through out the trend projection period. The above trends values of loan and advances of SCBNL and HBL are fitted in the trend line given in figure.

Figure No. 6
Trend Values of Loan and Advances of SCBNL and HBL



III. Analysis of Trend Values of Investment

Here, the trend values of total investment of concerned banks have calculated for five years and an attempt has been made to forecast the projections for next five years from 2008/09 to 2012/13. The following table shows the trend value if investment from 2003/04 to 2012/13.

Table No. 35
Trend values of Investment of SCBNL and HBL

(Rs. in million)

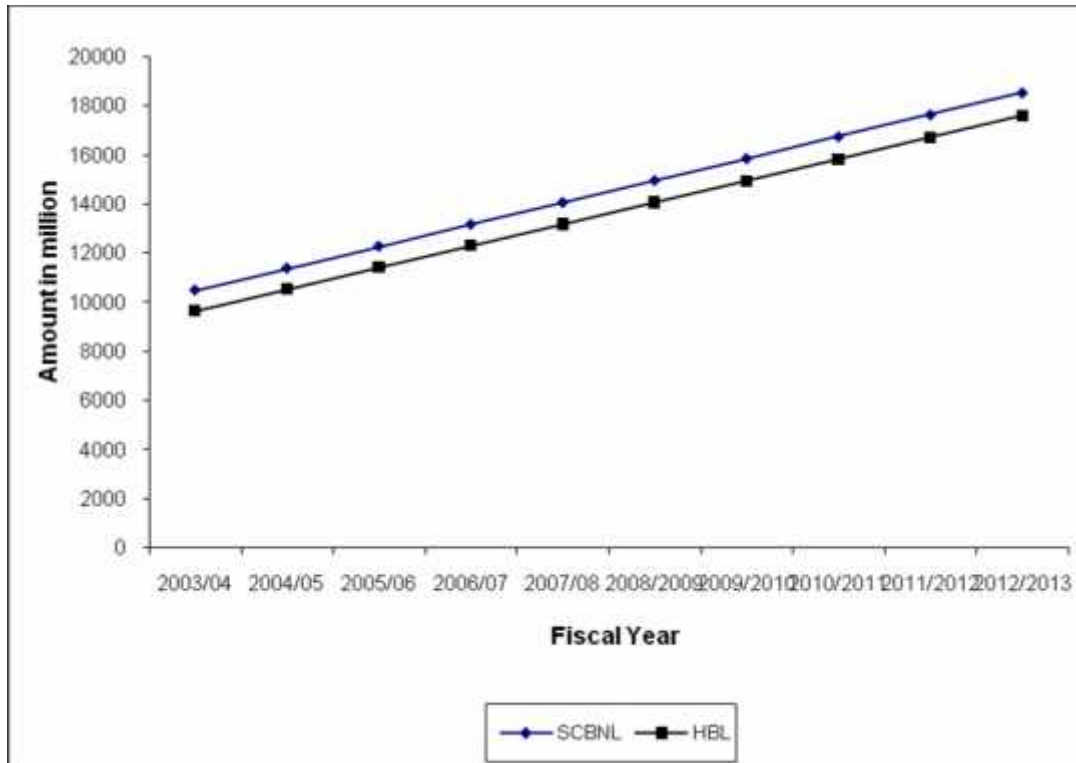
F/Y	SCBNL	HBL
2003/04	10486.15	11768.10
2004/05	11379.72	10524.65
2005/06	12273.29	11407.33
2006/07	13166.86	12290.01
2007/08	14060.43	13172.69
2008/2009	14954.00	14055.37
2009/2010	15847.57	14938.05
2010/2011	16741.14	15820.73
2011/2012	17634.71	16703.41
2012/2013	18528.28	17586.09

Source: Appendix No. H - 3

Table-35 it is clear that the trend values of all two banks are in increasing trend. If other things remain unchanged total investment of SCBNL is projected to be Rs 18528.28in F/Y 2012/13 and that of HBL to be Rs. 17586.09million in the F/Y 2012/13.

The above table reveals that SCBNL's total investment is higher than that of HBL through out the trend projection period. It can be said that all the two banks have followed the policy of maximizing their investment. The above calculated trend values are fitted in the trend line given in following figure.

Figure No. 7
Trend values of Investments of SCBNL and HBL



IV. Analysis of Trend Values of Net Profit

Under this topic on the trend values of net profit from F/Y 2003/04 to 2007/08, an attempt has been made to forecast the projections for next five years i.e. up to F/Y 2012/13. The following table shows the trend value of net profit form F/Y 2003/04 to 2012/13.

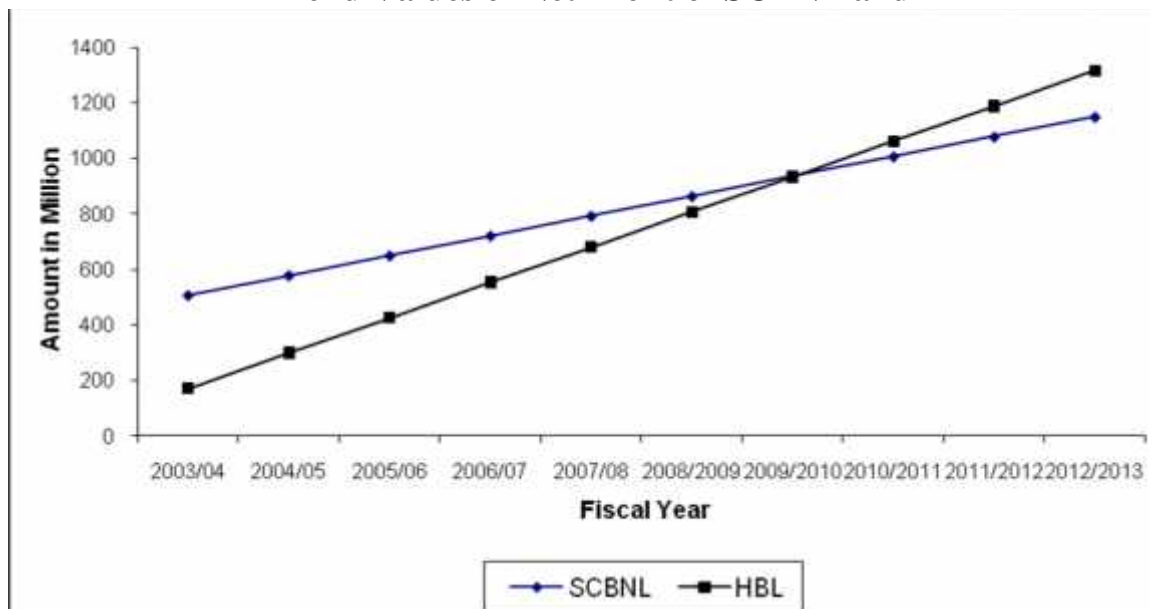
Table No. 36
Trend Values of Net Profit of SCBNL and HBL
(Rs. in million)

F/Y	SCBNL	HBL
2003/04	506.33	171.56
2004/05	577.80	298.73
2005/06	649.27	425.90
2006/07	720.74	553.07
2007/08	792.21	680.24
2008/2009	863.68	807.41
2009/2010	935.15	934.58
2010/2011	1006.62	1061.75
2011/2012	1078.09	1188.92
2012/2013	1149.56	1316.09

Source: Appendix No. H - 4

Table-36 it is clear that the trend value of the banks are in increasing trend. Other things remaining the same the trend value of SCBNL will be highest in F/Y 2012/13 i.e. Rs 1149.56million. In case of SCBNL net profit will be Rs 1149.56million. Similarly, HBL net profit will be Rs. 1188.92 in the F/Y 2012/13. HBL net profit is higher than that of SCBNL through the review period. It can be said that all the banks have followed the policy of maximizing their net profit. The above calculated trend values are fitted in the trend line given in following figure.

Figure No. 8
Trend Values of Net Profit of SCBNL and HBL



4.1.2.4. TEST OF HYPOTHESIS

Under this topic, effort has been made to test the significance regarding the parameter of the population on the basis of sample drawn from the population. The following steps have been followed.

- I. Formulating the Hypothesis
 - a. Null Hypothesis
 - b. Alternative Hypothesis
- II. Computing the test statistic
- III. Fixing the level of significance
- IV. Deciding the two tail or one tail test
- V. Making decision

Here, some of main hypothesis tests are calculated and decision is made. Null Hypothesis (H_0): $\mu_1 = \mu_2 = \mu_3$ i.e. there is no significant difference between mean ratios of two variables of SCBNL and HBL.

Alternative Hypothesis (H_1): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is significant difference between mean ratios of two variables of SCBNL and HBL.

t - test

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

Assumptions:

- I. The parent population from which the sample is drawn is normal or approximately normal.
- II. The given sample is drawn by random sampling method.
- III. The population standard deviation is not known.

I. Test of Hypothesis on Loan and Advances to Total Deposit Ratios**Table No. 37**

F/Y	SCBNL			HBL		
	X_1	X_1	X_1^2	X_2	X_2	X_2^2
2003/04	30.29	-7.31	53.44	54.30	-0.68	0.46
2004/05	42.12	4.52	20.43	50.07	-4.91	24.11
2005/06	38.75	1.15	1.32	55.27	0.29	0.08
2006/07	39.72	2.12	4.88	55.06	0.08	0.006
2007/08	37.11	-0.49	0.24	60.21	5.23	27.35
Sum	187.99		80.31	274.91		52.008

Here,

$$\bar{x}_1 = \frac{\sum x_1}{n} \qquad \bar{x}_2 = \frac{\sum x_2}{n}$$

$$\bar{x}_1 = \frac{187.99}{5} \qquad \bar{x}_2 = \frac{274.91}{5}$$

$$\bar{x}_1 = 37.60 \qquad \bar{x}_2 = 54.98$$

Test of significant difference between SCBNL and HBL

Here,

Null Hypothesis (H_0): $\bar{x}_1 = \bar{x}_2$ i.e. there is no significant different between two mean ratios of loan and advances to total deposit of SCBNL and HBL.

Alternative Hypothesis (H_1): $\bar{x}_1 \neq \bar{x}_2$ (two - tailed test) i.e. there is significant different between mean ratios of loan and advances to total deposit of SCBNL and HBL.

(Where \bar{x}_1 is mean ratio of SCBNL and \bar{x}_2 is mean ratio of HBL)

The test statistic under H_0 is given by,

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S_p^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where,

S_p^2 = an unbiased estimate of common population variance and its value is computed by

$$S_p^2 = \frac{1}{n_1 + n_2 - 2} \left(\sum x_1^2 + \sum x_2^2 \right) = \frac{1}{5+5-2} (80.31 + 52.008) = 16.54$$

Now, Test statistic under H_0 is,

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S_p^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} \quad \text{or, } t = \frac{37.60 - 54.98}{\sqrt{16.54 \left(\frac{1}{5} + \frac{1}{5} \right)}} = -6.7574$$

The calculated value of 't' = -6.7574

Degree of freedom = $n_1 + n_2 - 2 = 5+5-2= 8$

Critical value = The tabulated value of 't' at 5% level significance for two tailed test and for 8 d.f. is 2.306.

Decision: Since calculated value of 't' is less than tabulated value, the null hypothesis is accepted. Therefore we can conclude that there is no significant different between two means i.e. loan and advances to total deposit of SCBNL and HBL.

II. Test of Hypothesis of Total Interest Earned to Total Working Fund Ratio

Table No. 38

F/Y	SCBNL			HBL		
	X ₁	X ₁	X ₁ ²	X ₂	X ₂	X ₂ ²
2003/04	4.41	-0.58	0.336	5.03	-0.53	0.281
2004/05	4.84	-0.51	0.260	5.19	-0.37	0.137
2005/06	4.62	-0.37	0.137	5.52	-0.040	0.002
2006/07	5.73	0.74	0.548	5.91	0.35	0.123
2007/08	5.35	0.54	0.292	6.17	0.61	0.372
Sum	24.95		1.573	27.82		0.915

Here,

$$\bar{x}_1 = \frac{\sum x_1}{n} \qquad \bar{x}_2 = \frac{\sum x_2}{n}$$

$$\bar{x}_1 = \frac{24.95}{5} \qquad \bar{x}_2 = \frac{27.82}{5}$$

$$\bar{x}_1 = 4.99 \qquad \bar{x}_2 = 5.56$$

Test of significant difference between SCBNL and HBL

Here,

Null Hypothesis (H₀): $\bar{x}_1 = \bar{x}_2$ i.e. there is no significant different between two mean ratios of total interest earned to total working fund of SCBNL and HBL.

Alternative Hypothesis (H₁): $\bar{x}_1 \neq \bar{x}_2$ (two - tailed test) i.e. there is significant different between mean ratios of total interest earned to total working fund of SCBNL HBL.

(Where \bar{x}_1 is mean ratio of SCBNL and \bar{x}_2 is mean ratio of HBL)

The test statistic under H₀ is given by,

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S_p^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where,

S_p^2 = an unbiased estimate of common population variance and its value is computed by

$$S_p^2 = \frac{1}{n_1 + n_2 - 2} (\sum x_1^2 + \sum x_2^2) = \frac{1}{5 + 5 - 2} (1.573 + 0.915) = 0.311$$

Now, the test statistic under H_0 is

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S_p^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{4.99 - 5.56}{\sqrt{0.311 \left(\frac{1}{5} + \frac{1}{5} \right)}} = 1.6161$$

The calculated value of 't' = 1.6161

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Critical value = The tabulated value of 't' at 5% level significance for two tailed test and for 8 d.f is 2.306.

Decision: since calculated value of 't' is less than tabulated value, the null hypothesis is accepted. Therefore we can conclude that there is no significant different between two means i.e. total interest earned to total working fund of SCBNL and HBL.

III. Test of Hypothesis of Loan and Advances to Current Asset Ratio

Table No. 39

F/Y	SCBNL			HBL		
	X ₁	X ₁	X ₁ ²	X ₂	X ₂	X ₂ ²
2003/04	27.28	-6.56	43.03	48.93	-0.97	0.941
2004/05	37.34	3.50	12.25	45.86	-4.04	16.322
2005/06	34.80	0.96	0.922	50.67	0.77	0.593
2006/07	35.17	1.33	1.769	50.00	0.10	0.010
2007/08	34.63	0.79	0.624	54.03	4.13	17.057
Sum	169.22		58.60	249.49		34.92

Here,

$$\bar{x}_1 = \frac{\sum x_1}{n} \qquad \bar{x}_2 = \frac{\sum x_2}{n}$$

$$\bar{x}_1 = \frac{169.22}{5}$$

$$\bar{x}_1 = 33.84$$

$$\bar{x}_2 = \frac{249.49}{5}$$

$$\bar{x}_2 = 49.90$$

Test of significant difference between SCBNL and HBL

Here,

Null Hypothesis (H_0): $\bar{x}_1 = \bar{x}_2$ i.e. there is no significant difference between two mean ratios of loan and advances to current assets of SCBNL and HBL.

Alternative Hypothesis (H_1): $\bar{x}_1 \neq \bar{x}_2$ (two - tailed test) i.e. there is significant difference between mean ratios of loan and advances to current assets of SCBNL and HBL.

(Where \bar{x}_1 is mean ratio of SCBNL and \bar{x}_2 is mean ratio of HBL)

The test statistic under H_0 is given by,

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S_p^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where,

S_p^2 = an unbiased estimate of common population variance and its value is computed by

$$S_p^2 = \frac{1}{n_1 + n_2 - 2} \left(\sum x_1^2 + \sum x_2^2 \right) = \frac{1}{5 + 5 - 2} (58.60 + 43.92) = 12.82$$

Now, the test statistic under H_0 is

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S_p^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{33.84 - 49.90}{\sqrt{12.82 \left(\frac{1}{5} + \frac{1}{5} \right)}} = -7.091$$

The calculated value of 't' = -7.091

Degree of freedom = $n_1 + n_2 - 2 = 5 + 5 - 2 = 8$

Critical value = The tabulated value of 't' at 5% level significance for two tailed test and for 8 d.f. is 2.306.

Decision: since calculated value of 't' is less than tabulated value, the null hypothesis is accepted. Therefore we can conclude that there is no significant difference between two means i.e. loan and advances to current assets of SCBNL and HBL.

4.2 MAJOR FINDINGS OF THE STUDY

The basic analysis required for this study has been completed. The final and most important task of the researcher is to enlist the findings. This will give meaning to the desired result. A comprehensive summary of the major findings of this study is presented below.

The main findings of the study derived from the analysis of financial data of SCBNL in comparison to HBL are given below.

I. Liquidity Ratio

The liquidity position of SCBNL and HBL reveals that:

- From the analysis of current ratio, it is found that the mean ratio of SCBNL is slightly higher than HBL. It means SCBNL has maintained the higher liquidity and lower risk in comparison to HBL.
- The mean ratio of cash and bank balance to total deposits of SCBNL is higher than HBL. It states that the liquidity position of SCBNL is better in this regard because of high percentage of liquid assets. On the contrary, a high liquid ratio also indicates the inability of the bank to mobilize its current assets. The ratios of HBL are more consistent than other banks.
- The mean ratio of cash and bank balance to current asset of SCBNL is higher than HBL. It states that the liquidity position of SCBNL is better in this regard. And the ratio of HBL is less variable than that of SCBNL bank. The ratio of SCBNL is high consistency.
- The mean ratio of investment on government securities to current asset of SCBNL is higher in comparison to HBL. It reveals that it has invested more of its fund on government securities. The ratios of SCBNL are less consistent.
- The mean ratio of loan and advances to current assets of SCBNL is highest. The variability of ratios of SCBNL is greater than other bank. SCBNL seems to be more consistent and HBL seems to be less consistent.

The above result shows that the liquidity positions of all two banks are satisfactory. SCBNL has the highest current ratio which justifies that it is capable enough to meet its current obligations and also it has highest loan and advances to current assets ratio. It means SCBNL is very successful in mobilizing its funds as loan and advances. The investment policy is better than HBL. HBL has highest cash and

bank balance to total deposit and current assets ratio. It indicates that it has lower investment policy on loan and advances and government securities.

II. Assets Management Ratio (Activity Ratio):

The assets management ratio of SCBNL and HBL reveals that:

- The mean ratio of loan and advances to total deposit of HBL is highest. SCBNL is lowest. In terms of consistency, SCBNL seems to be less consistency.
- The mean ratio of total investment to total deposit of SCBNLL is higher than HBL and. The ratio of HBL is more consistency and the ratio of SCBNL is less consistency.
- In case of loan and advances to working fund ratio, the mean ratio of HBL is highest. The ratio of HBL is more consistent than that of SCBNL.
- The mean ratio of investment on government securities to total deposit of SCBNL is greater than HBL bank. HBL has lower mean ratio. SCBNL seems to be more consistency and HBL seems to be less consistency.
- The mean ratio of investment on shares and debentures to total deposit of HBL is significantly higher than SCBNL. The ratio of SCBNL is less consistency and ratio of HBL is more consistency.
- The mean ratio of loan loss provision of HBL is highest and SCBNL is lowest. SCBNL seems to be more consistency.

From the above findings, it helps to conclude that SCBNL has been more successful in mobilization of its total deposits and deposit as loan & advances, investment in shares and debentures and also SCBNL appears to be stronger in mobilization of total deposit as investment in risk free government securities. HBL seems to be stronger in loan loss provision. The investment policy of SCBNL has better than other bank towards loan and advances and in other companies' shares and debentures. SCBNL has successfully managed their assets towards different income generation activities.

III. Profitability Ratio

The profitability ratios of SCBNL and HBL reveal that:

- The mean ratio of return on loan and advances of SCBNL has been found to be significantly greater than HBL bank. The ratios of SCBNL are fewer variables and more consistency.
- The mean ratio of return on total deposit of SCBNL is higher than HBL. SCBNL has lower ratio. On the other hand, the ratio of SCBNL is less consistency and fewer variables in compared to HBL bank.

- The mean ratio on equity capital ratio of SCBNL is higher than HBL. SCBNL seems to be less consistency in this case.
- The mean ratio of total interest earned to total deposit of HBL is highest of all. The total interest earned to total outside assets ratio of the HBL is less variable in comparison to SCBNL.
- The mean ratio of total interest earned to total operating income of HBL is higher than other bank. HBL seems to be less consistency and fewer variables.
- The mean ratio of total interest earned to total outside assets of HBL is higher than other compared bank. The ratio of HBL is less consistency and higher variables.
- The mean ratio of total interest paid to total deposit of HBL is greater than SCBNL. It means HBL has paid higher interest than SCBNL. The ratio of HBL is less consistent than that of other SCBNL bank.
- The mean ratio of interest earn on government security to total interest earned of SCBNL is higher than HBL. The ratio of HBL is more consistent than that of other SCBNL bank.
- The mean ratio of interest earn on other security to total interest earned on SCBNL is higher than HBL. The ratio of SCBNL is more consistent than that of other HBL bank.

On the basis of above, we can conclude that HBL has been more successful in mobilization of its funds in interest bearing assets to earn higher interest income form working fund and outside assets. SCBNL has been more successful in maintaining its higher return on loan and advances, total working fund and equity capital. HBL is better in interest earning from its total operating income and also better position than other banks from interest payment point of view.

IV. Risk Ratio

The Risk ratio of SCBNL and HBL reveals that,

- The mean liquidity risk ratio of SCBNL is higher than HBL. HBL has lower mean liquidity risk ratio. On the contrary, HBL seems to be less stable and more variable.
- The mean credit risk ratio of HBL is higher than SCBNL. SCBNL has lower risk ratio. HBL seems to be less stable and SCBNL seems to be more stable.

Based on above findings we can conclude that SCBNL is in moderate position in liquidity and capital risk. It has more credit risk. SCBNL has higher liquidity risk and HBL.HBL have greater exposure to risk in its financial operations.

V. Growth Ratio

The growth ratio of SCBNL and HBL reveals that,

- The growth ratio of deposit of SCBNL is slightly lower than HBL. It means the performance of SCBNL is poorer in collecting more deposit in comparison to HBL.
- The growth ratio of total loan and advances of SCBNL is slightly higher than HBL. It means the performance HBL to grant loan and advances in compared to SCBNL is not good. SCBNL seems to stronger in this case.
- The growth ratio of total investment of SCBNL is higher than HBL. SCBNL has good performance of investing in different sectors.
- The growth ratio of net profit of SCBNL is higher than HBL It means that the earning profit from various sectors is better than HBL.

Based on the above findings, we can conclude that, SCBNL has been more successful in increasing its deposits, loan & advances and investment during the study period, whereas, SCBNL has been more efficient in terms of increasing its net profit, but less successful in deposit collection, loan & advances and investing. HBL needs to seriously rethink about its strategy.

VI. Co-efficient of Correlation Analysis

Co-efficient of correlation between different variables of SCBNL and HBL reveal that:

- SCBNL has a higher value of coefficient of correlation between deposits and loan and advances than HBL. This indicates that SCBNL is better position of it in mobilization of deposits as loan and advances in compared to other bank.
- The coefficient of correlation between deposits and total investment of HBL is higher than SCBNL. It indicates that HBL is better position in total deposit in mobilizing as on investment.
- The coefficient of correlation between deposit and net profit of HBL has highest value, whereas the coefficient of correlation between the same variables in case of SCBNL has a lower positive value. This indicates that HBL is capable to earn net profit by mobilizing its total deposit in compared to SCBNL.

In conclusion, we can say that there is a significant relationship between deposits and investment, deposits and loan & advances, deposit and net profit, total deposit and net profit, in case of HBL.

In case of SCBNL, there is a significant relationship between deposits and investment, deposits and loan & advances, deposit and net profit, total deposit and net profit, in case of HBL.

VII. Regression Analysis

Regression analysis between different variable of SCBNL and HBL reveals that,

- Regression analysis between total investment and net profit of HBL shows the positive relationship and analysis between these two variables of SCBNL shows the positive relationship.
- Regression analysis between total deposit and net profit of HBL shows the positive relationship between two variables. The ratio of SCBNL shows positive relationship.

In conclusion we can say that there is positive relationship between total investment to net profit and total deposit to net profit of HBL. SCBNL's relationship is positive in both cases.

VII. Trend Analysis and Projection for next five years

The trend analysis of deposits, loan and advances, total investment and net profit and its projection for next years of SCBNL and HBL reveals that:

- The deposit trend of the bank SCBNL and HBL have an increasing trend. The total deposit of SCBNL to be 26243.70 million at the end of F/Y 2012/13. Similarly, the total deposit of HBL is predicted to be 293840.79 million. The deposit collection of HBL is much better than SCBNL.
- The loan and advance of all the sample banks have an increasing trend. The total loan and advance of SCBNL to be 16493.55 million at the end of F/Y 2012/13. Similarly, the amount is predicted to be 27940.03 million of HBL. The loan and advances of HBL is much better in compared to SCBNL.
- The total investment of the banks SCBNL and HBL both have an increasing trend. The total investment of SCBNL is 18528.28 million by the end F/Y 2012/2013. HBL is predicted to be 17586.09 million at the end of F/Y 2012/13. SCBNL seems to have much focused policy with regards to total investment than HBL.

- The net profits of all the two banks are in an increasing trend. The net profits of SCBNL & HBL are predicted at 12149.56 million and 1316.09 million respectively by the end of F/Y 2012/2013. The position of SCBNL with regard to utilization of the fund to earn profit is better than HBL.

VIII. Test of Hypothesis

The test of significance regarding the parameter of the population, the basis sample drawn from the population reveals that:

- There is no significance difference between mean ratio of loan and advances to total deposit of SCBNL and HBL.
- There is no significant difference between mean ratio of total interest earned to total working fund of SCBNL & HBL.
- There is no significant difference between mean ratio of loan and advances to current assets of SCBNL & HBL.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The chapter includes two aspects of the study. The first aspects are to focus on summarizing the fact finding of the study and making conclusion remarks upon them. While second aspects of the study focuses on making some useful suggestions and recommendations based on findings of the study for further improvement of the banks. This would be meaningful to the top management of the bank to initiate action and achieve the desired results. The objective of the researcher is not only to point out errors and mistakes but also to correct them and give directions for further growth and improvement.

5.1 SUMMARY

The development of any country largely depends upon its economic development. Economic development demands transformation of savings into the actual investments. Capital formation is the prerequisite in setting the overall pace of the economic development of a country. It is financial institutions that transfer funds from surplus spending unit to deficit units.

Banking sector plays an important role in the economic development of the country. Joint venture banks have been helpful in transferring foreign investment and advanced technology from one country to another. The liberal trade and investment policies have facilitated joint venture bank that is greater in developing countries like Nepal. In financial sector, there are various commercial banks established as joint venture. After implementation of the open market policy, joint venture commercial banks are opened as private banks. In competitive financial market performance of joint venture banks are very good. The main objective of the study was to study the comparative analysis of the investment policy of joint venture banks, i.e. Standard Chartered Bank Nepal Limited in comparison to Himalayan Bank Limited.

In the study, the word investment conceptualized spending or setting aside money for future financial gain. Investment might include the purchase of financial assets such as stocks, bonds, mutual fund or life insurance. The term investment covers a wide range of activities. It is only possible when there is adequate savings. Investment promotes economic growth to the nation's wealth. People deposit money in the bank. The bank may invest them in various business companies. As a result of which investment raises a nation's standard living.

In viewpoint of shareholders, investment is very important factor. For this commercial banks have to pay due considerations while formulating investment policy. A healthy development of any commercial banks depends upon its investment policy. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. The major source of income of a bank is interest income from investments & loans and fee based income. As loan and advance dominates the assets side of the balance sheet of any bank. Similarly, earnings from such loan and advances occupy a major space in income statement of the bank.

The first chapter focuses the introduction of the study. It attempts a little bit to introduce the investment policy of these banks. It has also attempted to set the objectives and significance of the study. Finally it presents the study of the organization.

The second chapter deals with review of literature, which includes the conceptual framework different view of different writers, books, journals and articles. Review of literature section has attempted to review the studied done so far on the same topic of different organizations.

Research methodology is studied in the third chapter; it has included the research design. It presents sources of data, data collection and processing techniques and financial and statistical tools used. Financial ratios like current ratio, assets management ratio, profitability ratio, risk ratio and growth ratio have been used. Karl Pearson's coefficient of correlation, regression analysis, trend analysis and hypothesis test have been used to analyze.

Presentation and analysis of data are studied in the fourth chapter. On the basis of variable level of current assets, current liabilities loan & advances and investment in various sectors is analyzed. The major ratio analysis consists of the composition of investment policy liquidity position, assets management position, profitability position and risk position. Under these, mean ratios and their trend position are studied. In order to test the correlation coefficient 'r' and regression analysis is calculated and analyzed. Some null and alternative hypothesis tests are calculated and analyzed. Major findings from data analysis are also studied in this fourth chapter. The data which were employed in this research are secondary in nature. They are obtained from annual reports of the concerned banks. Likewise, the financial statements of five fiscal

5.2 CONCLUSION

Years (from 2003/04 to 2007/08) were selected for the purpose evaluation. The following conclusions are drawn from the findings of the study.

- i. The liquidity position of SCBNL is comparatively better than HBL. SCBNL has the highest current ratio but in loan & advances to current assets ratio, HBL has been more successful in identifying profitable investment sectors and increasing its earning. In cash and bank balance SCBNL has the greater position than the HBL. SCBNL has maintained better investment policy on investment on government securities. It indicates that SCBNL is very successful in mobilizing its funds as loan and advance. This shows that the investment policy of SCBNL is better than HBL.
- ii. The assets management of HBL is good enough as compared to that of SCBNL. HBL has the highest loan and advances, investment on shares and debentures that of SCBNL. The total investment, investment on government securities of SCBNL is in between in comparison to HBL, SCBNL has been more successful in mobilizing its resources on various forms of investment. But in the case of loan and advances to total deposit, HBL is in strong position. However, SCBNL has the lowest proportion of loan loss ratio as comparing with HBL. SCBNL appears to be stronger in mobilizing of total deposit as invest in risk free government securities which indicates that the investment portfolio of SCBNL is better than HBL.
- iii. From analysis of profitability ratio, it can be concluded that SCBNL is success than HBL. The return on loan and advances, return on total deposit ratio, interest earned in government securities, interest earned in other income and return on equity is the highest in SCBNL than HBL. This shows the highest importance of lending business in SCBNL. SCBNL seems to be better in interest payment point of view then HBL. SCBNL seems to have collected its funds from cheaper sources than other bank. Total interest earned to total outside assets, interest earned to total deposit and total interest paid to total deposit of HBL is satisfactory in comparing to SCBNL. It indicates that SCBNL is successful in its investment portfolio management by which SCBNL generates higher returns on loan and advance, total deposit and equity capital. It concludes that the impact of investment of SCBNL is more effective than HBL to generate profit of the bank.
- iv. The degree of liquidity risk ratio is highest in SCBNL and credit risk ration is lower compare to HBL. It indicates that SCBNL investment policy are

implemented less effectively to generate enough profit and successful not in diversifying risk by investing funds through effective investment portfolio which minimize the risk and maximize the profit of the bank.

- v. The growth ratio of SCBNL and HBL reveals that SCBNL is more successful in increasing its loan, net profit and advances and total investment, net profit whereas, HBL has been more efficient in terms of increasing its deposit but less successful in net profit collection, loan and advances and total investment. It indicates that HBL is not much serious about its strategy implementation.
- vi. The correlation analysis, regression analysis, trend analysis and hypothesis analysis of SCBNL shows significant relationship, positive relationship, trend of deposits, loan and advances, total investment and net profit are relatively good and hypothesis indicates that there is no significant different between loan and advances to total deposit, total working funds, and current assets of SCBNL and HBL. From the above performance of two banks we come to the conclusion that in most of the cases SCBNL is good and only in few cases SCBNL is poor but it is just opposite to HBL bank. It indicates that SCBNL is stronger than HBL to survive in the financial markets.

5.3 RECOMMENDATIONS

On the basis of analysis and findings of the study, following recommendations can be advanced to overcome weakness, inefficiency and to improve present fund mobilization and investment of HBL.

- i. There are various factors, which can affect to the liquidity position of the bank. Among the various factors, the liquidity position is affected by internal factors as well as external factors. So that the bank should give more concentrate on internal and external factors. From the analysis, it reveals that SCBNL has recorded the ratio of cash and bank balance to total deposit and current asset are considerably lower than other bank. SCBNL is recommended to increase its cash and bank balance to meet current obligations and loan demand. The bank should give more focus on collecting deposit by giving more facilities and different schemes such as gift cheque scheme, house building deposit scheme, monthly interest scheme, direct finance housing scheme, cumulative deposit scheme and life insurance scheme.

- ii. From the above findings, it reveals that investment on government securities to current assets and total deposit ratio of HBL is comparatively lower than SCBNL. These are free of risk and highly in nature. Government securities (i.e. treasury bills, development bonds, saving certificate and government debenture) are semi liquid assets and it can be sold easily in market because these are free of risk. So, HBL is recommended to invest more of its funds in government securities in relevant manner instead of keeping them idle. It should keep in mind this proverb, "Something is better than nothing".
- iii. The loan and advances to total deposit and total deposit of HBL is better than SCBNL. However, it should try to maintain the consistency of loan and advances to total deposit ratio since it is less consistency than that HBL. It is good to invest more on share and debentures as it encourages financial and economic development of the country. A commercial bank must mobilize its funds in different sector such as to purchase shares and debentures of other companies out of total deposit. If other sector goes up positively then banks can utilize its fund more and more by providing them loan and advances or getting sufficient dividend on their share or interest on debentures.
- iv. The recovery of loan is the most challenging job to a bank. From the above findings, the credit risk taken by HBL is higher than SCBNL. HBL is in better position in loan and advances than SCBNL but it is failure to get sufficient return. So, it is strongly recommended that HBL should take strong steps to recover, which in turn can show high growth in profitability. The large amount of loan is blocked as non performing assets. Therefore, there is an urgent need to workout a suitable mechanism through which the overdue loan can be realized with time for this purpose special act named " loan recovery Act " should be enacted. Loan default in commercial bank is a result of various factors i.e. political influence, lack of skilled manpower, irregular supervision, lack of entrepreneurship attitude. HBL is recommended to formulate a sound collection policy including procedures which ensures paid identification of delinquent loan, immediate contact with borrower and continual follow up until a loan is recovered.
- v. The condition of portfolio of HBL should be carefully examined time to time. It should always try to maintain the equilibrium in the portfolio condition of bank. Portfolio management of bank assets basically means allocation of fund in different components having different degree of risks and varying rate of return so as to maintain a proper degree of balance between risk and return.

- vi. Profit is very important for survival of stability of any organization. As a joint venture private bank, HBL can not keep its eyes off from the profit motive. It should be always careful in increasing profit in the real sense to maintain the confidence of shareholders, depositors and customers. The return on loan and advances, return on deposit, return on equity is lower than SCBNL. This may be due to the focus of HBL on low return areas with higher degree of risk. It should look for productive areas of investment with higher return and lower risk. So that, it can earn a sufficient return enough for its survival, stability and long term sustainability.
- vii. In the competitive environment in the banking sector, the business should be customer oriented. It should strengthen and active its marketing function, as it is an effective tool to attract and retain the customers. The bank should make survey in the market before formulating new strategies and programs. It should try to know the customer needs and demands. Then only bank should develop an innovative approach to marketing and formulate new strategies and programs of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices.
- viii. The study reveals that HBL has not adopted any cost management strategy to have control over its cost of funding. Higher interest paid to total deposit, Loan loss ratio, high administrative costs are some of the reasons behind less profitability of the bank. So, HBL should try to adopt cost management strategy by applying standard costing, value analysis and value added statement and sound capital structure.
- ix. Last but not least: we know 2009 is very much challenging for the financial institute due to the GLOBEL RECESSION and the potential impact of recession in NEPAL financial market. We come to know about the bankruptcy of world top AMERICAN BANK and EUROPEAN BANK as well and the close down of big companies due to recession etc. so, NEPAL is the developing country where must of the funds are invested in infrastructural development and many more unsafe sector and unproductive sector and even the political disability of the country really creates the problem in manufacture sector where most of the bank provide loan to run the industries. I think each and every bank of NEPAL have to learn the lesson form the bankruptcy of different banks of the world and the possibility of risk and its impact in the financial market of NEPAL. SO, lastly in the GLOBEL RECESSION every bank of NEPAL have to diversify the investment in less risky sector than to the higher risky areas and hope to have sufficient liquidity to maintain good position in financial markets.

BIBLIOGRAPHY

- Alexander, G. J., Sharpe, W. F & Bailey, J. V. (2002). **Fundamentals of Investments**, New Delhi: Prentice Hall of India Pvt Ltd,
- Bhalla, V. K. (2004). **Security Analysis and Portfolio Management**, New Delhi: S Chand & Company Ltd.
- Cheney, M. John & Moses, A. Edward (1973). **Fundamentals of Management**, St. Paul: West Publishing Company Pvt Ltd, London, U. K.
- Crosse, H. D. (1963). **Management Policies for Commercial Banks (2nd edition)**, Englewood Cliffs. N. J., Prentice Hall Inc.
- Francis, J. C. (1998). **Investment Analysis and Management**, New York: McGraw Hill.
- Gupta, D. P. (1984). **Banking System, its role in export development**, New Delhi: S Chand & Company Ltd.
- Gupta, Kamal (1999). **Complementary Auditing (5th edition)**, New Delhi: McGraw Hill Publishers.
- Gupta, S. P. (1991). **Statistical Methods**, New Delhi: S Chand & Sons.
- Jones, P. Charles (1991). **Investment Analysis and Management**, Bombay: Himalayan Publishing House.
- Sekaran, V. (1992). **Research method in business: A skill building approach**. Singapore: John Wiley and Sons
- Van Horne, J. C, & Wachowicz Jr., J. M. (2001). **Fundamentals of Financial Management**, New Delhi: Pearson education Inc.
- Van Horne, J. C. (2002). **Financial Management and Policy (12th edition)**, Singapore: Pearson Education Pvt Ltd.
- Wolf, H. K. & Pant, P. R. (1999). **A Hand Book for Social Science Research and Thesis Writing**, Kathmandu: Buddha Academic Enterprises.
- An Annual Report of Five Years (2002/03 to 2006/07) of Standard Chartered Bank Nepal Limited and Himalayan Bank Limited.**
- Bajracharya, B. Bodhi (2047 B. S.). **Monetary Policy and Deposit Mobilization in Nepal**, Rajat Jayanti Smarika, RBB, Kathmandu, Nepal.
- Bista, Bhagat (2048 B. S.). **Nepalma Adhunik Banijya Byabastha**, Indu Chhapkhana, Kuponhole, lalitpur, Nepal
- Kishi, Dev Lal (1996). **The Changing Faces of Banking Sector and the HMG/N Recent Budgetary Policy**, Nepal Bank Patrika, NBL, Vol 25.
- Meschi, P. X. (2005). **Stock Market Valuation of Joint Venture Sell-Off**, Journal of International Business Studies, Vol. 36, U.K: Palgrave Macmillan, Houndmills, Basingstoke, Hampshire
- Morris, F. (1990). **Latin America's Banking System in the 1980s. World bank discussion Paper- 81**, the world bank, Washington D. C.

- Nepal Rastra Bank, (2005). Statistical and Financial Report, Kathmandu: NRB Publication.*
- Pradhan, Radhe Shyam (1994). Financial Management Practice in Nepal, Vikash Publishing House Pvt Ltd, New Delhi, India.*
- Pyakuryal, Bishwomber (1987). Workshop on Banking & National Development, Paper presented, NBL.*
- Shrestha, Ram Lal, (2045 B. S.). A Study on Deposits and Credits of Commercial Banks in Nepal, Nepal Rastra Bank Samachar, NRB.*
- Shrestha, Shiba Raj (2055). Portfolio Management in Commercial Banks, Theory & Practice, Nepal Bank Patrika, Baisakh Masanta.*
- Gautam, Kasum (2000) Investment Analysis of the Finance Companies Context of Nepal, Unpublished Thesis Submitted to Central Department of Management, Shanker Dev Campus, Putalisadak.*
- Lamichhane, (2004). Investment Policy of Joint Venture Banks in Nepal, Nepal Commerce Campus, T. U.*
- Regmi, (2001). A Comparative Study on the Financial Performance of Himalayan Bank limited and Nepal Bangladesh Bank Ltd, Shanker Dev Campus, T. U.*
- Shrestha, (2004). The Investment Practices of Joint Venture Banks in Nepal with special reference to NABIL, SCBNL and NSBI Bank limited, Nepal Commerce Campus, T. U.*
- Thapa, (2001). A Comparative Study on Investment Policy of NBBL and Other Joint Venture Banks (NABIL & NGBL), Shanker Dev Campus, T. U.*
- Udas, (2001). A Comparative Appraisal on Financial Performance of Nepal Bangladesh bank and Bank of Kathmandu Ltd, Shanker Dev Campus, T. U.*
- Lamichane, (2005). A Comparative Study of Agricultural Development Bank, Central Department of Management, T.U.*

Website:

www.himalayanbank.com
www.nabilbank.com
www.nepalstock.com
www.sebo.com
www.standardchartered.com

APPENDICES

Appendix A -1 Current Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	C. A	C. L	C. R	C. A	C. L	C. R
2003/04	23494.63	22086.21	1.06	24428.12	23390.87	1.04
2004/05	21808.84	20250.50	1.08	27508.97	26302.95	1.05
2005/06	25675.03	24022.19	1.07	28897.84	27189.59	1.06
2006/07	27838.04	25047.02	1.11	33084.07	30644.59	1.08
2007/08	31869.20	2974.00	1.07	35486.85	32785.97	1.08

Appendix A -2 Cash and Bank Balance to Total Deposit Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	C.A.B.B	T. D	RATIO	C.A.B.B	T. D	RATIO
2003/04	2023.16	21161.46	9.56	2001.19	22010.34	9.09
2004/05	1111.12	19335.10	5.75	2014.47	24814.01	8.12
2005/06	12762.20	23061.03	5.53	1717.35	26490.85	6.48
2006/07	2021.02	24647.02	8.20	1757.34	30048.42	5.85
2007/08	2050.24	29744.00	6.89	1448.14	31842.79	4.55

Appendix A -3 Cash and Bank Balance to Current Assets Ratio(Rs. in million)

F/Y	SCBNL			HBL		
	C.A.B.B	C. A	RATIO	C.A.B.B	C. A	RATIO
2003/04	2023.16	23494.63	8.61	2001.19	24428.12	8.19
2004/05	1111.12	21808.84	5.09	2014.47	27508.97	7.44
2005/06	1276.20	25675.03	4.97	1717.35	28897.84	5.94
2006/07	2021.02	27838.04	7.26	1757.34	33084.07	5.31
2007/08	2050.24	31869.20	6.43	1448.14	35486.85	4.08

Appendix A - 4

Investment on Govt. Securities to Current Assets Ratio(Rs. in million)

F/Y	SCBNL			HBL		
	I.O.G.S	C. A	RATIO	I.O.G.S	C. A	RATIO
2003/04	7948.22	23494.63	33.83	3431.73	24428.12	14.05
2004/05	7203.07	21808.84	33.03	5469.73	27508.97	20.19
2005/06	8644.9	25675.03	33.67	5144.38	28897.84	17.80
2006/07	7107.93	27838.04	25.53	6454.88	33084.07	19.51
2007/08	8137.61	31869.20	25.53	7471.66	35486.85	21.05

Appendix A - 5

Loan and Advances to Current Assets Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	L & A	C. A	RATIO	L & A	C. A	RATIO
2003/04	6410.24	23494.63	27.28	11951.87	24428.12	48.93
2004/05	8143.21	21808.84	37.34	12424.52	27508.97	45.86
2005/06	8935.42	25675.03	34.80	14642.56	28897.84	50.67
2006/07	9790.87	27838.04	35.17	16543.73	33084.07	50.00
2007/08	11036.63	31869.20	34.63	19172.94	35486.85	54.03

Appendix B - 1

Loan and Advances to Total Deposit Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	L & A	T. D	RATIO	L & A	T. D	RATIO
2003/04	6410.24	21161.46	30.29	11951.87	22010.34	54.30
2004/05	8143.21	19335.10	42.12	12424.52	24814.01	50.07
2005/06	8935.41	23061.03	38.75	14642.56	26490.85	55.27
2006/07	9790.87	24647.02	39.72	16543.73	30048.42	55.06
2007/08	11036.63	29744.00	37.11	19172.94	31842.79	60.21

Appendix B - 2

Total Investment to Total Deposit Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	T. INV	T. D	RATIO	T. INV	T. D	RATIO
2003/04	11360.33	21161.46	53.68	11768.10	22010.34	42.21
2004/05	9702.55	19335.1	50.18	11692.34	24814.01	47.12
2005/06	12847.54	23061.03	55.71	10889.03	26490.85	41.10
2006/07	13553.23	24647.02	54.99	11822.99	30048.42	39.35
2007/08	13902.82	29744.00	46.74	13340.18	31842.79	41.90

Appendix B - 3

Investment on Govt. Securities to Total Deposit Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	I.O.G.S	T.D	RATIO	I.O.G.S	T. D	RATIO
2003/04	7948.22	21161.46	37.56	3431.73	22010.34	15.59
2004/05	7203.07	19335.10	37.25	5469.73	24814.01	22.04
2005/06	8644.88	23061.03	37.49	5144.38	26490.85	19.42
2006/07	7107.93	24647.02	28.84	6454.88	30048.42	21.48
2007/08	8137.61	29744.00	27.36	7471.66	31842.79	23.46

Appendix B - 4

Investment on Share and Debenture to Total Deposit Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	I.O.S.D	T. D	RATIO	I.O.S.D	T. D	RATIO
2003/04	11.19	21161.46	0.047	34.27	22010.34	0.138
2004/05	13.34	19335.10	0.061	39.91	24814.01	0.143
2005/06	15.37	23061.03	0.060	39.91	26490.85	0.135
2006/07	44.94	24647.02	0.182	73.42	30048.42	0.244
2007/08	114.54	29744.00	0.385	89.56	31842.79	0.281

Appendix B - 5

Loan Loss Provision Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	L. L. P	L & A	RATIO	L. L. P	L & A	RATIO
2003/04	283.62	6410.24	4.42	967.76	11951.87	8.10
2004/05	277.66	8143.21	3.41	1026.64	12424.52	8.26
2005/06	270.89	8935.41	3.03	1229.94	14642.56	8.40
2006/07	287.51	9790.87	2.94	795.73	16543.73	4.81
2007/08	245.39	11036.63	2.22	682.09	19172.94	3.56

Appendix C - 1

Return on Loan and Advances (Rs. in million)

F/Y	SCBNL			HBL		
	N. P	L & A	RATIO	N. P	L & A	RATIO
2003/04	537.80	6410.24	8.39	463.05	11951.87	2.20
2004/05	539.20	8143.21	6.62	308.28	12424.52	2.48
2005/06	658.75	8935.41	7.37	457.46	14642.56	3.12
2006/07	691.67	9790.87	7.06	491.83	16543.73	2.97
2007/08	818.92	11036.63	7.42	635.87	19172.94	3.32

Appendix C - 2
Return on Total Deposit (Rs. in million)

F/Y	SCBNL			HBL		
	N. P	T. D	RATIO	N. P	T. D	RATIO
2003/04	537.80	21161.46	2.54	463.05	22010.34	1.20
2004/05	539.20	19335.10	2.79	308.28	24814.01	1.24
2005/06	658.75	23061.03	2.86	457.46	26490.85	1.73
2006/07	691.67	24647.02	2.81	491.83	30048.42	1.64
2007/08	818.92	29744.00	2.75	635.87	31842.79	2.01

Appendix C - 3
Return on Equity Capital Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	N. P	E. CAP	RATIO	N. P	E. CAP	RATIO
2003/04	537.80	374.64	143.55	463.05	536.25	49.05
2004/05	539.20	374.64	143.92	308.28	643.50	47.91
2005/06	658.75	374.64	175.84	457.46	772.20	59.24
2006/07	691.67	413.26	167.37	491.83	810.81	60.66
2007/08	818.92	620.78	131.92	635.87	1013.51	62.74

Appendix C - 4
Total Interest Earned to Total Deposit Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	T. I. E	T. D	RATIO	T. I. E	T. D	RATIO
2003/04	1042.18	21161.46	4.41	1245.89	22010.34	5.03
2004/05	1058.68	19335.10	4.84	1446.47	24814.01	5.19
2005/06	1189.60	23061.03	4.62	1626.47	26490.85	5.52
2006/07	1411.98	24647.02	5.73	1775.58	30048.42	5.91
2007/08	1591.20	29744.00	5.35	1963.65	31842.79	6.17

Appendix C - 5
Total Interest Earned to Total Outside Assets Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	T. I. E	T. O. A	RATIO	T. I. E	T. O. A	RATIO
2003/04	1042.18	17770.57	5.86	1245.89	21243.97	5.86
2004/05	1058.68	17845.76	5.93	1446.47	24116.86	6.00
2005/06	1189.60	21782.94	5.46	1626.47	25531.59	6.37
2006/07	1411.98	22563.89	6.26	1775.58	25867.34	6.86
2007/08	1591.20	22985.78	6.92	1963.65	26234.20	7.49

Appendix C - 6

Total Interest Earned to Total Operating Income Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	T. I. E	T. O. I	RATIO	T. I. E	T. O. I	RATIO
2003/04	1042.18	1264.90	82.39	1245.89	1028.08	121.19
2004/05	1058.68	1285.54	82.35	1446.47	1198.72	120.67
2005/06	1189.60	1418.25	83.88	1626.47	1395.42	116.16
2006/07	1411.98	1558.00	90.63	1775.58	1493.62	118.88
2007/08	1591.20	1774.15	89.69	1963.65	1608.00	122.12

Appendix C - 7

Total Interest Paid to Total Deposit Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	T. I. P	T. D	RATIO	T. I. P	T. D	RATIO
2003/04	272.24	21161.46	1.29	491.54	22010.34	2.23
2004/05	254.13	19335.10	1.31	561.96	24814.01	2.27
2005/06	303.20	23061.03	1.32	648.84	26490.85	2.45
2006/07	413.05	24647.02	1.68	767.41	30048.42	2.55
2007/08	471.73	29744.00	1.59	823.74	31842.79	2.59

Appendix C - 8

Interest Earned on Govt. security to Total Interest Income Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	T. I. E.Gvt	T. O. I	RATIO	T. I. E.Gvt	T. O. I	RATIO
2003/04	231.45	1264.90	18.30	148.34	1028.08	14.43
2004/05	345.12	1285.54	26.85	156.98	1198.72	13.10
2005/06	312.42	1418.25	22.03	172.24	1395.42	12.34
2006/07	326.55	1558.00	21.00	191.56	1493.62	12.83
2007/08	319.61	1774.15	18.09	201.31	1608.00	12.52

Appendix C - 9

Interest Earned on other income to Total Interest Income Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	T. I. E.O	T. O. I	RATIO	T. I. E.O	T. O. I	RATIO
2003/04	189.88	1264.90	15.01	34.08	1028.08	3.32
2004/05	212.45	1285.54	16.53	41.30	1198.72	3.45
2005/06	231.76	1418.25	16.34	52.33	1395.42	3.75
2006/07	251.98	1558.00	16.17	40.33	1493.62	2.70
2007/08	309.78	1774.15	17.46	62.10	1608.00	3.86

Appendix D - 1
Liquidity Risk Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	C.A.B.B	T. D	RATIO	C.A.B.B	T. D	RATIO
2003/04	2023.16	21161.46	9.56	2001.19	22010.34	9.09
2004/05	1111.12	19335.10	5.75	2014.47	24814.01	8.12
2005/06	12762.20	23061.03	5.53	1717.35	26490.85	6.48
2006/07	2021.02	24647.02	8.20	1757.34	30048.42	5.85
2007/08	2050.24	29744.00	6.89	1448.14	31842.79	4.55

Appendix D - 2
Credit Risk Ratio (Rs. in million)

F/Y	SCBNL			HBL		
	L & A	T. A	RATIO	L & A	T. A	RATIO
2003/04	6410.24	23642.06	27.11	11951.87	25729.79	46.45
2004/05	8143.21	21781.68	37.39	12424.52	28871.34	43.03
2005/06	8935.42	25767.35	34.68	14642.56	30579.81	47.88
2006/07	9790.87	28596.69	34.24	16543.73	34314.87	48.21
2007/08	11036.63	33335.79	33.11	19172.94	36858.01	52.02

Appendix E - 1
Growth Ratio of Total Deposit (Rs. in million)

F/Y	2003/04	2004/05	2005/06	2006/07	2007/08	G. R (%)
SCBNL	21161.46	19335.10	23061.03	24647.02	29744.00	7.05
HBL	22010.34	24814.01	26490.85	30048.42	31842.79	7.42

Sample calculation of growth rate of total deposit of SCBNL

Here,

D_n = Total deposit in the nth year

D_o = Total deposit in the initial year

g = Growth rate

n = Number of year i.e. =5

According to the formula,

$$D_n = D_o (1+g)^n \quad \text{or, } D_{2007/08} = D_{2003/04} (1+g)^5 \quad \text{or, } 29744.00 = 21161.46 (1+g)^5$$

$$\text{Or, } (1+g)^5 = 29744.00/21161.46 \quad \text{or, } 1+g = (1.4056)^{1/5} \quad \text{or, } 1+g = 1.0705$$

$$\text{Or, } g = 1.0705 - 1 \quad \text{or, } g = 0.0705$$

i.e g = 7.05 %

Sample calculation of growth rate of total deposit of HBL

Here,

D_n = Total deposit in the nth year

D_o = Total deposit in the initial year

g = Growth rate

n = Number of year i.e. =5

According to the formula,

$$D_n = D_o (1+g)^n \quad \text{or, } D_{2007/08} = D_{2003/04} (1+g)^5 \quad \text{or, } 31842.79 = 22010.34 (1+g)^5$$

$$\text{Or, } (1+g)^5 = 31842.79 / 22010.34 \quad \text{or, } 1+g = (1.4304)^{1/5} \quad \text{or, } 1+g = 1.0742$$

$$\text{Or, } g = 1.0742 - 1 \quad \text{or, } g = 0.0742$$

i.e. $g = 7.42\%$

Growth rate of other banks are calculated and fed in the corresponding tables according to the above formula.

Appendix E - 2

Growth Ratio of Loan and Advances (Rs. in million)

F/Y	2003/04	2004/05	2005/06	2006/07	2007/08	G. R (%)
SCBNL	6410.24	8143.21	8935.41	9790.87	11036.63	11.47
HBL	11951.87	12424.52	14642.56	16543.73	19172.94	9.91

Appendix E - 3

Growth Ratio of Total Investment (Rs. in million)

F/Y	2003/04	2004/05	2005/06	2006/07	2007/08	G. R (%)
SCBNL	11360.33	9702.55	12847.54	13553.23	13902.82	4.12
HBL	11768.10	11692.34	10889.03	11822.99	13340.18	2.54

Appendix E - 4

Growth Ratio of Net Profit (Rs. in million)

F/Y	2003/04	2004/05	2005/06	2006/07	2007/08	G. R (%)
SCBNL	537.80	539.20	658.75	691.67	818.92	8.77
HBL	463.05	308.28	457.46	491.83	635.87	6.55

Appendix F -1
Correlation between Total Deposit and Loan & Advances of SCBNL
(Rs. in million)

F/Y	T. D (X)	L & A (Y)	x = X- \bar{x}	x^2	y=Y- \bar{y}	y^2	x y
2003/04	21161.46	6410.24	-	5996446.63	-	11923416.18	8385510.26
2004/05	19335.1	8143.21	-	19101791.34	-	2958606.40	14006809.79
2005/06	23061.03	8935.42	-528.69	2795513.12	-927.85	850905.62	490545.02
2006/07	24647.02	9790.87	1057.30	1117883.29	-72.40	5241.76	-75548.52
2007/08	29744.00	11036.63	5154.28	26566602.32	1173.36	1376773.69	6047825.98
	$\sum x =$ 117948.61	$\sum y =$ 44316.37		$\sum x^2 =$ 55578236.70		$\sum y^2 =$ 17114943.65	$\sum xy =$ 29855142.53
	1	7		0		5	3

Here, $N=5$ $\bar{x} = \frac{\sum x}{N} = \frac{117948.61}{5} = 23589.72$

$\bar{y} = \frac{\sum y}{N} = \frac{44316.37}{5} = 8863.27$

Calculation of Correlation Coefficient (r):

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{29855142.53}{\sqrt{55578236.70} \sqrt{17114943.65}} = 0.9680$$

$r^2 = 0.9370$

Calculation of Probable Error (P. Er.):

$$P. Er. = 0.6745 \frac{1-r^2}{\sqrt{N}} = 0.6745 \frac{1-0.9370}{\sqrt{5}} = 0.0190$$

6P. Er. = 0.11402

Appendix F - 2
Correlation between Total Deposit and Loan & Advances of HBL
(Rs. in million)

F/Y	T. D (X)	L & A (Y)	$x = X - \bar{x}$	x^2	$y = Y - \bar{y}$	y^2	$x y$
2003/04	22010.34	11951.87	5030.94	25310357.2	-2995.25	8971522.56	15068923.04
2004/05	24814.01	12424.52	2227.27	4960731.65	-2522.56	6363308.95	5518422.21
2005/06	26490.85	14642.56	-550.43	302973.18	-304.56	92756.79	157629.82
2006/07	30048.42	16543.73	3007.14	9042890.98	1596.61	2549163.49	4901229.80
2007/08	31842.79	19172.94	4801.51	23054498.2	4225.82	17857554.6	220005.19
	$\sum x =$ 135206.4 1	$\sum y =$ 74735.62		$\sum x^2 =$ 54533451.3 7		$\sum y^2 =$ 35834306.4 6	$\sum xy =$ 25866210.0 6

Here,
 $r = 0.5851$ $r^2 = 0.3424$ P. Er. = 0.1983 6P. Er. = 1.1896

Appendix F - 3
Correlation between Total Deposit and Total Investment of SCBNL
(Rs. in million)

F/Y	T. D (X)	T. I (Y)	$x = X - \bar{x}$	x^2	$Y = Y - \bar{y}$	y^2	$x y$
2003/04	21161.46	11360.33	-2428.26	5996446.63	-912.96	833495.96	2216904.25
2004/05	19335.1	9702.55	-4254.62	19101791.34	-2570.74	6508704.15	10937521.82
2005/06	23061.03	12847.54	-528.69	279513.12	574.25	329763.06	-303600.23
2006/07	19335.1	13553.23	1057.30	1117883.29	1279.94	1538246.40	1353280.56
2007/08	23061.03	13902.82	5154.28	26566602.32	1629.53	2555368.02	8399053.89
	$\sum x =$ 117948.61	$\sum y =$ 61366.47		$\sum x^2 =$ 55578236.70		$\sum y^2 =$ 11865577.59	$\sum xy =$ 22603160.29

Here,
 $r = 0.88018$ $r^2 = 0.7747$ P. Er. = 0.06796 6P. Er. = 0.40776

Appendix F - 4

Correlation between Total Deposit and Total Investment of HBL

(Rs. in million)

F/Y	T. D (X)	T. I (Y)	$x = X - \bar{x}$	x^2	$y = Y - \bar{y}$	y^2	$x y$
2003/04	22010.34	11768.10	-5030.94	25310357.28	-2115.23	4474197.95	10641595.22
2004/05	24814.01	11692.34	-2227.27	4960731.65	285.01	81230.70	-634794.22
2005/06	26490.85	10889.03	-550.43	302973.18	-518.30	258634.89	295287.87
2006/07	30048.42	11822.99	3007.14	9042890.98	415.66	172773.24	1249947.81
2007/08	31842.79	13340.18	4801.51	23054498.28	1932.85	3735909.12	9280598.60
	$\sum x =$ 135206.41	$\sum y =$ 57036.64		$\sum x^2 =$ 54533451.37		$\sum y^2 =$ 8722745.90	$\sum xy =$ 20832635.28

Here,

$$r = 0.95518$$

$$r^2 = 0.91237$$

$$P. Er. = 0.02643$$

$$6P. Er. = 0.1586$$

Appendix F - 5

Correlation between Total Deposit and Net Profit of SCBNL

(Rs. in million)

F/Y	T. D (X)	N. P (Y)	$x = X - \bar{x}$	x^2	$Y = Y - \bar{y}$	y^2	$x y$
2003/04	21161.46	537.80	-2428.26	5996446.63	-111.47	12425.56	270678.14
2004/05	19335.1	539.20	-4254.62	19101791.34	-596.07	355299.44	2536051.34
2005/06	23061.03	658.75	-528.69	279513.12	9.48	89.87	-5011.98
2006/07	19335.1	691.67	1057.30	1117883.29	42.40	1797.76	44829.52
2007/08	23061.03	818.92	5154.28	26566602.32	169.65	29781.12	874423.60
	$\sum x =$ 117948.61	$\sum y =$ 3246.34		$\sum x^2 =$ 55578236.70		$\sum y^2 =$ 399393.75	$\sum xy =$ 3720970.62

Here,

$$r = 0.7898$$

$$r^2 = 0.6237$$

$$P. Er. = 0.11351$$

$$6P. Er. = 0.6811$$

Appendix F - 6

Correlation between Total Deposit and Net Profit of HBL

(Rs. in million)

F/Y	T. D (X)	N. P (Y)	$x = X - \bar{x}$	x^2	$y = Y - \bar{y}$	y^2	$x y$
2003/04	22010.34	463.05	-5030.94	25310357.28	-162.85	25520.12	819288.58
2004/05	24814.01	308.28	-2227.27	4960731.65	-117.62	13834.46	251971.50
2005/06	26490.85	457.46	-550.43	302973.18	31.56	996.03	-17371.57
2006/07	30048.42	491.83	3007.14	9042890.98	65.93	4346.76	198260.74
2007/08	31842.79	635.87	4801.51	23054498.28	209.97	44087.40	1008173.06
	$\sum x =$ 135206.41	$\sum y =$ 2129.49		$\sum x^2 =$ 54533451.37		$\sum y^2 =$ 89784.75	$\sum xy =$ 2260322.31

Here,

$$r = 1.02150 \quad r^2 = 1.0435 \quad P. Er. = -0.01312 \quad 6P. Er. = -0.0787$$

Appendix G-1

Regression Equation between Total Investments to Net Profit of SCBNL

(Rs. in million)

F/Y	T. I (y)	N. P (y)	x y	x ²	y ²
2003/04	11360.33	537.80	6109585.474	129057097.7	289228.84
2004/05	9702.55	539.20	5231614.96	94139476.5	290736.64
2005/06	12847.54	658.75	8463316.98	155059284.10	433951.56
2006/07	13553.23	691.67	9374362.59	193690043.4	478407.39
2007/08	13902.82	818.92	11385297.35	193288404.00	670629.97
SUM	61366.47	3246.34	40564177.35	2508534306.7	2172954.40

Let the regression equation of y on x be

$$Y = a + b x \text{----- (i)}$$

We have,

$$\sum y = na + b \sum x \text{----- (ii)}$$

$$\sum xy = a \sum x + b \sum x^2 \text{----- (iii)}$$

Now, substituting the value in equation (ii) and (iii)

$$3246.34 = 5 a + 61366.47 b \text{----- (iv)}$$

$$40564177.35 = 61366.47 a + 2508534306.7 b \text{----- (v)}$$

After solving the equation (iv) and (v) we get,

$$b = 0.00041 \quad a = 644$$

Now, substituting the value of a and b in equation (i), the regression equation y on x is

$$Y = 644 + 0.00041x$$

Appendix G -2

Regression Equation between Total Investment to Net Profit of HBL

(Rs. in million)

F/Y	T. I (y)	N. P (y)	x y	x ²	y ²
2003/04	11768.10	463.05	2444286.905	86343122.41	69195.303
2004/05	11692.34	308.28	3604514.575	136710814.7	95036.558
2005/06	10889.03	457.46	4981295.67	118570974.3	209269.65
2006/07	11822.99	491.83	5814901.17	139783092.5	241896.75
2007/08	13340.18	635.87	8482620.26	177960402.4	404330.66
SUM	57036.64	2129.49	25327618.58	658368406.31	

Let the regression equation of y on x be

$$Y = a + b x \text{----- (i)}$$

We have,

$$\sum y = na + b \sum x \text{----- (ii)}$$

$$\sum xy = a \sum x + b \sum x^2 \text{----- (iii)}$$

Now, substituting the value in equation (ii) and (iii)

$$2129.49 = 5a + 57036.64b \text{----- (iv)}$$

$$25327618.58 = 57036.64a + 658368406.31b \text{----- (v)}$$

After solving the equation (iv) and (v) we get,

$$b = 0.13395 \quad a = -1102.15$$

Now, substituting the value of a and b in equation (i), the regression equation y on x is $Y = -1102.15 + 0.13395x$

Appendix G - 3

Regression Equation between Total Deposit to Net Profit of SCBNL

(Rs. in million)

F/Y	T. D (x)	N. P (y)	x y	x ²	y ²
2003/04	21161.46	537.80	11380633.19	447807389.3	289228.84
2004/05	19335.1	539.20	10425485.92	373846092	290736.64
2005/06	23061.03	658.75	15191453.51	531811104.7	433951.56
2006/07	19335.1	691.67	13373508.62	373846092.00	478407.38
2007/08	23061.03	818.92	19885138.69	531811104.7	670629.96
SUM	117948.61	3246.34	69256796.46	2259121783.70	

The regression equation y on x is, $Y = 364.19 + 0.01208x$

Appendix G - 4

Regression Equation between Total Deposit to Net Profit of HBL

(Rs. in million)

F/Y	T. D (x)	N. P (y)	x y	x ²	y ²
2003/04	22010.34	463.05	5789819.937	484455066.9	69195.303
2004/05	24814.01	308.28	7649663.003	615735092.3	95036.558
2005/06	26490.85	457.46	12118504.24	701765133.7	209269.652
2006/07	30048.42	491.83	14778714.41	902907544.5	241896.74
2007/08	31842.79	635.87	20247874.88	1013963275.0	404330.65
SUM	138206.41	2129.49	159626878.40	3728823112.4	

The regression equation y on x is, $Y = 342.68 + 0.00301x$

Appendix H - 1
Trend Value of Total Deposit of SCBNL (Rs. in million)

F/Y (t)	T. D (y)	x = t - 2005.5	x ²	x y	y = a + b x
2003/04	21161.46	-2	4	-42322.92	22829.89
2004/05	19335.1	-1	1	-19335.1	23210.58
2005/06	23061.03	0	0	0	23589.72
2006/07	19335.1	1	1	19335.10	23968.86
2007/08	23061.03	2	4	46122.06	24348.00
N = 5	∑y=117948.61		∑x ² = 10	∑xy=3799.14	

Here,

$$a = \frac{\sum y}{N} = \frac{117948.61}{5} = 23589.72$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{3799.14}{10} = 379.14$$

Trend value of total deposit of SCBNL from the F/Y 2008/09 to 2012/13

F/Y	x = t - 2005.5	y = a + b x
2008/2009	3	24726.72
2009/2010	4	25178.28
2010/2011	5	25485.42
2011/2012	6	25864.56
2012/2013	7	26243.70

Appendix H - 2
Trend Value of Total Deposit of HBL (Rs. in million)

F/Y (t)	T. D (y)	x = t - 2005.5	x ²	x y	y = a + b x
2003/04	22010.34	-2	4	-44020.68	271431.42
2004/05	24814.01	-1	1	-24814.01	278901.21
2005/06	26490.85	0	0	0	276411.28
2006/07	30048.42	1	1	30048.42	278901.21
2007/08	31842.79	2	4	63685.58	281391.14
N = 5	∑y=138206.41		∑x ² = 10	∑xy=24899.31	

Here, $a = \frac{\sum y}{N} = \frac{138206.41}{5} = 276411.28$

$$b = \frac{\sum xy}{\sum x^2} = \frac{24899.31}{10} = 2489.93$$

Trend value of total deposit of HBL from the F/Y 2008/09 to 2012/13

F/Y (t)	x = t-2005.5	y = a + b x
2008/2009	3	283881.07
2009/2010	4	286371.00

2010/2011	5	288860.93
2011/2012	6	291350.86
2012/2013	7	293840.79

Appendix H - 3

Trend Value of Loan and Advances of SCBNL (Rs. in million)

F/Y (t)	L & A (y)	x = t - 2005.5	x ²	x y	y = a + b x
2003/04	6410.24	-2	4	-12820.48	6683.18
2004/05	8143.21	-1	1	-8143.21	7773.23
2005/06	8935.42	0	0	0	8863.27
2006/07	9790.87	1	1	9790.87	9953.31
2007/08	11036.63	2	4	22073.26	11043.35
N = 5	∑y=44316.37		∑x ² = 10	∑xy = 10900.44	

Here,

$$a = \frac{\sum y}{N} = \frac{44316.37}{5} = 8863.27$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{10900.44}{10} = 1090.04$$

Trend value of Loan and Advances of SCBNL from the F/Y 2008/09 to 2012/13

F/Y (t)	x = t - 2005.5	y = a + b x
2008/2009	3	12133.39
2009/2010	4	13223.43
2010/2011	5	14313.47
2011/2012	6	15403.51
2012/2013	7	16493.55

Appendix H -4

Trend Value of Loan and Advances of HBL (Rs. in million)

F/Y (t)	L & A (y)	x = t - 2005.5	x ²	x y	y = a + b x
2003/04	11951.87	-2	4	-23903.74	11234.86
2004/05	12424.52	-1	1	-12424.52	13090.99
2005/06	14642.56	0	0	0	14947.12
2006/07	16543.73	1	1	16543.72	16803.25
2007/08	19172.94	2	4	38345.88	18659.38
N = 5	∑y=74735.62		∑x ² =10	∑xy=18561.34	

Here,

$$a = \frac{\sum y}{N} = \frac{74735.62}{5} = 14947.12$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{18561.34}{10} = 1856.13$$

Trend value of loan and advances of HBL from the F/Y 2008/08 to 2012/13

F/Y (t)	x = t -2005.5	y = a + b x
2008/2009	3	20815.51
2009/2010	4	22371.64
2010/2011	5	24227.77
2011/2012	6	26083.90
2012/2013	7	27940.03

Appendix H - 5

Trend Value of Total Investment of SCBNL (Rs. in million)

F/Y (t)	INV(y)	x = t - 2005.5	x ²	x y	y = a + b x
2003/04	11360.33	-2	4	-22720.66	10486.15
2004/05	9702.55	-1	1	-9702.55	11379.72
2005/06	12847.54	0	0	0	12273.29
2006/07	13553.23	1	1	13553.23	13166.86
2007/08	13902.82	2	4	27805.64	14060.43
N = 5	∑y=61366.47		∑x ² =10	∑xy=8935.66	

Here,

$$a = \frac{\sum y}{N} = \frac{61366.47}{5} = 12273.29 \quad b = \frac{\sum xy}{\sum x^2} = \frac{8935.66}{10} = 893.57$$

Trend value of Total Investment of SCBNL from the F/Y 2008/09 to 2012/13

F/Y (t)	x = t -2005.5	y = a + b x
2008/2009	3	14954.00
2009/2010	4	15847.57
2010/2011	5	16741.14
2011/2012	6	17634.71
2012/2013	7	18528.28

Appendix H - 6
Trend Value of Total Investment of HBL (Rs. in million)

F/Y (t)	INV(y)	x = t - 2005.5	x ²	x y	y = a + b x
2003/04	11768.10	-2	4	-18584.2	9641.97
2004/05	11692.34	-1	1	-11692.34	10524.65
2005/06	10889.03	0	0	0	11407.33
2006/07	11822.99	1	1	11822.99	12290.01
2007/08	13340.18	2	4	26680.36	13172.69
N = 5	∑y=57036.64		∑x ² =10	∑xy=8226.81	

Here,

$$a = \frac{\sum y}{N} = \frac{57036.64}{5} = 11407.33 \quad b = \frac{\sum xy}{\sum x^2} = \frac{8226.81}{10} = 822.68$$

Trend value of Total Investment of HBL from the F/Y 2008/09 to 2012/13

F/Y (t)	x = t - 2005.5	y = a + b x
2008/2009	3	14055.37
2009/2010	4	14938.05
2010/2011	5	15820.73
2011/2012	6	16703.41
2012/2013	7	17586.09

Appendix H - 7
Trend Value of Net Profit of SCBNL (Rs. in million)

F/Y (t)	N. P (y)	x=t-2005.5	x ²	x y	y = a + b x
2003/04	537.80	-2	4	-1075.60	5306.33
2004/05	539.20	-1	1	-539.20	5777.80
2005/06	658.75	0	0	0	6649.27
2006/07	691.67	1	1	691.67	7020.74
2007/08	818.92	2	4	1637.84	7092.21
N = 5	∑y=3246.34		∑x ² =10	∑xy=714.71	

Here,

$$a = \frac{\sum y}{N} = \frac{3246.34}{5} = 649.27 \quad b = \frac{\sum xy}{\sum x^2} = \frac{714.71}{10} = 71.47$$

Trend value of Net Profit of SCBNL from the F/Y 2008/09 to 2012/13

F/Y (t)	x = t - 2005.5	y = a + b x
2008/2009	3	8063.68
2009/2010	4	9035.15
2010/2011	5	11006.62
2011/2012	6	11078.09
2012/2013	7	12149.56

Appendix H -8

Trend Value of Net Profit of HBL (Rs. in million)

F/Y (t)	N. P (y)	x = t - 2005.5	x ²	x y	y = a + b x
2003/04	263.05	-2	4	-526.10	171.56
2004/05	308.28	-1	1	-308.28	298.73
2005/06	457.46	0	0	0	425.90
2006/07	491.83	1	1	491.38	553.07
2007/08	635.87	2	4	1271.74	680.24
N = 5	∑y=2129.49		∑x ² =10	∑xy=929.19	

Here,

$$a = \frac{\sum y}{N} = \frac{2129.49}{5} = 425.90 \quad b = \frac{\sum xy}{\sum x^2} = \frac{1271.74}{10} = 127.17$$

Trend value of Net Profit of HBL from the F/Y 2008/09 to 2012/13

F/Y (t)	x = t - 2005.5	y = a + b x
2008/2009	3	807.41
2009/2010	4	934.58
2010/2011	5	1061.75
2011/2012	6	1188.92
2012/2013	7	1316.09