CHAPTER-I

INTRODUCTION

1.1   Background of the study

Investment is simply defined as the sacrifice of current consumption for future whose objective is to increase future wealth. The sacrifices of current consumption take place at present with certainty and the investor expects desired level of wealth at the end of his investment horizon. The general principle is that the investment can be retired when cash is needed. The decision to invest now is a most crucial decision as the future level of wealth is not certain. Time and risk are the two conflicting attributes involve in the investment decision. Broadly, investment alternatives fall into two categories, real assets and financial assets. Real assets are tangible while financial assets involve contracts written on pieces of paper such as common stock, bond and debenture. Financial assets are bought and sold in organized security markets.

An institution involved in monetary transaction is called bank. A bank simply called the work of exchanging money, providing loan, accepting deposits and transferring the money. There are many types of banks such as commercial bank, agricultural bank, industrial bank, development bank. They are established to improved peoples economic welfare and to provide loan in different sectors. Among them commercial banks play important role in the development of a country. They are directly related to the people and institution. Their functions are very attractive towards people. Commercial bank is a corporation which accepts demand deposits, subject to check and make short term loan to bushiness enterprises. Nowadays joint venture bank

are increasing in Nepal. Nepal Arab bank Ltd. was the first joint venture bank established in 1984 with 50% invest by Dubai Bank Ltd of UAE and of remaining 50% Nepalese financial institution comprises 30% and 20% by general public.

In global prospective, joint venture are the modes of trading through partnership among nations and also of form of negotiations between various group of industries and trades to achieve mutual exchange of goods and services for sharing comparative advantages. A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out a specific operation. Joint venture bank has been contributing a lot towards the promotion and expansion of both export and Import trade. They start their operation with automated system which could easily attract the elite group of business community due to their prompt served modern management. In this way, joint ventures are successful to bring healthy competition among banks, increase in foreign investment, promote and expand export-import trade, introduce new techniques and technologies. All this reveal the vital role and the need of ventures Nepalese banking sectors.

The development of the country is always measured by its economic development through economic indices. Therefore, every country has given emphasis on enlistment of its economy. Nowadays the financial institutions are viewed as catalyst in the process of the economic growth and its mobilization of the domestic resources is the key factor in the economic development. The financial institution act as intermediaries by transferring the resources from the point of surplus to the deficit. A new organized financial institution including financial 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 are associated with social, commercial and economic activities of the country. The economy of the country can hardly be carried forward without the assistant of financial institution. They are indispensable part of development process. Commercial play an important role for economic development of a country as they provide capital for the development of the industries, trade and business by investing the saving collected as deposits from the public. They render various services to their customers facilitating their economic and social life. Therefore a competitive and reliable banking is essential to the nation for the development.

Every bank broad of directors formulates an investment policy statement in order to define the objectives of a banks liquidity management and investment portfolios. One of the most important problems in the banking industries is investing its deposits and capital in various form of earning assets. A sound investment policy of commercial bank is such that its funds are distributed on different types of assets with good profitability one hand and provides maximum safety and security to the depositors and banks on the other hand. The bank should follow basic principle of liquidity, profitability, safety, security, suitability while making loan and advances. Nowadays there is very much competition in different fields, so in banking sector as well but less opportunities to make investment. In this condition, joint venture bank can take initiation in search of new opportunities so that the bank can survive in the competitive market and earn profit. But investment is the very risky job. For a purposeful, safe and profitable investment, banks must follow a sound investment policy. The study is related on investment policy of leading bank Standard Chartered Bank Nepal

(SCBNL) in comparison with other main joint venture banks, Himalayan Bank Ltd (HBL) and Nepal Bangladesh Bank Ltd (NBBL).

1.1.1 Brief introduction of sample banks

a)   Himalayan bank Ltd (HBL)

Himalayan bank was established in 1993 in joint venture with Habib bank Ltd of Pakistan with initial paid of capital of rupees 60 million. Despite the throat-cut competition in the Nepalese banking sector, Himalayan bank has been able to maintain a lead in the primary banking activities loan and deposits with a network of 24 branches and a corporate office. Legacy of Himalayan lives on in an institution that is known throughout Nepal for its innovative approaches to merchandising and customer services. Product such as premium saving account, HBL proprietary card and millionaire deposit scheme services such as ATM card and Tele banking were first introduce by HBL. The ownership composition or the holding pattern of share capital of the bank is follows.

Habib bank of Pakistan	21%
Nepali promoters	51%
Employees provident fund	14%
Public share holder	14%

b)   Nepal Bangladesh Bank Ltd (NBBL)

Nepal Bangladesh bank Ltd was established in June 1994 with an authorized capital of rupees 240 million and paid of capital of rupees 60 million as a joint venture bank with IFIC bank Ltd of Bangladesh. Its head office situated at New Baneshwor, Bijuli Bazaar Kathmandu. The main objective of this bank is to render banking services to the different sectors like industries, trades, businessman, priority sector, small entrepreneurs and

weaker section of the society and every other people who need banking services. During the period of 10 years of its operation, it has accumulated large number of client and has been able to provide excellent services to its clients.

c)   Standard Chartered Bank Nepal Ltd (SCBNL)

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. Standard chartered bank Nepal Ltd offers a full range of banking products and services in whole sale and customer banking, catering to wide range of customers from, individuals, to mid market, local corporate to multinationals and large public sectors companies as well as embassies, aid agencies, airlines, hotels and government corporations. The bank has been the pioneer in introducing customer focused products and services in the country and aspires to continue to be a leader in introducing new products and highest level of service delivery. It is the first in Nepal that has implemented the Anti-money Laundering policy and applied the "know your customer" procedure on all the customer accounts.

1.2   Focus of the study

Investment policy of a bank such that its funds are distributed on different of assets with good profitability on one hand and provides maximum safety security to the depositors and banks on other hands. Banks play a very important role in investment by collecting saving from individual and providing loans to the industries and individual for the economic

activities. It helps to mobilize the ideal saving in financial activities. The financial institutions of all classes are increasing every year. In a small country like Nepal, it is a question of great concern as to how so many banks are surviving. The concern is not only about these days but also the sustainability of the operating banks in future days also. Therefore the study mainly focuses on investment policy of the joint venture banks by comparing other two joint venture banks of Nepal. It will focus on the comparative profit of these banks regarding profitability, liquidity, leverage position, cost minimization etc. So in this study all types of fund mobilizing and investments of SCBNL are compared with all types of fund mobilizing and investment activities of HBL and NBBL

1.3   Statement of the problem

Investment policy is the most important factor from the shareholders and banks management point of view. Though many banks have established in our country with short period of time, strong stable and appropriate investment policy has not been followed by the commercial banks due to throat-cut competition of financial environment banks seem to be ready to grant much more loan, advance and other facilities against their client's insufficient deposits. Unsecured loan and investment may cause the liquidation of banks. If the funds are wrongly invested without thinking any risk, the bank cannot obtain profitable returns as well as it should sometime loss its principle. In this study, investment policy of SCBNL is analyzed comparing with HBL and NBBL. The problems associated with commercial banks with regard of investment policy are given below.

a.   Does, the investment decision affect the total earning of the bank?

b.   Are, there any relationships between investment policy and profitability ratios?

c.   Is, SCBNL fund mobilization and investment policy is more effective or not with other selected banks?

d.   Are, there similar deposit collection pattern and investment policy in selected banks?

e.   In which trend the bank grow to reach the present status?

In conclusion, this study aims to find out the area of differences between the selected joint venture banks in term of deposits collection, resources mobilization, liquidity position, profitability and others. This study will also predict the special strength and weakness, fluctuations of ratios, trends and correlation between relevant variables of the selected banks. As a result the areas of improvement could be identified and necessary suggestions could be given to those areas.

1.4 Objectives of the study

The main objective of the study is to analyze the liquidity position as well as the investment policy adapted by Nepalese commercial banks. The specific objectives of the study are given below.

a.   To analyzed, examine and interpret the financial position of the selected banks.

b.   To evaluate efficiency of liquidity assets management and profitability position in fund mobilization of commercial banks in Nepal.

c.   To analyzed the relationship between total investment with other financial variables of SCBNL, HBL and NBBL.

d. To examine the fund collection and mobilization pattern of commercial bank.

e. To make relevant suggestion and practical ideas and materialize recommendation based on the analysis of data.

1.5   Significance of the study

Investment policy is one of the essential and the main functions where the whole banking business is related. Therefore, the study on the major joint venture banks and especially in their lending and investment policy carries of great significance to the shareholders of banks, banking professionals, students and teachers of the banking and commerce. The significance of the study are point out below.

a. The study of investment policy would provide information to the management of the bank. The management will know about their weakness, gap which can be improved and corrected.

b. The shareholders would get information from this study on investment policy about how bank is mobilizing their fund in correct place. So they can decide to make investment on shares of various banks.

c. The study helps banks to compare each other's Performance and plan accordingly for the future.

d. General public know the fund mobilizing activities of banks with the help of this study.

e. Government gets help while formulating policy from this study.

1.6   Research hypothesis

To achieve the objective of the study, various financial, statistical and accounting tools have been used in research hypothesis.

Hypothesis is a statement about the relationship between two or more variables which needs to be investigated for its truth. The analysis of data is done according to pattern of data available. Because of limited time and resources, simple analytical statistical tool such as graph, percentage, correlation and the method of least square are adopted in this study. Similarly some strong accounting tools such as ratio analysis and trend analysis has been used for financial analysis. The various calculated results obtained through financial and statistical tools are tabulated under different headings. Then they are compared with each other to interpret the results. Following tools are used in research hypothesis

i) Liquidity Ratio

ii) Assets Management Ratio

iii) Profitability Ratio

iv) Growth Ratio

v) Correlation Analysis

vi) Trend Analysis

vii) Test of Hypothesis

1.7 Limitations of the study

This is simply a partial requirement of MBS programme. There are some limitations which weaken the generalization e.g. In adequate coverage of industries, period taken, reliability of statistical tools used and their variation. The limitations of the study are follows.

a. The whole study based on the secondary data collected from the banks. The study concerns only a period of 6 fiscal years from 2004 to 2009.

b. The study is conducted only three joint venture banks i.e. HBL, SCBNL and NBBL. It is not sure that it will reflect the real status of all joint venture banks.

c. There are many factors that affect investment policy decision and valuations of the firm. However, only these factors, which are related with fund mobilizing, will be considered in this study.

d. Some of statistical as well as financial tools of comparison and analysis should be used in the study. Hence, the drawback and weakness of those tools may have an adverse effect on the outcome of the study.

e. Being a student, resource constraint is the factor, which has limited the scope of the study.

1.8   Organization of the study

The whole study based on secondary data collected from concern bank. It contains the following five chapters.

Chapter I: Introduction

This chapter includes background of the study, focus of the study, statement of problems, objectives of the study, significance of the study, limitation of the study and chapter plan.

Chapter II: Review of literature

This chapter includes conceptual frame work, review of empirical works and concluding remarks.

Chapter III: Research methodology

This chapter shows the systematic way of solving research problems. It includes research design, nature and sources of data, population and sample and method of data analysis.

Chapter IV: Presentation and analysis of data

This part constitutes the tabular and graphical representation of the collected data, their interpretation and analysis using various financial as well as statistical tools. Apart from it, summary of the major findings are also presented at the end of the chapter.

Chapter V: Summary, conclusions and recommendations

This chapter concerned with summary, conclusions and recommendations along with future avenues.

Besides this, Bibliography and Appendices are also presented in the last of this study.

CHAPTER-II

REVIEW OF LITERATURE

Literature review is basically a "stock taking" of available literature in one's field of research. The literature survey thus provides us with the knowledge of the status of their field of research. Therefore this chapter has its own importance in the study. This chapter basically concerned with conceptual frame work and review of literature relevant to the investment policy of commercial banks. Every study is based on past knowledge and activities. The past study and knowledge should not be ignored as it provides foundation to the present study. Under this chapter, following parts have been analyzed and presented.

2.1 Conceptual frame work

2.1.1 Concept of investment

Investment can be defined as the current commitment of funds for a period of time to derive a future follow of funds that will compensate the investing unit for the time the funds are committed. It is the investor's sum of current income and present value of all future income.

2.1.2 Concept of investment policy

Investment policy is a vital plan for future return. It defines responsibility for the investment deposition of the bank's assets in the term of allocating funds for investment and loan and establishing responsibility

for day to day management of these assets. To prepare investment policy we should keep in mind about the profit and possible losses. If the investment policy is suitable, future will be bright and earning will be more. A sound investment policy is best of every investor.

2.1.3 Concept of banking

Generally an institution established by law which deals with money and credit is called bank. It plays a significant role in the development of the country. It facilitates the growth of trade industry and boost national economy. It is resource for economic development which maintains the self confidence of various segments of society and extends credit to the people.

A bank is a business organization that receives and holds deposits of funds from others make loans or extends credits and transfer funds by written orders of depositors (The Encyclopedia America, 1984, Vol 3:p302).

The business in banking is one of collecting funds from the community and extending credit to people for useful proposes. Banks have plays a vital role in making money from lenders to borrowers. It is expected to pay dividends add to the wealth of its shareholders. In Nepalese context, nowadays three types of bank are performing their activities in different sectors such as central banks, commercial banks and development banks. Commercial banking is either operated fully in the public sectors or joint sector or being operated under joint venture with foreign banks with private participation.

2.1.4 Concept of joint venture banks (JVB)

Joint venture banks are the mode of trading to achieve mutual exchange of goods and services for sharing comparative advantage by performing joint investment scheme between Nepalese investors, financial, non-financial institute as well as private investors and their parent banks each supplying 50% of total investment. The parent banks, which have been experiencing highly mechanized and efficient modern banking management skill and an international banking institutions, JVBS are formed in Nepal as fully fledged commercial bank under the economy act 2021 B.S. and operated under the Banijya Bank act 2032 B.S.

All the Nepalese JVBs are established and operated under the rules and regulation and guidance of Nepal Rastra Bank. HMG's deliberate policy of allowing foreign JVBs to operate in Nepal is basically targeted to enhance encourage local traditionally run commercial bank to enhance their bank able capacity.

2.1.5 Some important terms

In this section of the study, efforts have been made to clarify the meaning of some important terms frequently in this study, they are presented below.

a) Loan and advances

This is the primary source of income and most profitable net to a bank. A bank is always willing to lend as more as possible since they constitute the profitable source of revenue. This occupies the highest proportion of assets of any commercial banks bearing more than 40% of the asset used but a bank has to be more careful while providing loans and advances since they may not be realized in a short period of time and

sometimes they may turn into bad dept. therefore, it is not wise to rely on them at the time of emergency for all banks.

A commercial bank hardly lends for a longer period of time. It lends money for a short period of time that can be collected in a short period of time. The commercial banks never bound to provide long-term loan because it has to synchronize the loans and advances with the nature of deposits they receive. Loans and advances are provided against the personal security of the immovable and movable properties. Banks provide the loans in the various forms such as overdraft, cash, credit, direct loan and discounting bills of exchange.

b) Investment on government security shares and debentures

Though a commercial bank can earn interest and dividend forms the investment on government securities, shares and debentures, it is not the major portion of income. But it is treated as a second source of banking business. A commercial bank makes credit by treated as a second source of banking business. A commercial bank may extend credit by purchasing government securities, bond and debenture for several reasons.

i. It may wish to have high grade marketable securities to liquid if it's primary of reserves become inadequate.

ii. It may also be force to invest because the demands for loan have decreased as it not sufficient to absorb its excess reserves.

However, investment portfolio of commercial bank is established and maintained primarily with a view to nature of bank liabilities. Since depositors may demand funds in great volume without notice to banks,

the investment must be of a type that can be mark quickly with little or no shrinkage in value.

c) Other use of funds

Commercial banks must maintains balance with NRB i.e. 6% for fixed deposits and 8% for current and saving deposits an account in local currency. Similarly 3% cash balance of local currency accounts must be maintained in the vault of the bank. Again apart of the funds should be used for bank balance in foreign bank and to purchase fixed assets like and, building, furniture, computer and stationery and so on. However only a small portion of total assets is covered in this category.

d) Deposits

The principal liability of a commercial bank is its deposits collected from general public, business and government agencies. It is a direct claim of outsiders to the bank. The total assets of banks are financed by more than 75% from the deposits. Normally deposits are classified into three categories. Demand deposits, saving deposits and fixed deposits.

Demand deposits are permitted for unlimited check writings but they do not bear any interest liabilities. However, a minimum balance is fixed for the depositors. By the viewpoint of banks, these are cost free deposits but banks are not confirmed to invest them for a larger period, since it can be demanded at any time.

Saving deposits are normally meant for the individuals, non-profit making organization and other who are for saving motive and also want to earn some interest from the deposits. However, there is a minimum fixed balance bank offer interest in the minimum, monthly balance to the saving depositors and also permit with drawls and deposits to these accounts.

Fixed terms deposits are the major sources for bank's longer-term investment as their deposits bear fixed maturity periods. These deposits are offered a stipulated interest rate, a fixed denomination of amount and a prefixed maturity period. Banks tend to offer different interest rates to these deposits amount and maturity time.

2.1.6 Principles of sound investment policy

The principles of sound investment policy are explained below.

a. Safety and security

A bank should be very careful while planning the investment procedures and setting policy. The bank never invest its fund in those securities, which are subject too much depreciation because a little alteration may cause a great loss. It must not invest its fund without careful analysis of the proposal of the borrower. It must not invest funds in the speculative business. Such business may cause bankrupt at once and earn millions in a minute. Only commercial, durable, marketable and high market valued securities are good for investment to the commercial bank.

b. Profitability

There must be profit prospect in the project to make investment decision. It should select the most profitable investment area so that it can be able to maximize the shareholders wealth. The profits of the commercial bank mainly depend on the interest rate, maturity period, and volume of loan and the nature of investment.

c. liquidity

Liquidity is the ability of the bank to meet entire obligation. People deposit their earned money in the bank making in the mind that they will

withdraw it when they need. So a bank should try to maintain the liquidity position. It should not invest all the money seeing the uncertain future profit. Once it loses the trust of the customer, the bank may be in the shortage of the funds in the future. So, to have the customer's faith a bank should always maintains the liquidity.

d. Diversification

A bank should minimize its risk in every sector of investment. Diversification can reduce the risk by investing in various sectors so that loss on one can be compensated by the profit of other. It should not lay all eggs on the same basket.

e. Purpose of loan

Customer has needed the loan for different purpose. Why is a needed a loan? This is a key question. If customer misusage the loan granted by the bank, they can never repay and bank will posses heavy bad debts. Therefore, banks need the details information of the customers before granting loan.

f. Legality

All the commercial banks are required to follow the directions given by Nepal Rastra Bank (NRB) for the investment. Illegal method of investment seems good on short term but it will consequently hamper the bank lending towards bankruptcy as well.

2.1.7 Procedure of investment policy of joint venture banks

Every bank has applied their own fund mobilizing procedure. Generally all the banks have same fund mobilizing procedures which are as follows.

A. **Sources of fund**

Banks collect the fund from different sources. The sources fund can be classified in two ways. Equity capital and borrowed capital.

a) Equity capital of bank (owned funds)

Following are the equity capital funds sources,

Ordinary share

Ordinary shares are the banks strong and reliable source of funds. Banks promoters issued ordinary shares to the public in fixed number. Banks collect the fund by selling fixed ordinary share to the public by adopting fixed rules and regulation. These public make shareholders after purchasing the issued shares. So banks collect a large amount of funds from promoters and ordinary shareholders.

Preference share

Preference share means a type of share which receive dividend after liquidation before ordinary share. But in Nepal bank cannot issue preference share. In some times, it can issue preference share by taking permission from NRB.

Bonus share

Bonus share means company issues the extra to the shareholders from the saving from profits and reserved by capitalizing these funds. Banks issued share to share holder instead of banks amount. From the bonus, bank collects sum of funds.

Reserve fund

Bank separates some share of a capital in reserve funds in the time of banking activities. These reserve funds size based on banks earning and rules and regulation. Banks have been earning by investing the reserve funds in liquid sectors. So the reserves are also kinds of sources of funds.

Retained earning

Bank earns profit by investing the funds in different sectors through the principal of profit earning. Banks invests its fund in productive are profitable industries and business. Bank earns some amount from these investments.

b)   Borrowed fund of bank

Banks collect the fund from another source except owned funds. Following title called illustrate in this fund.

Selling of debenture

Debenture means a "Rin Patra" which is issued by company by keeping or not keeping assets securities for collection of funds. If bank need fund, it can collect capital by issuing debenture.

Deposit

The bank borrows money by accepting deferent types of deposit. Deposits are the life blood of commercial bank and it is the most important source of the liquidity for the commercial bank. The bank attracts the deposit from the public. The bank not only under takes care of deposit but also agree to honors the demand of the depositor for withdraws of money from the depositor. There are three types of deposit Current deposits, Saving deposits and fixed deposits

Loan from central bank

NRB is the central bank in Nepal. It is the bank of banks. All banks should operate their banking activities under central bank. So central bank provides loan to the banks if needed. The loan provided by central bank is a bank capital.

Loan from financial institution and commercial banks

Bank can received loan from commercial bank and financial institution in the form of borrowing when needed. They solved the money problem of another bank by providing loan. This type's loans are also bank capital.

B. Mobilization of funds

Bank utilizes its funds in suitable area and sector. Bank cannot get its aim of profit earning without mobilizing its funds in right sector and different activities. Bank should separate the useful and profitable sector for mobilization of its funds. Mainly a bank has mobilized its funds in following activities.

a. Liquid fund

Bank has kept large amount in liquid funds. The funds have so many responsibilities in banking activities. Liquid funds contain Cash in hand Balance with NRB, Balance with domestic bank and Call money.

b. Investment

Bank invests its fund in different banking activities and different field. Many types of field are in the market for investment but bank invests its funds in profitable and safety activities. Bank invests its fund in Government securities, Share and debenture and Nepal Rastra Bank (NRB)

c. Loan and advances

A bank mobilizes its funds by providing different types of loan and advances to customers, by charging fixed interest. There are two types of loan and advances to government enterprises and to private enterprises.

d. Fixed Assets

Land and building are essential for the establishment of bank. Banks funds are used in buying furniture, vehicles, computer and other concerned instrument which are related to banking activities bank cannot take direct gain from these assets, but bank should buy it. A bank has needed fund to buy assets for the new branches of the bank.

e. Administrative & miscellaneous expenses

Bank should manage a fund for administrative and other miscellaneous expenses. Administrative expenses includes Salary of employee, Allowances, Pension, Provident funds, Advertisement, Stationery, Rent, Income tax, Donation, Insurance, Commission, Tour Expenses etc. Bank uses large portion of fund to distribute the dividend to shareholders, to bear the loss on sale and purchasing of banking assets, maintenance expenses, to pay the interest on borrowed amount and reserve Fund which falls under miscellaneous expanses

In this way, bank mobilizes its fund in different activates to achieve its goal of earning profit. However, banks main aim is to earn more and more profit by mobilizing its fund in different sector.

2.2 Review of related studies

2.2.1 Review of journals and books

According to Sharpe and Alexander, "Investment in its broadest sense, means the sacrifice of certain present value for future value" (Sharpe, 2000:39)

Charles P.Jones 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 an Investors wealth, which is the sum of current income and present value of all future income". (Jones P. Charles, "Investment analysis of management" P.97)

Frank K.Reily defined "An Investment may be defined as the current commitment of funds for a period of time to derive a future follow of funds that will compensate the investing unit for the time the funds are committed for the expected rate of inflation and also for the uncertainty involved in the future follow of funds." (Reily k. frank, "Investment" P.3)

According to Cheney & mosses, "The Investment objective is to increase systematically the individuals wealth defined as assets minus liabilities. The higher the level of desired wealth the higher the return must be received," (John M. Cheney & Edward A. Moses, "Fundamental of investment" P.23)

As the view of James B. Beslay, "Investment policy is defined responsibility for the investment deposition of the bank's assets in terms of allocating funds for investment and loan and establishing responsibility for day to day management of these assets" (James B. Beslay, "Banking management" 1973)

2.2.2 Review of articles

Mr. Shiv Raj Shrestha, (2045 B.S), deputy chief officer Nepal Rastriya Banijya Banking operation department has given a short guide line on the "portfolio management in commercial bank, theory and practice". Mr Shrestha has highlighted many issues in the articles. The portfolio management becomes very important both for individual as well as institutional investors would like to select a best mix of investment assets. Regarding the joint venture commercial banks, they are very eager to provide such services but because of above mentioned problems, very limited opportunities are available to the banks for exercising the portfolio management. Mr. Shrestha has drawn following concluding remarks.

i. The survival of the banks depends upon its own financial health.

ii. In order to develop and expand the portfolio management activities successfully, the investment management methodology of a portfolio management should reflect high standard and give their clients the benefits of global strength, local insights and product philosophy.

iii. With the discipline and systematic approval to the selection of appropriate countries, financial assets and the management of various risks, the portfolio manager could enhanced the opportunities for each investors to earn superior returns over time.

iv. The Nepalese banks having greater network and access to national and international capital market have to go for portfolio management activities for the increment of their fee based income as well as to enrich the client based and contribute in national economy.

Dr. Govinda Bahadur Thapa, (1994) in "Financial System in Nepal" has expressed his view that the commercial banks including foreign JVBs

seem to be doing well mobilizing deposits . Likewise, loan and advances of these banks are also increasing but compared to the high credit needs particularly by the newly emerging industries, the bank still seem to look adequate funds. The banks are increasing their lending to non-traditional sectors along with the traditional sectors. Out of the all commercial banks, Nepal Bank Ltd and Rastriya Banijya Bank are operating with a nominal profit. Because of non recovery of accrued interest, the margin between interest income and interest expenses declining, because of this two local banks in traditional off balance sheet operation, this banks hasn't been able to increase their income from commission and discount. On the country they have got heavy burden of personal and administrative overheads. Similarly, due to accumulated overdue and defaulting loan, profit positions of these banks have been seriously affected. On the other hand the foreign JVB have been functioning in an extremely efficient way. They are making huge profit year after year and have been distributing large amount of bonus and dividends to its employees and shareholders. Because of their effective persuasion for loan recovery, overdue and defaulting loan have been limited resulting in high margins between interest income and interest expenses. Similarly, concentration of these banks to modern balance sheet operations and efficient personnel management has added to the maximization of their profit.

At the end of article, he concludes that the domestic banks could not compete with the private sector banks, so only remedy to the problems of these banks as government decided to handover the ownership as well as the management of the banks to the private hands.

Mr. Sekhar Bahadur Pradhan, (2053 B.S.) in his article "Deposit mobilization, Its problem and prospects" has presented that deposits is the life-blood of every financial institution like commercial bank, finance company, co-operative or non-government organization. He further adds consider the most of banks and finance companies that the latest figure does produce a strong feeling that serious review must be made on problems & prospects of deposits sector. Leaving few joint venture banks, other organization rely heavily on the business deposit and credit disbursement. The writer has highlighted following problems of deposit mobilization in Nepalese context.

i. Most of Nepalese do not go for saving in institutional manner because of lack of good knowledge. However, they are very much used of saving in the form of cash or ornaments. Their reluctance to deal with institutional system is governed by the lower level of understanding about financial organization process with drawn system and availability of depositing facilities.

ii. There is unavailability of the institutional services in the rural areas.

iii. Due to lesser office hours of banking system people prefer holding cash in the personal possession.

iv. There is no more mobilization and improvement of the employment of deposits and loan sectors.

The writer has also recommended the following points for the prosperity of deposits mobilization which are follows.

i. By providing sufficient institutional services in the rural areas.

ii. By cultivating the habit of using rural banking unit.

iii. By adding service hour system to bank.

iv.   Nepal Rastra bank should organized training program to develop skilled man power.

v.   By spreading co-operative to the rural areas development mini branch services.

2.2.3 Review of previous Thesis

In Nepalese context, very few studies can be found in the topics of finance. But there are some independent thesis, which are related to the topics are listed below.

Mrs. Sunity Shrestha (1993) in her research, " Investment planning of commercial banks in Nepal " concluded that bank portfolio of commercial banks has been influenced by the variable securities. Investment planning and operation of commercial banks in Nepal hasn't been found satisfactory in terms of profitability, safety, liquidity and social responsibility. To overcome this problem she has suggested that commercial banks should take their investment function with proper business attitude and should perform lending and investment functions with proper business attitude and should perform lending and investment with proper analysis of the project.

Mr. Raja Ram Khadka (1998) in his thesis paper, "A study on the investment policy of Nepal Arab Bank Ltd in comparison to other joint venture banks in Nepal." He has compared investment policy of Nepal Arab bank Ltd with Nepal Grindlyas Bank Ltd and Nepal Indosuez Bank Ltd. His study is based on 5 years period from 1992 to 1996. He has taken only two banks to compare the investment policy of Nabil among 13 commercial banks in Nepal. Mr. Khadka has suggested the JVB to be careful in

increasing profit to maintain the confidence of share holders, depositors and customers. He has strongly recommended Nabil to utilizing risk assets and shareholders fund to gain highest profitability. He has suggested investing its fund in different sector of investment and administering various deposit schemes, gift cheque scheme, house building deposits scheme etc.

Mr. Dilip Roy (2003) on his thesis entitled, "An investment analysis of Rastriya Banijya Bank" has tried to analyze relationship of loan and advances and total investment with total deposits and to compare it with that of NBL and to compare loan and advance, total deposits and net profit of RBB and compare it with that of NBL. His whole study was based on secondary data covering five years period from 1993 to 1997. He has found that RBB has good deposit collection loan and advances and small investment in government securities. He also found that profitability position of RBB is not good. RBB needs immediate step to increase its profitability. He also further found that RBB has more low quality of loan and advances. The researcher has recommended that RBB should enhance investment in securities. Small amount investment in securities of good company brings better income that large amount investment in securities of worse companies. So RBB needs to pre-analysis before such investment. He also recommended that RBB should decrease loan loss by decreasing its poor quality of loan and advance. It needs to revise credit collection policy. He further suggested that RBB should decreases interest expenses, unnecessary fixed assets expenses and administrative expenses. Moreover RBB should enhance its off balance sheet operation, remittance n order to increase its earning.

The forgoing review of literature suggests that deposits mobilization play vital role in economic development of country. Investment policy of commercial bank can be examined using the factor such as interest rate, loan and advances, investment, branch expansion etc.

Mr. Sunil Maharjan (2006), Conducted his thesis on "A comparative study of financial performance of commercial bank (with reference to Himalayan Bank Ltd, Nepal Investment Bank Ltd and Everest Bank Ltd." Had main objective to identify the relationship between net profit with respect to deposit, loan and advance and investment and to analyze financial performance of sample banks in terms of liquidity, profitability, growth, leverage and capital adequacy and reached to the conclusion, the overall performance of sample banks found to be satisfactory. All sample banks are not strong in all performance. Some are strong in liquidity point of view, EBL found to be comparatively better than sample banks because HBL and NIBL has aggressive working policy. All the sample banks are comparatively successful in assets and deposits in profitable sector in form of loan and advance, investment in government securities and shares and debentures.

Mr. Upendra Shrestha (2002) in the thesis entitled, "Investment practice of joint venture banks in Nepal" has selected three JVBs i.e. Nabil Bank Ltd, Standard Charted Bank Ltd and SBI Bank Ltd for the study of lending and investment practice. He has concluded that the liquidity position of Nabil and SCBNL have not found satisfactory. It is therefore, suggested to improve cash and bank balance to meet current obligations. SCBNL loan and advances to total deposits ratio is lower at all. Therefore t is recommended to follow liberal landing policy for enhancement of landing

mobilization. It was found that SBI has not invested its fund on share and debenture of other companies. It is suggested to enhance of balance sheet transaction, diversifying investment, open new branches, play merchant banking role and invest their risky assets and share holders' funds to gain higher profit margin. Nabil and SCBNL are recommended to increase cash and bank balances to meet current obligations and loan demand.

The above findings showed that there are some conflicting statements, which are obviously not matching with his statement of the problem. This study ignored the industries average and also failed to figure out what is a right industry like banking among the excess of investment and advances. Again he thought liberal lending policies to solve the problem to increase the label of loans and advances. But somewhere in his recommendation, he has warned commercial banks to increase the level of investment to government securities or other safe instrument just to avoid risk arising from lending. From this, it can be concluded that Mr. Shrestha has made his entire conclusion absolutely and he has not made any relative analysis of pros and cons the entire factors affecting the study.

Mr. Lila Pd. Ojha (2002) has conducted a research on "lending practice: a study of Nabil Bank Ltd, Standard Chartered Bank Ltd and Himalayan Bank Ltd." The study revealed that the mean current ratio of all three bank is not widely varied. All the banks are capable in discharging their current liabilities by current assets. The ratio of liquid fund to current and total deposit has some degree of deviation among the banks as compared to current ratio. Cash and cash balance to interest sensitive liability has measured the liquidity risk arising from fluctuation of interest rate in the market. The measurement of lending strength in relative term has revealed

that the total liability to total assets of SCBNL has the highest ratio. The steady and high volume of loans and advances throughout the years has resulted Nabil ratio to be the highest .Nabil has deployed the highest proportion of its total deposit in earning activities and this ratio is significantly above the ratios of others to banks. This is the indicative of that in fund mobilizing activities of Nabil is significantly better than SCBNL.

Mr. Ishowri Prasad Panta (2005), has conducted a research on a topic "A comparative study of Everest bank Ltd, and Nepal Industrial and commercial Bank Ltd.". He had mainly focused on his study in comparing and analyzing liquidity, profitability, solvency and activity ratio analysis as well as other major ratio such as weighted average interest rate spread, FX-fluctuation gain to total income ratio etc. Time period covered by the research was six years data from FY 1998/99 to 2003/04. Necessary data and other information have been collected from the secondary sources of data. In this research, Mr. Panta had pointed out various remarkable findings:

i.   CRR of the banks were maintained as per the directives of NRB.

ii.   Both banks had maintained NRB balance to deposit ratio remarkable higher than the standard prescribed by the NRB.

iii.   Both banks were maintaining lower capital adequacy ratio. The assets, net worth to total deposit and net worth to total credit seemed less satisfactory.

iv.   They should encourage to small, medium and large-scale organizations to avail their services.

v.   Both banks were suggested to review their overall structured and investment portfolio to make better mix in capital structure as well as investment portfolio.

Mr. Ram Prasad Kafle, (2005) in his study entitled "Non-performing loan of Nepalese commercial banks." has given the following main objective of the study.

i. To know the problems of the non-performing loans and its effect in the ROA and ROE, of the Nepalese commercial banks

ii. To find out whether the Nepalese commercial banks are following the NRB directives regarding loan loss provision for non-performing loan or not.

iii. To make necessary suggestion and recommendations.

The major findings of the study are:

Through the research he has found that the no banks have been following NRB's directives regarding the loan loss provision. He also conclude that the return on assets (ROA) and return on equity (ROE) of the bank deposit upon the NPL. The high degree of negative correlation between NPL and ROA and the NPL and ROE clearly indicates that three is inverse relation between them, He had recommended that for the smooth operation of the commercial banks, NPL should be controlled for this banks should provide necessary training regarding loan management to the manpower in order to remove, the NPLs. Banks should take enough collateral so that banks can recover its loan amount. For the loan loss provision as per the NRB directive and to reduce the NPL. The Bank management should be effective and the NRB monitoring and regulation is necessary.

Mrs. Anjali Singh (2007) has conducted a research on "Investment policy of commercial bank in Nepal". She has taken three banks

for comparative study having five year data from 2000 to 2004. Especially SCBNL is compared with Nabil and HBL. After analyzing the different financial ratios, she concluded that Current ratio of SCBNL seems stronger then Nabil and HBL. SCBNL seems strong position to invest on government securities, share and debenture. The profitability ratio of SCBNL seems in average position but it seems weak position of interest earned to total outside assets. Similarly, SCBNL seems less successful to mobilize its working fund in comparison with Nabil and HBL. Likewise the growth ratio 0f SCBNL seems in strong position than Nabil and HBL but growth ratio of loan and advance, net profit and investment seems in average position than Nabil and HBL

After average analysis by using different financial and statistical tools and technique SCBNL seems in average condition. In conclusion, it can be say that SCBNL funds mobilization status is satisfactory. She has provided recommendation in accordance with the fact finding .she recommended to grant the loan and advances without its lengthily process. She has suggested that in order to become success in competitive banking environment, banks should be able to utilize depositor's money as loan and advances. She has also recommended enhancing banking transaction up to rural areas of the kingdom.

CHAPTER- III

RESEARCH METHODOLOGY

3.1 Introduction

"Research methodology is the systematic way of solving research problems. Research methodology refers to the overall research process, which a researcher conducts during his/her study, if all the procedures from theoretical foundation to the collection and analysis of data. As most of the data are quantitative the research is based on the scientific models. It is composed of both parts of technical aspect and logical aspect. On the basis of historical data, research is systematic and organizational effort to investigate specific problems that need a solution. This process of investigation involves a series of well throughout activities of gathering, recording and analyzing the data with the purpose of finding answer to the problem. Hence, the entire process by which we attempt to solve the problem is called research methodology." (Kothari, CR 1990:21 p)

The main objective of this study is to analyze the lending and investment procedure of private commercial banks with the help of various financial statements, statistical tools and non-financial subject matters. As the study intends to show effectiveness of lending operation in a concern, it requires an appropriate research methodology.

3.2 Research design

Research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances. It is the arrangement of condition for collection and analysis of

data. To achieve the objectives of this study, descriptive and analytical research design has been used. The justification for the choice of this method is preferred because it concludes reliable data and information covering a long time and avoids numerical complex variables.

"Research design is a controlling part for the collection of the data and it helps to collect the accurate information which is related to the research topic. Research design is the plan structure and strategy of investigation conceived so as to obtain answers to research questions and to control variances through the analysis of data." (Kothari, C.R 1990:22P)

3.3 Nature and Sources of data

This study is conducted on the bases of secondary data. The data relating to the investment, loan and advances, assets and profit directly obtained from the balance sheet and profit loss account of concerned banks annual reports. Supplementary data and information are collected from number of institution and regulating authorities like NRB, Nepal stock exchange etc.

According to the need of the objective, all secondary are complied, processed and tabulated in time series. In order to judges the reliability of data provided by the banks and other sources, they were compiled with the annual reports of auditors. Formal and informal talks to the concerned head of the department of the bank were also helpful to obtain the additional information of the related problems. Similarly various data and information are collected from the periodicals, economic journals, managerial magazines and other published and unpublished reports and document.

3.4 Population and sample

It is difficult to study all the data related with all JVB of Nepal. There are 32 commercial banks operating in the country which are the population of this research study. Out of this population only 3 banks namely HBL, NBBL & SCBNL constitute the sample of the study. The population is as follows.

1. Nepal bank Limited
2. Rastriya Banijaya Bank
3. Agricultural development bank limited
4. Nepal Arab bank limited
5. Nepal investment bank limited
6. Standard chartered bank Nepal Limited
7. NIC Bank limited
8. Himalayan bank limited
9. Nepal SBI bank limited
10. Nepal Bangladesh bank limited
11. Everest bank limited
12. Bank of Katmandu limited
13. Nepal credit and commerce bank limited
14. Lumbini bank limited
15. Machapuchhre bank limited
16. Kumari bank limited
17. Siddhartha bank limited
18. Laxmi bank limited
19. Global bank limited
20. Citizens International bank limited
21. Bank of Asia Nepal limited

22. Nepal merchant bank limited

23. Sunrise bank limited

24. Prime commercial bank limited

25. DCBL bank limited

26. NMB Bank Limited

27. Kist bank limited

28. Janata bank limited

29. Mega bank Limited

30. Commerce and Trust bank Limited

31. Century Bank Limited

32. Civil Bank Limited

3.5 Method of analysis

To achieve the objective of the study, various financial, statistical and accounting tools have been used in this study. The analysis of data is done according to pattern of data available. Because of limited time and resources, simple analytical statistical tool such as graph, percentage, correlation and the method of least square are adopted in this study. Similarly some strong accounting tools such as ratio analysis and trend analysis has been used for financial analysis. The various calculated results obtained through financial and statistical tools are tabulated under different headings. Then they are compared with each other to interpret the results.

3.5.1 Financial tools

Ratio analysis

Ratio is the relationship between two accounting figures expressed mathematically. It is the main tool of financial statement analysis. It can be

expressed as percentage, Fraction or stated comparison between numbers. From the Information provided by ratio analysis with the help of financial statement are very useful for making decision on any financial activity. Here only those ratios have used which are related to investment policy of JVBs, which are as follows.

a. **Liquidity ratio**

The ability of a firm to meet obligation in the short term is known as liquidity. It is measured by the speed with which a bank's asset can be converted into cash to meet deposits withdrawals and other current obligation. There are various ratios under liquidity ratio.

i. **Current ratio: -** Current ratio is the relationship of current assets and current liabilities. Current assets are those assets, which can be converted into cash within short period of time. Current liabilities are those items, which are paid within one year. Traditionally, 2:1 is standard ratio but it is a conservative outlook about the coverage of current liabilities.

$$current\,ratio = \frac{current\,assets}{current\,liabilities}$$

Note: current assets = inventories, sundry debtors, cash and bank balance receivable, loan and advances, disposable and investment etc.

Current liabilities = creditors, short term loan, bank over draft, cash credit, outstanding expenses, provision for tax, proposed dividend and unclaimed dividend.

ii. **Cash and bank balance to total deposit ratio :-** This ratio is computed by dividing cash and balance by total deposits, i.e.

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

Cash and bank balance includes cash on hand, cheque and other cash items, balance with domestic banks and balance held abroad. The total deposits consist of current deposits, saving deposits, fixed deposits, money at call and short notice and other deposits.

iii. **Investment on government securities to current assets ratio**:-

Investment on government securities include treasury bills, development bonds, saving bonds etc. This ratio can be computed by dividing investment on government securities by current assets, i.e.

$$\frac{\text{Investment on government securities}}{\text{total current assets}}$$

iv. **Loan and advances to current asset**: - This ratio can be computed by dividing loans and advances by current assets, i.e.

$$\frac{\text{Loan and advances}}{\text{current assets}}$$

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

b. **Asset management ratio**

Asset management ratio measure the proportion of various assets and liabilities in balance sheet. The proper management of asset and liabilities ensure its utilization .It measures how efficiently the banks manage the resource at its commands, under this ratio following ratios are calculated.

i. **Total investment to total deposit ratio: -** This ratio is calculated to see how efficiently the banks have mobilize there total deposits on investment. It is calculated by dividing total investment by total deposits, i.e.

$$\frac{\text{Total investment}}{\text{total deposits}}$$

ii. **Loan and advances to total deposits ratio: -** This ratio measures how much extend the bank is successful in utilizing the outsider's funds in the profit generating purpose. This is calculated by using the following formula.

$$\frac{\text{Loan and advances}}{\text{total deposits}}$$

iii. **Loan and advance to total working fund ratio: -** This ratio is calculated by dividing loan and advances by total working fund, i.e.

$$\frac{\text{Loan and advances}}{\text{total working funds}}$$

The denominator includes all assets of on-balance sheet items, in other words this includes current asset, net fixed assets, loan from for development banks and other miscellaneous assets but excludes off-balance sheet items like letter of credit, letter of guarantee etc.

iv. **Investment on government securities to total working fund ratio :-** This ratio is calculated by dividing on government securities by total working funds, i.e**.**

$$\frac{\text{Investment on government securities}}{\text{Total working funds}}$$

v. Investment on share and debenture to total working fund ratio :-

This ratio can be computed by dividing investment on share and debenture by total working funds, i.e.

$$\frac{Investment\ on\ share\ and\ debenture}{total\ woking\ funds}$$

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

c. Profitability ratio

Profitability ratio measures the efficiency of a firm in term of profit. So it indicates the position of the bank and the ability of the management. This implies the higher the profitability ratio, better the financial performance of the bank and vice versa. The profitability position can be evaluated through the following ratio.

i. **Return on equity: -** it is an important ratio because it judges whether the firm has earned a satisfactory return for its equity holder or not. It indicates how well the firm has deployed the resources of the owners to earn profit. Higher ratio represents sound management and efficient mobilization of the owner's equity. This ratio is calculated by dividing net profit by total shareholders fund.

$$\frac{Net\ profit}{Total\ shareholders\ equity}$$

ii. **Return on assets: -** This ratio is used to measures in term of the relationship between net profit after tax and total assets. It measures the profitability of the firm in term of assets employed in the firm. It reflects

efficiency of the banks in utilizing its overall resources. This ratio is calculated the net profit after tax dividing by total assets.

$$\frac{\text{Net profit after tax}}{\text{Total assets}}$$

d. Growth ratio

To examines and analyze the expansion of the total investment, total assets, profit, loan and advance and the expansion of the overall business growth ratio are calculated. Under this study following ratio are calculated.

i.   Growth ratio of total deposits.

ii.   Growth ratio of investment.

iii. Growth ratio of net profit.

iv.   Growth ratio of loan and advance.

3.5.2   Statistical tools

Some statistical tools are used to achieve the objective of this study. In this study, statistical tools such as correlation coefficient a, standard deviation, regression analysis and hypothesis testing have been use. The basic tools are written in point below.

a. Coefficient of correlation analysis (r)

Correlation is the statistical tools that we can use to describe the degree to which one variable linearly related to another and correlation analysis involves various techniques used for studying. The coefficient of correlation measures the degree of relationship between two sets of variable. The effect off correlation is to reduce the range of uncertainty of our prediction. Two variables are said to be correlated if the change in

one variable result in a corresponding change in the other variable. Correlation coefficient can be either positive or negative. If the value of the two variables deviates in the same direction, correlation is said to be positive or direct. On the other hand, coefficient of correlation is said to be negative or inverse if the variable deviate in the opposite direction. It is also likely that there may be no relationship between the variations of the two series in which case there is said to be no correlation between them. Among the various method of finding out coefficient of correlation, Karl Pearson's method is applied in the study. The result of coefficient of correlation is always lies between +1 and -1. When r = +1, it means that there is perfectly positive relationship between two variables and vice-versa. When r = 0, it means no relationship between two variables. The Pearson's formula is

$$r = \frac{n\sum xy - \sum x . \sum y}{\sqrt{n\sum x2 - (\sum x)2} . \sqrt{n\sum y2 - (\sum y)2}}$$

Where

r	=	correlation coefficient
n	=	number of years
x & y	=	financial variable of banks
x	=	sum of x series
y	=	sum of y series
xy	=	sum of x and y series
x^2	=	sum of square of series x

43

y^2　　　=　　　sum of square of series y

b. Standard Deviation

The measurement of the scatterness of the mass of figure 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. A small standard deviation means a high degree of uniformity of the observation as well as homogeneously of a series; large standard deviation means just the opposites. S.D. is the square root of the variance and measures the unsystematic risk in investment.

$$S.D\,(\sigma) = \sqrt{\frac{\Sigma(x - \bar{x})^2}{N}}$$

Where,

σ　　　=　　　standard deviation

$\bar{x}$　　　=　　　arithmetic mean

N　　　=　　　number of observation

c. Coefficient of variation (C.V.)

Coefficient of variation is the percentage variation in mean. S.D. being considered as the total variation in the mean. Standard deviation is only an absolute measure of dispersion depending upon the units of measurement. The relative measures of dispersion based on standard deviation is called the coefficient of variation and is given by

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

Where,

C.V. =   Coefficient of Variation

σ =   Standard Deviation

$\bar{x}$ =   Mean

This is a pure number in depended of the units of measurement and thus, is suitable for comparing the variability, homogeneity or uniformity of two or more distribution. For comparing the variability of two distributions we compute the coefficient of variation for each distribution. A distribution with smaller C.V. is set to be more homogeneous or uniform or less variable than the other and the series with greater C.V. is said to be more heterogeneous or more variable than the other.

d. Least square linear trend

Among the various method of determining trend of a time series, the most popular and mathematical method is the least square. It has been tried to estimate the future trend of loan and advances and deposits investment. For estimation, straight line method is used.

$$y = a+bx$$

Where,

y= dependent variable

x= independent variable

a= y intercept

b= slope of the trend line

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

4.1 Financial analysis

The main focus of this chapter is to study, evaluate and analyze various financial performances that are mainly related to the investment policy and fund mobilization of HBL, NBBL and SCBNL. Different types of ratios are found to be helping but only those ratios that are related to the evaluation of fund mobilization and investment are calculated. The main ratios that are studied for this purpose are given below.

Liquidity ratio
Assets management ratio
Profitability ratio
Growth ratio

4.1.1 liquidity ratio

Liquidity ratio measures the capacity of firm to meet its cash obligation. Banks must maintain its satisfactory liquidity position to meet the credit need of the community. Demand for the deposits withdrawals,

pay maturity in time and convert non-cash assets into cash to satisfy immediate need without lost to bank consequent impact or long fund profit.

4.1.1.1 Current ratio

The current ratio measures the ability of bank to meet its current obligation. It measures the short term solvency. It can be calculated by dividing current assets by current liabilities. The standard current ratio is 2:1 however, 1:1 also accepted.

Current ratio (times)

<div align="right">Table 1</div>

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	1.039	1.047	1.05	1.052	1.060	1.071	1.053	0.01	0.95
SCBNL	1.061	1.063	1.04	1.039	1.046	1.054	1.051	0.009	0.85
NBBL	1.01	0.932	0.958	0.949	1.11	1.15	1.018	0.083	8.18

Source: annual report of selected banks

Chart 1
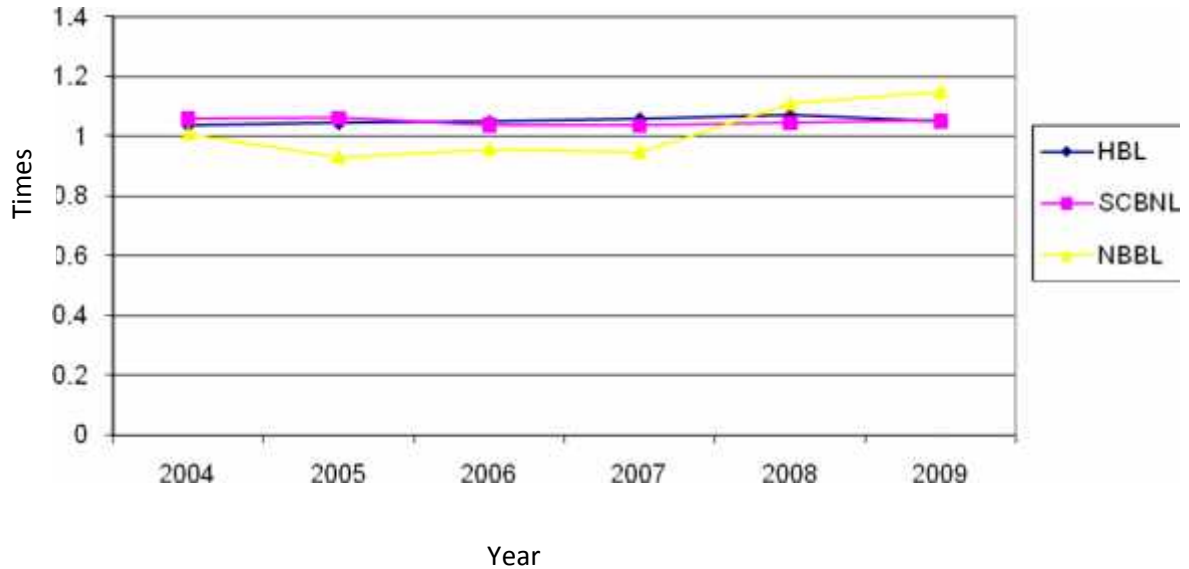
The above comparative table shows the current ratio of the banks HBL, SCBNL and NBBL. The current ratio of HBL has increasing trend in year 2004 to 2009 but SCBNL and NBBL have fluctuation throughout review period. The mean current ratio of HBL and SCBNL is better than NBBL. It means that all banks are seem to capable of paying current obligation in satisfactory level. Similarly, S.D and C.V of HBL, SCBNL and NBBL are 0.01, 0.009, 0.083 and 0.95%, 0.85% and 8.18% respectively. Finally it can be concluded that current ratio of the banks are below the standard of 2:1 but it can't say that the liquidity position of banks are poor. The C.V reveals that the ratio is quite consistent during the study period but above table shows NBBL is less consistent than other two banks.

4.1.1.1 Cash and bank balance is to total deposit ratio

Cash and bank balance is said to be the first line defense of every bank. The ratio between the cash and bank balance and total deposit measures the ability of a bank to meet the sudden demand of deposits. Cash and bank balance is composed of cash on hand; foreign currencies, cheques as well as other cash items and balance with domestic banks. This ratio is computed by dividing cash and bank balance by total deposits. A high ratio indicates the greater ability to meet their deposits and vice versa. Moreover, too high ratio is unfit as capital will be tied up and opportunity cost will be higher.

Cash and bank balance to total deposits ratio (percent)

Banks	2004	2005	2006	2007	2008	2009	mean	S.D.	C.V.(%)
HBL	9.19	8.11	6.48	5.84	4.54	8.78	7.156	1.669	23.32
SCBNL	8.06	7.49	7.84	7.93	8.14	8.31	7.96	0.256	3.22
NBBL	8.5	8.4	7.094	8.34	8.67	4.60	7.6	1.44	18.94

Source: annual report of selected bank

Chart 2
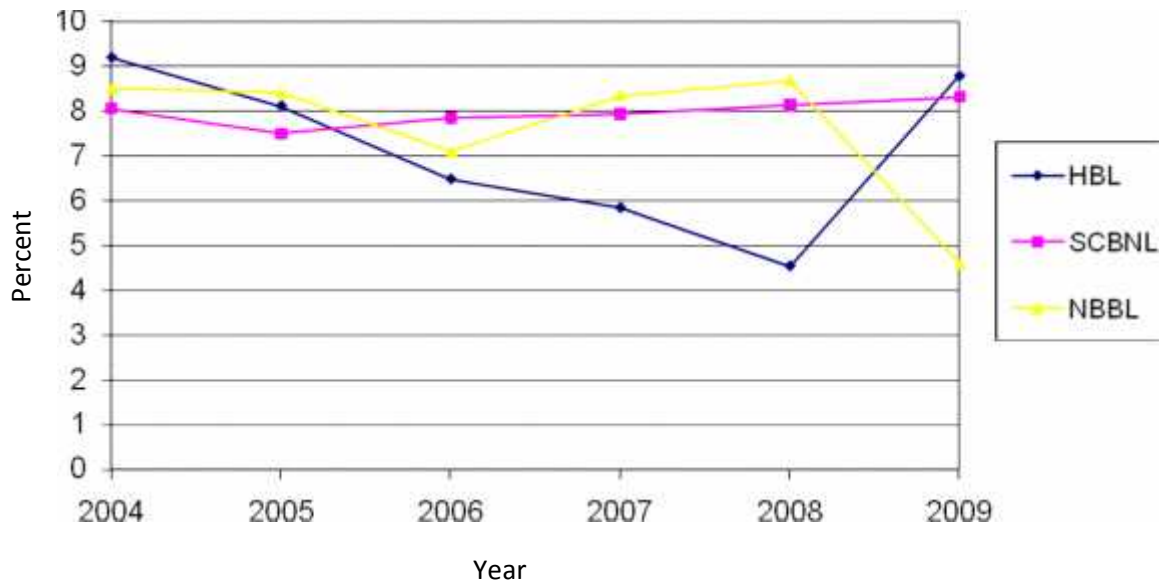
The above table shows that the cash and bank balance to total deposits ratio of all three banks have fluctuating trend. SCBNL has highest ratio than others with more consistency. Higher ratio of SCBNL shows that the SCBNL is able to serve the demand of its customers. Similarly, S.D. and C.V. of HBL, SCBNL and NBBL are 1.669, 23.3%, 0.256 and 3.22% and 1.44 and 18.94%.

In comparative study, SCBNL has the average position of cash and bank balance to total deposits ratio regarding the meeting of the demands of its customer on their deposit at any time.

4.1.1.2 Cash and bank balance to current assets ratio

This ratio revel the ability of the bank to make the quick payment of its customer deposits. A high ratio indicates the sound ability to meet their daily cash requirement of their customer deposits and vice versa. Therefore

bank has to balance cash and bank balance to current assets ratio in such a manner that it should have the adequate cash for the customers demand and less interest is required to be paid against the cash deposit.

Cash and bank balance to current asset ratio (percent)

Table 3

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	8.14	7.29	5.84	5.37	4.08	7.92	6.43	1.472	22.89
SCBNL	7.27	6..64	6.89	6.93	7.28	7.5	7.085	0.328	4.63
NBBL	7.9	9.58	7.5	9.64	8.17	8.34	8.42	0.696	8.276

Source: - annual report of selected bank

Chart 3
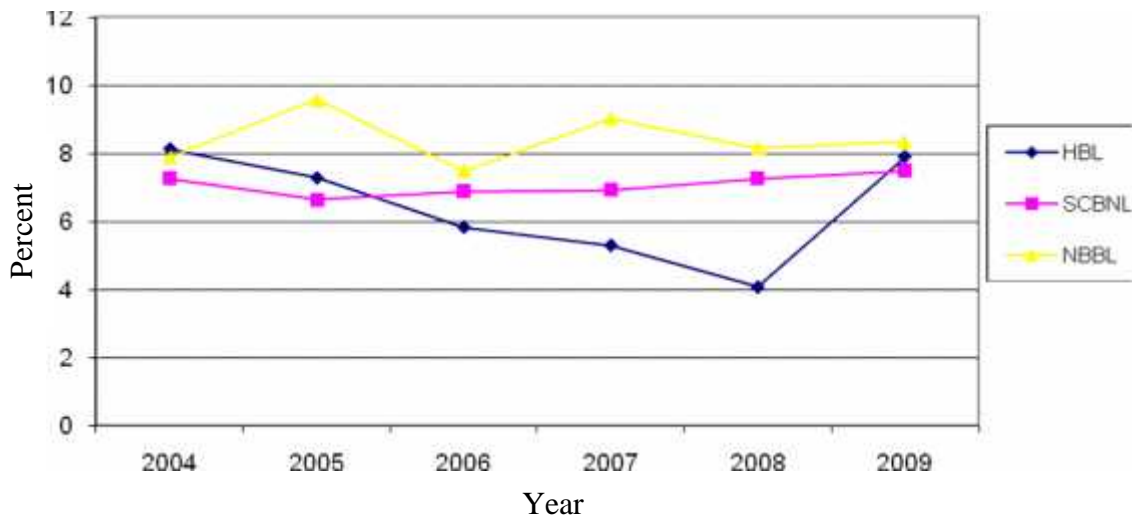
The above table shows the ability of managing the deposits withdraws from the customer. All three banks have maintained the cash and bank balance on current assets in fluctuation trends. The mean ratio of NBBL is

higher than HBL and SCBNL. From the above study, C.V of HBL, SCBNL and NBBL is 22.89 , 4.63 and 8.276 respectively. The C.V of SCBNL is lower than other two banks, which means SCBNL is more consistence than HBL and NBBL. In conclusion we can say that, SCBNL has followed the average cash and bank balance to total current assets in comparison with NBBL and HBL.

4.1.1.3 Investment on government securities to current assets

The government securities are the safest place to make investment. Commercial bank is invested to invest collected funds in various government securities issued by government, but these securities are not liquid as cash and bank balance, but they can easily sell in market. So in this ratio we examine that the portion of current assets that invested on different government securities by the commercial bank.

Investment on government securities to current assets (percent)

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.( )
HBL	16.26	14.53	13.95	12.43	11.84	11.18	13.365	1.734	12.97
SCBNL	49.7	47.9	52.5	38.3	44.9	45.3	46.433	4.461	9.16
NBBL	18.8	19.3	16.4	17.2	14.6	18.46	17.46	1.61	9.21

Source: - annual report of selected bank

Chart 4

Year
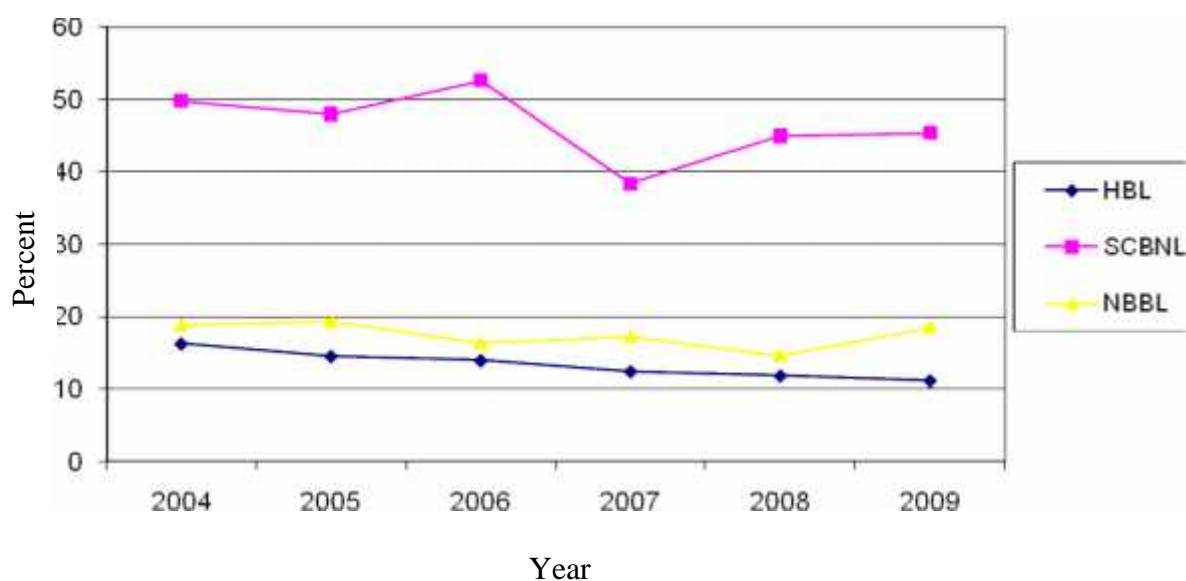
The above table reveals that all the banks investment on government securities have fluctuating trend. In average, SCBNL has invested more part of current assets in government securities i.e. 46.433 than HBL and NBBL. It means SCBNL is more sensitive in investment in productive sector than HBL and NBBL. On the basis of C.V. SCBNL seems more consistent and stable than HBL and NBBL. In conclusion, the liquidity position of SCBNL, from the point of view of investment on government securities is best.

4.1.2 Assets management ratio

Assets management ratio measures the efficiency of the bank to manage its assets in profitable and satisfactory manner. A commercial bank must manage its assets property to earn high profit. Under this chapter following ratios are studies.

4.1.2.1 Loans and advances to total deposit ratio

This ratio shows how successfully the banks are utilizing their total deposits for profit generating purpose. A high ratio indicates better mobilization of collected deposit and vice –versa. It should be noted that too high ratio might not better from its liquidity point of view. This ratio is calculated by dividing loans and advances by total deposits.

Loan and advances to total deposit ratio (percent)

Table 5

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.( )
HBL	58.6	54.2	59.5	59.2	63.3	73.58	61.39	6.036	9.865
SCBNL	30.4	29.1	30.2	29.3	28.3	27.83	29.18	0.926	3.174
NBBL	68.5	68.98	49.63	46.97	50.19	67.06	58.54	9.69	16.57

Source: - annual report of selected bank

Chart 5
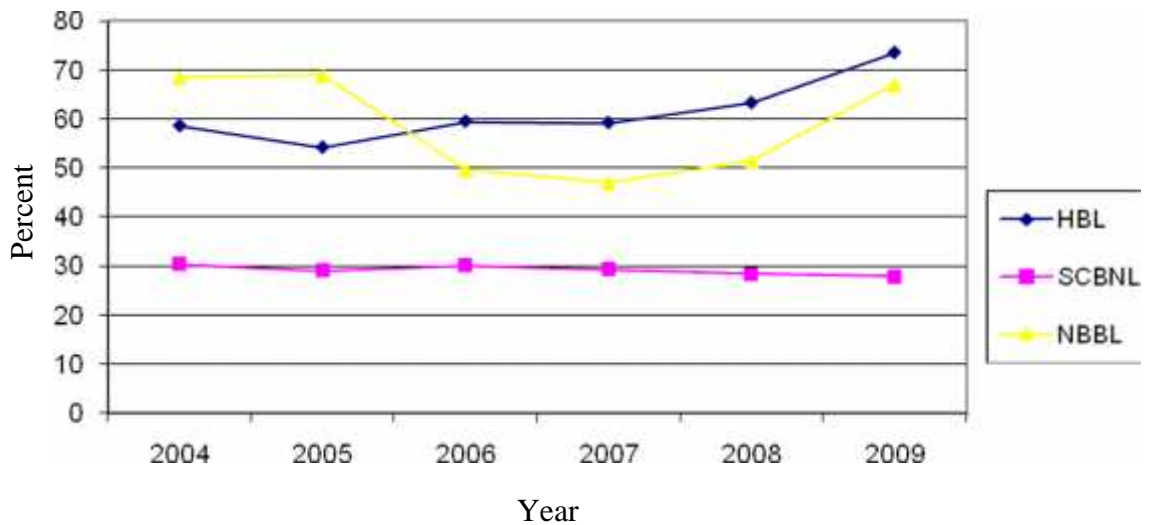
The above table reveals that all the banks have fluctuating loans and advances to total deposit ratio. The mean ratio of HBL is higher i.e. 61.3 followed by NBBL 58.54　and SCBNL 29.18　. HBL seems to be strong in term of mobilization of total deposit of loan and advances when compared to another two banks. Similarly during the reviewed period SCBNL has the highest consistency ratio i.e. C.V. with 3.174　and it is followed by HBL 9.865　and NBBL 16.57　.

4.1.2.2　Total investment　to total deposit ratio

A commercial bank mobilizes its deposits by investing its fund in different securities issued by government and other financial or non financial companies. The ratio measures the extent to which the banks are able to mobilize their deposit on investment in various securities. A high ratio indicates the success in mobilizing deposit in securities and vice –versa.

Total investment to total deposit ratio (percent)

Table 6

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.( )
HBL	42.1	47.1	41.1	39.3	41.8	25.1	39.41	6.8	17.33
SCBNL	55.2	53.4	58.2	54.1	60.9	61.65	57.24	3.2	5.6
NBBL	20.1	17.2	20.45	11.02	12.77	22.22	17.29	4.11	23.81

Source: - annual report of selected banks

Chart 5
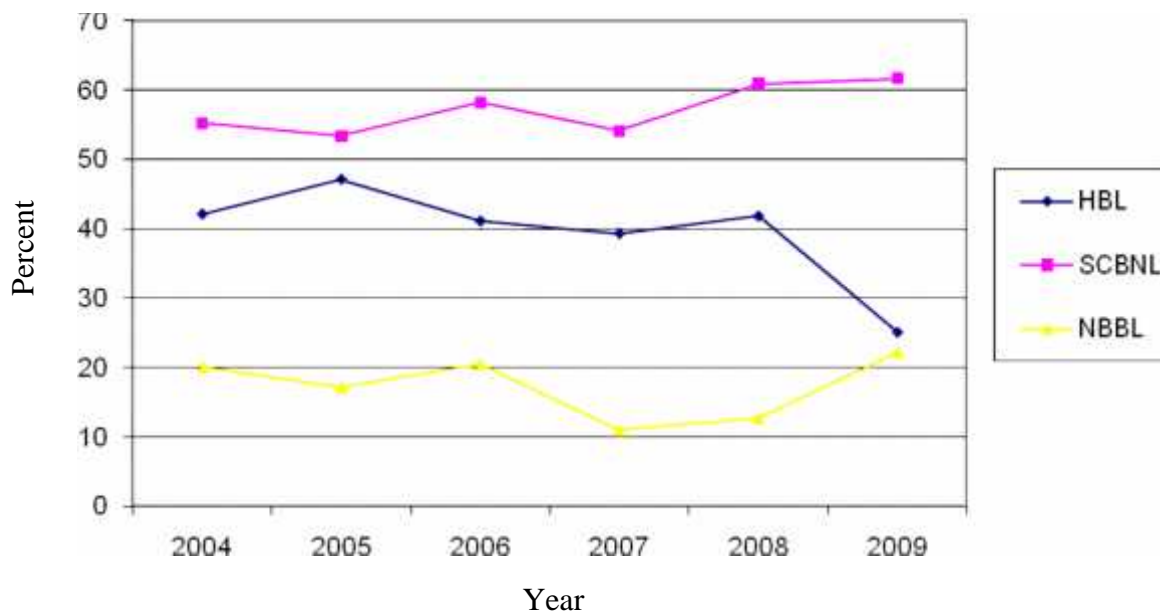
From above table it can be concluded that all three banks have fluctuating trend of ratios under fix years study period .The mean ratio of SCBNL is higher i.e. 57.24   followed by HBL 39.41   and NBBL 17.29 . Similarly during reviewed period SCBNL has highest consistency in terms of C.V. i.e. 5.6% followed by HBL 17.33   and NBBL 23.81   . Finally it

can be calculated that the SCBNL has mobilized its fund as investment at satisfactory level.

4.1.2.3 Loans and advances to total asset ratio

Loan and advances is an important part of total assets. Commercial banks must be very careful in mobilizing its total assets as loan and advances in appropriate level to generate profit. This ratio related the extent to which the commercial banks are success in mobilizing their assets on loan and advances for the purpose of income generation. A high ratio indicates better mobilization of fund on loan and advances and vice- versa.

Loan and advances to total asset ratio (percent)

Table 7

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V. (%)
HBL	50.20	46.6	51.5	51.9	54.7	63.7	53.1	5.31	10.01
SCBNL	60.7	58.01	55.17	60.17	58.12	50.7	57.14	3.39	5.94
NBBL	27.1	25.1	26.1	25.5	24.30	24.03	25.35	1.04	4.11

Source: - annual report of selected banks

Chart 7
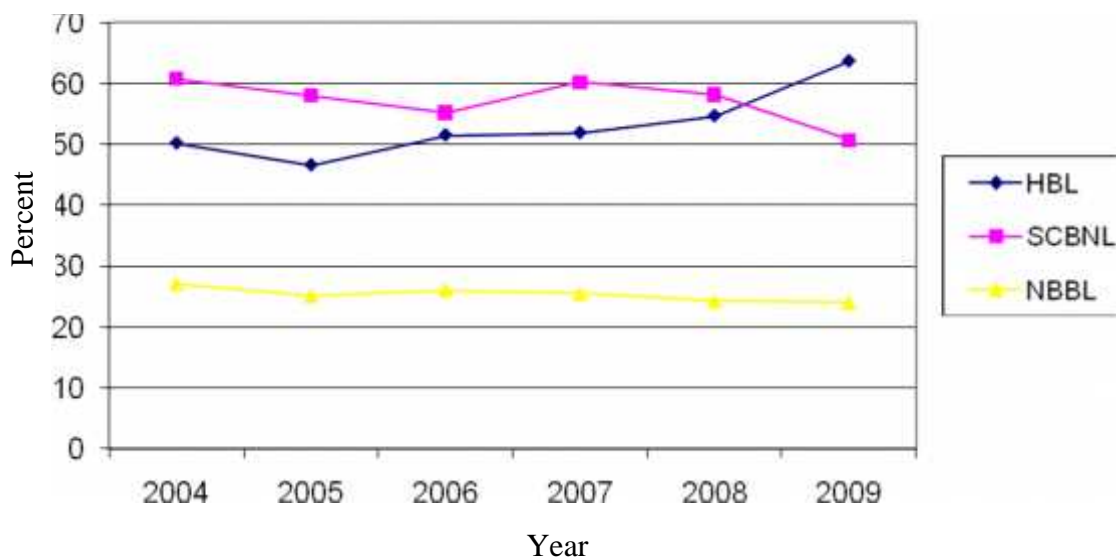
Above table describes the loan and advances to total asset ratio of all banks in falling and rising trend. In the study period, for HBL 63.7% highest ratio and 46.6% is lowest ratio in year 2009 and 2005 respectively. For SCBNL, highest ratio is 60.17 and lowest is 50.7% in year 2002 and 2009 respectively. And for NBBL, highest ratio is 27.1% and lowest is 24.03 in year 2004 and 2009 respectively. In average SCBNL maintained higher loans and advances to total assets ratio i.e. 57.14%. The C.V. of NBBL is lower than HBL and SCBNL. So NBBL is more consistence and stable than others.

4.1.2.4 Investment on government securities to total assets ratio

This ratio is very important to know the extent to which the banks are successful in mobilizing their total working fund on different types of government securities to maximize the income. All the deposit of the bank should not be utilized in loans and advances and other credit from the point of view of securities and liquidity. Therefore, to some extent, commercial

bank seems to be interested to utilize their deposits by purchasing government security and vice-versa.

Investment on government securities to total asset ratio (percent)

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	15.54	13.89	13.40	11.98	11.39	10.73	12.82	1.63	12.73
SCBNL	27.12	25.13	26.14	25.51	24.30	24.03	25.37	1.053	4.15
NBBL	17.85	15.34	15.01	26.96	21.35	17.75	19.043	4.104	21.56

Source: - annual report of selected banks
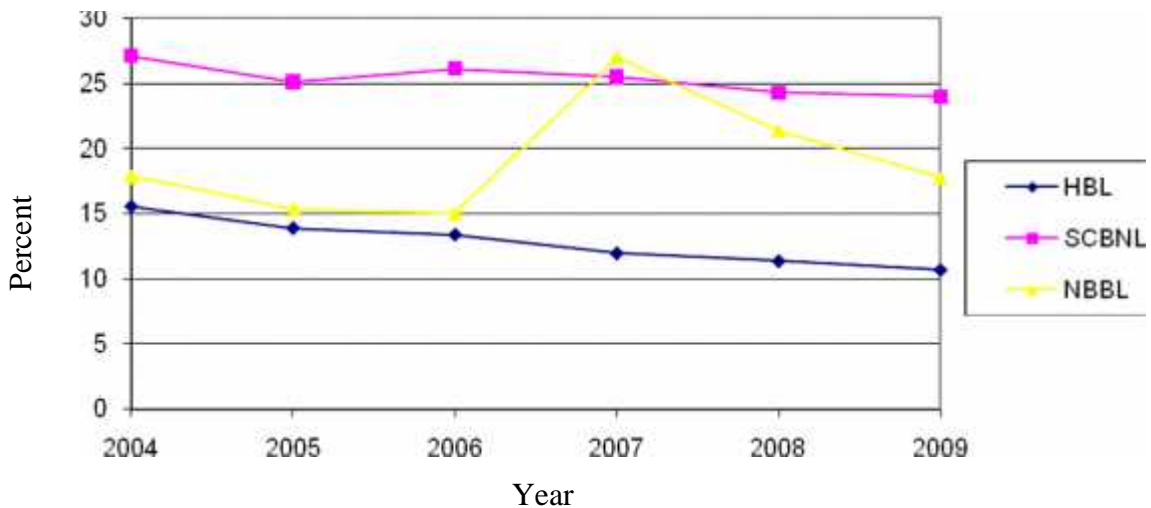
From above the table it is seen that the trends of all three banks have fluctuating trend. The highest ratio of HBL and SCBNL and NBBL is 15.54%, 27.12% and 26.96% respectively. During study period SCBNL seems more successful to invest its funds in government securities than HBL and NBBL. The C.V. of SCBNL is lowest i.e. 4.15%. So SCBNL is more stable and consistence than HBL and NBBL. From the above analysis we

can concluded that SCBNL has invested its fund more efficiency in productive activities than HBL and NBBL. So investment on government securities is in strong position..

Diagram showing total deposits, total investment and total loan and advances of HBL, SCBNL and NBBL.

Trend and Composition of Total Deposits, Total Investment and Total Loan and Advances of HBL   Table 9

HBL	2004	2005	2006	2007	2008	2009
Total deposits	22010	24814	26491	30048	31842	34681
Total investment	9292	11692	10889	11823	13340	8711
Total loan and advance	12919	13451	15762	17794	20180	25520

Source: annual report of HBL bank.

Chart9
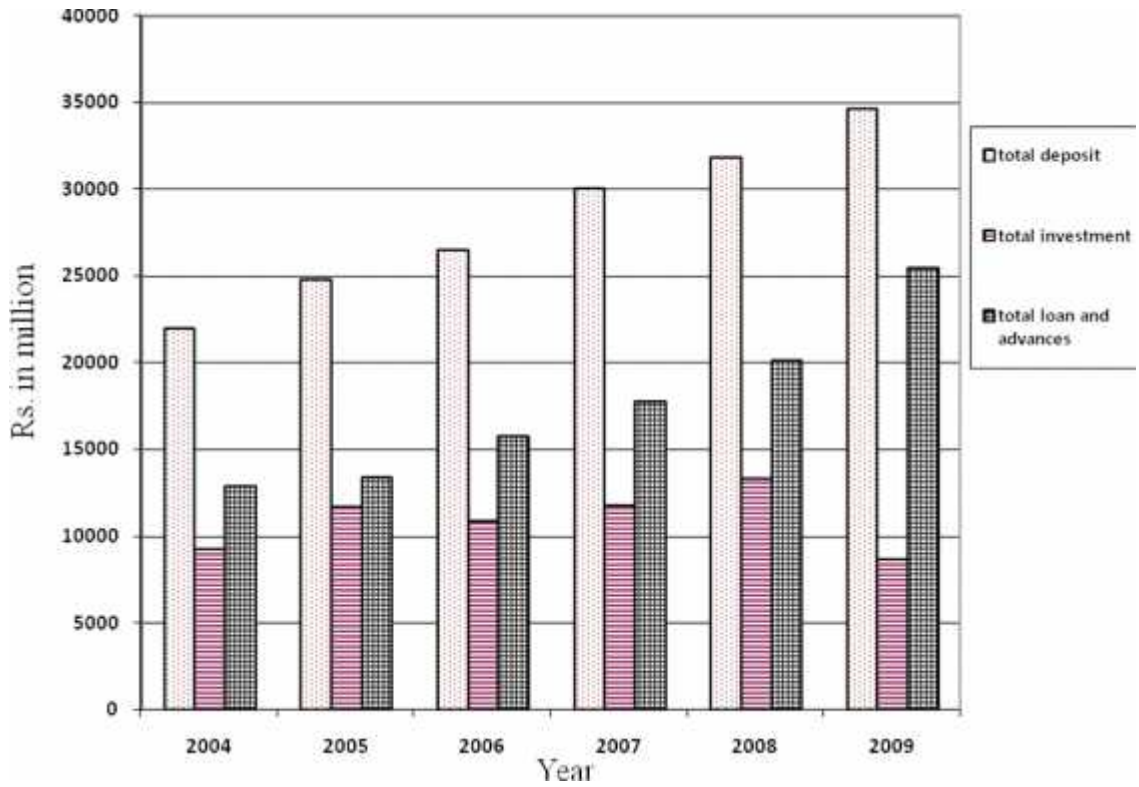
Trend and Composition of Total Deposits, Total Investment and Total Loan and Advances of SCBNL

Table 10

SCBNL	2004	2005	2006	2007	2008	2009
Total deposits	18755.6	18960.3	19146.5	19870.6	20456.5	20325.1
Total investment	10346.5	10122.3	11146.5	10750.9	12456.7	12529.5

Total loan and advances	5695.82	5525.6	5790.3	5812.5	5796.52	5824.5

Source: - annual report of SCBNL bank

Chart 10
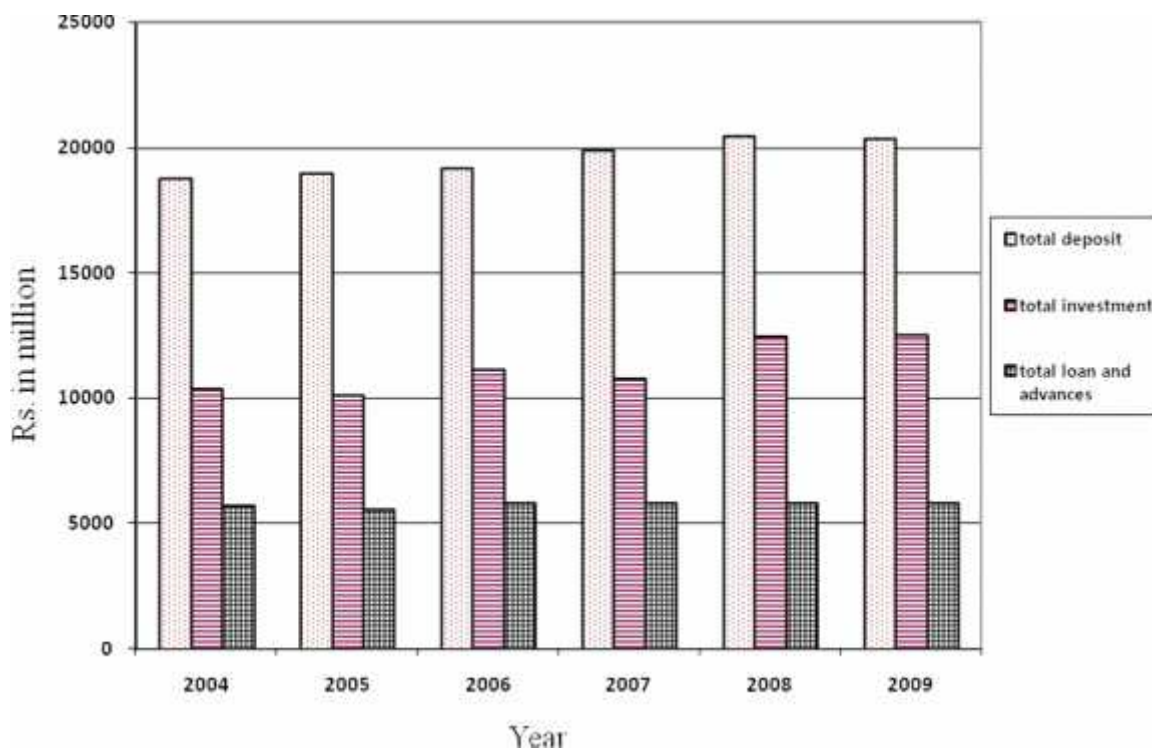
Trend and Composition of Total Deposits, Total Investment and Total Loan and Advances of NBBL

Table 11

NBBL	2004	2005	2006	2007	2008	2009
Total deposits	10580.2	10212.5	13015.1	9385.9	10883.7	9997.6
Total investment	2130.5	1758.3	2661.8	1034.5	1389.9	2222.4

Total loan and advances	7247.9	7045.5	6460.2	4409.2	5457.2	6704.9

Source: - annual report of NBBL bank.
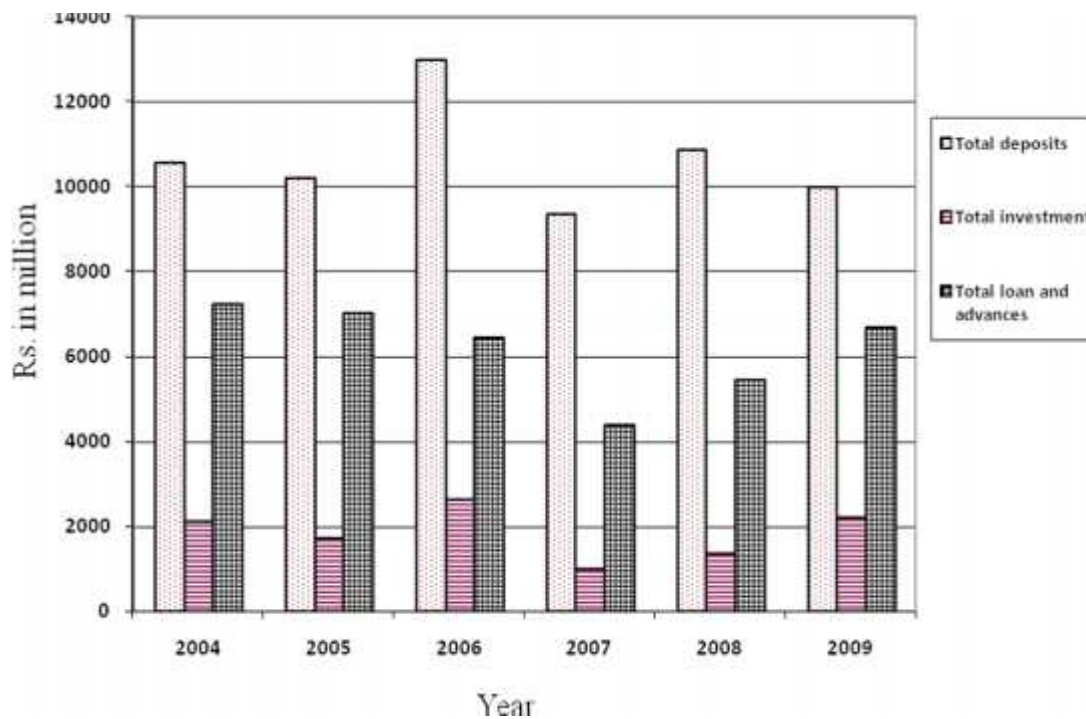
4.1.3   Profitability ratio

Profit is the difference between revenues and expenses over a period of time. The main objectives of a commercial bank are to earned profit by providing different types of banking services to its customers. To meet various objectives like maintaining good position, overcome the future contingencies, meet internal obligation, grab hidden investment in need of development funds etc, banks have to earn sufficient profit. Of course the

profitability ratios are the best indicators of overall efficiency. Here mainly two ratio are presented and analyzed which are related with profit as well as fund mobilization.

4.1.3.1 Return on loans and advances

Return on loans and advances shows how efficiently the bank has utilize their resources to earn good return from provided loans advances. Higher the ratio better is the situation because it shows that the bank is able to disburse good loans in higher proportion. The ratio is calculated by dividing net profit by loan and advances

Return on loan and advances (percent)

Table 12

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	2.04	2.3	2.6	2.8	3.2	2.9	2.64	0.383	14.52
SCBNL	8.9	10.8	10.5	11.9	12.3	12.24	11.11	1.2	10.83
NBBL	0.99	0.98	1.1	4.7	2.86	3.87	2.42	1.48	16.43

Source: - annual report of selected banks.

Chart12
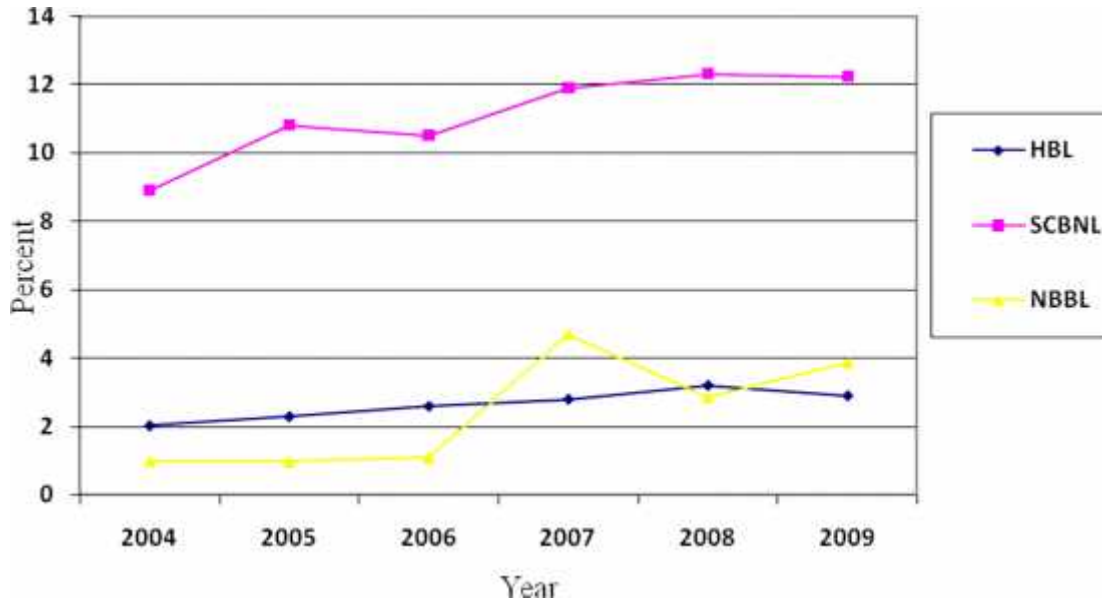
From above comparative table, all banks have fluctuating trend during study period. SCBNL has highest ratio of 12.3 % in year 2008 where as the HBL and NBBL has 3.2% and 4.7% in year 2008 and 2007 respectively. From the analysis of mean ratio of SCBNL seems better i.e. 11.11% than HBL and NBBL. The C.V. of SCBNL is 10.83% where as HBL and NBBL have 14.52% and 16.43% respectively. Thus it can be concluded that SCBNL profit earning capacity on loan and advances is more than HBL and NBBL.

4.1.3.2 Return on total assets

Return on total assets is also known as ROA. This ratio measures the rate of return earned by the bank as a whole for all its investors. Higher the ratio higher the efficiency of the in utilization its overall assets and resources

and lower the volume of non-performing assets. A firm without good return on assets finds it almost impossible to generate a satisfactory return on equity. It is calculated by dividing net profit by total assets.

Return on total assets (percent)

Table 13

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	1.02	1.1	1.5	1.4	1.7	1.9	1.44	0.32	16.64
SCBNL	2.4	2.7	2.7	3.11	3.02	2.98	2.82	0.22	7.9
NBBL	0.59	0.57	0.61	2.53	1.67	1.96	1.32	0.37	28.68

Source: - annual report of selected banks.

Chart 13
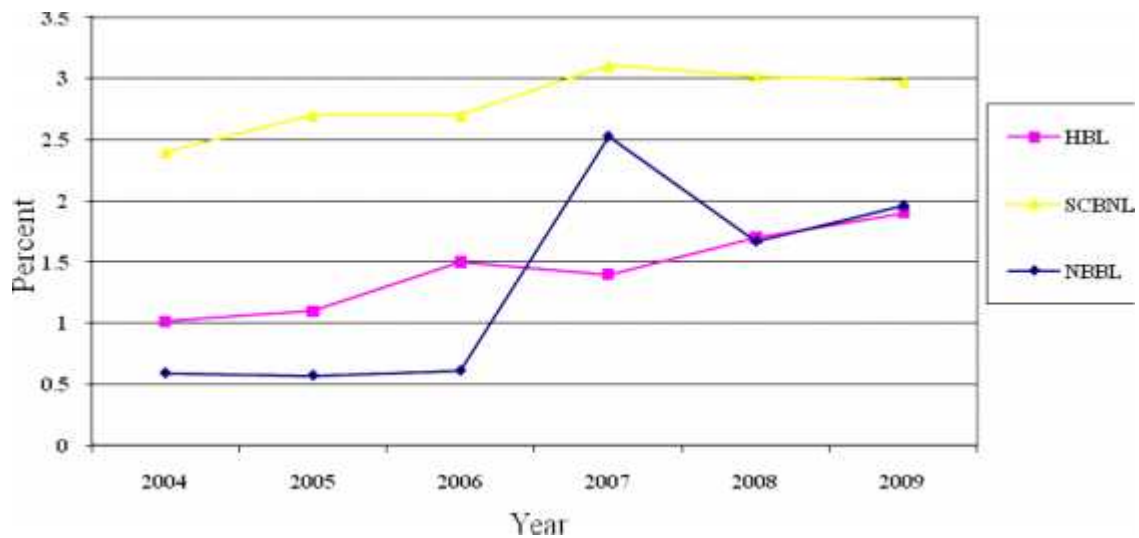
The above comparative table shows that all the selected banks have fluctuating trend during study period. The mean ratios of SCBNL have higher than NBBL and HBL. The mean ratio of HBL, SCBNL and NBBL is 1.44%, 2.82% and 1.32% respectively. The C.V. of SCBNL, HBL and NBBL are 7.9%, 16.64% and 28.68% respectively. This concludes that the return on total assets of SCBNL is more consistent and stable than others selected banks. It means that SCBNL is able to utilize its assets efficiently than HBL and NBBL.

4.1.3.3 Return on equity (ROE)

Equity capital of any banks its owned capital. The main objective of any banks of wealth maximization on its equity capital, ROE is the measuring rode of the probability of the bank. It reflects the extent to which the banks have been successful to mobilize its owned capital and vice-versa. This ratio is calculated by dividing net income by equity.

Return on equity (percent)

Table 14

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	19.86	19.99	25.90	22.9	25.3	24.13	23.01	2.32	10.12
SCBNL	45.3	39.01	47.4	43.8	40.6	39.36	42.58	3.14	7.37
NBBL	18.03	11.7	9.9	25.58	21.04	12.64	16.48	5.58	33.86

Source: - annual report of selected banks

Chart 14
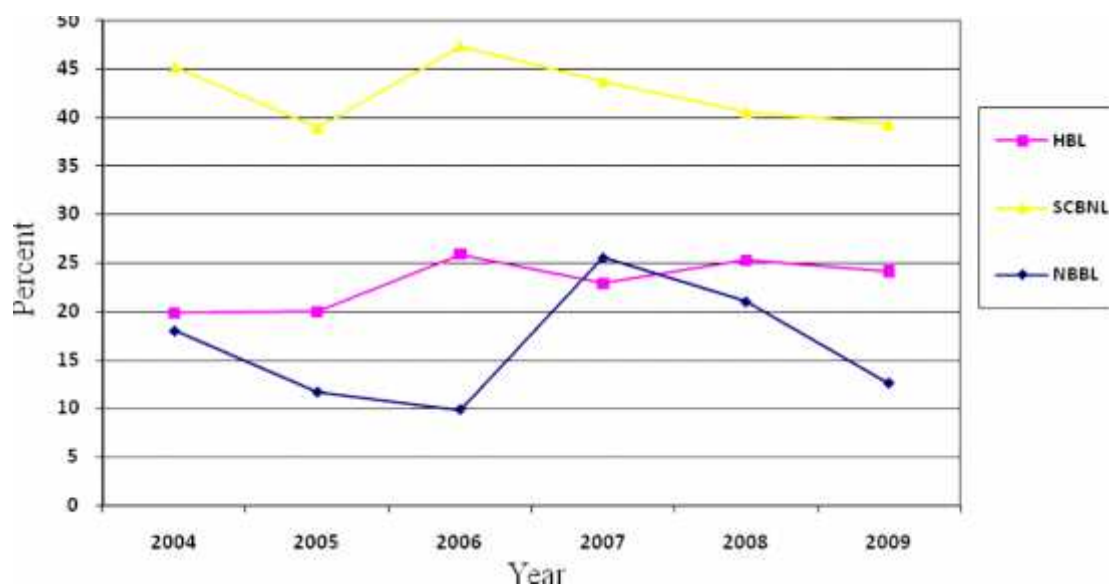
The above comparative table shows that all three banks are fluctuating banks. The highest ratio in all is 47.4%. The mean ratio of HBL, SCBNL, and NBBL are 23.01%, 42.58% and 16.48% respectively. The mean shows that SCBNL has strong to earn high return to equity capital. Other has also good return but comparatively lower i.e. the return of SCBNL has more stable with increasing trend. Comparatively NBBL is failure to earn adequate amount those others. Thus overall it can be concluded that NBBL has not been able to earn high profit through the efficient utilization of its own capital. Moreover its high C.V. shows its less homogenous ratios during the study period. HBL stand in average and SCBNL has superior.

4.1.3.4 Total interest earned to total assets ratio

This ratio reflects the extent to which banks is successful in mobilizing these total assets to acquire income as interest. The ratio actually reveals the earning capacity of commercial banks by mobilizing the assets.

A high ratio is an indicator of high earning power of the bank of its assets and vice versa. This ratio is calculated by dividing total interest earned by total assets.

Total interest earned to total assets ratio (percent)

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	4.8	5.01	5.3	5.17	5.3	5.8	5.23	0.31	5.91
SCBNL	4.7	4.95	4.97	4.61	5.05	5.39	4.95	0.25	5.09
NBBL	3.49	7.91	6.47	5.53	8.81	11.17	8.89	3.7	42.4

Source: - annual report of selected banks
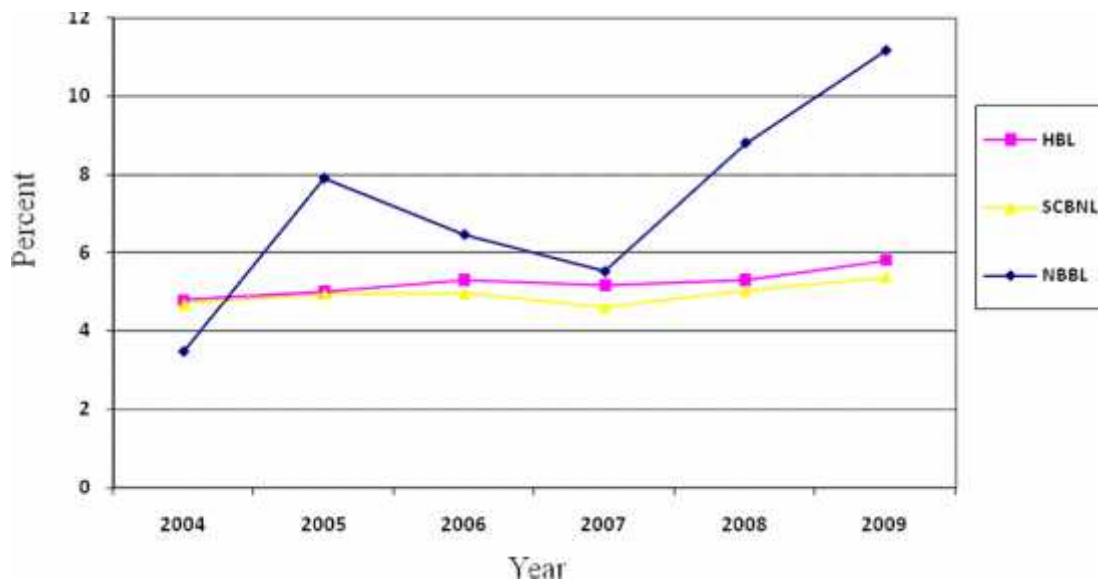
The above comparative table shows that all three banks have fluctuating trends. The highest ratio in all is 15.53 of NBBL during year 2007. The mean ratio of total interest earned to total assets ratio of NBBL is higher than others selected banks. It indicates that interest earning power in respect to total assets is seem to be effective as HBL and NBBL. The C.V. of HBL, SCBNL and NBBL is 5.91%, 5.09% and 42.4% respectively. This shows that SCBNL and NBBL is stable than NBBL. From this analysis, it can say that interest earning power of SCBNL is more consistent than HBL and NBBL.

4.1.3.5 Total interest paid to total assets ratio

This ratio measures the percentage of interest paid against total assets. A high ratio indicates the higher interest expenses on total working fund and vice-versa. This ratio can be calculated by dividing total interest paid by total assets.

Total interest paid to total assets ratio (percent)

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	1.92	1.94	2.1	2.21	2.23	2.33	2.12	0.15	4.24
SCBNL	1.2	1.3	1.4	1.43	1.48	1.52	1.38	0.105	7.6
NBBL	4.6	4.13	4.4	5.9	4.2	3.4	4.43	0.75	16.97

Source: - annual report of selected banks

Chart 16
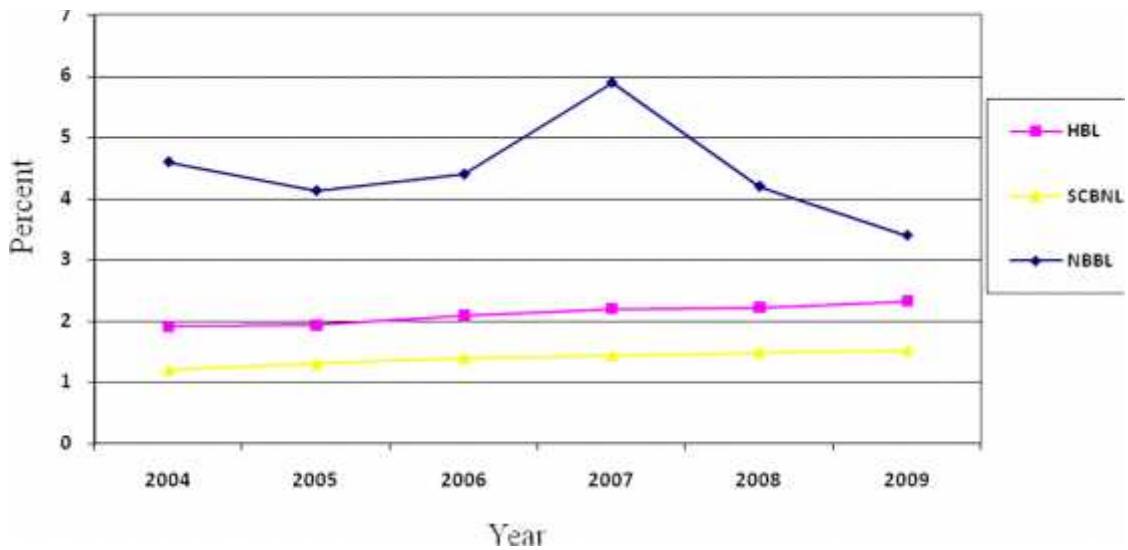
The above comparative table shows that HBL and SCBNL have increasing trend ratio of interest paid to total assets ratio but NBBL has rising and falling trend. The mean ratio of HBL, SCBNL and NBBL are 2.12%, 1.38% and 4.43% respectively which indicates SCBNL paid low interest on its total working fund than HBL and NBBL. In conclusion, it can be concluded that SCBNL paid interest on total working fund is better position. It seems to be successful success to collects its working funds from less expensive sources in comparison to HBL and NBBL.

4.1.3.6 Total interest paid to total deposits ratio

Banks should pay interest on deposits and borrowing. If the interest paid on deposits is higher than the cost of service will increase the cost of funds. Due to this reason bank should search the cheaper sources of funds so this ratio reveals how much percent reveals how much percent is paying to depositors or borrower, high cost will risky for banks, So low cost will

preferable and vice-versa. It is calculated by dividing total interest paid by total deposits.

Total interest paid to total deposits ratio (percent)

Table 17

Banks	2004	2005	2006	2007	2008	2009	Mean	S.D.	C.V.(%)
HBL	2.23	2.26	2.45	2.55	2.58	2.69	2.46	0.165	6.15
SCBNL	1.3	1.47	1.58	1.66	1.73	1.82	1.601	0.08	4.99
NBBL	5.24	4.92	3.98	4.51	3.66	4.09	4.44	0.5	12.46

Source: - annual report of selected banks.

Chart 17
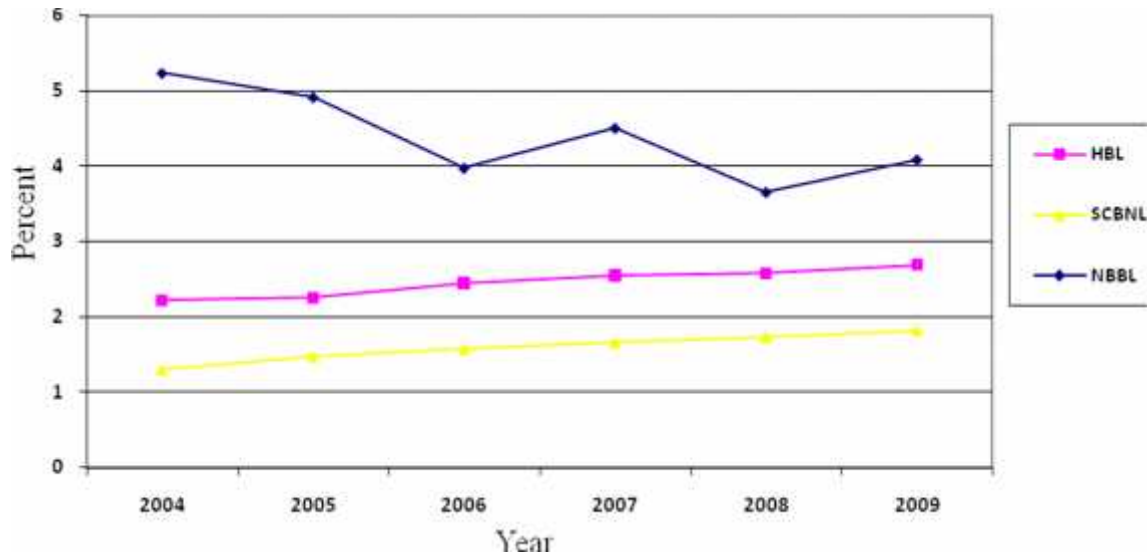
The above comparative table shows that HBL and SCBNL have increasing total interest paid to total deposits ratio but NBBL has rising and falling trend. The average ratio of HBL, SCBNL and NBBL are 2.46%,

1.601% and 4.4% respectively which indicates SCBNL paid low interest on its total deposits than HBL and NBBL. As the C.V. of SCBNL is greater than HBL and NBBL, it seems more stable and consistent. In collusion, we can say that SCBNL paid low interest on total deposits and borrowing than HBL and NBBL. SCBNL has maintained to decrease cost of service.

4.1.4 Growth ratio

The growth ratio represents how well the commercial bank is maintaining economic and financial position. Higher growth ratio indicates better performance of the bank and vice versa. Under this topic, only those ratios are analyzed and interpreted which are directly related to the fund mobilization and investment policy of a commercial bank. The ratios are calculated by using following formula.

$$D_n = D_o(1+g)^n$$

Where, D_n = total amount in n^{th} year

D_o = total amount in the initial year

g = growth ratio of amount during the study period.

n = total number of year

4.1.4.1   Growth ratio of total deposit (percent)

Table 18

Banks	2004	2005	2006	2007	2008	2009	Growth rate
HBL	22010	24814	26491	30048	31843	34681	10.78
SCBN L	18755.6	18960.3	19146.5	19870.6	20456.8	20325.1	1.34

73

| NBBL | 10580.15 | 10212.5 | 13015.1 | 9385.9 | 10883.65 | 9997.6 | 0.5 |

Chart 18
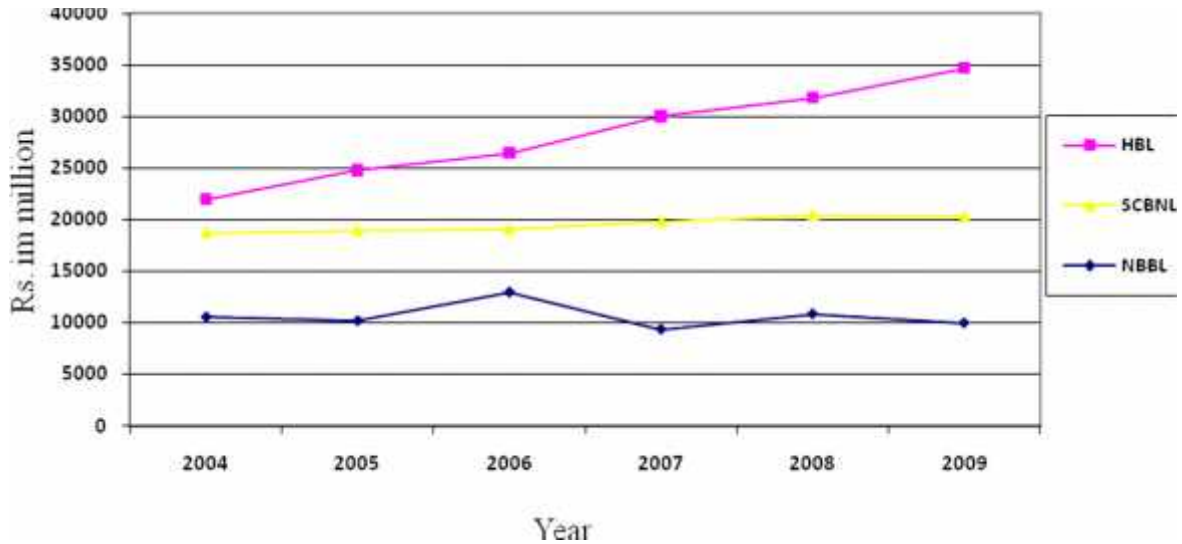
The above comparative table shows the growth ratio of total deposits of HBL, SCBNL and NBBL during five year study period. The total deposits trend of HBL and SCBNL are increasing but NBBL is fluctuating. Here the growth ratio of HBL, SCBNL and NBBL are 9.52%, 1.62% and - 1.13% from year 2004 to year 2009. So in comparison HBL is able to increase deposit collection than SCBNL and NBBL.

4.1.4.2 Growth ratio of loans and advances

Table 19

Bank	2004	2005	2006	2007	2008	2009	Growth ratio
HBL	12912	13451	15762	17794	20180	25520	12.02

74

SCBL	18755.6	18960.3	19146.5	19870.6	20456.8	20923.6	1.02
NBBL	7247.98	7045.5	6460.24	4409.13	5457.81	6704.94	-1.28
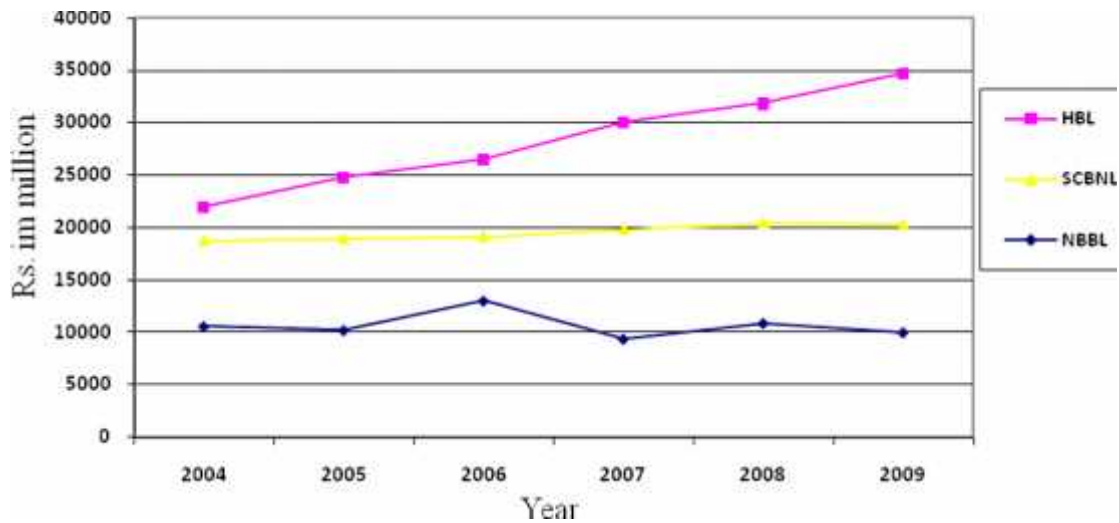
The above comparative tables describe the loan and advance growth ratio of HBL, SCBNL and NBBL. The total loan advance table shows that banks have rising trends except NBBL. The table shows highest growth rate of loan and advances is 14.59% of HBL where as SCBNL and NBBL has 2.21% and -1.54% respectively. In conclusion it can be concluded that HBL growth ratio of loans and advances seems in strong condition in comparison with SCBNL and NBBL.

4.1.4.3 Growth ratio of investment (%)   Table 20

Bank	2004	2005	2006	2007	2008	2009	Growth ratio
HBL	9292	11692	10889	11823	13340	8711	-1.28

SCBNL	10346.5	10122.3	11146.5	10745.9	12456.7	12529.5	3.24
NBBL	2130.5	1758.3	2661.8	1034.5	1389.9	2222.4	0.7

Chart 20
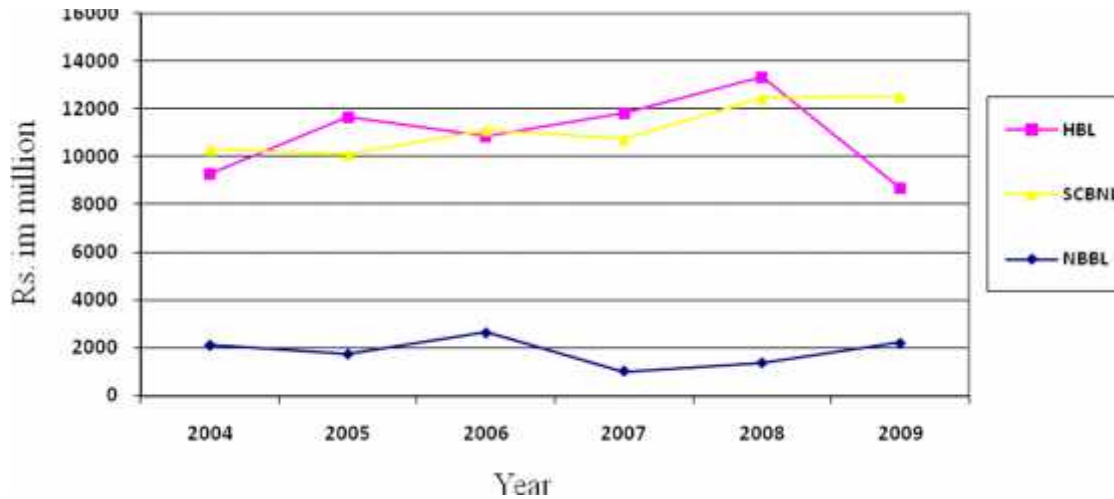
The above comparative table shows that the growth ratio of total investment of HBL, SCBNL and NBBL have functioning. The table shows HBL have negative growth rate in comparison of year 2004 and 2009 but SCBNL and NBBL has positive growth rate. From above table it can be concluded that the investment growth rate of SCBNL is satisfactory than HBL and NBBL

4.1.4.4 Growth ratio of net profit

Table 21

Bank	2004	2005	2006	2007	2008	2009	Growth ratio (%)

HBL	263.1	308.3	457.5	491.8	635.9	752.8	19.14
SCBNL	506.91	596.3	605.9	609.2	712.6	721.7	6.06
NBBL	71.51	69.5	71.29	184.19	156.59	235.2	21.88

<div align="right">**Chart 21**</div>
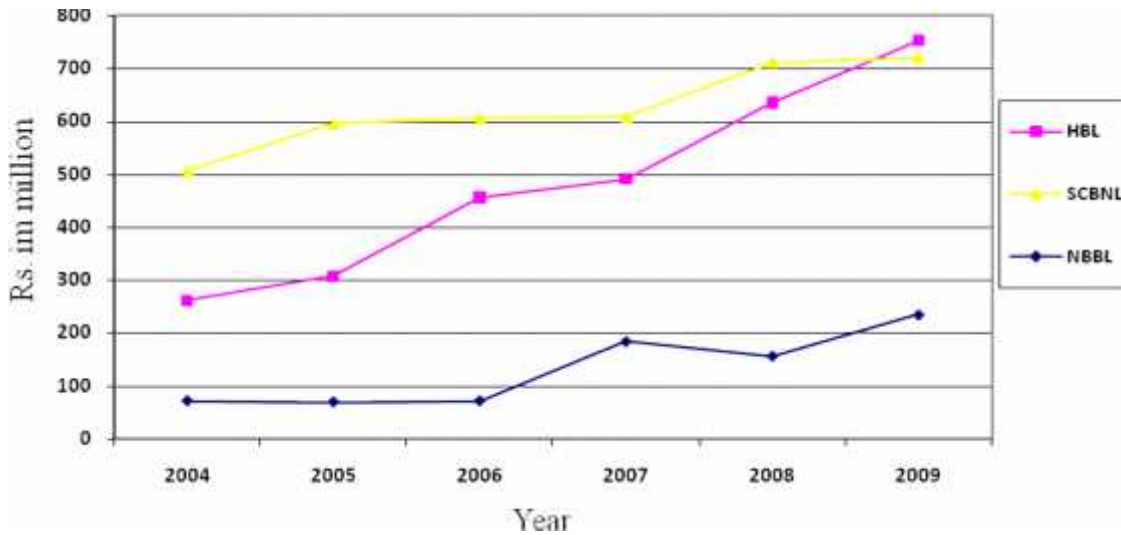
The above table shows the growth rate of net profit of HBL, SCBNL, and NBBL 23.39%, 7.32%, and 26.86 respectively. During the study period it is seen that the growth rate of net profit of all banks are increasing trend expect NBBL but the yearly growth rate i.e. 2009 shows NBBL and HBL are better than SCBNL.

4.2 Statistical analysis

In this topic some major and important statistical tools which are related to fund mobilizing policy of commercial bank s like coefficient of correlation analysis, trend analysis and test of hypothesis are used to achieve the objective of this study. They are presented below**.**

4.2.1 Coefficient of correlation analysis

The correlation describes the relation between two variables whether the relation is positive or negative between independent variable and dependent variable. The coefficient of correlation helps to determine following relationship.

i. A positive or negative relationship exists.

ii. The relationship can be significant or insignificant.

iii. Established caused and effect relation if any.

Correlation analysis is preferred in this study to identify the relationship between variables whether the relationship is significance or not.

When r= 1, there is positive correlation.

When r= -1, there is negative correlation.

When r= 0, there is no correlation.

When r lies between 0.7 to 0.199, there is high degree of positive correlation.

When r lies between 0.5 to 0.6199, there is moderate degree of correlation.

When r is less than 0.05 there is low degree of correlation.

The formula for computing correlation coefficient (r) is as follows.

$$r = \frac{n\sum xy - \sum x.\sum y}{\sqrt{n\sum x2 - (\sum x)\,2}.\sqrt{n\sum y2 - (\sum y)2}}$$

Test of significance (probable error)

The probable error of the correlation coefficient helps in interpreting the value of correlation. It helps to determine the reliability of the value of coefficient in so far as it depends on the conditions of the random sampling. The P.E. can be computed by following formula.

$$P.E. = \frac{0.6745(1-r^2).}{\sqrt{n}}$$

If r <6P.E. then the value of r is not significance.

If r > 6 P.E. then the value of r is definitely significant.

If the other situations happened, nothing can be concluded with certainty.

4.2.1.1 Correlation coefficient between total deposits and total loan and advances

Correlation coefficient between total deposits and total loan and advances indicate the degree of relationship between total deposits and advance. Here deposit is independent Variable and loan and advances dependent variable.

Table 22

Name of banks	r	r^2	P.E.	6 P.E.
HBL	0.96	0.92	0.0216	0.129
SCBNL	0.66	0.435	0.155	0.93
NBBL	0.38	0.14	0.23	1.38

The above comparative table describes the relationship between deposits and loan & advances of HBL, SCBNL and NBBL during six year

study period. The above table shows, there is positive relationship between deposits and loan and advances in all three banks. The value of correlation coefficient of HBL is highest i.e. 0.96 followed by SCBNL 0.66 and NBBL 0.38 respectively.The value of coefficient of determination (r^2) of HBL is 0.92, it means 92% of variation in the loan and advances has been explained by the deposits and remaining 8% of variation in the loans advances has occurred due to other variable. Similarly by comparing the value of r with 6P.E, we can find that the value of r is significant. In other words, there is significant relationship between deposit and loans and advances in case of HBL.

The value of coefficient of determination of SCBNL is 0.435, which means 43.5% of variation in the loan and advances has been explained by the deposits and remaining 56.5% of variation in the loans and advances has occurred due to other variables. The value of r i.e. 0.66 is smaller than value of 6P.E i.e. 0.93, which means the relation between deposited and loan and advances is not significant.

Similarly, the value of coefficient of determination of NBBL is 0.14, which shows that 14% of variation in the loans and advances has been explained by the deposits and 86% of variation in the loans and advances has occurred due to other variables. The value of r i.e. 0.38 is smaller than 6P.E i.e. 0.23, which means the relationship between deposited and loans and advances is not significant.

4.2.1.2 Correlation coefficient between total deposit and total Investment

Correlation coefficient between total deposit and total investment measures the degree of relationship between two variables. In analysis

deposit is taken as independent variable (x) and investment is dependent variable (y). The main purpose of calculating r is to judge whether deposits are significantly mobilized as investment or not.

Name of banks	r	r^2	P.E.	6 P.E.
HBL	0.089	0.01	0.273	1.63
SCBNL	0.90	0.81	0.049	0.294
NBBL	0.71	0.5	0.1365	0.82

The above comparative table describes the relationship between total deposit and total investment of HBL, SCBNL and NBBL during review period. The table shows there is positive relationship between deposits and investments. The value of correlation coefficient of SCBNL is more i.e. 0.90 followed by NBBL 0.71 and HBL 0.089.

The value of coefficient of determination of HBL is 0.01 which indicates 0.01% of the variation in the total investment due to variation in deposits but 99.99% variation occurred due other factor. The coefficient of determination of SCBNL is 0.81, which indicates 81% in variation in the investment due to total deposit but 19% variation occurred due to other variable. Similarly the coefficient of determination NBBL is 0.71, which shows 71% variation in the investment due to total deposit but 29% variation occurred due to other variable.

The value of 6P.E (r) of HBL is 1.63 which is greater than coefficient of correlation i.e. 0.089, which shows value of r is not significant. Similarly the value of 6P.E (r) of NBBL is greater than r. Therefore the value of r is

not significant because the coefficient of correlation is greater than 6P.E (r). In conclusion, it is said that SCBNL has mobilizing its fund more effectively than HBL and NBBL due to more coefficient of correlation.

4.2.2 Trend analysis

Trend analysis is utilized to see the movement of upward or downward by the help of given numerical values of some specified period of time. It shows the trend of deposit collection and load and advances of selected commercial banks for next five years. Simply trend analysis is a statistical tool which will highlight the previous trend of the financial performance and helps in forecasting the future financial results of this commercial bank. The forecast is based on following assumptions.

i.   Other things remain unchanged.
ii. The bank will ran in present position.
iii. The economy will remain in the present position.
iv. The forecast will be true only when limitation of least square method is carried out.
v.   Nepal Rastra Bank will not change its guidelines to commercial banks.

4.2.2.1 Trend value of total deposits

Table 24

Year	Trend value of HBL	Trend value of SCBNL	Trend value of NBBL
2004	14741.5	12624.2	7545.5
2005	21527.9	16154.9	9112.5

82

2006	28314.3	19685.6	10679.3
2007	35100.7	23216.3	12246.2
2008	41887.1	26747	13813.1
2009	48673.5	30277.7	15380
2010	55459.9	33808.4	16946.9
2011	62246.3	313391	18513.8
2012	69032.7	40869.8	20080.7
2013	72890.1	44400.5	21647.6
2014	82605.5	47931.5	23214.5

<div align="right">

Chart 22

</div>
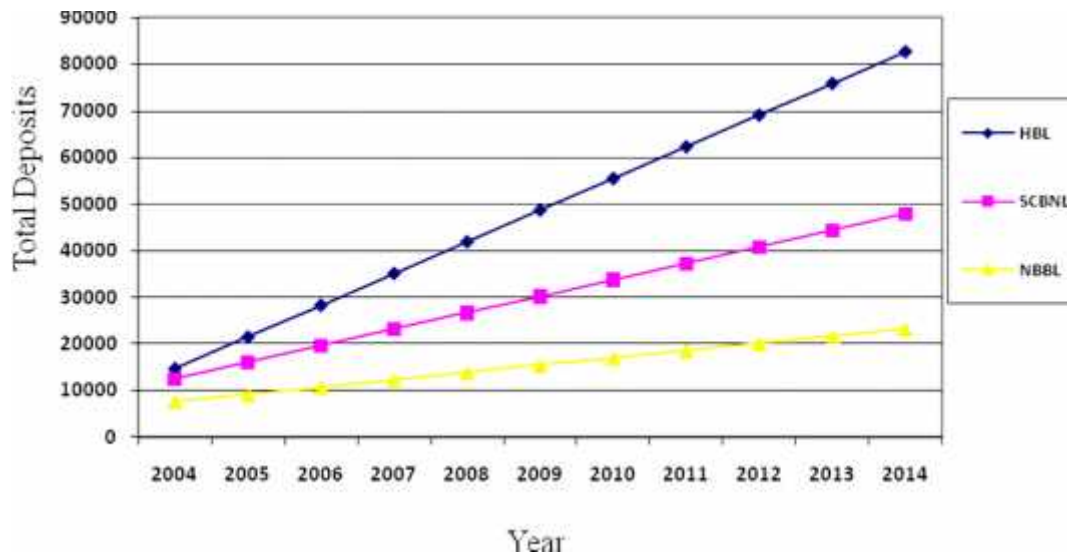
From above comparative table it is clear that a trend value of all banks are in increasing trend. If the other things remain unchanged, the total deposit of HBL is predicted to be Rs. 82605.5 million followed by SCBNL 47931.8 million and NBBL is 23214.5 million by the end of 2014. From

above analysis, it is quite obvious that HBL deposits collection is proportionately batter than SCBNL and HBL. The trend value of total deposits of total the selected banks are fitted in the trend in the trend lines given in the figure.

4.2.2.2 Trend value of loan and advances

Table 25

Year	Trend value of HBL	Trend value of SCBNL	Trend value of NBBL
2004	7559.4	3850	4757.8
2005	12581.8	4795.7	5489.3
2006	17604.2	5740.8	6220.8
2007	22626.6	6686.2	6952.3
2008	27649	7631.6	7683.8
2009	32671.4	8577	8415.3
2010	37693.8	9522.4	9146.8
2011	42716.2	10417.4	9878.3
2012	47738.6	11413.2	10609.8
2013	52761	12358.6	11341.3
2014	57783.1	13304	12072.8

Chart 23
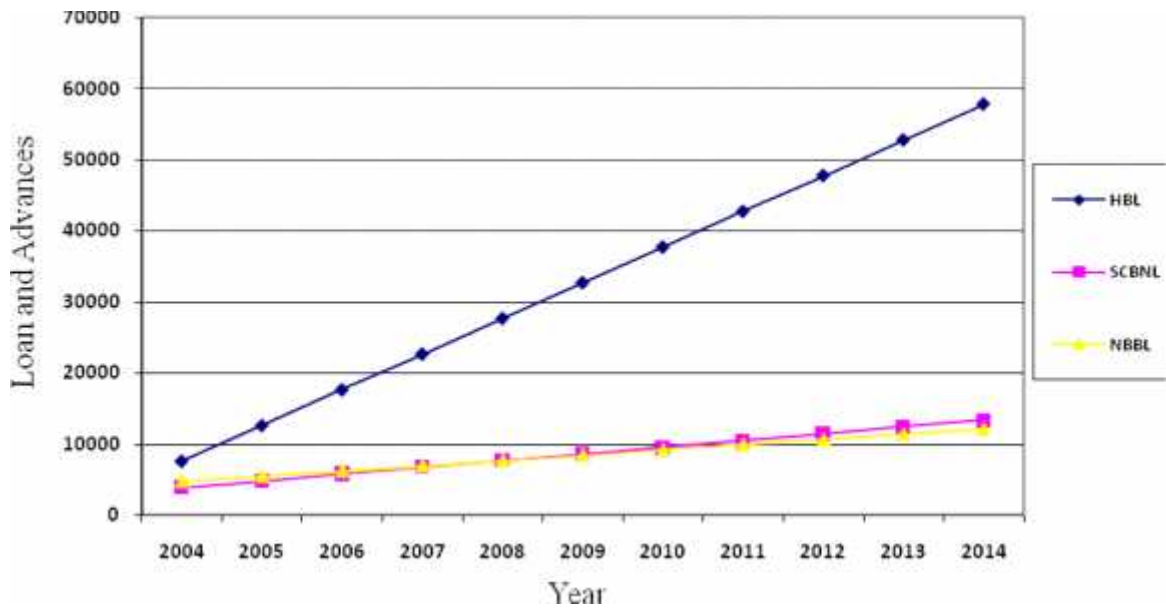
The above comparative table clearly shows that the loans and advances of all banks are in increasing trend. Assuming that other things will remain constant, the loans and advances of HBL is Rs. 57783.1 million. Similarly the projection for SCBNL and NBBL at the end of year 2014 is Rs. 13304 million and Rs. 12072.8 million respectively. From the above trend analysis it is clear that HBL loans and advance in relation to SCBNL and NBBL is comparatively higher throughout the trend projection period. The above trend value of HBL, SCBNL and NBBL are fitted in the trend line given in the figure.

4.2.2.3 Trend value of net profit

Table 26

Year	Trend value of HBL	Trend value of SCBNL	Trend value of NBBL
2004	149.3	357.9	27.2
2005	317.1	498.5	79.3
2006	484.9	638.9	131.4
2007	652.7	779.4	183.5
2008	820.5	919.9	235.5
2009	988.3	1060.4	287.7
2010	1156.1	1200.9	339.8
2011	1323.9	1341.4	391.9
2012	1491.7	1481.9	444
2013	1659.7	1622.48	496.1
2014	1827.3	1762.9	548.2

Chart 24
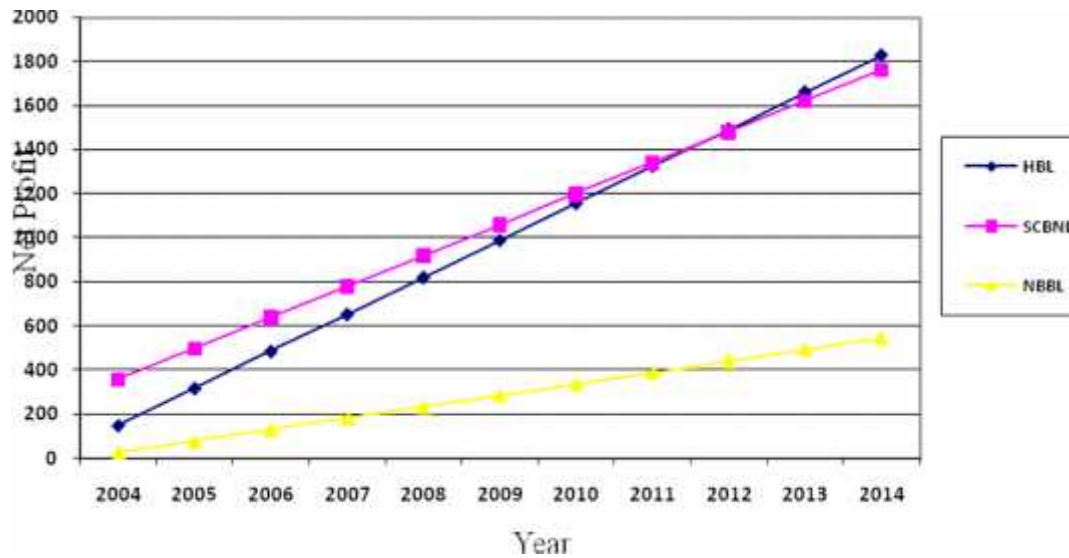
The above table comparative table shows that the trend value of all banks are in increasing trend. Other things remaining same, the trend value of net profit of HBL is Rs. 1827.3 million followed by SCBNL Rs. 1762.9 million and NBBL is Rs.548.2 million at the end of year 2014 respectively.

HBL net profit is higher than that of SCBNL and NBBL. It can be said that all the banks have followed by the policy of maximizing their net profit. However we can draw a conclusion that HBL has utilized it fund better than the other two banks to earn higher amount of profit. The above evaluated trend value of net profit of HBL, SCBNL and NBBL are fitted in the trend line given in figure.

4.2.3 Test of hypothesis

Hypothesis is a process of testing of significance regarding the parameter of the population on the basis of sample drawn from the population. In hypothesis testing ,we examine on the basis of statistic, computed from the sample drawn , whether the sample drawn belong to the

population with certain specific characteristic or not .Following steps are followed to the hypothesis.

a) Formulation of hypothesis

⎭ Null hypothesis

⎭ Alternative hypothesis

b) Computing the text statistics

c) Fixing the level of significance

d) Finding critical region

e) Making decision

4.2.3.1 Test of hypothesis on loan and advance to total ratio.

a. Test of hypothesis between HBL and SCBNL

Let loans and advances to total deposit ratio of HBL and SCBNL is x and y respectively.

<div align="right">Table 27</div>

Years	HBL			SCBNL		
	x	$d1=(x-\bar{x})$	$d1^2$	y	$d2=(y-\bar{y})$	$d2^2$
2004	58.6	-2.78	7.73	30.4	1.22	1.49
2005	54.2	-7.18	51.55	29.1	-0.08	0.01
2006	59.5	-1.88	3.53	30.2	1.02	1.04
2007	59.2	-2.18	4.75	29.3	0.12	0.01
2008	63.3	1.92	3.69	28.3	-0.88	0.77
2009	73.5	12.12	146.89	27.8	-1.38	1.9
	x=3 68.3	d1=0	$d1^2$=218. 14	y=17 5.1	d2=0	$d2^2$=5.2 2

88

Here,

$$\bar{x} = \frac{\Sigma x}{n} = \frac{368.3}{6} = 61.38 \text{ and } \bar{y} = \frac{\Sigma y}{n} = \frac{175.1}{6} = 29.18$$

$$S^2 = \frac{1}{n1+n2-2}\left[\Sigma d1^2 - \frac{(\Sigma d1)^2}{n1} + \Sigma d2^2 - \frac{(\Sigma d2)^2}{n2}\right]$$

$$= \frac{1}{6+6-2}\left[218.14 - \frac{0}{6} + 5.22 - \frac{0}{6}\right]$$

$$= 22.336$$

Null hypothesis, $H_0: \mu_x = \mu_y$

I.e. there is no significance difference between mean ratio of loan advances to total deposits ratio of HBL and SCBNL.

Alternative Hypothesis, $H_0: \mu_x \neq \mu_y$

I.e. there is significance difference between mean ratio of loan advances to total deposits ratio of HBL and SCBNL.

Under H_0, the test statistics is

$$t_{cal} = \frac{\bar{x}-\bar{y}}{\sqrt{s^2\left[\frac{1}{n_1}+\frac{1}{n_2}\right]}} = \frac{61.38-29.18}{\sqrt{22.24\left[\frac{1}{6}+\frac{1}{6}\right]}} = 3.74$$

Tabulated value of t for two tailed test at 5% level of significance for degree of freedom 10 is 2.228.

Decision,

Since the calculated value of $t_{cal} = 3.74$ is > tabulated value of 2.228. So H_0 is rejected, i.e. there is significance difference between mean ratio of loan advances to total deposits ratio of HBL and SCBNL.

b. Test of hypotheses between HBL and NBBL

Table 28

Year	HBL			NBBL		
	x	$d_1=(x-\bar{x})$	d_1^2	y	$d_2=(y-\bar{y})$	d_2^2
2004	58.6	-2.78	7.73	68.5	9.96	99.20
2005	54.2	-7.18	51.55	68.98	10.44	108.99
2006	59.5	-1.88	3.53	49.63	-8.91	79.39
2007	59.2	-2.18	4.75	46.9	-11.57	133.86
2008	63.3	1.92	3.69	50.15	-8.39	7039
2009	73.5	12.12	146.89	67.06	8.52	72.59
	x=3 68.3	$d_1=0$	$d_1^2=21$ 8.14	y=35 1.29	$d_2=0$	$d_2^2=56$ 4.42

Here,

$$\bar{x}=\frac{\Sigma x}{n}=\frac{368.3}{6}=61.38 \text{ and } \bar{y}=\frac{\Sigma y}{n}=\frac{351.29}{6}=58.54$$

$$S^2=\frac{1}{n1+n2-2}\left[\Sigma d1^2-\frac{(\Sigma d1)^2}{n1}+\Sigma d2^2-\frac{(\Sigma d2)^2}{n2}\right]$$

$$=\frac{1}{6+6-2}\left[218.14-\frac{0}{6}+564.42-\frac{0}{6}\right]$$

$$= 78.25$$

Null hypothesis, $H_0:\mu_x = \mu_y$

I.e. there is no significance difference between mean ratio of loan advances to total deposits ratio of HBL and NBBL.

Alternative Hypothesis, $H_0:\mu_x \neq \mu_y$

I.e. there is significance difference between mean ratio of loan advances to total deposits ratio of HBL and NBBL.

Under H_0, the test statistics is

$$t_{cal} = \frac{\bar{x} - \bar{y}}{\sqrt{s^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}} = \frac{61.38 - 58.54}{\sqrt{78.25\left[\frac{1}{6} + \frac{1}{6}\right]}} = 0.556$$

Tabulated value of t for two tailed test at 5% level of significance for degree of freedom 10 is 2.228.

Decision,

Since the calculated value of $t_{cal} = 0.556$ is < tabulated value of 2.228. So H_0 is accepted, i.e. there is no significance difference between mean ratio of loan advances to total deposits ratio of HBL and NBBL.

C. Test of hypothesis between SCBNL and NBBL

Table 29

Year	SCBNL			NBBL		
	x	$d_1 = (x - \bar{x})$	d_1^2	y	$d_2 = (y - \bar{y})$	d_2^2
2004	30.4	1.22	1.49	68.5	9.96	99.20
2005	29.1	-0.08	0.01	68.98	10.44	108.99
2006	30.2	1.02	1.04	49.63	-8.91	79.39
2007	29.3	0.12	0.01	46.9	-11.57	133.86
2008	28.3	-0.88	0.77	50.15	-8.39	7039
2009	27.8	-1.38	1.9	67.06	8.52	72.59
	x=1 75.1	$d_1 = 0$	$d_1^2 = 5.2$ 2	y=35 1.29	$d_2 = 0$	$d_2^2 = 56$ 4.42

Here,

$$\bar{x} = \frac{\Sigma x}{n} = \frac{175.1}{6} = 29.18 \text{ and } \bar{y} = \frac{\Sigma y}{n} = \frac{351.29}{6} = 58.54$$

$$S^2 = \frac{1}{n1+n2-2}\left[\Sigma d1^2 - \frac{(\Sigma d1)^2}{n1} + \Sigma d2^2 - \frac{(\Sigma d2)^2}{n2}\right]$$

$$= \frac{1}{6+6-2}\left[5.22 - \frac{0}{6} + 564.42 - \frac{0}{6}\right]$$

$$= 56.964$$

Null hypothesis, $H_0: \mu_x = \mu_y$

I.e. there is no significance difference between mean ratio of loan advances to total deposits ratio of SCBNL and NBBL.

Alternative Hypothesis, $H_0: \mu_x \neq \mu_y$

I.e. there is significance difference between mean ratio of loan advances to total deposits ratio of SCBNL and NBBL.

Under H_0, the test statistics is

$$t_{cal} = \frac{\bar{x} - \bar{y}}{\sqrt{s^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}} = \frac{29.18 - 58.54}{\sqrt{22.24\left[\frac{1}{6} + \frac{1}{6}\right]}} = 6.74$$

Tabulated value of t for two tailed test at 5% level of significance for degree of freedom 10 is 2.228.

Decision,

Since the calculated value of $t_{cal} = 6.74$ is > tabulated value of 2.228. So H_0 is rejected, i.e. there is significance difference between mean ratio of loan advances to total deposits ratio of SCBNL and NBBL.

4.2.3.2 Test of Hypothesis on total investment to total deposits ratio

a. Test of hypothesis between HBL and SCBNL

Table 30

Year	HBL			SCBNL		
	X	$d_1=(x-\bar{x})$	d_1^2	y	$d_2=(y-\bar{y})$	d_2^2
2004	42.1	2.68	7.18	55.2	-2.04	4.16
2005	47.1	7.68	58.98	53.4	-3.8	14.75
2006	41.1	1.68	2.82	58.2	0.96	0.92
2007	39.3	-0.12	0.01	54.1	-3.14	9.86
2008	41.8	2.38	5.66	60.9	3.66	13.39
2009	25.1	-14.32	205.1	61.65	4.41	19.45
	x=236.5	d_1=0	d_1^2=279.7	y=343.45	d_2=0	d_2^2=62.53

Here,

$$\bar{x}=\frac{\Sigma x}{n}=\frac{236.5}{6}=39.42 \text{ and } \bar{y}=\frac{\Sigma y}{n}=\frac{343.45}{6}=57.24$$

$$S^2=\frac{1}{n1+n2-2}\left[\Sigma d1^2-\frac{(\Sigma d1)^2}{n1}+\Sigma d2^2-\frac{(\Sigma d2)^2}{n2}\right]$$

$$=\frac{1}{6+6-2}\left[279.7-\frac{0}{6}+62.53-\frac{0}{6}\right]$$

$$=34.223$$

Null hypothesis, $H_0:\mu_x=\mu_y$

I.e. there is no significance difference between mean ratio of total investment to total deposits ratio of HBL and SCBNL.

Alternative Hypothesis, $H_0: \mu_x \neq \mu_y$

i.e. there is significance difference between mean ratio of total investment to total deposits ratio of HBL and SCBNL.

Under H_0, the test statistics is

$$t_{cal} = \frac{\bar{x} - \bar{y}}{\sqrt{s^2\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}} = \frac{39.42 - 57.24}{\sqrt{34.223\left[\frac{1}{6} + \frac{1}{6}\right]}} = 5.28$$

Tabulated value of t for two tailed test at 5% level of significance for degree of freedom 10 is 2.228.

Decision,

Since the calculated value of $t_{cal} = 5.28$ is > tabulated value of 2.228. So H_0 is rejected, i.e. there is no significance difference between mean ratio of total investment to total deposits ratio of HBL and SCBNL.

b. Test of hypothesis between HBL and NBBL

Table No. 31

Years	HBL			NBBL		
	X	$d_1=(x-\bar{x})$	d_1^2	Y	$d_2=(y-\bar{y})$	d_2^2
2004	42.1	2.68	7.18	20.1	2.81	7.89
2005	47.1	7.68	58.98	17.2	-0.09	0.01
2006	41.1	1.68	2.82	20.45	3.16	9.98
2007	39.3	-0.12	0.01	11.02	-6.27	39.31
2008	41.8	2.38	5.66	12.77	-4.52	20.3
2009	25.1	-14.32	205.1	22.22	4.93	24.30
	x=236.5	$d_1=0$	$d_1^2=279.$	y=103.76	$d_2=0$	$d_2^2=101$

			7			.9

Here,

$$\bar{x}=\frac{\sum x}{n}=\frac{236.5}{6}=39.42 \text{ and } \bar{y}=\frac{\sum y}{n}=\frac{103.76}{6}=17.29$$

$$S^2=\frac{1}{n_1+n_2-2}\left[\sum d_1{}^2-\frac{(\sum d_1)^2}{n_1}+\sum d_2{}^2-\frac{(\sum d_2)^2}{n_2}\right]$$

$$=\frac{1}{6+6-2}\left[279.7-\frac{0}{6}+101.92-\frac{0}{6}\right]$$

$$=38.14$$

Null hypothesis, $H_0:\mu_x=\mu_y$

I.e. there is no significance difference between mean ratio of total investment to total deposits ratio of HBL and NBBL.

Alternative Hypothesis, $H_0:\mu_x \neq \mu_y$

I.e. there is significance difference between mean ratio of total investment to total deposits ratio of HBL and NBBL.

Under H_0, the test statistics is

$$t_{cal}=\frac{\bar{x}-\bar{y}}{\sqrt{s^2\left[\frac{1}{n_1}+\frac{1}{n_2}\right]}}=\frac{39.42-17.29}{\sqrt{38.14\left[\frac{1}{6}+\frac{1}{6}\right]}}=6.21$$

Tabulated value of t for two tailed test at 5% level of significance for degree of freedom 10 is 2.228.

Decision,

Since the calculated value of $t_{cal}=6.21$ is > tabulated value of 2.228.

So H_0 is rejected, i.e. there is no significance difference between mean ratio of total investment to total deposits ratio of HBL and NBBL.

c. **Test of Hypothesis between SCBNL and NBBL**

Table No. 32

Years	SCBNL			NBBL		
	X	$d_1=(x-\bar{x})$	d_1^2	Y	$d_2=(y-\bar{y})$	d_2^2
2004	55.2	-2.04	4.16	20.1	2.81	7.89
2005	53.4	-3.8	14.75	17.2	-0.09	0.01
2006	58.2	0.96	0.92	20.45	3.16	9.98
2007	54.1	-3.14	9.86	11.02	-6.27	39.31
2008	60.9	3.66	13.39	12.77	-4.52	20.3
2009	61.65	4.41	19.45	22.22	4.93	24.30
	x=343.45	$d_1=0$	$d_1^2=62.53$	y=103.76	$d_2=0$	$d_2^2=101.9$

Here,

$$\bar{x}=\frac{\sum x}{n}=\frac{343.45}{6}=57.24 \text{ and } \bar{y}=\frac{\sum y}{n}=\frac{103.76}{6}=17.29$$

$$S^2=\frac{1}{n_1+n_2-2}\left[\sum d_1^2-\frac{(\sum d_1)^2}{n_1}+\sum d_2^2-\frac{(\sum d_2)^2}{n_2}\right]$$

$$=\frac{1}{6+6-2}\left[62.53-\frac{0}{6}+101.92-\frac{0}{6}\right]$$

$$= 16.445$$

Null hypothesis, $H_0: \mu_x = \mu_y$

I.e. there is no significance difference between mean ratio of total investment to total deposits ratio of SCBNL and NBBL.

Alternative Hypothesis, $H_0: \mu_x \neq \mu_y$

I.e. there is significance difference between mean ratio of total investment to total deposits ratio of SCBNL and NBBL.

Under H_0, the test statistics is

$$t_{cal}=\frac{\bar{x}-\bar{y}}{\sqrt{s^2\left[\frac{1}{n_1}+\frac{1}{n_2}\right]}}=\frac{57.27-17.29}{\sqrt{16.445\left[\frac{1}{6}+\frac{1}{6}\right]}}=17.08$$

Tabulated value of t for two tailed test at 5% level of significance for degree of freedom 10 is 2.228.

Decision,

Since the calculated value of t_{cal} =17.08 is > tabulated value of 2.228. So H_0 is rejected, i.e. there is no significance difference between mean ratio of total investment to total deposits ratio of SCBNL and NBBL.

4.3 Major finding of the study

This chapter focuses on the major findings, which are derived from the analysis by using different financial tools and statistical tools of HBL, SCBNL and NBBL .under six years study period from 2004 to 2009. On the basis of presentation, analysis and interpretation of the Data regarding the investment policy of the three banks, the major findings of the study can be summarized as follows.

Coefficient of correlation analysis

a) The coefficient of correlation between total deposit and loan advances of HBL is higher than SCBNL and NBBL. The correlation coefficient of HBL is greater than 6 times of P.E but in case of SCBNL and NBBL ,r is smaller than 6P.E, which indicates that HBL is in better position to grant loan and advances for mobilizing the collected deposits.

b) Correlation coefficient between deposits and investment of HBL, SCBNL and NBBL shows the positive relationship. By comparing r with 6P.E, it seems there is significant relationship between deposit and total investment of SCBNL and NBBL but there is not significant relationship between deposits and total investment of HBL. So SCBNL is in better position than NBBL and HBL.

97

Trend analysis

a) Trend analyses of total deposits of all banks are in raising trend but HBL has highly increasing trend than SCBNL and NBBL. So HBL deposit collection is proportionally better than SCBNL and NBBL.

b) Accordingly, after analyzing the trend value of loan and advances seems in increasing trend .by comparison, it seen that HBL trend is better than SCBNL and NBBL.

c) The comparative study of three banks show that the trend analysis of net profit is in increasing trend in all three banks. It shows that HBL has utilized its fund better than the SCBNL and NBBL to earn higher amount of profit.

Test of hypothesis

a) There is significant different between mean ratio of loan and advances to total deposit of HBL and SCBNL but there is no significant different between mean ratio of loan and advances to total deposit of HBL and NBBL.

b) There is significant difference between mean ratio of investment to total deposit of HBL and SCBNL.

Liquidity ratio

a) During the review period current ratio of the entire are greater than 1 which should be considered satisfactory. It means that all banks are capable of paying current obligations.

b) The average ratio of cash and bank balance to total deposits ratio of SCBNL is higher than other selected banks. The higher mean ratio and

conclude that SCBNL is able to serve the demand of customers on their deposits at any time.

c) The average ratio of cash balance to current assets ratio of NBBL is higher. On the basis of C.V., SCBNL seems more consistent then HBL and NBBL.

d) The mean ratio and C.V. of investment on government securities to current assets ratio of SCBNL is higher and more consistent.

Assets management ratio

a) The mean ratio of loans and advancers to total deposits ratio of HBL is higher it means that HBL has mobilized large proportion of deposits as loans and advances than SCBNL and NBBBL.

b) The average ratio and C.V. of total investment to total deposits ratio of SCBNL is better. So SCBNL is able to mobilize its deposits on investment more effectively than HBL and NBBL.

c) The mean ratio of loan and advances to total assets ratio of SCBNL is higher. It means that it mobilized large proportion of total assets on loan and advances. However, NBBL seems more stable than others.

d) The mean ratio and C.V. of investment on government securities to total assets of SCBNL is higher and stable. It means that SCBNL has invested its fund more efficiently in productive activities than HBL and NBBL.

Profitability ratio

a) The average ratio and C.V. of return on loans and advances of SCBNL is higher and stable. It means that SCBNL is able to utilize its fund properly and disburse good performing loans than HBL and NBBL.

b) The average ratio and C.V. of return on total assets of SCBNL is higher and stable. It means that SCBNL is able to utilize its assets efficiently than HBL and NBBL.The average ratio and C.V. of return of equity of SCBNL is higher and stable. HBL and NBBL have low ratios. It means that SCBNL is able to earn high profit through the efficient utilization of its own capital.

c) The average ratio of total interest earned to total assets ratio of NBBL is higher. It means that interest earning power of NBBL is efficient than HBL and NBBL. But SCBNL seems more consistent than other selected banks.

d) The average ratio of total interest paid to total interest paid to total assets ratio of SCBNL is lower and stable. It means that SCBNL paid low interest on total deposits and borrowing them HBL and NBBL.

Growth ratio

a) The growth ratio of total deposits of HBL is higher. It means that deposits collection capacity of HBL is better than SCBNL and NBBL.

b) The growth ratio of loans and advances of HBL is higher. It means that HBL is strong to increase loans and advances.

c) The growth ratio of investment of SCBNL is higher than HBL and SCBNL. It means that SCBNL is increasing investment.

d) The growth ratio of net profit of HBL and NBBL is better than that of SCBNL.

CHAPTER- V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter is important for researcher because it is the extract of the entire previously discussed chapter. This chapter consists of mainly three part summary, conclusion and recommendation. In summary part, revision of all four chapters made. In conclusion part, the result from the research is summed up and a recommendation is made for improving the present situation to the concerned parties as well as further research.

5.1 Summary

The commercial banks played the great role in the development of the country. They collect deposits from public and mobilized that collected fund in different sector of nation. We are standing in the third wave, after the wave of agriculture and industrialization; it is a wave of information technology. Today we are taking a high pace of new generation tools for the achievement and betterment of our daily lives. Now, if we talk about banks, we think a credit card, ATM, Tele-Banking, Master Card and many more. In this present context of information and technology generation, financial institutions are getting high competition. In the context of Nepal the Nepalese financial system, comprising network of institutions and market has made rapid progress. With the umbrella act of Nepal Rastra Bank, all the financial institutions i.e. public sector banks; private sector banks, finance companies and foreign banks turn themselves as rivals. As these reforms have been a fall out of general liberalization of the economy, stiff

competitive challenges have already emerged for the private sector bank form other financial sector. So an attempt for evaluating the financial performance of the commercial joint venture banks has been made in this study on its quantitative grounds. The analysis and assumption presented in this thesis, Banks and the researcher could get benefits because financial policies of any concern are directly or indirectly by the financial performance under study period, three banks are taken for the research work. The researcher has taken 6 years data from 2004 to 2009 of selected banks. In the introduction chapter, the report has tried to give introduction about investment policy, brief profile of concerned banks, statement of problems, objectives of the study and its limitations. During the research work, extensive review of various literature books, past thesis, journal have been studied and consulted as per requirement internet material from relevant websites are also visited. These works are complied in the second chapter titled "Review of literature" of this report. For this study the researcher has gathered the required data basically from annual report published by the concerned banks for last six years. To calculated various ratios, statistical tools such as mean, S.D., correlation etc are followed this research work in third chapter title "Research Methodology".

Data relating to activities of the banks have been collected and presented in figure and table as far as are tried to be interpreted in the study report in logical ways. Data are then analyzed applying various financial and statistical tools and findings of the study have been listed in a systematic manner. All these works are compiled in the forth chapter titled "Presentation and Analysis of Data" of the study. Finally, the summary,

conclusion and recommendation made by the research are presented in the current chapter titled "Summary, Conclusion and Recommendation".

5.2 Conclusions

a) The study reveals that from liquidity point of view the current ratio of all the banks are greater than 1 which should be considered satisfactory. It means that all banks are capable of paying current obligation. The cash and bank balance to total deposits ratio of SCBNL is better than HBL and NBBL. It means that SCBNL is able to meet the demand of customers on their deposits at any time. The average ratio of investment on government securities of SCBNL is higher. NBBL kept more current assets as cash and bank balance. From the point of liquidity, it is concluded that SCBNL and HBL has higher degree of liquidity than NBBL.

b) After analysis of assets management ratio, HBL seems better in case of mobilizing deposits at loans and advances but SCBNL has mobilized highest percentage of its total deposits in to total investment. Similarly SCBNL is able to mobilized large proportion of total assets on loans and advances. SCBNL has invested its fund more efficiently in productive activities than HBL and NBBL. In overall it is concluded that SCBNL has better activity ratio and HBL has average ratio but NBBL seems lowest position in comparison.

c) From profitability ratio analysis, SCBNL seems better than HBL and NBBL. SCBNL is able to maintained high return on loans and advances, total assets, equity and low interest expenses. NBBL is able to earn interest but not effective operation of resources.

d) After analysis of growth ratio it seems HBL is successful in increasing deposits collection and landing loans and advances and net profit but SCBNL is able to increase its investment.

e) From coefficient of correlation analysis, it seems that all banks are positive correlation. The positive correlation exists in relation of total deposits to loan and advances and total deposits and investment. There is significant relationship between total deposits and loans and advances. HBL seems in better position to grant loan and advances for mobilizing collected deposits. SCBNL is mobilizing deposits as investment successfully.

f) From trend analysis, total deposits, loans and advances and net profit of HBL has highly increasing trend than SCBNL and NBBL. It means that HBL has utilized its fund batter than the SCBNL and NBBL to earn higher amount of profit.

g) After hypothesis testing, there is now homogeneity on their policy towards mobilizing loan and advances from their total deposit collection it is find that there is significant difference between mean ratio of loan and advancers to total deposits of HBL and SCBNL and that of SCBNL and NBBL but there is no significant different between mean ratios of loans and advances to total deposits of HBL and NBBL. There is significant different between mean ratios of investment to total deposits of HBL & SCBNL, HBL & NBBL and SCBNL & NBBL.

5.3 Recommendations

Based on analysis, interpretation and conclusion, some of the major recommendations are mentioned below.

a) Liquidity measures the company's ability to pay current liabilities through current assets. High liquidity is an indication of mismanagement of resources and low liquidity is risky one. There is very low liquidity position of the selected banks. Therefore, the banks should diagnose the root cause for low liquidity ratio and should improve the liquidity ratio. So a suggestion that a standard ratio of 2:1 be maintained is proposed for the selected banks.

b) Cash and bank balance to total deposits ratio of all the banks were in fluctuating trend. Since it is the most liquid assets, some provision regarding on this should be made to have consistency. It is recommended to have moderate level of cash and bank balance to meet unanticipated calls on current, saving call and others deposits.

c) SCBNL invest more part of investment on government securities. It is recommended to mobilize its fund in purchasing share and debenture of other companies which helps to maintained sound portfolio management of the banks. It will definitely help to decrease the risk factor; on the other hand it helps to increase the net profit of the banks.

d) HBL should be more serious to improve the efficiency in utilizing the deposits in loan and advances for generating the profit. Like while the other banks should keep of their efforts in utilizing there assets decentralize and search new area of investment. Instead of getting aggressive in only the risky area of loan and advances.

e) NBBL is not used more part of its assets in loan advances than SCBNL and HBL besides giving more priority to invest in other sector. Bank should mobilize its fund on the sound portfolio management and bank is recommended to follow the liberal lending policy in loan and advances to increase the net profit in future.

f) Profit is essential for the survival and growth of the banks and also a psychological impact on the shareholders and investors. During study period, profit of the selected banks is not satisfactory level. All of the banks are recommended more to earn operational profit either by increasing their operational efficiency or by decreasing their operational expenses as for as possible.

g) Shareholders are the real owner of the organizations but they do not seem to be happy with the rate of return on equity provided by the banks. To some extent SCBNL has been successful in providing better return on equity than others. Thus it is recommended that the management team should put emphasis on the maximizing the wealth of the shareholders.

h) The higher proportion of earning retained by the HBL and NBBL which directly affect the ROE. Retained earnings is good for financial straightens but reduces the ROE. So the appropriate level of retained earnings and other low cost fund that is deposits should be mobilized properly.

i) The level of cash balance and investment and security of HBL is to be rearranged by curtaining cash balance. The bank should invest such fund in government securities to make overall profitability.

j) The banks must control their expenses especially those which are unnecessary and a burden for the banks. The banks most formulate a strategy to control expenses using modern banking technology, computer networking, expert advisors and well trained personnel. These will also increase the operating efficiency of the banks. It is recommended that there may be a chance to increase the operating income in future by increasing the service with adopting modern technology but may also be subjecting the banks to large potential losses.

k) It is recommended to adapt innovative approach to marketing. In the light of growing competition in the banking sector, the business of the banks should be ustomer oriented. It's should strengthen and activate its marketing functions as it is an effective tools to attract and return the customer. For the purpose, the bank should develop an innovative approach to bank marketing and formulate new strategies of serving customers in a more convenient and satisfactory way. It is recommended to form strong marketing department in its central level, which deals with the banking products, places, prices and promotion. Integrated development of the country but most of the JVBs is centralized in urban areas. So these banks are recommended and suggested

l) Joint venture banks play important role on to extend their banking facility even in the rural areas providing special loans to the deprival and priority sectors.

m) It is suggested that the selected banks should use well trained personnel. Well trained personnel will provide better service to the bank and people. This will increase the operational efficiency of the banks.

In conclusion, it is found that modern banking technologies followed by joint venture banks in Nepal are mostly beneficial to high level depositors. So the sample banks are suggested here to make these technologies accessible to their all kind of depositors as far as possible.

5.4 Future avenues

There are several future avenues for the future researcher in the area of investment policy of commercial banks In Nepal. Commercial banks are increasing in the Nepalese content. Mainly most of the people have craze of investment towards banking and financial sector. For the

economic development of the country the researchers need to study periodically about the investment of commercial Bank.

There are various areas for study of investment policy, which seems to be studies in future.

1. Researcher may study in non commercial bank.

2. Researcher should selected many banks than this study.

BIBLIOGRAPHY

Books

Charles, J.C. (1990), *Investment,* Newyork, Mc Graw HUI International Edition.

Francis, Jack Clark, (1987) *Investment Analysis and Management,* Newyork, Mc Graw Hill.

Joshi, P.R. (2002), *Research Methodology*, 2nd Edition, Kathmandu, Buddha Academic Publisher and Distributor Pvt. Ltd.

Khan, M.Y. and Jain, P.K. (1992), *Management Accounting,* New Delhi, Tata Mc Graw Hill Publishing Company Ltd.

Kothari, C.R. (1990), *Research Methodology Methods and Techniques,* 2nd Edition, New Delhi, Wishwa Prakashan.

Pandey, I.M. (1993), *Financial Management,* 6th Revised Edition, New Delhi, Vikash Publishing House Pvt. Ltd.

Sharpe, William F., Alexander Gorden J. and Bailey Jeffery V. (2000), *Investments,* 5th Edition, New Delhi, Prentice Hall of India.Ltd.

Western and Bringham, (1980), *Managerial Finance,* 7th Edition, U.S.A., The Dryden Press.

Reports and Article

Annual report of selected commercial banks under studies from 2004 to 2009.Nepal Rastra Bank, Directive to Commercial Banks, NRB Baluwataar, Kathmandu, 2064.

Pradhan, Shekhar Bahadur, "Deposits Mobilization, its Problem and Prospect", Kathmandu 2003.

Shresetha, Shiv Raj, "Portfolio Management In Commercial Banks, Theory and Practice", Nepal Patrika, Baishakh Masant, 2045.

Subedi, Kamal, "Growth in Major Commercial Banks, New Bussiness age", Vol.3, Kathmandu, 2004.

Thapa, Govinda Bahadur, "Financial System in Nepal", Development Division, Patan Multuple Campus, Lalitpur, Vol.3, 1994.

Thesis

Khadka, Raja Ram, (1998), *A Study on Investment Policy of Nepal Arab Bank Ltd in Comparison to Others Joint Venture Banks in Nepal,* An Unpublished Thesis, Shanker Dev Campus, T.U.

Ojha, Lila Prashad, (2002), *Lending Practices: A Study on Nabil Bank Ltd., Standard Chartered Bank Nepal Ltd. And Himalayan Bank Ltd.,* an Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Roy, Dilip, (2003), An *Investment Analysis of Rastria Banijya Bank,* An Unpublished Master's Degree Thesis.

Shrestha, Sunity, (1993), ***Investment Planning of Commercial Banks In Nepal,*** Central Department of Management, T.U.

Shrestha, Upendra,(2002), ***Investment practice of joint venture banks in Nepal,*** An Unpublished Master's Degree Thesis.

Singh, Anjali, (2007), ***Investment Policy of Commercial Bank in Nepal,*** An Unpublished Master's Degree Thesis, Bhairahawa Multiple Campus, Bahirahawa.

Websites

www.himalayanbank.com

www.nbbl.com.np

www.nepalstock.com

www.nrb.org.np

www.standerdcharteredbank.com.np

APPENDIX I

1. Current ratio   Rs. In million

S N	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Total current assets	24582	27598	29373	33084	35485	38450
	Total current liabilities	23637	26346	28115	31446	33468	35907
	current ratio	1.039	1.047	1.05	1.052	1.060	1.071
B	SCBNL						
	Total current assets	20797.6	21417.3	22360	23541.3	23960.5	24513.2
	Total current liabilities	19569.4	20145.6	21488.5	22654.2	22896.3	23252.3
	current ratio	1.06	1.063	1.04	1.039	1.046	1.054
C	NBBL						
	Total current assets	11345.5	9636.94	10846.1	11345.5	13758.1	11499.2
	Total current liabilities	11233.7	10345.3	11322.3	11956.3	12345.6	10011.5
	Current ratio	1.01	0.932	0.958	0.949	1.11	1.15

2. Cash and bank balance to total deposits ratio   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Cash and balance	2001	2014	1717	1757	1448	3048
	Total deposits	22010	24814	26991	30048	31842	34681
	Ratio	9.09	8.11	6.48	5.84	4.54	8.78
B	SCBNL						
	Cash and balance	1512.3	1423.6	1542.12	1623.9	1745.6	1809.6
	Total deposits	18755.6	18986.5	19645.8	20455.35	21423.53	22132.5

	Ratio	8.06	7.49	7.84	7.93	8.14	8.31
C	NBBL						
	Cash and balance	899.51	923.6	813.52	1025.3	1124.12	459.4
	Total deposits	10580.65	10986.3	11466.9	12300.5	12960.45	9997.7
	Ratio	8.5	8.4	7.094	8.34	8.67	4.60

3. Cash and bank balance to current assets ratio   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Cash and balance	2001	2014	1717	1757	1448	3048
	Total current assets	24582	27598	29373	33084	35485	38450
	Ratio	8.14	70.29	5.84	5.31	4.08	7.92
B	SCBNL						
	Cash and balance	1512.3	1423.6	1542.12	1623.9	1745.6	1809.6
	Total current assets	20797.6	21417.3	22360	23541.3	23960.5	24513.2
	Ratio	7.27	6.64	6.89	6.93	7.28	7.5
C	NBBL						
	Cash and balance	899.51	923.6	813.52	1025.3	1124.12	459.4
	Total current assets	11345.5	9636.94	10846.1	11345.5	13758.1	11499.2
	Ratio	7.9	9.58	7.5	9.04	8.17	8.34

4. Loans and advances to total deposits ratio   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Loan and advances	12919	13451	15762	17794	20180	25520
	Total deposits	22010	24814	26991	30048	31842	34681
	Ratio (%)	58.6	54.2	69.5	69.2	63.3	73.5
B	SCBNL						
	Loan and advances	5695.82	5525.6	5790.3	5812.5	5796.52	5824.5
	Total deposits	18755.6	18986.5	19645.8	20455.35	21423.53	22132.5

	Ratio (%)	30.4	29.1	30.2	29.3	28.3	26.3
C	NBBL						
	Loan and advances	7247.98	7045.5	6460.24	4409.13	5457.8	6704.69
	Total deposits	10580.65	10986.3	11466.9	12300.5	12960.45	9997.7
	Ratio (%)	68.5	68.98	49.63	46.97	50.15	67.06

5. Total investment to total deposits ratio   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Total investment	9292	11692	10889	11823	13340	8711
	Total deposits	22010	24814	26991	30048	31842	34681
	Ratio (%)	42.1	47.1	41.1	39.3	41.8	25.1
B	SCBNL						
	Total investment	10346.5	10112.3	11140.5	10745.9	12456.7	12529.5
	Total deposits	18755.6	18986.5	19645.8	20455.35	21423.53	22132.5
	Ratio (%)	55.2	53.4	58.2	54.1	60.9	61.65
C	NBBL						
	Total investment	2130.5	1758.3	2661.8	1034.5	1389.9	2222.4
	Total deposits	10580.65	10986.3	11466.9	12300.5	12960.45	9997.7
	Ratio (%)	20.1	17.2	20.45	11.02	12.77	22.22

6. Loan and advances to total assets ratio   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Loan and advances	12919	13451	15762	17794	20180	25520
	Total assets	25730	28871	30580	34315	36858	40047
	Ratio (%)	50.2	46.6	51.5	51.9	54.8	63.7
B	SCBNL						
	Loan and advances	5695.82	5525.6	5790.3	5812.5	5796.52	5824.5
	Total assets	21000.5	21990.7	22145.6	22780.5	23852.3	24235.6
	Ratio (%)	27.1	25.1	26.1	25.5	24.3	24.03
C	NBBL						
	Loan and	7247.98	7045.5	6460.24	4409.13	5457.8	6704.69

	advances						
	Total assets	11932.6	12145.7	11709.2	7254.5	9391.02	11964.55
	Ratio (%)	60.7	58.01	55.17	60.17	58.12	50.7

7. Investment on government securities to current assets ratio Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Inv. On gov. sec.	3998.87	4012.17	4098.63	4112.3	4201.63	4298.4
	Total current assets	24582	27598	29373	33084	35485	38450
	Ratio (%)	16.26	14.53	13.95	12.43	11.84	11.18
B	SCBNL						
	Inv. On gov. sec.	10346.5	10256.2	11745.6	9009.25	10759.3	10989.4
	Total current assets	20797.6	21417.3	22360	23541.3	23960.5	24513.2
	Ratio (%)	49.7	47.9	52.5	38.3	44.9	45.3
C	NBBL						
	Inv. On gov. sec.	2130.5	1863.23	1756.52	1956.32	2005.24	2123.3
	Total current assets	11345.5	9636.94	10846.1	11345.5	13758.1	11499.2
	Ratio (%)	18.8	19.3	16.4	17.2	14.6	18.46

8. Investment on government securities   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Inv. On gov. sec.	3998.87	4012.17	4098.63	4112.3	4201.63	4298.4
	Total assets	25730	28871	30580	34315	36858	40047
	Ratio (%)	15.54	13.89	13.40	11.98	11.39	10.73
B	SCBNL						
	Inv. On gov. sec.	10346.5	10256.2	11745.6	9009.25	10759.3	10989.4
	Total assets	21000.5	21990.7	22145.6	22780.5	23852.3	24235.6

	Ratio (%)	27.12	25.13	26.14	25.51	24.30	24.03
C	NBBL						
	Inv. On gov. sec.	2130.5	1863.23	1756.52	1956.32	2005.24	2123.3
	Total assets	11932.6	12145.7	11709.2	7254.5	9391.02	11964.55
	Ratio (%)	17.85	15.34	15.01	26.96	21.35	17.95

9. Return on loan and advances   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Net income	263.1	308.3	457.5	491.8	635.9	752.8
	Loan and advances	12919	13451	15762	17794	20180	25520
	Ratio (%)	2.04	2.3	2.6	2.8	3.2	2.9
B	SCBNL						
	Net income	506.95	596.3	605.9	690.2	712.6	721.7
	Loan and advances	5695.82	5525.6	5790.3	5812.5	5796.52	5824.5
	Ratio (%)	8.9	10.8	10.5	11.9	12.3	12.24
C	NBBL						
	Net income	71.5	69.5	71.29	184.19	156.59	235.2
	Loan and advances	7247.98	7045.5	6460.24	4409.13	5457.8	6704.69
	Ratio (%)	0.99	0.89	1.1	4.17	2.86	3.87

10. Return on total assets   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Net income	263.1	308.3	457.5	491.8	635.9	752.8
	Total assets	25730	28871	30580	34315	36858	40047
	Ratio (%)	1.02	1.1	1.5	1.4	1.7	1.9
B	SCBNL						
	Net income	506.95	596.3	605.9	690.2	712.6	721.7
	Total assets	21000.5	21990.7	22145.6	22780.5	23852.3	24235.6
	Ratio (%)	2.4	2.7	2.7	3.11	3.02	2.98
C	NBBL						
	Net income	71.5	69.5	71.29	184.19	156.59	235.2

	Total assets	11932.6	12145.7	11709.2	7254.5	9391.02	11964.55
	Ratio (%)	0.59	0.57	0.61	2.53	1.67	1.96

11. Total interest earned to total assets ratio   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Total interest earned	1245.9	1446.5	1626.5	1775.6	1963.6	2342.19
	Total assets	25730	28871	30580	34315	36858	40047
	Ratio (%)	4.8	5.01	5.3	5.17	5.3	5.8
B	SCBNL						
	Total interest earned	1001.36	1090.3	1102.3	1050.6	1203.8	1307.1
	Total assets	21000.5	21990.7	22145.6	22780.5	23852.3	24235.6
	Ratio (%)	4.7	4.95	4.97	4.61	5.05	5.4
C	NBBL						
	Total interest earned	1013.7	960.23	758.13	982.2	828.27	1337.1
	Total assets	11932.6	12145.7	11709.2	7254.5	9391.02	11964.55
	Ratio (%)	8.49	7.91	6.47	15.53	8.81	11.17

12. Total interest paid to total deposits ratio   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Interest paid	491.5	561.9	648.8	767.4	823.7	934.77
	Total deposits	22010	24814	26991	30048	31842	34681
	Ratio (%)	2.23	2.26	2.45	2.55	2.58	2.69
B	SCBNL						
	Interest paid	255.13	280.19	604.2	318.6	354.7	370.4
	Total deposits	18755.6	18986.5	19645.8	20455.35	21423.53	22132.5
	Ratio (%)	1.3	1.47	1.58	1.66	1.73	1.82
C	NBBL						

Interest paid	554.13	502.6	518.7	432.2	397.9	409.7
Total deposits	10580.65	10986.3	11466.9	12300.5	12960.45	9997.7
Ratio (%)	5.24	4.94	3.98	4.51	3.66	4.09

13. Return on equity   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Net income	263.1	308.3	457.5	491.8	635.9	752.8
	Equity	1324.16	1541.74	1766.17	2146.5	2512.99	3119.8
	Ratio (%)	19.86	19.99	25.9	22.9	25.3	24.13
B	SCBNL						
	Net income	506.95	596.3	605.9	690.2	712.6	721.7
	Equity	1119	1527.9	1278.2	1576.6	1755.3	1833.2
	Ratio (%)	45.3	39	47.4	43.8	40.6	39.36
C	NBBL						
	Net income	71.5	69.5	71.29	184.19	156.59	235.2
	Equity	396.59	595.12	719.85	719.85	744.12	1860.31
	Ratio (%)	18.03	11.7	9.9	25.58	21.04	12.64

14.Total interest paid to total assets ratio   Rs in million

SN	Name of the bank	2004	2005	2006	2007	2008	2009
A	HBL						
	Interest paid	491.5	561.9	648.8	767.4	823.7	934.77
	Total assets	25730	28871	30580	34315	36858	40047
	Ratio (%)	1.92	1.94	2.1	2.24	2.23	2.33
B	SCBNL						
	Interest paid	255.13	280.19	604.2	318.6	354.7	370.4
	Total assets	21000.5	21990.7	22145.6	22780.5	23852.3	24235.6
	Ratio (%)	1.2	1.3	1.4	1.4	1.5	1.5

C	NBBL						
	Interest paid	554.13	502.6	518.7	432.2	397.9	409.7
	Total assets	11932.6	12145.7	11709.2	7254.5	9391.02	11964.55
	Ratio (%)	4.6	4.13	4.4	5.9	4.2	3.4

APPENDIX II

Sample calculation of growth rate

D_n = Total deposits in the nth year

D_0 = Total deposits in the initial year

g = Growth rate

n = Total number of year

Here,

D_{2009} = 34682

D_{2004} = 22101

n = 6 year

We have,

$D_n = D_0(1+g)^n$

$34682 = 22101 (1+g)^6$

Or, g = 10.58%

Therefore, Growth rate of deposits of HBL during the six years study period is 10.58%.

APPENDIX III

Sample calculation of correlation of coefficient between total deposits and loan and advances HBL.

Let the independent variable (total deposits) be 'x' and dependent variable (loan and advances) be y.

Year	Total deposits (x)	Loan & advances (y)	dx=(x-26491)	dy= (y-17794)	dx^2	dy^2	dx.dy
2004	22010	12919	-4481	-4875	20079361	23765625	21844875
2005	24814	13451	-1677	-4343	2812329	18861649	7283211
2006	26491	15762	0	-2032	0	4129024	0
2007	31048	17794	3557	0	12652249	0	0
2008	31843	20180	5352	2386	28643904	5692996	12769872
2009	34682	25520	8191	7726	67092481	59691076	63283666
Total			$\sum dx=$ 10942	$\sum dy=$ -1138	$\sum dx^2=$ 131280324	$\sum dy2=$ 112140370	$\sum dx$.dy= 105181624

We know that,

Coefficient of correlation (r) $= \dfrac{n\sum dx.dy - \sum dx.\sum dy}{\sqrt{n\sum dx2 - (\sum dx)^2} . \sqrt{n\sum dy2 - (\sum dy)^2}}$

Or, r $= \dfrac{6 \times 105181624 - 10942 \times (-1138)}{\sqrt{6 \times 131280324 - (10942)^2} \times \sqrt{6 \times 112140370 - (1138)}}$

r = 0.96

Coefficient of determination (r^2)= 0.98

Probable error (P.E.) = $0.6745 \times \dfrac{1-r2}{\sqrt{n}}$ = $0.6745 \times \dfrac{1-0.962}{\sqrt{6}}$ = 0.02158

APPENDIX IV

Sample calculation of trend of total deposits

Year	Total deposits (y)	X= (t-2006)	X^2	Xy	Y=a+bx
2004	22010	-2	4	-44020	Y=28314.3+6786.4×(2)=14 741.5
2005	24814	-1	1	-24814	Y=28314.3+6786.4×(1)=21 527.9
2006	26491	0	0	0	Y=28314.3+6786.4×0=2831 4.3
2007	30048	1	1	30048	Y=28314.3+6786.4×1=3510 0.7
2008	31842	2	4	63684	Y=28314.3+6786.4×2=4188 7.1
2009	34681	3	9	104043	Y=28314.3+6786.4×3=4867 3.5
Total	**y=169886**		**X^2=9**	**xy=128941**	

Here,

y= 169886

x^2= 19

xy= 128941

We have the equation of straight line is, y= a+bx

Where, a= $\frac{\sum y}{n} = \frac{169886}{6} = 28314.3$

  b= $\frac{\sum xy}{x^2} = \frac{128941}{19} = 6786.4$

Now,

 Projected trend value of total deposits for next five year (2010 to 2014)

Year	x=t-2006	y= a+bx
2010	4	y=28314.3+6786.4×4= 55459.9
2011	5	y=28314.3+6786.4×5=62246.3
2012	6	y=28314.3+6786.4×6=69032.7
2013	7	y=28314.3+6786.4×7=75819.1
2014	8	y=28314.3+6786.4×8=82605.5