CHAPTER - I
INTRODUCTION

1.1 Background of the Study

Credit risk management is one of the most important functions of a financial institution and the composition of loans and advances directly affects the performance and profitability of the bank. There is intense competition in banking business with limited market and less investment opportunities available.

Credit risk management is the heart of commercial banking; consequently the formulation and implementation of lending policies are among the most important responsibilities of directors and management. Well formulated lending policies and careful lending practices are essential if a bank is to perform its credit. Credit management affects on the company's profitability and liquidity so it is one of the crucial decisions for the financial institutions. The banks take almost care in analyzing the creditworthiness of the borrowing customer to ensure that the interest and the principal amount on loans are timely recovered without much trouble and legal process. A sound lending policy is essential for the good performances of the bank and further to attain economic objectives directed towards acceleration of the development. Lending policy should be carefully analyzed and the banks should be careful while performing its credit creation effectively and to minimize the risk factor.

The return of any banks basically depends upon its sound lending policy, lending procedure and investing its fund in different securities and different sectors of market. A sound fund mobilizing policy is not only prerequisite for bank profitability but also crucially significant for the promotion of commercial saving of backward country like Nepal.

Liquidity refers to availability of liquid assets or that state of position of a bank that pronounces its capacity to meet its entire obligation. It refers to the capacity of bank to pay cash against deposits. People deposit money at the bank in different accounts with the confidence that the bank will repay their money when they need. To maintain such confidence of the depositors, the bank must keep this point in mind while investing its excess fund in different securities at the time of lending. So that it can meet current or short - term obligation when they become due for payment (Baxley, 1987:38)

Bank should always know the purpose of loan demanded by a customer because if the borrower misuse the loan granted by the bank he will never able to repay interest and principal. In order to avoid such circumstances, loans should be allowed to the selected borrowers and it should demand all the essential detailed information about the scheme of project in which the bank is lending for. Finance companies must keep in mind the overall development plans of the nation and the credit policy of the concerned authority i.e. central bank

Banking plays a significant role in the development of nations. Bank is a financial institution which primary classes in borrowing and lending. Modern bank prefers varieties of functions. Therefore, it is difficult to decide the function of a modern bank because of their complexity and versatility in operation. Various authors have defined the word ‘Bank’ in different ways. “A commercial bank is dealer in money and it substitutes for money such a cheque or bills of exchange, it also provides a variety of financial service” (Britannica, 1985:600).

Banks are those financial institutions that offer the widest range of financial services especially credit, savings, and payment services and perform the wisest rage of financial services of any business firm in the economy. As a financial institution a bank links the surplus unit with the deficit unit of the economy. Banks today provide a number of financial services to their customers. This multiplicity of bank’s functions and services has led to banks being labeled "financial departmental stores" and to such advertising slogans as your bank – a full service financial institution. Customers can satisfy virtually every type of financial services needs at one financial institution in one location.

Financial intermediaries are those institutions, which mediate between the savers in the community and the users of the savings. Commercial bank is also one of the financial intermediaries. Commercial bank plays an important role in directing the affairs of the economy in various ways. The operations of commercial banks record the economic pulse of the economy. The size if their transaction actions mirror the economic happening of the country .Example is mass failure of commercial bank in 1930 reflected the phenomenon of several global depressions in the world. Commercial banks have played a vital role in giving a direction to economy's development over time by financing the requirements of trade and industry in the country.

The world business scenario has been changing very fast. Most countries around the globe have efficiently eliminated state monopolies of business. The volume of international trade has been increasing year after year. Due to globalization many international companies have been actively doing their business across the national boundaries. This competitive market barrier is becoming the major problem for the survival. Now due to these factors, financial institutions face significant change in a time of new alignments in domestic market and increased international competition.

1.1.1. Profile of Sample Bank

A. Bank of Kathmandu (BOK)

Bank of Kathmandu (BOK) is a culmination of a comprehensive vision of the Promoters to take the Nepalese economy to newer realm in the global market. The promoters' comprehensive vision and the government's overwhelming support gave birth to BOK as one of the private sectors banks of the country in 1993 which commenced its commercial business in March, 1995.

BOK was established by a group of distinguished civil servants and renowned businessmen in collaboration with the SIAM Commercial Public Company Limited (SCB) - a leading bank of Thailand. Upon establishing BOK as one of the reputed banks in a short period, the Nepalese promoters decided to conclude the technical service agreement with SCB and BOK to be arranged by the Nepalese professionals as it could further enhance its business performance years ahead under the Nepalese management. With the well-acclaimed capabilities of the Nepalese management team, BOK has successfully enhanced its capital structure, profitability; reach to the customers and image in the market. It has created a position in the industry in a shortest possible span of time.

Since, BOK is established with the objective of providing prompt and quality services the clients. Its branches as well as number of eligible staffs have been increasing. Therefore, it has become successful Commercial banks in Nepal.

B. Himalayan Bank Ltd. (HBL)

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits.

Legacy of Himalayan lives on in an institution that's known throughout Nepal for its innovative approaches to merchandising and customer service. Products such as Premium Savings Account, HBL Proprietary Card and Millionaire Deposit Scheme besides services such as ATMs and Tele-banking were first introduced by HBL. Other financial institutions in the country have been following our lead by introducing similar products and services. Therefore, we stand for the innovations that we bring about in this country to help our Customers besides modernizing the banking sector. With the highest deposit base and loan portfolio amongst private sector banks and extending guarantees to correspondent banks covering exposure of other local banks under our credit standing with foreign correspondent banks, we believe we obviously lead the banking sector of Nepal. The most recent rating of HBL by Bankers' Almanac as country's number 1 Bank easily confirms our claim.

All Branches of HBL are integrated into Globus (developed by Temenos), the single Banking software where the Bank has made substantial investments. This has helped the Bank provide services like 'Any Branch Banking Facility', Internet Banking and SMS Banking. Living up to the expectations and aspirations of the Customers and other stakeholders of being innovative, HBL very recently introduced several new products and services. Millionaire Deposit Scheme, Small Business Enterprises Loan, Pre-paid Visa Card, International Travel Quota Credit Card, Consumer Finance through Credit Card and online TOEFL, SAT, IELTS, etc. fee payment facility are some of the products and services. HBL also has a dedicated offsite 'Disaster Recovery Management System'. Looking at the number of Nepalese workers abroad and their need for formal money transfer channel; HBL has developed exclusive and proprietary online money transfer software- HimalRemitTM. By deputing our own staff with technical tie-ups with local exchange houses and banks, in the Middle East and Gulf region, HBL is the biggest inward remittance handling Bank in Nepal. All this only reflects that HBL has an outside-in rather than inside-out approach where Customers' needs and wants stand first.

HBL is not only a Bank, It is committed Corporate Citizen also. Corporate Social Responsibility (CSR) holds one of the very important aspects of HBL. Being one of the corporate citizens of the country, HBL has always promoted social activities. Many activities that do a common good to the society have been undertaken by HBL in the past and this happens as HBL on an ongoing basis. Significant portion of the sponsorship budget of the Bank is committed towards activities that assist the society as large.

The Bank's mission is to become preferred provider of quality financial services in the country. There are two components in the mission of the Bank; Preferred Provider and Quality Financial Services, therefore we at HBL believe that the mission will be accomplished only by satisfying these two important components with the Customer at focus. The Bank always strives positioning itself in the hearts and minds of the customers.

1.2. Focus of the Study

Present situation of Nepalese market is not so good for any kind of business, banking business is totally focus on lending business, which is naturally a risky business, as per present situation finance companies are playing the vital roles in the growth of Nepalese economy. So what kinds of precautions are taken by bank for its survival is very serious subject. As loan is the core area of the commercial banking. It plays the significance impact on the banks and finance companies liquidity and profitability. But the most worry factor in banking industry is the total management of loan. Due to the excessive amount of non- performing assets in banks and finance companies, there is the wide spread suspicion on the performance on the banks and finance companies.

1.3. Statement of the Problem

As financial institutions are becoming main sources of mobilizing the financial resources, the large amount of commercial bank funds are concentrated on total loan portfolio. Therefore, the success and failure of the bank largely depend on the total credit risk management of finance companies. In order to analyze the credit risk management of commercial bank following research problems are formulated.

1. What is the status of credit portfolio of commercial bank in terms of?

a) Deposits

b) Interests Income

c) Net Profit

d) Total assets

2. What is the credit management status of commercial bank in general?

3. What are the total compositions of credit of commercial bank?

4. What is the loan loss provision status that has been established by commercial bank?

5. What are the effects on bank’s total performance by the recent regulations relating to loan classification and loan loss provisioning?

7. What is the effect that has been caused by non-performing assets of commercial bank on their profitability and liquidity managements?

1.4 Objectives of the Study

The main objective of the study is to evaluate the credit risk management of commercial bank in Nepal. In order to achieve the basic objective, the following other objectives are

1. To evaluate the status of liquidity, asset management, profitability and risk position of sample commercial banks.
2. To evaluate problems and weakness in credit risk management of BOK and HBL

3. To measure the relationship trend analysis between deposit, loan and advance, investment and profit of sample commercial banks BOK and HBL
4. To offer suitable suggestions and recommendations based on findings of this study.

1.5 Significant of the Study

Loan is the main product of commercial bank. It plays the significance impact on the financial institution's liquidity and profitability. But the most worry factor in banking industry is the total management of loan. Due to the excessive amount of non-performing assets in finance companies, there is the wide spread suspicion on the performance on the commercial bank.

Nepal Government has just enacted the debt recovery act and approved the long waited regulation on debt recovery to speed up the financial reforms in the financial sector. As the proposed study is focused on the total aspect of credit risk management of commercial bank, it would giant information to speed up the process.

The proposed study would be of enormous assistance to the executives of commercial bank on how they should manage the different composition of loans. The study would be important as it provide theoretical as well as conceptual framework of different aspect of credit risk management.

1.6 Limitations of the Study

The study has been subject of the following limitations.

a) The study has been based on the secondary data provided by Nepal Rastra Bank.

b) The study is based on data and information provided by commercial bank.

c) The study has been limited to the viewpoint of the credit risk management.

d) The study covers the time period of 2003 to 2008

e) Differences macro indicators of the global as well domestic economy, which has the impact on the total performance of credit management of commercial bank, have been ignoring.

1.7. Organization of the Study

The present study is organized in such way that the stated objectives can easily be fulfilled. The structure of the study will try to analyze the study in a systematic way. The study report has presented the systematic presentation and finding of the study. The study report is designed in five chapters which are as follows:

Chapter-I: Introduction

This chapter describes the basic concept and background of the study. It has served orientation for readers to know about the basic information of the research area, various problems of the study, objectives of the study and need or significance of the study.

Chapter-II: Review of literature

The second chapter of the study assures readers that they are familiar with important research that has been carried out in similar areas.

Chapter-III: Research Methodology

It describes about the various source of data related with study and various tools and techniques employed for presenting the data.

Chapter-IV: Presentation and Analysis of data

This chapter analysis the data related with study and presents the finding of the study and also comments briefly on them.

Chapter-V: Summary, Conclusion and Recommendation

On the basis of the results from data analysis, the researcher concluded about the performance of the concerned organization for better improvement.

CHAPTER - II
REVIEW OF LITERATURE

Review of literature means reviewing research studies or other relevant proposition in the related credit management of commercial bank. This area of the study show that all the past and previous studies, their conclusion and perspective of deficiency may be known and further researcher can be conducted or done. It is an integral mandatory process in research works. It is a crucial part of all dissertations. In other words it’s just like fact are finding based on sound theoretical framework oriented towards discovery of relationship guided by experience, resonating and empirical investigation. It helps to find out already discovered things. Review of relevant literature implies putting new spectacle in old eyes to think in new way by posting the problem with new data and information to see that what results are derived. The primary purpose of literature is to learn and it helps researcher to find out what research studies have been conducted in one’s chosen field of study, and what remains to be done. For review study, the researcher uses different books and journal, reviews and abstracts, indexes, reports, and dissertation or research studies published by various institutions, encyclopedia etc.

We study the review of literature in dividing two headings:

- Conceptual Review
- Review of related Studies

2.1 Conceptual Review

2.1.1 Concept of Bank

Simply, Bank is financial institutions that accepts deposits and invest the amount in the leading activities and commercial service provide. In ancient, the words Bank was emerge form Latin words Bancus, French words Banque and Italian words Banca, which means a Bench where sitting over there invest, exchange and keep record of money and cash. These all functional activity are formed as current banking activities.

According to S. and S.'s definition of bank, a banker or bank is a person or company carrying on the business of receiving money collecting drafts, for customers subject to the obligation of honoring cheques drawn upon them from time to time by the customers to the extent to the amount available on their customer (Shekher & Shekher, 1999).

The words Bank refer as Central bank, Commercial bank, Development bank, Exchange bank, Saving bank, Cooperative bank, Merchant bank, Housing bank, Equipment bank, Infrastructure bank and Mutual fun etc. they provide financial as well as non-financial services. It is a financial intermediary between depositors or lender and withdrawal or loaner. Bank plays a great role that it helps investors to invest in different sector by giving a loan and providing other consultancy and agency services. Thus the words bank its self provided huge sense of banking activity.

2.1.2 Concept of Commercial Bank

commercial bank is a corporate business venture which have certain paid up capital and provide loan, accept deposit, exchange money and other consultancy, agency, guarantee etc services are perform. Commerce is the financial transactions related to selling and buying activities of goods and services. Therefore commercial banks are those banks, which work from commercial viewpoint. They perform all kinds of banking functions as accepting deposits, advancing credits, credit creation and agency functions. They provide short-term credit, medium term credits and long terms credit as well as issuing guarantee, bonds, letter of credit, etc to trade and industry.

"A commercial bank is the bank which exchanges money, accepts deposit transfers loans and performs banking functions " (Commercial Bank Act, 2031 B.S.).

"Principally commercial bank accepts deposits and provides loans, primarily to business firms there by facilitating the transfer of fund in economy" (Rose, 1989: 9).

“ The commercial bank has its own role and contribution in the economic development. It is a resource for the economic development, it maintain economic confluence of various segments and extends credit to people” (Ronald, 1999: 87)

Commercial Banks function as an intermediary; accepting deposits and providing credits to the needy area. The primary source of funds for commercial bank are capital (shareholder equity) reserve (retain earning) and other main source of the commercial bank is current deposit issue of commercial paper bond etc. Commercial banks are restricted to invest their funds in corporate securities. They invest their funds in long term as well as short-term needs of any trade and industry. They grant credits in the form of cash credits and overdraft**.**

Banks undertaking business with the objective of earning profits are commercial banks. Commercial banks pool scattered fund and channels it to productive use. Commercial Banks Apart from financing, they also render a variety of service like collection of bills and cheques, safe keeping of valuables, financial advising, agencies functions, keeping of guarantee etc to their value customers**.**

2.1.3 Joint venture Bank in Nepal

Join stock venture means two or more then two enterpriser, persons or countries mutually performing some specific venture in any area for common objective. . When two or more independent firm mutually decides to participate in a business venture, contribute to the total equity or more or less capital and establish a new organization, it is known as a joint venture. When two commercial bank from different countries join hand to form an independent enterprise it is said as joint venture commercial bank. Joint venture banks are the mode of trading to achieve mutual exchange of goods and services for sharing competitive advantages by performing joint investment schemes between Nepalese investors, financial and non- financial institution as well as private investors and their parents banks each supplying certain percent of investment.

Liberalization and globalization started after 70s. Many countries applied this policy. The government of Nepal also realized and starts to apply the policy with greater responsibility in fulfilling national goal and objectives. With this realization, the government mushroomed into a number of establishments like agriculture, industry, commerce, public works, transport etc. In this context, banking was seen as a major industry to uplift the economic condition of public and country as well. There for the government was forced to adopt a liberal economic policy regarding operations of banks. About the financial liberalization process it was said that “the interest rate deregulation, curtailment or elimination of directed credits, lifting entry and exit barriers for financial intermediaries, restructuring of banking system and institution for regulatory and supervisory mechanism is some of the key components of such liberalization” (Shrestha, 2051 : 27).

Liberal economic policy and Restoration of democracy and policy of the government led the opening of various joint ventures in Nepal. Nepal Arab Bank Limited (Nabil) was the first joint venture bank which was established in 2041 B.S. Its joint venture partner was Emirates Bank international Limited, (Dubai Bank). Similarly Nepal IndoSwiss bank ltd, Nepal Greenland bank ltd, Himalayan bank, Nepal Bangladesh bank ltd, SBI bank ltd etc accordingly. Establishing the join stock commercial bank makes tough competition to domestic bank and compels improvement in their services and technology. All the Nepalese joint venture banks established and operated under the rules and regulation and guidance under Nepal Rastra Bank (NRB).

2.1.4 Functions of Commercial Banks

The business of commercial bank is primarily to hold deposits and make credits and investments to securing profits for its shareholders. Its primary motive is profit; other considerations are secondary. The major functions of commercial banks are as follows:

Accepting Deposit, Advancing credits, Agency Services, Credit Creation, Financing of Foreign Trade, Safekeeping of valuables, Making Venture Capital Credits, Financial Advising and Offers Security Brokerage Services. They also function as issue of commercial paper, bond and debenture, invest in government security as well as underwriting function under rules and regulation of their Central Bank**.**

i) Assist in foreign Trade:

The bank assist the traders engaged in foreign trade of the country. He discounts the bills of exchange drawn by exporters on the foreign importers and enables the exporters to receive money in the home currency. Similarly, he also accepts the bills drawn by foreign exports.

ii) Offers Investment Banking and Merchant Banking Services:

Banks today are following in the footsteps of leading financial institutions all over the globe in offering investment banking and merchant banking services to corporations. These services include identifying possible merger targets, financing acquisitions of other companies, dealing in security underwriting, providing strategies marketing advice and offering hedging services to protect their customers against risk from fluctuating world currency prices and changing interest rate. In this way they support the overall economic development of the country by various modes of financing.

2.1.5 Concept of Credit

Credit is the sum amount of money lent by the creditor (Bank) to the borrower (Customers) either on the basis of security or without security. Sum of the money lent by a bank, is known as credit (Oxford Advanced Learners Dictionary, 1992). Credit and advances is an important item on the asset side of the balance sheet of a commercial bank. Bank earns interest on credits and advances, which is one of the major sources of income for banks. Bank prepares credit portfolio, otherwise it will not only add bad debts but also affect profitability adversely (Varshney and Swaroop, 1994: 42).

Credit is financial assets resulting from the delivery of cash or other assets by a lender to a borrower in return for an obligation of repay on specified on demand. Banks generally grants credit on four ways (Chhabra and Taneja, 1991).

1. Overdraft
2. Cash Credit
3. Direct Credit
4. Discounting of Bills

2.1.6 Types of Credit

Overdrafts:

It denotes the excess amount withdrawn over their deposits. In other words bank provide sum limit of money to their value customer according to their believe ness and level of transaction.

Cash Credit:

The credit is not given directly in cash but deposit account is being opened on the name of credit taker and the amount credited to that account. In this way, every credit creates deposit.

Term Credit:

It refers to money lent in lump sum to the borrowers. It is principle form of medium term debt financing having maturities of 1 to 8 years.

Barely and Myers urge that bank credits with maturities exceeding 1 years are called term credits. The firm agrees to pay interest based on the bank's prime rate and to repay principle in the regular installments. Special patterns of principle payments over time can be negotiated to meet the firm's special needs (Richard, 1996:89).

Working Capital Credit:

Working capital denotes the difference between current liabilities. It is granted to the customers to meet their working capital gap for supporting production process. A natural process develops in funds moving through the cycle are generated to repay a working capital credit**.**

Priority or Deprived sector Credit:

Commercial banks are required to extend advances to the priority and deprived sector 12% of the total Credit must be toward priority sector including deprived sector. Rs.2 million for agriculture cum service sector and Rs.2.5 million for single borrowers are limit sanctioned to priority sector. Institutional support to 'Agriculture Development bank' and 'Rural Development Bank' are also considered under this category. Deprived sector lending includes:

- Advances to poor/downtrodden/weak/deprived people up to Rs 30,000 for generating income or employment.
- Institutional Credit to Rural Development Bank.
- Credits to NGOs those are permitted to carryout banking transactions for lending up to Rs.30, 000.

Hire Purchase Financing (Installment Credit):

Hire-Purchase credits are characterized by periodic repayment of principle and interest over the maturity of the credit. Hirer agrees to take the goods on hire at a stated rental including their repayment of principle as well as interest with an option to purchase.

A recent survey of commercial banks indicates those banks are planning to offer installment credits on a variable rate basis. It can be secured and unsecured as well as direct and indirect installment credits on a variable rate basis. It can be secured and unsecured as well as direct and indirect installment credit.

Housing Credit (Real Estate Credit):

Financial institutions also extend credit to their customers. It is different types, such as residential building, commercial complex, construction of warehouse etc. It is given to those who have regular income or can earn revenue from housing project itself.

Project Credit:

Project credit is granted to the customers as per project viability. The borrowers have to invest certain proportion to the project from their equity and the rest will be financed as project credit. Construction credit is short-term credits made to developers for the purpose of completing proposed projects. Maturities on developers for completing proposed projects. Maturities on construction credits range from 12 months to as long as 4 to 5 years, depending on the construction credits range from 12 months to as long as 4 to 5 years, depending on the size of the specific project . The basic guideline principle involved in disbursement policy is to advance funds corresponding to the completion policy is to advance funds corresponding to the completion stage of the project. Term of credit needed for project fall under it (Johnson, 1940:83).

Consortium Credit:

No single financial institution grant credit to the project due to single borrower limit or other reason and two or more such institutions may consent to grant credit facility to the project of which is baptized as consortium credit. It reduces the risk of project among them. Financials bank equal (or likely) charge on the project's assets.

Credit Cards and Revolving Lines of Credit:

Banks are increasingly utilizing cards and revolving lines of credit to make unsecured consumer credit. Revolving credit line lowers the cost of making credit since operating and processing cost are reduced. Due to standardization, centralized department processes revolving credits resulting reduction on administration cost. Continued borrowing arrangement enhances cost advantages. Once the credit line is established, the customer can borrow and repay according to his needs and the bank can provide the fund to the customer at lower cost.

Off-Balance Sheet Transaction:

In fact, bank guarantee and letter of credit refer to off balance sheet transactions of financial institution. It is also known as contingent liability. Contingent liability pinpoints the liability, which may or may not arise during the happening of certain event. Footnotes are kept as references to them instead of recording in the books of accounts.

It is non-funded based remunerative facilities but more risky than the funded until adequate collateral are not taken. Lets its two varieties be described separately.

Bank Guarantee:

It used for the sake of the customers in favor of the other party (beneficiary) up to the approved limit. Generally, a certain percent amount is taken as margin from the customer and the customer's margin account is credited.

Letter of Credit (L/C):

It is issued on behalf of the customer (buyer/importer) in favor of the exporter (seller) for the import of goods and services stating to pay certain sum of money on the submission of certain documents complying the stipulated terms and conditions as per the agreement of L/C. It is also known as importers letter of credit since the bank of importer do not open separate L/C for the trade of same commodities (Jhonson, 1940:85).

2.1.7 Objectives of the Sound Credit Policy

The purposes of a written credit policy are:

1. To assure compliance by lending personnel with the bank's polices and objectives regarding the portfolio of credits
2. To provide personnel with a framework of standards within which they can operate.

2.1.8 Lending Criteria

While screening a credit application, 5-cs to be first considered supported by documents.

i). Character

Character is the analysis of the applicant as to his ability to meet the obligations put forth by the lending institution. For this analysis, generally the following documents are needed.

- Memorandum and Article of Association
- Registration certification
- Tax registration certificate (Renewed)
- Resolution to borrow
- Authorization-person authorizing to deal with the bank.
- Reference of other lenders with whom the applicant has dealt in the past of bank A/C statement of the customer.

ii). Capacity

It's describes the customer's ability to pay. It is measured by applicants past performance records and followed by physical observation. For this, an interview with applicant's customers/suppliers/ will further clarify the situation. Documents relating to this area were:

- Certified balance sheet and profit and loss account for at least past 3 years.
- References or other lenders with whom the applicant has dealt in the past or bank A/C.

iii). Capital

This indicates applicant's capacity to inject his own money. By capacity analysis, it can be concluded that whether borrower is truing to play with lender's money only or is also injecting his own fund to the project. For capital analysis, financial statements, like certified balance sheet, profit and loss account is the only tools.

iv). Collateral

Collateral is the security proposed by the borrower. Collateral may be of either nature moveable or immovable. Moveable collateral comprises right from stock, inventories to playing vehicles. In case of immovable it may be land with or without building or fixture, plant machineries attached to it.

v). Conditions

Once the funding company is satisfied with the character, capacity, capital and collateral then a credit agreement (sanction letter) is issued in favor of the borrower stating conditions of the credit to which borrower's acceptance is accepted.

2.1.9 Principle of Credit Policy

Good credit policy is essential to carry out the business of lending more effectively. Some policies are as follows:

i) Principle of Safety Fund

Banks should look the fact that is there any unproductive or speculative venture or dishonest behavior of the borrower.

ii) Principle of Liquidity

Liquidity refers to pay on hands on cash when it needed without having to sell long-term assets at loss in unfavorable market. A banker has to ensure that money will come in as on demand or as per agreed terms of repayment.

iii) Principle of Security

It acts as cushion to grant advances and credits. Adequate values of collaterals ensure the recovery of credit correctly at the right time. Accepted security should be readily marketable, handy and free from encumbrances.

iv) Principle of Purpose of Credit

Generally, credit request would be accepted for productive sector only. Bank should be rejected credit request for speculation, social functions, pleasures trips, ceremonies and repayment of prior credit as they are unproductive.

v) Principle of Profitability

Profitability denotes the value created by the use of resource is more than the total of the input resources. Bank should provide to such project that can provide optimum amount of return. For such purpose, bank should take a little bit risk by providing to venturous project.

vi) Principle of Spread

Portfolio of credit advances is to be spread not only among many borrowers of same industry. It across the industries in order to minimize the risk of lending by keeping “Do not put your all eggs in the same basket” in mind.

vii) Principle of National Interest

In lending and granting advances, interest of nation should not be distorted (if undermined). Priority and deprived sector of economy and other alarming sector should be given proper emphasis while extending advances.

Every Bank should always follow the rule “Do not put your all eggs in the same basket”. So every bank makes appropriate portfolio in their investment the credit management would be excellent.

2.1.10 Lending / credit process

Commercial bank follows several steps to disburse loan to the borrowers. The lending policies might be different form one bank to another. In general, these steps can be pointed out of follows.

Application: the needy are required to submit an application to the bank along with required documents. The documents required for credit proposal appraisal and processing by banks are as follows:

- Loan application
- Citizenship certificate of applicant
- Firm/ company registration certificate (if self employed)
- Income tax registration certificate (if self employed)
- Authenticated partnership deed in case of partnership firm, and memorandum and article of association in case of company
- Attested copy of board resolution in case of company resolved to avail loan and banking facilities form bank against the pledge, hypothecation, and mortgage of fixed property owned by company or property of third party named.
- Letter of authority authorizing to sign loan deed and other relevant document paper which are deemed necessary while dealing with bank on behalf of firm/company.
- Feasibility report/scheme (for new project)

Lending appraisal and possessing

Basically, appraisal of loan proposal is processing for the analysis of the variability of the scheme proposed. It also helps to assets the actual financial assistance needed to operate the scheme.

Commercial bank carries out loan appraisal on the basis of past performance, future forecast and information available form the documents submitted by aspirant borrowers.
The bank tries to ascertain the following during loan processing:

- ➢ The cost of estimate us examined so that the appropriate estimate can be accepted. Under and over estimates are rejected. Similarly, the specification of machinery should be proper.
- ➢ Working capital projection has to be reasonable as compared to past performance and on the basis of target for future expansion.

- The return rates should be adequate like return on investment (ROI), internal rate of return (IRR) and debt service coverage ratio (DSCR).
- The capacity, competency, integrity and commitment of promoters/partners/proprietors/directors/personnel should be intact.
- SWOT (strength, weakness, opportunity and threat) analysis of the proposed project must give reasonable assurance.

2.1.11 Project Appraisal

Before providing credit to the customer, bank makes analysis of project from various aspects and angles. It will help the bank to see whether project is really suitable to invest. The purpose of project appraisal is to achieve the guarantee of reasonable return from the project. Project appraisal answers the following questions:

- Is the project technically sound?
- Will the project provide a reasonable return?
- Is the project in line with the overall economic objectives of the country?

Generally, the project appraisal involves the investigation from the following aspects (Gautam, 2004).

1. Financial aspect
2. Economic aspect
3. Management /organizational aspect
4. Legal aspect

Directives issued by NRB for the commercial Bank: (related to credit aspect only):

1. Credit classification and provisioning

Classification	Provision
1. Pass Credit	1%
2. Sub Standard Credit	25%
3. Doubtful Credit	50%
4. Bad Credit	100%

Those credits that have not crossed the time schedule of repayment and are within three months delay of maturity date fall under the classification topic ‘pass credit’. It is also known as performing credit.

Sub standard credit are those credit which are already crossed the repayment time schedule and are within 3-6 months delay of maturity date. Likewise, within 6-12 months from the time to be recovered are classified as doubtful credit. Those credits, which are not recovered yet after 1 year from maturity date, are known as bad credit. All the above 3 types of credits are classified as non-performing credit also. The credit loss provision for performing credit is termed as general credit loss provision whereas the credit loss provision for non- performing credit is termed as specific credit loss provision.

Auditor has to correctly rate the credit and ensure that accurate credit loss provision has been made. The auditor should examine whether the bank has obtained complete documentation so that banks interest is secured. In addition audit is made to inspect compliance of terms and conditions laid down. Credit audit is required to check whether credit given is within authority, drawing power, etc. Credit audit helps the bank to know quality of its credit, its weakness and strengths. This, in turn, helps the bank to adopt corrective measures where weaknesses have been pointed out and to focus further on strengths. General guidelines whether to reject or renew the credit can be established with the help of credit audit.

2. Limit of Credit and Advances in a Particular Sector.

- Fund based credit and advances can be issued up to 25% (upper limit) of core capital to a single customer, firm, company and a group of related customer.
- Non-fund based (off-balance items) can be issued up to 50% of core capital to a single customer, firm, company and group of related customer.

Note: The core capital includes {paid up capital + share premium + non-redeemable preference share + general fund + accumulated profit (loss) –goodwill (if any included)}.

Group of related customer:

- If a company takes 25% or more share of another company.
- Member of board of directors of company shareholders of private limited company and such members and shareholders with others in a single house, even if husband, wife, son, daughter, daughter in law, unmarried daughter, adopted son, adopted unmarried daughter, father, mother, stepmother, brothers and sisters whom be should look after. And the above members personally or combined take 25% or more share of another company.
- Firm, company and members as a related group.
- Members of board of directors, shareholders and other relatives as stated in serial number 'b' takes less than 25% of board of directors of the company solely or combined but have control on the other company by the following ways:
- Being president of board of directors of the company.
- Being executive directors of the company.
- Nominating more than 25% of members of board of directors of the company.
- If cross guarantee is given by one company to another company.

2.2 Review of related studies

The article published in Annual Bank supervision Report NRB (2006/07), Bank supervision Department; conclude that the loan and advances extended by banking industry. The loans and advances of the public banks (excluding ADB) have remained more or less the same for the last three years, while the private banks have enhanced their portfolio by more them Rs 20.50 billion resulting in the dilution of the concentration of public banks. However, the three public banks are still the three largest individual banks in Nepal, in respect of the size of their loans portfolio.

The Nepalese banking system is riddled with a significant amount of non-performing assets (NPA). It is clearly evident from the following picture that the volume of non-performing assets is on the decline while total loans are continuously increasing thus resulting in a favorable proportion of Non-performing assets. The NPA ratio, however is still a long way from being at satisfactory level with regard to quality of the loan portfolio of the individual banks, RBB was the worst closely followed by Nepal Bangladesh Bank, Lumbini Bank and NCC Bank Ltd. Along the private banks, it was Nepal Bangladesh bank, Lumbini Bank and NCC who had the largest proportion of NPA in their portfolio, while the lowest and the best NPA ratio belonged to Machha Puchhre Bank Ltd. RBB has 60% of Bad debts and according to FY 2063/064 NPA of RBB has 26%. In FY 2063/064 Bad debt principle is Rs 40 million. The large volume NPA has traditionally been a problem in public banks and three private banks. After a reform program was initiated in the public banks, the volume of NPA, both gross as well as net has come down, significantly. The fact is also reflected in the following chart, where a wide gap between NPA and provision can be observed.

N. Crosby, N. French and M. Oughton (2007), in their article “Banking lending valuations on commercial property” elaborates that the banking community are trying to identify the value on which they can apply a loan value ratio and thus protect their loan in the future should the borrower default. A simplistic understanding the value therefore suggest that figure provided should be the figure which has a life for the length of the loan. However the very concept is economically impossible in any market with volatility. Values can only be snapshots in time. They do not have a shelf life.

For this reason EMLV is conceptually and practically redundant in real estate markets. It appears on the surface to be a solution to the banks’ requirement for the reduced risk property lending. In reality, it may indeed transfer that risk by demanding a level of protection to the bank that the valuation cannot give. But if values agree to it, it could open the way to successful negligence claims in the aftermath of poor lending decisions. This is because the concepts appears the determinants of the virtually certain level of value below which the value will not fall for an indeterminate time into the future. Values are vulnerable to claims that their valuation was too high, should values fall below that level at any time during the loan. Sustainable value is predicated on having a shelf life but the application believes this fundamental requirement. Values must have a time point.

The concept is redundant, the target unidentifiable and the definition ambiguous. It is little wonder that the application appears mechanistic. Market value is an obtainable and useful piece of information to the lender. Worth in the market sets this in context and gives the lender a view of whether market prices are at current sustainable levels. In obtaining worth, the value is obliged to carry out both quantitative and qualitative investigation into the future and this generates other analyses at different time points during the course of the loan.

EMLV appears to be another blind alley which will divert the appraisal profession from its more important task of improving pricing estimates, and thereby influencing market prices, and providing all clients, whatever the valuation purpose, with the information in reports which puts the limitations of valuation figure into perspective.

Sujit Mundul, (2008), Understanding of credit derivative Business Age September" emphases Credit derivative enable financial institution and companies to transfer credit risk to a third parity and thymus reduce their exposure to the risk of an obligor's default. Credit enhancement technique, which helps reduce the credit risk of an obligation, play a key role in encouraging loans and investment in debts. In legal term credit derivative are privately negotiated bilateral contract to transfer credit risk from one party to another. Some credit enhancement methodologies have existed for the in debts. Some credit enhancement methodologies have existed for a longtime with the support of guarantee, letter of credit or insurance product. However such mechanism works best during economic upturns. As an alternative to commercial risk mechanism, various financial mechanisms have been developed over the past few decades. Such credit risks instruments are normally refer to as credit derivatives. Credit derivative helps to transfer credit risk away from the lender to some other party. Now credit derivative grew popular both as tools for hedging credit risk exposure as well as method of investing in certain types of credit risk.

Credit derivative not only helps corporation and financial institution to manage to their credit risk but also enabled a new set of individual retail client to invest in bonds and stocks previously unaffordable. Through credit derivative individual investor ca invest indirectly in foreign bonds at a lower price. Credit derivative helps investor isolated credit, and transfer it to other investor who are better suited to managing it or who finds the investment opportunity more interesting. There are many credit instruments in the market they are

- Total return swap (TRS)
- Credit default swaps (CDS)
- Credit linked notes (CLN)
- Credit spread option (CSO)

According to the behavior of the asset or deal above credit instrument can be used and minimizing the risk. In this way credit derivative provide protection against credit peril and risk.

2.3 Review of Thesis

This dissertation has been written after studying various books journals article website and previous thesis. I here comprise the some previous thesis review, which are mainly concerned about financial performance and fund mobilization policy, lending practices and investment policy, credit management and loan management of commercial bank.

Paudel, P. (2001) in his Thesis “A study on lending practices of joint venture commercial banks with reference to Nepal Bangladesh Bank Ltd (NBBL) and Himalayan Bank Ltd.(HBL)” has made comparative study of these two banks in different lending aspects and strategies.

Mr Paudel in his findings the liquidity position of NBBL is comparatively better than HBL. The liquidity ratio of HBL is more stable and consistent than NBBL that indicates the stable policy of HBL. NBBL is found slightly better to be maintaining between assets and liabilities. NBBL has high loan and advances to total assets ratio, loan and advances to total deposit ratio, but HBL has high investment to total loans and advances and investment and total investment to total deposit ratio. He has concluded that NBBL is able to manage its assets to complete in this competitive banking business than HBL. As per his findings the liquidity position of NBBL is better and hence HBL is recommended to increase its liquidity position. He has suggested both banks to strictly follow the NRB directives, which will help them to reduce credit risk arising from borrower's defaulter, lake of proper credit appraisal, defaulter by blacklisted borrowers and professional defaulter. Loan loss provision of both banks is in fluctuating trend. So both banks are suggested to adopt sound credit collection policy which wills helps to decrease loan loss provision.

Main objective of his Thesis lending practices of joint venture commercial banks with reference to NBBL and HBL is investment criteria and sector, loan distribution and advance practice of joint venture bank. The limitation of the thesis was base on secondary data given by responded, five year's data and non ending years data.

Bista, G. B. (2002) in his dissertation found that the study has been undertaken to examine and evaluate the financial performance of NIBIL bank limited. The researcher has used the financial tools to make this study more effective and informative. This study has corrected ten years data from 1991/1992 to 2000/2001 of the NABIL bank limited. The analysis shows that the deposits of the bank have increased during the years 1999/00 and 2000/01. The rate of increase was comparatively low for the year 1996/97. Total loans and advances have been increasing at an average rate of 24% each year, highest of 51% in year and lowest of 7% in year 1996/97. Total investment of the bank has been increasing over the years, which is mainly due to the bank's strategy of safe lending and because of increase in customer's deposits and limited opportunities for prudent lending.

The main statements of the problem of his research is financial management aspect is considered to be the vital and integral part of overall management of any enterprises, ensuring financial strength through adequate cash flows, liquidity and better utilization of assets. Commercial joint venture banks set up in Nepal seem to need grater funds in terms of financing to the expansion of their assets because of growing number of new establishment of joint venture banks in the country. These banks deal with other people's deposits, most of which are payable on demand. There is no doubt that the survival of the existing commercial banks and other financial institution depend upon how they manage their assets and liabilities to maximize their profits with the minimum exposure of assets to risks, and are guided by there important conflicting criteria of solvency, liquidity and profitability. Therefore, the financial management is the main indicator of the success or failure of any business firm. Financial condition of the business firm should be sound be sound from the point of view of shareholders, debenture holders' financial institutions and nation as a whole. The main objectives is analyze liquidity, leverage, activity profitability and ownership ratios of the bank.

Joshi, S. (2003) In "A Comparative Study on Financial Performance of Standard Chartered Bank Nepal Limited and Everest Bank Ltd" states that the mean current ratio of EBL is slightly higher than that of the SCBNL and the variability of ratio of EBL is more consistence than SCBNL in comparison. The mean ratio of cash and bank balance to total deposit of SCBNL is lower in comparison to EBL. SCBNL has better liquidity position than EBL because of the high volume of liquidity indicated the inability of the bank to mobilize its current assets. Moreover SCBNL's ratios are homogeneous than EBL. The mean ratio of cash and bank balance to current assets of SCBNL is lower in comparison to EBL. Similarly, SCBNL's ratios of the study period are more consistent than EBL. The mean ratio of loan and advances to total deposit of EBL is higher than SCBNL. It can be said that EBL used to provide grater loan and advance in comparison to its total deposit than SCBNL. Likewise, SCBNL's ratio seems to be variable them EBL. The mean ratio of investment on government securities to total working fund of SCBNL is higher than EBL. Consequently, it has consistency in maintaining the ratio than EBL. The mean ratio of return on loan and advances of SCBNL has found to be significantly grater than EBL with more consistency than that of EBL. The mean ratio of credit risk of SCBNL is lower than that of EBL's ratios are more consistent than that of SCBNL. Growth ratios of deposit are more consistent than that of SCBNL is lower i.e. 19.28% in comparison to EBL i.e. 76.46%.

The main statement of the problem of his research is the investment decision is the major tool of financial institution. There are many finance companies and commercial banks operating in Nepal. The fast growth of such organizations has made pro-rata increment of in collecting deposits and their investment. They collected adequate amount from the mass, however they could not find or locate new investment sectors required to mobilizes their fund on the changing context of Nepal. Many banks or companies succumbed to liquidation although they had sustainable investment capacity. The increasing rate of liquidity has caused a downward trend in investment sectors. It has ensured bad impact on interest rate to the depositors, lower market value of shares etc. for the assessment of such adverse impact, this study has shown to contrast and analyses the investment policy of joint venture banks. Joint venture banks viz. standard chartered bank Nepal Ltd and Everest bank limited. The main objectives are compare investment policy of concern banks, find out the empirical relationship among total investment, deposit, deposit utilization loan and advance, net profit and outside asset and compare of SCBNL and EBL.

Parajuli, S. (2003) in his dissertation “Credit management of joint venture banks” states that concept of financial reform emerged since 1980s with economic liberalization. Nepal Government and NRB published the economic and monitory policy to support such reform. As the result of these policies various jointed venture bank established in the private sector.

Under the structural adjustment program of the IME the financial sector was further liberalized in 1987. The focus of NRB was placed on indirect monitory control. The agricultural development bank of Nepal and Nepal industrial development corporation were allowed to issue debentures to increase their financial resources. NRB strengthened its regulation and supervision of banking and financial institution and the commercial banks were granted virtually freedom to fix their interest rates on deposit in July 1989 except for the priority sector credit. The credit information Bureau was established in 1989. NRB started to control the financial institutions with strengthening to supervision and monitoring system. It has also pointed out the need of having deposit taking institutions act which it’s on umbrella act of all deposit taking institution. Some of the main elements of financial sector reform strategy published by NG in December 2000 such as restructuring the government owned banks strengthening the commercial banks regulation accounting and auditing system improving the regulation and supervision on non banking deposit institutions.

The main statement of the problem of the study is government owned banks are in critical condition they are unable to recover the credit. Financial sector reform programs are not being able to achieve the expected target. Performance on the credit is poor in the government banks. Amount of non - performing assets is increasing. Generally, it is accepted If bank maintain low ratio, bank may not able to make the payment of against cheque that disadvantage sector in the economy such as the farmer and the small business have been neglected by the banking industry. In other words such sectors in the economy are not receiving the financial supports as commercial banks hesitate to be involved in these sectors where they do not see adequate profit. The main objectives of his research are: procedures of granting loans, examine the level of non performing loan, relevancy of the financial sectors reform program, measure the comparative output of credit management in joint venture bank and government.

Regmi, P. (2004) Entitled Thesis “Credit Management of Commercial Banks with Reference to Nepal Bangladesh Bank and Bank of Kathmandu” states that commercial banks are those banks, which works from commercial view point. They perform all kinds of banking functions such as, accepting deposits, advancing credits, credit creation and management of credit and advances. Portfolio management helps to minimize or manage the credit risks and spreading over the risks to various portfolios. Banks earn interest on credit and advances which is one of the major source of income for banks. On average 5 years of research period, cash and bank balance to total deposits of ratio of NB bank and BOK is 12.75% and 14.12% respectively. Likewise NB bank and cash and bank balance 1.584 times of current deposits and BOK has cash and bank balance 1.14 times of current assets. NB bank: most of the credit and advances almost 70% is provided an assets guarantee. The assets guarantee credit is increasing period by period. After assets guarantee bank has provided credit based on bills guarantee credit is 3421.3millions (76.1% of total credit) and in the last period it is 3347.99millions (58.2%of total credit).

The main statement of the problem of his research is the Nepal is a small country with small market. Economic condition of the country is degrading. Nepal being an agriculture country needs more investment in this sector. Nevertheless, commercial banks are rather concerned in industrial and foreign projects. As a result, the credit extended to this sector is unsatisfactory. Besides, they are not even fulfilling the NRB's, regulation of 12% investment of their total loans to priority sectors like agriculture, cottage and small industries and services. Similarly, the banks are not following the diversification principle i.e. they are not considering the investment portfolio position. A good portfolio theory indicates diversification of invest able funds to reduce risks. Hence, the principle "do not put all the eggs in basket" really does not apply in context of Nepalese commercial banks. As a result, many banks today could not recover their loan because, in the past, a major portion of their investment were made in garment, carpets and hotel sectors that now come to the brick of extinction. The objectives of this research are To analyze the functions, objectives, activities, credits and advances procedure and recovery status of the NB bank and BOK.

Karki, B. R. (2004) in his entitled "A Comparative Study on Financial Performance of NABIL Bank and Standard Chartered Bank Limited" dissertation found that the development of any country largely depend upon its economic development capital formation is the prerequisite in setting the overall pace of the economic development of a country. Well-organized financial system contributes to the process of capital formation by converting scattered saving into meaningful capital investment in order to aid industry, trade, commerce and agriculture for the economic development of the nation. The financial institution play dominant role in the process of economic development. Banks are indispensable elements in these systems. Commercial banks furnish necessary capital needed for trade and commerce for mobilizing the dispersed saving of the individuals and institutions. They provide the bank of the money supply as well as the primary means of facilitating the flow of credit.

The main statement of the problem of his research is various financial institutions have been established to assist the process of economic development of Nepal. Delivering efficient services to the common people by enhancing efficiency of the commercial banks and improving their management style pose a challenge to the banks and financial institutions. The existing condition of the liquidity of the banking and financial institutions needs to be reduced through an appropriate investment policies. Equally important is the challenge to minimizing their intermediation cost. In order to help realize the goal of poverty alleviation, access to increased flow of credit and investment in the economic activities of direct benefit to the maximum number of low-income people through micro and medium sizes loan needs serious attention in the days to come. It is also necessary to identify the activities that ensure quick return of investment. Thus, the present study seems to explore the efficiency and weakness of NABIL and SCBNL.

The main objectives of his research are to compare analyze the liquidity, profitability, operating efficiency, capital structure, capital adequacy leverage and operation, over all performance, analyze the relationship between DPS and EPS of NABIL and SCBNL bank. Here various financial accounting and statistical tools have been used to achieve the objective of the study.

Shrestha, S. (2005) in his dissertation “Credit management with special reference to Nepal SBI Bank ltd” illustrates that lending is one of the most important parts of function of a commercial bank and composition of loan and advances directly affects the performance and profitability of the bank. There is intense competition in banking business with limited market and less investment opportunities available. Every bank is facing the problem of default loan and there is always possibility of a certain portion of the loan and advances, profitability deposits position of Nepal SBI Bank Limited is analyzed and its contribution in total profitability has been measured.

The main statement of the problem of his study is the credit management is the essence of commercial banking. Consequently, the formulation and implementation of sound Credit policies are among the most important responsibilities of bank directors and management. Well-conceived credit policies and credit careful credit practice are essential if a bank is to perform its credit creating function effectively and minimize the risk inherent in any extension of credit-credit management effects on the company's profitability and liquidity so it is one of the crucial decisions for the commercial banks. Measuring the credit performance in quality, efficiency and contribution of profitability, liquidity position and its effect on credit performance and measure the growth rate and propensity of growth based on trend analysis are the main objective of his dissertation.

Subedi, K.P. (2005) conducted a research title "Financial Performance of NABIL Bank Limited" states that deposit is the part of balance sheet which always remains the biggest in amount. It is the sensitive liability among al items. As like total liabilities and capital deposit also increase until 2057/58 and starts to fall down. The increment rate is satisfactory in first and second changing years, and then it has changed by negative digits therefore in two subsequent year's. The business in peak where the value was Rs.15839.0077millions. The proportion of debt over the total liabilities and capital is 83.35% in average. Fixed deposit is taken as a long-term debt in the banking business; it is key department factor to capital structure. The bank could collect the deposit is Rs.7667.8459 millions. In two subsequent years, it decreases and becomes Rs.2252.5464millions in the final study years. This items changes by in highly decreasing trend. The average change rate is 5.89%. The proportion over total liabilities and capital is 26.32% in average. The composition of paid up capital, reserve and surplus other reserves and undistributed profit is known as shareholders equity. Unlike other items mentioned above, shareholders equity is regularly increasing. The yearly change rate is in fluctuating trend varied from 8.97% to 24.63%.

The main statement of his research is the banking industry is one of the fast growing businesses in Nepal. After the liberalization policy was adopted by government this sector has been dramatically. Now, more then one and half dozen banks are in operation. Now too, new banks are being set up. Due to security, problem and political instability government could not be able to pay sufficient attention to business and industry sector.

Regulation and monitoring by government has been weekend in the banking sector as like others free and fair competition is decreasing. Customers and stakeholders are too much sad to hear the news that banks have tried to cartel in taking treasury bills before some months other type non-business practices might have been occurred in this industry. Surely such types of practices will hamper the whole sector. Ultimately, the capital structure will be affected. We have been watching the type scenario where the capital structure is not so stagnant and continues progress. The main objectives of his research are to be familiar and analyze the composition of the capital, examine the existing financial position, profitability and overall trend analysis of NABIL bank. Its also provide the recommendation, suggestion for the development of an appropriate capital structure concern NABIL Bank limited.

Gurung, A. K. (2006) explored in his research "Lending policy and recovery management of Standard Chartered Bank Nepal ltd and NABIL Bank Limited" has found out that the deposit collection by the banks shows that increasing but in a fluctuating trend. The trend analysis of deposit collection the increase in deposit collection in the forthcoming years will continue. Out of different types of deposit collection account, higher account has been collected in saving deposit account. Out of the total deposit collection, SCBNL has disbursed 36% of average as a loan and Nabil has disbursed 52% of its deposit collection as a loan disbursement to deposit collection ratio of commercial banks, it is around 60%. Thus this ratio is quite low incasing of sample bank especially of SCBNL. It is further proved by the calculation of correlation coefficient, which is 0.75 and 0.23 of SCBNL and Nabil respectively.

In order to analyze the recovery management of these banks, their loan loss provision and NPL were analyzed. While looking at the loan loss provision of SCBNL it is in decreasing trend from 2002. The correlation coefficient of loan loss provision and loan disbursement of SCBNL is 0.36. While looking at he future trend of loan loss provision its shows the increasing trend in case of SCBNL and the trend of Loan loss provision is decreasing every year in case of Nabil, which is proved by the trend analysis. The correlation of loan loss provision and loan disbursement of Nabil is negative.

The main statement of his problem is there many banks are mushrooming although banks are not interested to expand their branch in remote rural area. There are difficulty and length formality of procedure for long term and medium term as well as short-term loan, Low deposit habit of Nepalese people and lack of strong recovery act of lending and bad debt. The main objectives of the dissertation are loan and advance providing procedure of bank, lending and investment sector of bank, recovery condition of both SCBNL and NABIL bank.

Paudel, H. (2006) in his dissertation entitled "A Comparative Study on Nepal Siddhartha Bank Limited and Himalayan Bank Limited" states that interest income from loan and advances are the main sources of income, which will increases profit of commercial bank. The main ratio of interest income to total income of SBL is higher than that HBI. NRB has restricted the gap between the interest taken in loan and advances and interest offered in deposit. HBL have higher mean ratio of interest income to interest expenses and total income to expenses ratio than that of SBL. HBL has maintained high return in every reflect than that of SBL. Among the various measurement of profitability ratios return to equity and earning per share, reflects the relative measure of profitability. The performance of NBL is higher than that of SBL. Coefficient of correlation between deposit and loan and advances total income and loan and advances of both bank have positive value there is significant relationship between deposit and loan and advances total income and loan and advances. Coefficient of correlation between net profit and loan and advances of both bank have positive relationship. But the number of HBI is greater than number of SBL. There is no significant relationship between net profit and loan and advances of both banks. They are greater than number of both banks.

The main statement of the problem of his research is the present banking system is the result of liberalization of economy requirement and globalization in 1990s. The development of banking in both quality and quantity was satisfactory. How ever, subsequent development of commercial banks in quality has not been satisfactory; commercial bank in Nepal has been facing several challengers. The main objectives of the study are to know contribution made by both banks in lending. determine the impact of deposit in liquidity and in effect on lending policy, analysis the portfolio lending, ratio and volume of loans and advances made in different sector and documentation, legal procedure and practice loan of SBL and HBL.

Sedai, P. (2007) in his dissertation “An analysis on lending policy and strength of Nepal Investment Bank Ltd” highlighted that aggregate performance of NIBL is satisfactory and pushing upward. Lending strength of NIBL in term of exposure of loan and advances is good and appreciable. The contribution made by bank in industrial as well as agriculture sector of the economy is highly appreciable and its bust up towards national prosperity. The ratio of loan and advances to total asset, loan and advance to shareholder‘s equity indicate a good performance of NIBL in its lending activities.

Looking at the asset management ratio the performance of NIBL seems good in the area of lending, productivity and impact on national economy. The activity ratio also reflects to the soaring performance of NIBL. The decreasing loss loan provision ratio incate that bank is good enough to judgment in their value customer. The better activity ratio of this bank been a major contributor in managing the lending portfolio according to the demand of the profit oriented business. The high volume of lending activity of NIBL has put this bank in the top position in absolute term. Thus looking at the various summaries and findings, we can conclude that the bank has accelerated its performance in the year 2002/3 and has continued till 2004/5 and the bank has the potentiality to become a leading bank in Nepal.

The recommendations are forwarded according to finding and conclusion. It is recommended that extend their credit and branch in rural area, continue to maintain or further increase the performance, decrease the NPL and make proper loss loan provision, required proper market analysis, diversify the investment sector etc. finally however, performance of NIBL seems to be good till the date. There are still many opportunities for further growth of the bank. NIBL is suggested to further improve current position of lending portfolio. The bank should concentrate on financial strength, pe5rsonal integrity and credibility of the borrower of loan disbursement. It should maintain high level of monitoring and control system over the disbursed loan and advances. To create opportunity of business new and attractive lending scheme would be launched to the customer.

The main objective and target of this study is to observe the loan disbursement of Nepal Investment Bank Ltd. its shows the actual lending position, strength and weakness. The specific purpose are study of loan and advances provided to customer, amount loan investing in industrial sector, trend of loan disbursement , process are according to NRB rules & regulation and position of bank and its profitability.

Misra, S. (2007) entitled her Thesis “Credit management of Everest Bank Limited” illustrate that liquidity position, cash reserve ratio shows the more liquidity position. Cash and bank balance to interest sensitive ratio shows the bank is able to maintain good financial condition. Cash and bank balance to current assets ratio shows that the bank’s sound ability to meet the daily cash requirement of their customers deposit. That is why liquidity position of the bank is the better.

In the aspect of profitability position, interest income to interest expenses ratio shows the more profitable salivation. In addition, total income to total expenses ratio shows the overall predominance of the bank is satisfactory operating income. Return on loan advances are showing position that is more profitable on of the EBL. Analysis of the assets management ratio, loan advances to total assets ratio shows the better performance but loan and advances to total deposit position in minimum than the averages. Whereas investment in loan and advances is safely and not taking more risk. That’s why assets management position of the bank shows better performance in the latest year.

After analyzing the lending efficiency of the bank, the loan loss provision to loan advances indicator shows the better performance in the latest year. The interest expenses to total deposit ratios shows the improving efficiency of the bank. EBL bank has sufficient liquidity. It shows that bank has not got investment sectors to utilize their liquid money.

This is to recommend that Cash and bank balance of EBL bank is high. Banks efficiency should be increased to satisfy the demand of depositor at low level of cash and bank balance does not provide return to the bank. Therefore some percentage of the cash and bank balance should be invested in profitable sectors. Bank should open their branches in the remote area with the objective to provide the banking services and minimum deposit amounts should be reduced. The main objective of this study is to evaluate the credit management of Everest Bank Limited. Besides, there may be other objectives as well like to examine the impact of deposit in liquidity, loan management procedure, asset management and lending efficiency of the Everest Bank Limited.

Shrestha S. (2008) on her research "A study on the credit risk management of Nepalese Commercial Banks" aims following objective taking Kumari Bank and Machhapuchre Bank.

- To examine the credit risk position of the selected commercial banks in Nepal
- To analyze the credit risk management system and practices of KBL and MBL
- To evaluate the organizational structure of KBL and MBL to manage the credit risk.

From the analyses of credit risks, following major findings have been obtained:

1. From the analysis of primary data, it is found that the majority of the respondents of both banks have favored with the bank's single sector, which is up to 10 % of total loan. However, the sector wise lending analysis portrays that KBL and MBL have extended up to 19.88 % and 30.12% of loan in a single sector respectively in FY 2005/06. Similarly, the exposure on the single sector of KBL and MBL exceeds 10 % of total loan in 3 and 5 sectors respectively. The single sector loan to core capital shows that the ratio crossed 100% in 2 sectors of both KBL and MBL. Concerning concentration risk, KBL has more risk in manufacturing, others sector where as MBL has more risk on manufacturing, and Whole seller and sectors as the single sector credit to core capital ratio in these sectors is more than 100 %. MBL has very high loan concentration on manufacturing sector of 199.35% of the core capital. From the personal interview of the key respondents it was found that both banks have been

extending credit in those highly concentrated sectors after getting approval from the board of director. This clarifies that concentration risk is the main source of credit risk for KBL and MBL.

2. Similarly, lack of systematic and thorough credit processing is also the major source of credit risk in these banks. The problems in credit processing include lack of thorough credit assessment, absence of testing and validation of new lending techniques, subjective decision-making by senior management**,** lack of effective credit review process, failure to monitor borrowers or collateral values, and failure of banks to take sufficient account of business cycle effects etc. Likewise the market-sensitive and Liquidity-sensitive exposures also increase the credit risk of these banks. Both banks have ranked 1st to the manufacturing sector where as the Agriculture sector has been ranked the last on the basis of priority. KBL has chosen others sector and real estate business in 2nd and 3rd position respectively, where as the MBL has just opposite preference in these sectors.
3. Likewise, KBL has ranked Character, Collateral and Capacity of borrower first, second and third criterion for granting credit where as MBL ranked Character, Capacity and Capital first, second and third priority respectively
4. Lending analysis against various collaterals: it has been found that both the banks have lent highest amount of loan against the movable/ immovable property. The average lending over 5 years period of KBL and MBL against movable/ immovable property is Rs. 2,987 million and 2,673 million respectively. Similarly, the lending against others securities (i.e. other than prescribed by NRB) is second position for both banks, whereas the lending against guarantee of local banks and finance companies is in third position. However, MBL has also granted loan without any collateral. The average amount of loan without collateral is Rs. 3 million annually, which is in the 6th place on ranking. On the contrary, KBL has not granted any loan without backing any collateral.

In conclusion, the major banking risks include credit risk, market risk (i.e. liquidity risk, interest risk, operation risk etc). Among these risks, credit risk has the major impact on banking (i.e. more than 60 %). Because of the credit risk, the Non Performing Loan

(NPL) of bank will increase. With the increase in NPL, the loan loss provisioning will also increase simultaneously leading to decrease in profit. The decrease in profit results in low dividend to shareholder and bonus to employees.

To remain alert and prepare plans and policies to tackle unpredictable factors such as violence riots, natural disaster, technology and employees, fault and fraud of customers and outsiders are the challenges for these commercial banks.

For proper management of the credit risk, both banks have their own set of policies and practices, which is in consistence with NRB guidelines. For credit risk management, both banks have Credit Policies Guidelines (CPG). Similarly, NPL is regularly monitored by both the banks on regular basis and provisioning is done on quarterly basis by categorizing the loan as per NRB guidelines. Similarly, sector wise and security wise lending is being analyzed by these banks on monthly basis. Organizational structure of these banks is frequently restructured for proper credit risk management as per requirement.

For minimizing the loss arising due to occurrence of the credit risks, capital adequacy have been maintained by these banks within the standard prescribed by NRB

Though both the banks have their own set of procedures for assessing various risks and their management, problems are still prevalent in these banks. In credit risk, single sector loan concentration is the main problem in both the banks. In MBL, the major problem is a high amount of lending in manufacturing sector, lending without collateral, non-performing loan & organizational structure for handing credit risk. In KBL, with the increase in total loan, NPL is also increasing. So, proper adjustment is needed for managing the NPL.

2.4 Research Gap

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make this study meaningful and purposeful. There are various researchers conduct on investment policy, lending practice, credit policy, financial performance and of various commercial banks. I have found this topic unique among them. In order to perform those analysis researchers have used various ratio analysis. The past researches in measuring credit risk management of bank have been focused on the limit ratios, which are incapable of solving the problems. In this research various ratio are systematically analyzed and generalized. Past Researchers are not properly analyzed about investment and its impact on the profitability. The ratios are not categorized according to nature. Here in this research all ratios are categorized according to their area and nature.

In this study of credit risk management of BOK and HBL bank ltd. is measuring by various ratios, trend analysis and various statistical tools as well and financial tools are used for analyzing survey data. Since the researcher have used data only five fiscal year but all the data are current and fact. Clearly these are the issue in Nepalese commercial bank the previous scholar could not the present facts. This study tries to define investment policy by applying and analyzing various financial tools like liquidity ratio, asset management, profitability ratio, credit risk ratio and other ratio as well as different statistical tools like coefficient of correlation and trend analysis. Probably this will be the appropriate research in the area of credit risk management of Bank and financial institutions.

CHAPTER - III
RESEARCH METHODOLOGY

Research in common parlance refers to a search for knowledge. The Webster international Dictionary gives a very inclusive definition of research. Research is a careful critical inquiry or examination in seeking facts and principles diligent investigation in order to ascertain something.

This chapter deals with the research methodology employed in the entire aspect of the study. Research methodology is the process of arriving at solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of facts and figures. The research has been done on topic "Comparative study on credit risk management of Bank of Kathmanndu and Himalayan Bank Ltd. In order to reach and accomplish the objectives of the study, different activities will be carried out. In other words, research methodology refers to the various methods of practices applied by the researcher in the entire aspect of the study. This chapter includes the research design, population and sample, nature and sources of data and analysis of data.

3.1 Research Design

A Research Design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. (Kothari, 1992:25). Research design is the plan, structure and strategy of investigation conceived to obtain answers to the research question and to control variances. To achieve the objectives of the study, descriptive an analytical research design has been used. Some statistical and financial tools have also been applied to examine facts and descriptive techniques have been adapted to Comparative study on credit risk management. The study is based on secondary data. So the descriptive and analytical research designs have been used.

3.2 Population and Sample

The method of selecting for study a small portion of the population to draw conclusion about characteristics of the population is known as sampling. Sampling may be defined as the selection of part of the population on the basis of which a judgment or inference about the universe is made. There are lots of mushrooming financial institute, Which are regarded as a population of the study. But it is not possible to cover the entire financial institute under the study. There are altogether 78 finance companies are operating in Nepal. Therefore, only two Banks have been taken as sample i.e.

Sample Bank

Bank of Kathmandu Limited

Himalayan Bank Limited

3.3 Sources of Data

There are two sources of data collection. The research is based on secondary source of data. All the adequate data are collected from secondary sources.

This refers to data that are already used and gathered by others. Secondary data are mostly used for this research purpose. Therefore, the major sources of secondary data are as follows

- Annual Report of concern Bank.
- Internet and E-mails.
- NRB directives.
- Economy survey of Government of Nepal and Ministry of finance.
- Newspaper, journals, articles and various magazines.
- Dissertation of Central Library of T. U. and Library of Shanker Dev Campus.

3.4 Data Collecting Procedures

The annual reports of the concerned banks were obtained from their head office and their websites. The main source of data are annual report of concern financial institute. NRB publication, such as Banking and Financial Statistics Economic Reports, Annual Reports of NRB etc .has been collected from the personal visit of concerned department of NRB at Baluwatar. Besides, a details review materials are collected from the library of Shanker Dev Campus and central library of T.U.

3.5 Tools and Techniques used

"The analysis of data consists of organizing, tabulating, and performing statistical analysis" (Wolf and Pant: 127)

In this study, various financial and statistical tools have been used to achieve the objective of the study. According to the pattern of data available, the analysis of data will be done. The various tools applied in this study have been briefly presented as under:

- Financial tools
- Statistical tools

3.6 Financial Tools

Financial performance is analyzed through the use of two important tools. The financial tool is one of the most important tool, which includes ratio analysis and the other one financial statement analysis have been used in this study. Financial tools are used to examine the financial strength and weakness of bank. Although there are many financial ratios, only selected ratios are used in this study.

3.6.1 Analysis of Financial Rations

The techniques of ratio analysis in of considerable significance in studying the financial stability, liquidity, profitability and the quality of management of the business and industrial concerns, the important ratios that are studied for this purpose are given below.

3.6.2 Ratio Analysis

Ratio analysis is a technique of analysis and interpretation of financial statement. To evaluate the performances of an organization by creating the ratios from the figure of different accounts consisting in balance sheet and income statement is known as ratio analysis. Five types of ratios have been analyzed in this study, which are related to fund mobilization of the banks. They are presented below:

3.6.2.1 Liquidity Ratio

Liquidity ratio measures the ability of the firm to meet its current obligations. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community. Liquidity provides honor strength health and prosperity to an organization. It is extremely essential for an organization to meet its obligations as they become due. A firm should ensure that it has not lack of liquidity and also that it is not too much highly liquid.

i) Current Ratio: This ratio shows the bank's short-term solvency. It shows the ratio of current assets over the current liabilities. This ratio can be computed by dividing the total current assets by total current liabilities which can be presented as:

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

Higher ratio indicates the strong short-term solvency position and vice-versa.

ii) Cash and Bank Balance to Total Deposits Ratio: - Cash and bank balance is said to be 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 unanticipated call on all types of deposit. Higher the ratio greater will be the ability to meet the sudden demand of deposit. But every ratio is not desirable since bank has to pay interest on deposit. This also maximizes the cost of fund to the bank.

$$\textit{Cash and Bank Balance to Total Deposits Ratio}\,\mathrm{X}\frac{\textit{Cashand Bank Balance}}{\textit{Total Deposits}}$$

Where**,**

Cash and bank balance is composed up of cash on hand including foreign cheques and other cash item; balance with domestic banks and aboard. Deposits include current, saving, fixed money at short call notice and other types of deposits.

iii) Cash and Bank Balance to Current Assets Ratio: - This ratio shows the bank's liquidity capacity on the basis of cash and bank balance that is the most liquid assets. High the ratio indicates the bank's ability to meet the daily cash requirements of their customer deposits and vice versa. But the high ratio is not preferred as the bank has to pay more interest on deposit and will increase the cost of fund. Low ratio is also very dangerous, as the bank may not be able to make the payment against the cheques presented by the customers. We have,

$$\textit{Cash and Bank Balance to Current Assets Ratio } \mathrm{X} \frac{\textit{Cashand Bank Balance}}{\textit{Current Assets}}$$

iv) Investment on Government Securities to Current Assets Ratio: - This ratio is used to find out the percentage of current assets invested on government securities, treasury bills and development bonds. We can find out as:

$$Inv.on\,Gvt.\sec urities\,to\,Current\ Asset\ Ratio\ \mathrm{X}\frac{Investmenton\,Govt.Securities}{Current\ Assets}$$

Where**,**

Investment on Government Securities involves treasury bills and development bonds etc.

3.6.2.2. Assets Management Ratio:

The assets management ratios measure how effectively the firm is managing its assets. These ratios are designed to answer this question; does the total amount of each type of assets as reported on the balance sheet seem reasonable or not? If a firm has excessive investments in assets, then its capital cost will be unduly high and its stock price will be suffer.

i) Loan and Advances to Total Deposits Ratio: - This ratio is calculated to find out how successfully the selected banks are utilizing their collections or deposits on loan and advances for the purpose of earning profit. We have,

$$\textit{Loan and Advances to Total Deposits Ratio}\,\mathrm{X}\frac{\textit{Loan and Advances}}{\textit{Total Deposits}}$$

ii) Total Investment to Total Deposits Ratio: - Investment is one of the major sources of earning profit. It shows how properly firm's deposit has been invested on government securities and shares and debentures of other companies.

$$\textit{Total Investment to Total Deposits Ratio} \ \text{X} \frac{\textit{Total Investment}}{\textit{Total Deposits}}$$

iii) Loan and Advances to Total Working Fund Ratio: - This ratio shows the ability of selected banks in terms of earning high profit from loan and advances. Loan and advances to working fund ratio can be calculated by dividing loan and advances amount by total working fund.

$$\textit{Loan and Advances to Total Working Fund Ratio} \ \text{X} \frac{\textit{Loan and Advance}}{\textit{Total Working Fund}}$$

iv) Investment on Government Securities to Total Working Fund Ratio: - Investment on government securities to working fund ratio shows how much part of total investment is there on government securities in percentage, it is calculated for this purpose by following formula:

$$\textit{Investment on Govt. Securities to TWF Ratio} \ \text{X} \frac{\textit{Investment on Govt. Securities}}{\textit{Total Working Fund}}$$

v) Investment on Shares and Debentures to Total working Fund Ratio: Investment on shares and debentures to total working fund ratio shows the investment of banks on the shares and debentures of other companies in terms of total working fund. This ratio can be obtained dividing on shares and debentures by total working fund. It is calculated as:

$$\textit{Investment on Shares and debn. to TWF Ratio} \ \text{X} \frac{\textit{Investment on Share and Debenture}}{\textit{Total Working Fund}}$$

3.6.2.3 Profitability Ratio:

This ratio is related to profit of the banks is essential for the survival of the bank, so it is regarded as the engine that drives the banks and indicates economics progress. It calculated to measure the overall efficiency of the banks.

i) Return on Loan and Advances Ratio: - Return on loan and advances ratio shows how efficiently the banks have utilized their resources to earn good return from provided loan and advances. This ratio is computed as,

$$\textit{Return on Loan and Advances Ratio}\ \mathrm{X}\frac{\textit{Net Profit / Loss}}{\textit{Loan and Advances}}$$

ii) Return on Total Working Fund Ratio: - Return on total working fund ratio measures the profit earning capacity by utilizing available resources i.e. total assets. Return will be higher if the bank's working fund is well managed and efficiently utilized. Maximizing taxes, this in the legal options available will also improve the return. We have,

$$\textit{Return on Total Working Fund Ratio}\ \mathrm{X}\frac{\textit{Net Profit}}{\textit{Total Working Fund}}$$

iii) Total Interest Earned to Total Working Fund Ratio: - This ratio reflects the extent to which the banks are successful in mobilizing these total assets to acquire income as interest. This ratio actually reveals the earning capacity of commercial banks by mobilizing its working fund. Higher the ratio higher will be the income as interest. We have,

$$\textit{Total Interest Earned to TWF Ratio}\ \mathrm{X}\frac{\textit{Total Interest Earned}}{\textit{Total Working Fund}}$$

iv) Total Interest paid to Total working Fund Ratio: - This ratio measures the percentage of total interest expenses on total working fund and vice-versa. This ratio is calculated as, Total Interest paid to Total Working Fund Ratio X $\frac{Total\ Interest\ Paid}{Total\ Working\ Fund}$

3.6.2.4 Risk Ratios:

Commonly, risk means chance or possibility of loss, uncertainty which lies in the business transaction of investment management. When a firm wants to bear risk and uncertainty, profitability and effectiveness of the firm is increased. This ratio checks the degree of risk involved in the various financial operations. For this study following risk ratios are used to analyze and interprets the financial data and investment policy.

i) Liquidity Risk Ratio: - The liquidity risk of the bank defines its liquidity need for deposit. The cash and bank balance are the liquid assets and they are considered as banks liquidity sources and deposit as the liquidity needs. The ratio of cash and bank balance to total deposit is an indicator of bank's liquidity of need. This ratio is low if funds are kept idle as cash balance but this reduces profitability, when the banks makes loan, its profitability increase and also the risk. Thus, higher liquidity ratio indicates less profitable return and vice-versa. This ratio is calculated as below:

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

ii) Credit Risk Ratio: - Bank utilizes its collected funds in providing credit to different sectors. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. Generally credit risk ratio shows proportion of non-performing assets in the total investment plus loan and advances of a bank it is computed as:

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

3.7 Statistical Tools

Under this heading some statistical tool such as coefficient of correlation analysis between different variables, trend analysis of deposit, loan and advances, net profit and EPS are used to achieve the objective of the study.

3.7.1 Average/Mean

An average is a single value related from a group of values to represent them in someway, a value, which is supposed to stand for whole group of which it is a part, as typical of all the values in the group. There are various types of averages. Arithmetic mean (AM, Simple & Weighted), median, mode, geometric mean, harmonic mean are the major types of averages. The most popular and widely used measure representing the entire data by one value is the AM. The value of the AM is obtained by adding together all the items and by dividing this total by the number of items.

Mathematically:

Arithmetic Mean (AM) is given by,

$$\bar{X}\ \mathrm{X}\frac{X}{n}$$

Where, $\bar{X}$ = Arithmetic mean

$\sum x$ = Sum of all the values of the variable X

n = Number of observations

3.7.2 Coefficient of variation

The coefficient of variation reflects the relation between standard deviation and mean. The relative measure of dispersion based on the standard deviations known as coefficient of variation. The coefficient of dispersion based on standard deviation multiplied by 100 is known as the CV. It is used for comparing variability of two distributions; the CV is defined as,

$$CV = \frac{\pm}{\bar{X}}\ \varepsilon\ 100$$

Greater the CV, the more variable or conversely less consistent, less uniform, less stainable and homogenous than the consistent more uniform, more stable and homogenous. This nature of CV uses that actual size of working capital.

3.7.3 Coefficient of correlation (r)

Correlation analysis is the statistical tools that we can use to describe the degree to which one variable is liner related to another. Coefficient of correlation is the measurement of the degree of relationship between two casually related sets of figure whether positive or negative. Its values lie somewhere ranging between - 1 to +1. If the both variables are constantly changing in the similar direction, the value of coefficient will be –1, two variables take place in opposite defection. The correlation is said to be perfect negative. In this study, simple correlation is use to examine the relationship of different factors with working capital and other variable.

Coefficient of correlation (r) = $\dfrac{\text{CoVariance of X \& Y}}{\pm_X \ \pm_Y}$

i) <u>Coefficient of Correlation between Deposit and Loan & Advances</u>.

Deposit have played a very important role in performance of commercial banks and similarly loan & advances are important to mobile the collected deposits. Coefficient of Correlation between deposit and loan & advances measures the degree of relationship between the two variables. In this analysis, deposit is independent variable (X) and loan & advances is dependent variables(Y). The main objectives of computing 'r' between these two variables are to justify whether deposits are significantly used on loan & advances in a proper way or not.

The following table shows the value of 'r', 'r$^{2'}$ probable Error (P.Er) and P.Er between deposit and loan & advances for the study period 2002/03 to 2006/07.

ii) <u>Coefficient of Correlation between Deposit and Total Investment</u>

Coefficient of correlation between deposit and total investment measures the degree of relation between these two variables. Here deposit is independent variable (x) and total investment is dependent variable(y). The purpose of computing coefficient of correlation between deposit and total investment is to find whether deposit is significantly used as Investment or not.

3.7.4 Trend Analysis

The easiest way to evaluate the performance of a firm is to compare its current ratios with past ratios. When financial ratios over a period of time are compared it is known as the trend analysis. It gives an indication of the direction of change and reflects whether the firm's financial performance has improved, deteriorated or remain constant over time. The projections are based on the following assumptions:

The least square method to trend analysis has been used in measuring the trend analysis. This method is widely used in practice. The straight-line trend of a series of data is represented by the following formula.

$Y = a + bx$

Here,

Y is the dependent variable, a is y intercept or value of y when x=0, b is the slope of the trend line or amount of change that comes in y for a unit change in x.

CHAPTER - IV
PRESENTATION AND ANALYSIS OF DATA

Introduction review of literature and research methodology is presented in the previous chapters that provide the basic inputs to analyze and interpret the data. Presentation and analysis of data is the main body of the study. In this chapter collected data are analyzed and interpreted as per the stated methodology in the previous chapter. The main sources of data are secondary data. In this chapter, researcher has analyzed and diagnosed credit risk management of Bank of Katmandu Limited and Himalayan Bank Limited Different tables and diagrams are shown to make the analysis simple and understandable. All the credit risk management is analyze by calculating following ratio.

4.1 Financial Analysis

In this part various financials ratios related to the credit management and fund mobilization are presented to evaluate and analyze the performance and risk of commercial Banks i.e. BOK and HBL. Some important financial ratios are only calculated in the point of view of fund mobilization and credit patterns. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another.

4.1.1 Ratio Analysis

Ratio analysis shows the mathematical relationship between two accounting figures. It helps to analyze the financial strengths and weaknesses of the banks. It is also inevitable for the quantitative judgment with which the financial performance of banks can be presented properly..

4.1.1.1 Liquidity Ratio

Commercial bank must maintain its satisfactory liquidity posting to satisfy the credit needs of community, to meet demands for deposit–withdrawals, pay maturity obligation in time and convert non-cash assets into cash to satisfy immediate needs without loss to bank and consequent impact on long-run profit. Liquidity ratio is mainly used to analyze the short-term strength of commercial banks.

A. Analysis of Current Ratio

This ratio measures the liquidity position of the commercial banks. It indicates the ability of Banks to meet the current liquidity.

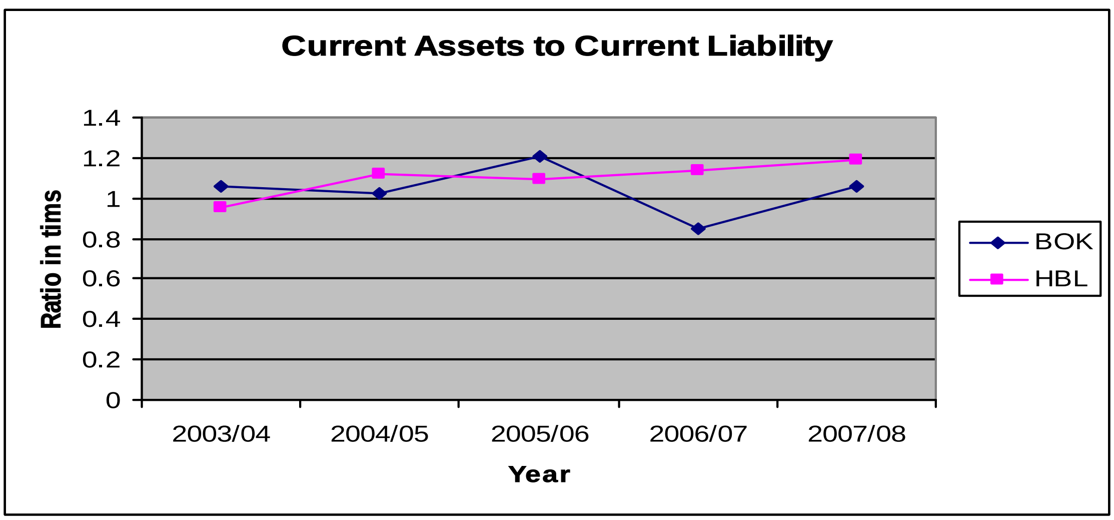
Table No. 4.1

Current assets to current liability (in times)

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	1.058	1.02	1.21	0.85	1.06	1.04	0.126	0.121
HBL	0.95	1.12	1.09	1.14	1.19	1.10	0.0904	0.082

Source: Annual Report of Concern Banks

Figure No 4.1



Above Table and Figure shows the current ratio of selected commercial banks during the study period. The current ratio of BOK and HBL is fluctuating trend. In general, it can be said that both the banks have sound ability to meet their short- term obligations. In the case of BOK the C.R. has high in 2005/06 and HBL has high in 2007/08 i.e. 1.19. In an average, liquidity position of HBL is greater than BOK i.e. 1.10>1.04 due to high mean ratio. So, HBL is sound in meeting short-term obligation than BOK. Likewise, S. D. and C.V. of HBL is less than BOK i.e. 0.082 < 0.121. It can be said that C.R. of HBL is more consistent than BOK.

Lastly, from the above analysis it is known that all these two banks have not better liquidity position because the standard ratio is 1:1. They have just met the standard ratio. Generally, banks require more liquid assets with compare to current liabilities in order to provide better bank service but these two banks have less liquidity position.

B) Cash and Bank Balance to Total Deposit Ratio

Cash and Bank Balance to Total Deposit Ratio indicates the bank ability to meet their daily requirement of depositors. Higher ratio shows the greater ability of the firms to meet customer demands on their deposits. Following table shows cash and bank balance to total deposit of BOK and HBL during the study period.

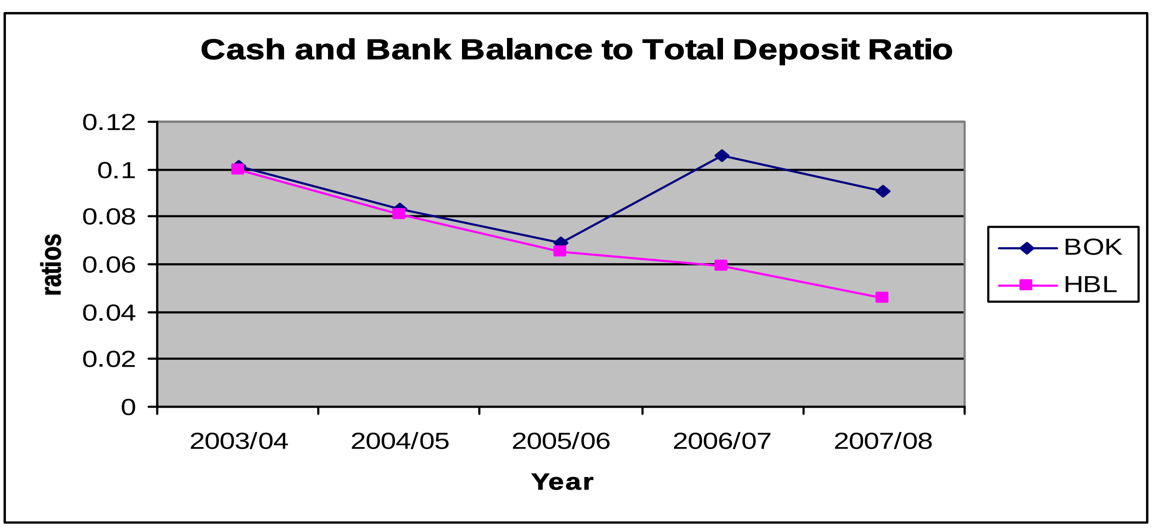
Table No. 4.2

Cash and Bank Balance to Total Deposit Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V. (%)
BOK	0.101	0.083	0.069	0.106	0.091	0.090	0.015	0.166
HBL	0.100	0.081	0.065	0.059	0.046	0.068	0.018	0.265

Source: Source: Annual Report of Concern Banks

Figure No 4.2



Above Table and Figure revels that the Cash and Bank Balance to Total Deposit Ratio of BOK and HBL are in fluctuating trend. The highest ratio of BOK is 0.106 times in FY 2006/07 and lowest is 0.069 times in FY 2005/06. Similarly, the highest ratio of HBL is 0.100 times in FY 2003/04 and lowers in 0.046 in 2007/08.

The mean ratio of BOK and HBL are 0.090 times and 0.068 times respectively. BOK has higher ratio than the HBL, which shows its greater ability to pay depositors money as they want. Similarly, the coefficient of variation of BOK is 0.166 times and HBL is 0.265 times. S.D. of BOK is lower than the HBL

The above analysis has to conclude that the cash and bank balance position of BOK with respect to HBL is better in order to serve its customer's deposits. It implies the better liquidity position of BOK from the viewpoint of depositor demand. In contrast a high ratio of cash and bank balance may be undesirable which indicates the bank's inability to invest its funds income generating areas. Thus BOK should invest in more productive sectors like short-term marketable securities insuring enough liquidity which will help the bank to improve its profitability.

C) Cash and Bank Balance to Current Assets Ratio

Cash and Bank Balance are the most liquid or quick assets. Cash and bank balance to current assets ratio represents the liquidity capacity of the firms as per cash and bank balance. Higher the ratios, better the ability of the firms to meet the daily cash requirement of their customers. But high ratio is not so preferred to the firms because firms have to manage the cash and bank balance to current asset ratio in such manner that firm may not be paid interest on deposits and may not have liquidity crisis.

Following the states the cash and bank balance to current assets BOK and HBL during the study period.

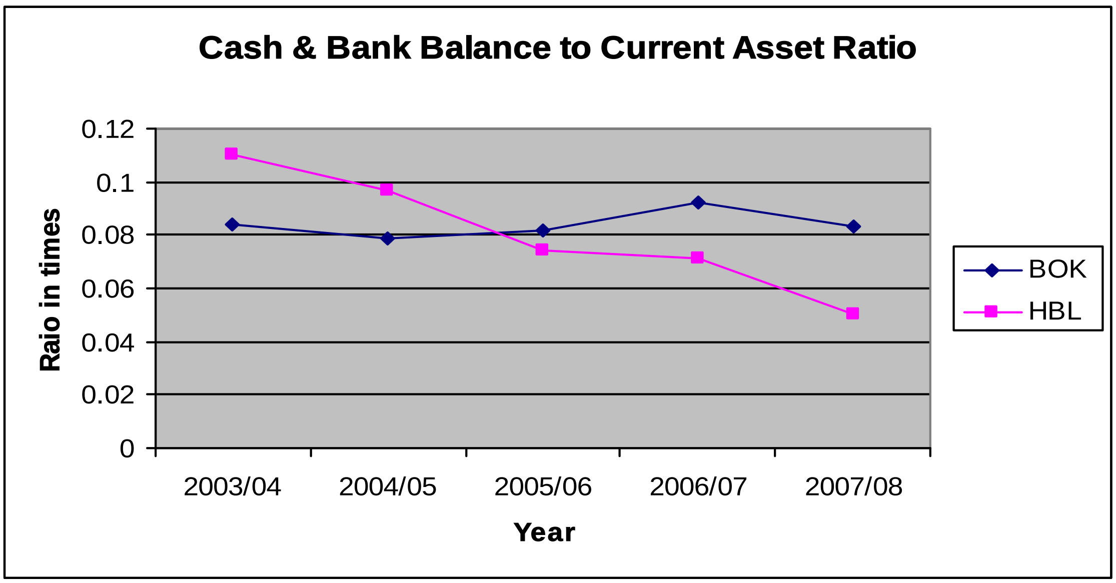
Table No. 4.3

Cash and Bank Balance to Current Asset Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.084	0.079	0.082	0.092	0.083	0.084	0.005	0.059
HBL	0.110	0.097	0.074	0.071	0.050	0.080	0.0237	0.296

Source: Source: Annual Report of Concern Banks

Figure No 4.3



Above Table and Figure reveals that cash and bank balance to current assets ratio of BOK is in fluctuating trend. But ratio of HBL is continuously decreasing to fiscal year 2007/08. The mean ratio of BOK and HBL is 0.084 times and 0.080 times respectively. The higher mean ratio shows BOK's liquidity position is better than that of HBL. Moreover, the .S.D and C.V. of HBL is higher than BOK. The higher C.V. of HBL indicates that it has more inconsistency in the ratios in comparison to BOK.

Regarding the above analysis, it can be concluded that BOK has a little bit better ability to meet daily cash requirements of their customers but there is not any fix policy to maintain the standard ratio of cash balance over the period.

D) Investment on Government Securities to Current Assets Ratio

This ratio examines that portion of a commercial bank's current assets, which is invested on different government securities. More or less, each commercial bank is interested to invest their collected funds on different securities issued by government in different times to utilize their excess funds and for other purpose. Although those securities can be sold easily in the financial market or they can be converted into cash, they are liquid assets like cash and bank balance. It shows the portion of current assets to banks that are invested on various securities. Government securities are the more secured investment alternatives. These securities are also called risk less investment but less return is generated than others risky assets.

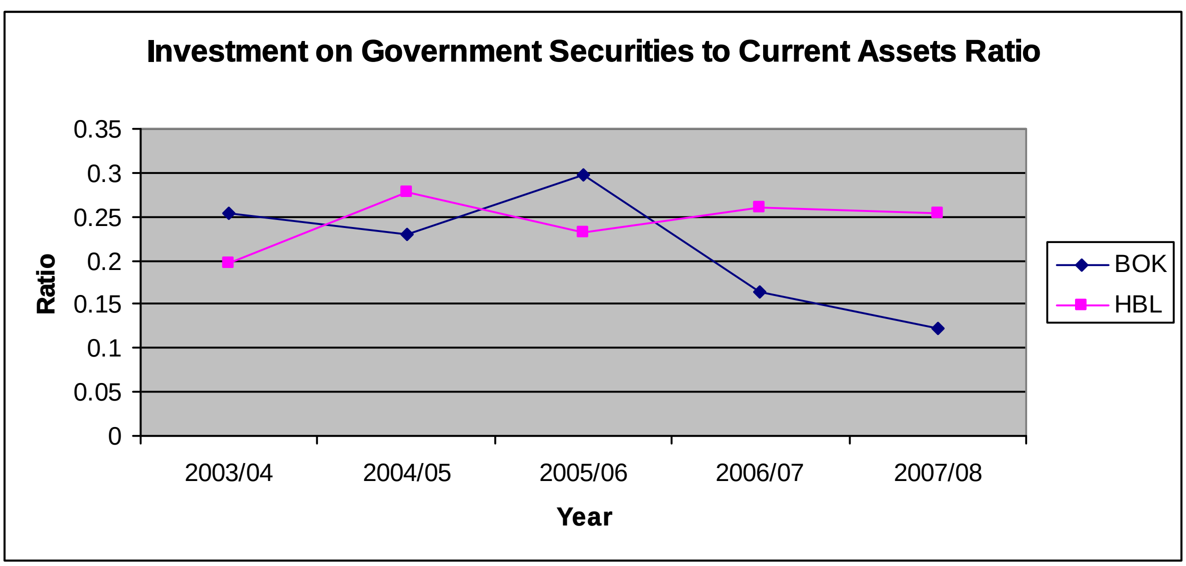
Table No. 4.4

Investment on Government Securities to Current Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.253	0.230	0.298	0.163	0.122	0.213	0.071	0.333
HBL	0.196	0.278	0.231	0.260	0.254	0.244	0.032	0.13

Source: Source: Annual Report of Concern Banks

Figure No 4.4



Above Table and Figure shows investment on government securities to current assets ratio of BOK and HBL. Both Banks has fluctuating type ratios. The table shows the highest ratio of BOK is 0.298 times in FY 2005/06 and lowest is 0.122 times in FY 2007/08.In the same way, the highest ratio of HBL is 0.278 times in FY 2004/05 and lowest is 0.196 times in FY 2003/04.

The mean ratio of BOK is 0.213 i.e. 21.3 percent which is lower than the mean ratio of HBL 0.244 i.e. 24.4 percent. It means HBL has invested more money in risk free assets than that of BOK. In another words BOK has emphases on more loan and advances and other short term investment than investment in govt. securities. For minimization of investment risk, BOK should divert its investment in govt. securities. Similarly, S.D. is 0.071 and 0.032 and C.V is 0.333 and 0.13 ok BOK and HBL.

The higher C.V. of BOK shows the more inconsistency in the ratios with compare to HBL.

4.1.1.2 Assets Management Ratio

A commercial bank must be able to manage it's assets very well to earn high profit, so to satisfy it's customers and for own existence. Assets management ratio measures how efficiently the bank manages the resources at its commands. Through following ratios, assets management ability of banks has been measured.

A) Loan and Advance to Total Deposit Ratio

This ratio actually measures the extent to which the banks are successful to mobilize the total deposit on loan and advances for the purpose of profit generation. A higher ratio of loan and advances indicates better mobilization of collection deposit and vice-versa. But it should be noted that too high ratio might not be better from its liquidity point of view. Following Table shows the loan and advances to total deposit ratio of related banks.

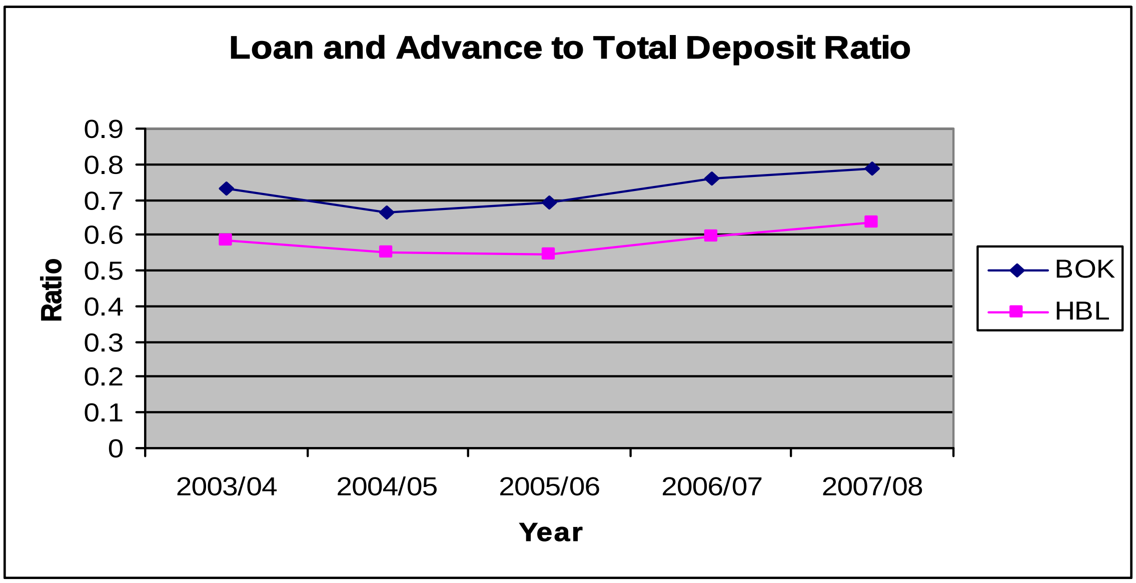
Table No. 4.5

Loan and Advance to Total Deposit Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.729	0.661	0.692	0.759	0.787	0.726	0.0503	0.069
HBL	0.587	0.549	0.544	0.595	0.634	0.582	0.0366	0.063

Source: Source: Annual Report of Concern Banks

Figure No 4.5



Above Table and Figure shows that the loan and advances to total deposit ratio of BOK and HBL is fluctuating trends. The ratio of BOK has more fluctuating trend. BOK has higher ratio than that of HBL in each year and mean too. It indicates the better mobilization of deposit by BOK. The mean of BOK and HBL are 72.6% and 58.18% respectively. So BOK has higher ratio than that of HBL. It reveals that the deposit of BOK is quickly converted in to loan and advances to earn income. According to NRB directives above 70% to 90% of loan and advances to total deposit ratio is able to better mobilization of collected deposit. So all of the year the BOK has met the NRB requirement or it has utilized its deposit to provide loan. But HBL has not met the NRB requirement or it has not utilized its deposit to provide loan properly.

The mean, S.D. and C.V of BOK is 0.726, 0.0503 and 0.069 similarly, HBL has 0.582, 0.0366 and 0.063. By the analysis, HBL has little used the deposit in profit generating sector than that of BOK

B) Total Investment to Total Deposit Ratio

Commercial banks and financial companies invest their collected funds in various government securities and other financial or non-financial companies. This ratio measures how successfully and efficiently the banks are mobilizing their funds on investment in various securities. This ratio of BOK and HBL are calculated and presentation below.

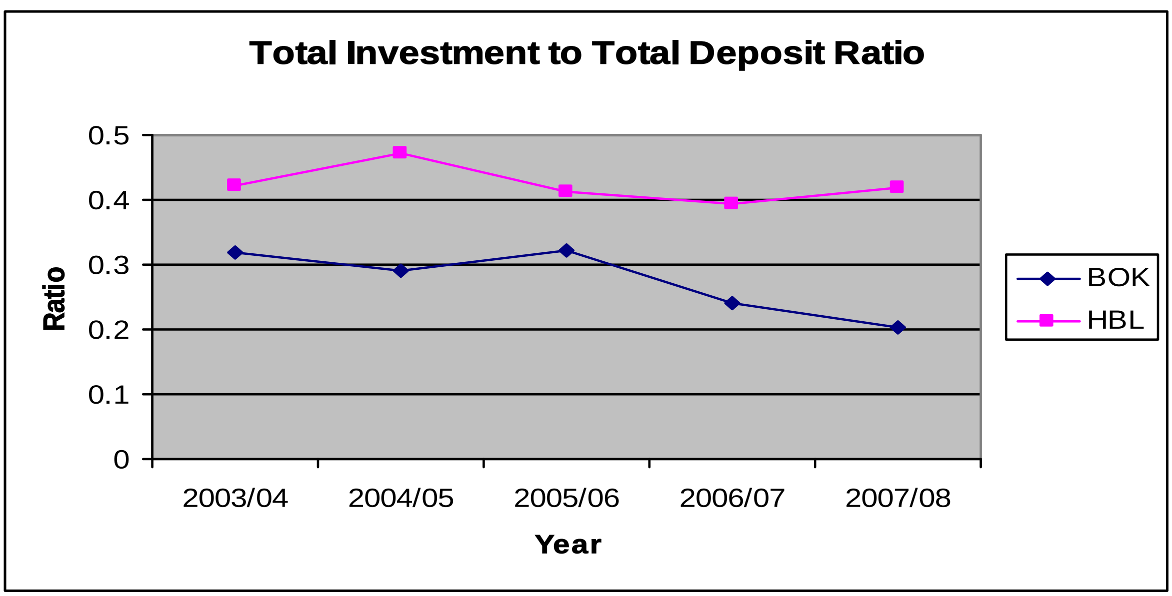
Table No. 4.6

Total Investment to Total Deposit Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.320	0.290	0.322	0.241	0.202	0.275	0.0522	0.189
HBL	0.422	0.471	0.411	0.394	0.419	0.423	0.029	0.068

Source: Source: Annual Report of Concern Banks

Figure No 4.6



Above Table and Figure shows that total investment to total deposit ratio of BOK and HBL. Both banks have fluctuating trend total investment to total deposit ratio. Higher ratio of BOK is 32.2 percent in FY 2005/06 and lowest ratio is 20.2 percent in FY 2007/08 in the same way the highest ratio of HBL 47.1% percent in FY 2004/05 and lowest ratio is 39.4% percent in FY 2006/07.Investment volume of BOK is lower than that of HBL because more funds of BOK were used in profitable loans to achieve optimum mix of interest earning assets.

The mean of the ratio of BOK and HBL are 27.50% and 42.34% respectively so HBL has higher ratio. It signifies HBL has successfully allocated its deposit in investment portfolio.

The C.V. of BOK is higher than HBL i.e. 0.189 > 0.068. So BOK seems to be more inconsistency

C) Loan and Advances to Total Assets Ratio

A commercial bank's working fund plays very active role in profit generation through fund mobilization. This ratio reflects the extent to which the banks are successful in mobilizing their total assets on loan and advances for the purpose of income generation. A high ratio indicates better mobilization of funds as loan and advance and vice-versa. The following table shows loan and advances to total assets of BOK and HBL as follows.

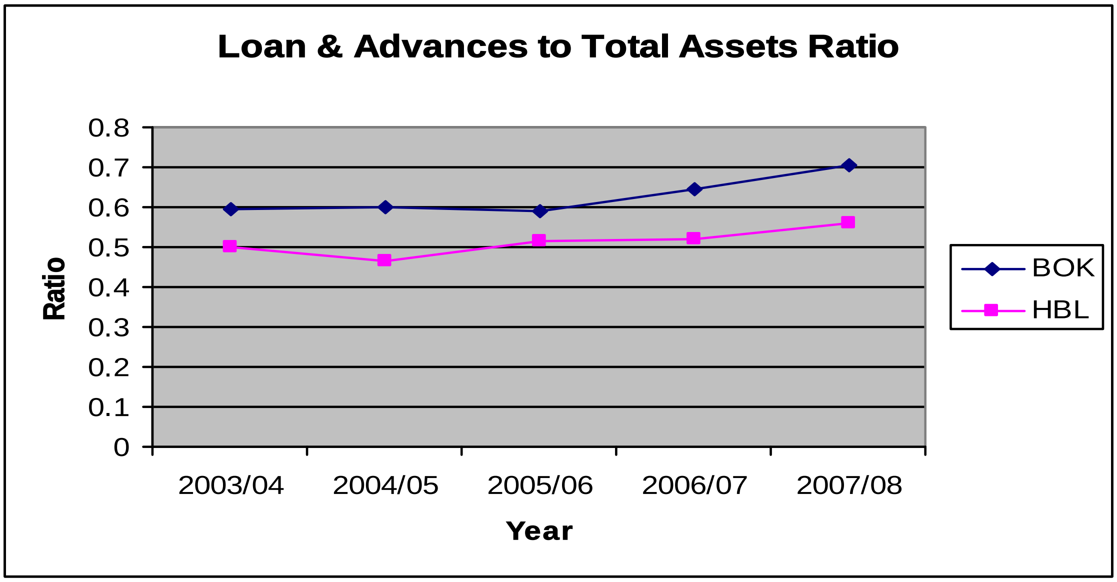
Table No. 4.7

Loan and Advances to Total Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.595	0.599	0.591	0.645	0.703	0.627	0.0479	0.076
HBL	0.502	0.466	0.515	0.519	0.558	0.512	0.033	0.065

Source: Source: Annual Report of Concern Banks

Figure No 4.7



Above Table and Figure shows the loan and advances to total assets ratio of BOK and HBL during the study period. Loan and advances to total assets of BOK is increasing trend and HBL has also increasing trend except in 2004/05. While observing their ratios; BOK is better mobilizing of fund as loan and advances and it seems quite successful in generating higher ratio in each year.

The mean of BOK and HBL are 62.7% and 51.20%% respectively. So BOK has higher ratio than that of HBL. It reveals that in total assets, BOK has high proportion of loan and advances. BOK has utilized its total assets more efficiently in the form of loan and advances. The higher C.V. of BOK states that it has less uniformity in these ratios throughout the study period than that of HBL. S.D. and C.V. of BOK has high than the HBL.

D) Investment on Government Securities to Total Assets ratio

It is not possible to apply all collection, deposit and other resources in to loan and advances for the banks. Therefore, they arrange their total assets in various sectors. Among all possible sectors, investment on government securities is one, which is very less risky. Invest on government securities to total assets ratio measures how successfully selected banks have applied their total assets on various forms of government securities in profit maximization and risk minimization point of view. The higher ratio represents the better position of fund mobilization into investment on government securities and vice-versa.

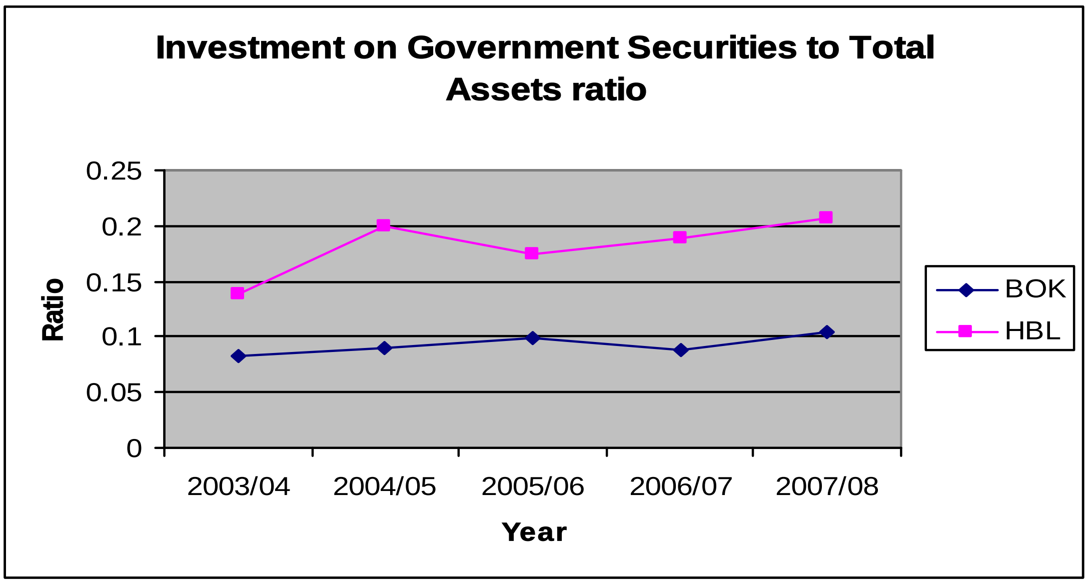
Table No. 4.8

Investment on Government Securities to Total Assets ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.083	0.090	0.099	0.088	0.104	0.093	0.0523	0.271
HBL	0.139	0.20	0.175	0.188	0.207	0.182	0.0268	0.148

Source: Source: Annual Report of Concern Banks

Figure No 4.8



Above Table and figure shows that the investment on government treasury bills to Total assets of BOK is in increasing trend except in 2006/07 and HBL are in fluctuating trend. The highest ratio of HBL is 10.4%% and HBL is 20.7% in 2007/08 and the lowest ratio of BOK and HBL are 8.3% and 13.9% in 2003/04 respectively.

From the table we notice that mean ratio of BOK and HBL are 9.30% and 18.20% respectively. HBL has higher ratio in every year and mean too. It means HBL has invested more money in risk free assets than that of BOK. In another words BOK has emphases on more loan and advances and other short-term investment than investment in govt. securities. For minimization of investment risk, BOK should divert its investment in govt. securities.

There is more variability in the ratio of BOK as compare to HBL. It shows there is more inconsistent in the ratio of BOK during the study period, which is indicated by higher C.V. of OBK. But there is inconsistent in its investment.

4.1.1.3 Profitability Ratio

The major performance indicator of any firm is profit. The objective of investment policy is to make good return. Any organization has to desire of earning high profited which helps to survive the firm and indicates the efficient operation of the firm. Profit is the essential part of business activities to meet internal obligation, overcome the future contingencies, make a good investment policy, expand the banking transaction etc.

Profitability ratios are the best indicators of overall efficiently. Here, those ratios are presented and analyzed which are related with profit as well as fund mobilization. Through the following ratios, effort has been made to measure the profit earning capacity of BOK and HBL.

A) Return on Loan and advances

Every financial institution tries to mobilize their deposits on loan and advances properly. So this ratio helps to measure the earning capacity of selected banks. Returns on loan and advances ratio of selected banks are presented as follows.

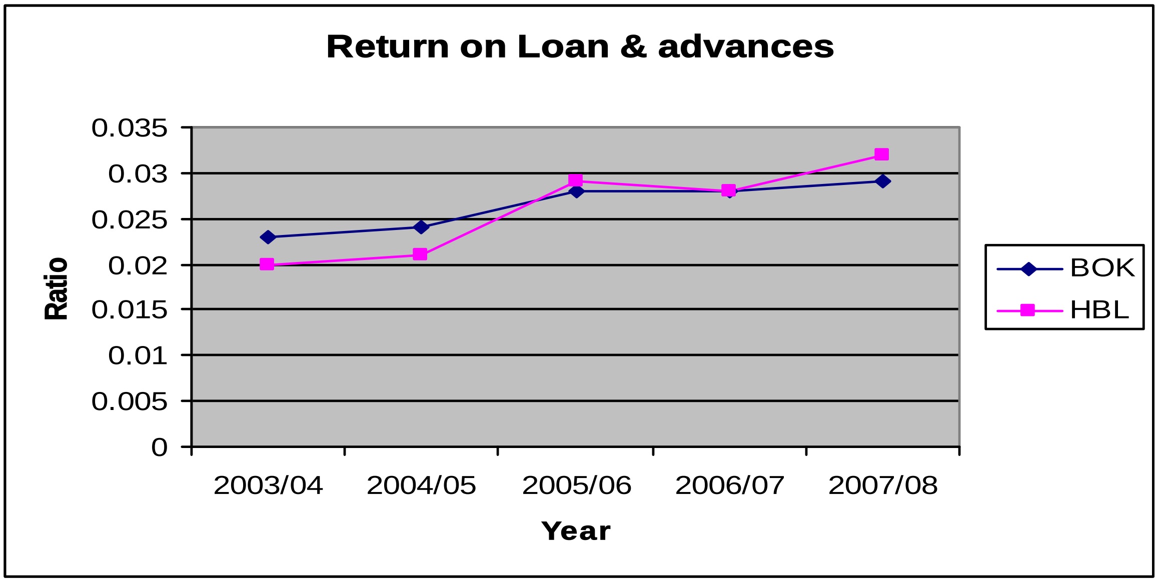
Table No. 4.9

Return on Loan and advances

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.023	0.024	0.028	0.028	0.029	0.026	0.0029	0.11
HBL	0.020	0.021	0.029	0.028	0.032	0.026	0.0045	0.17

Source: Source: Annual Report of Concern Banks

Figure No 4.9



Above Table and Figure shows that return on loan and advances ratio of BOK is in increasing trend and HBL is also in increasing trend except in 2006/07. The highest ratio of BOK is 2.90% in the year 2007/ 2008 and lowest ratio 2.30% in year 2003/2004. The mean ratio is 2.60%.Whereas highest ratio of HBL is 3.20% in year 2007/2008 and lowest ratio is 2.04% in 2003/2004. The mean ratio is 2.60%of HBL. This both banks show the normal earning capacity in loan and advances and same earning capacity in form of loan and advances.

From the table we notice that BOK has higher Ratios in preceding two years and HBL has higher ratios in subsequent two years and both banks have same mean ratio i.e. 2.60%. It can be concluded that both banks have utilized the loan and advance for the profit generation in same earning capacity. However both banks seem to have poor performance in order to have returns from loan and advances because of heavy less than five percents of return on loan and advances as five percent is benchmarking ratio in this case.

B) Return on Total Assets

This ratio measures the overall profitability of all working fund i.e. Total assets. A firm has to earn satisfactory return on working funds for its survival. The following table shows return on total assets ratio of selected banks.

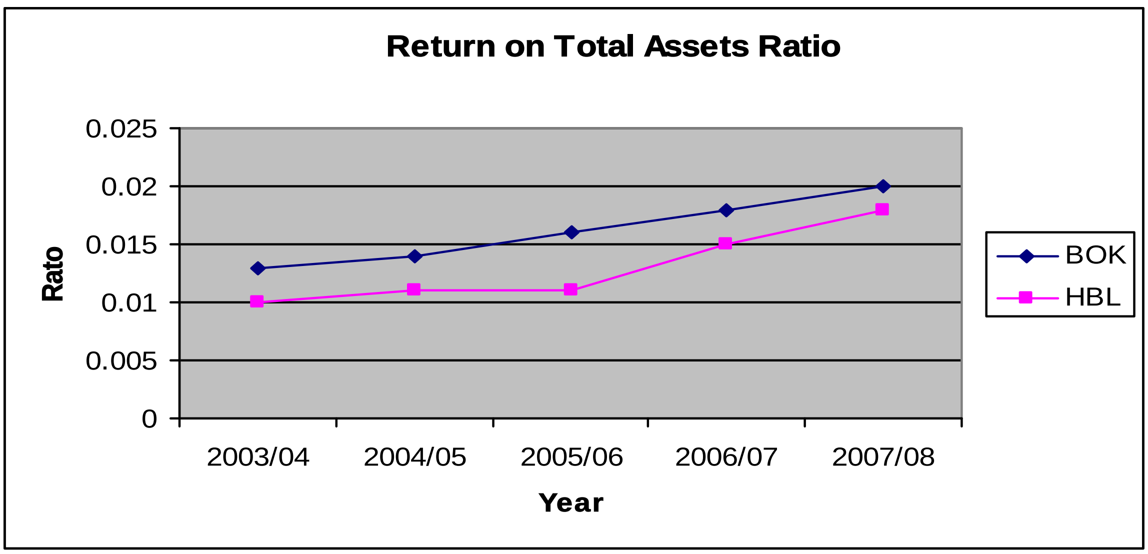
Table No. 4.10

Return on Total Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.013	0.014	0.016	0.018	0.020	0.0165	0.0029	0.176
HBL	0.010	0.011	0.011	0.015	0.018	0.013	0.0033	0.258

Source: Source: Annual Report of Concern Banks

Figure No 4.10



Above Table and Figure shows the Return on Total Assets of BOK and HBL. This table states the net profit to total assets of selected banks during the study period. Both banks have constantly increasing trend of return on its total assets however, BOK seems successful in managing and utilizing the available assets in order to generate revenue since its ROA ratio is 1.65.% of total assets in an average which is higher than that of HBL. BOK has also higher ratio in each years. Where as S.D. and C.V .of HBL has relatively high it indicate less uniformity in the ratios.

C) Return on Equity

Equity capital of any bank is its owned capital. The prime objective of any bank is wealth maximization or in other words to earn high profit and there by, maximizing return on its equity capital. Return on equity plays the measuring role of profitability of bank. It reflects, the extend to which the bank has been successful to mobilize or utilize its equity capital. A high ratio indicates higher successful to mobilize its owned capital and vice-versa. Following table shows the return on equity of BOK and HBL during the study period.

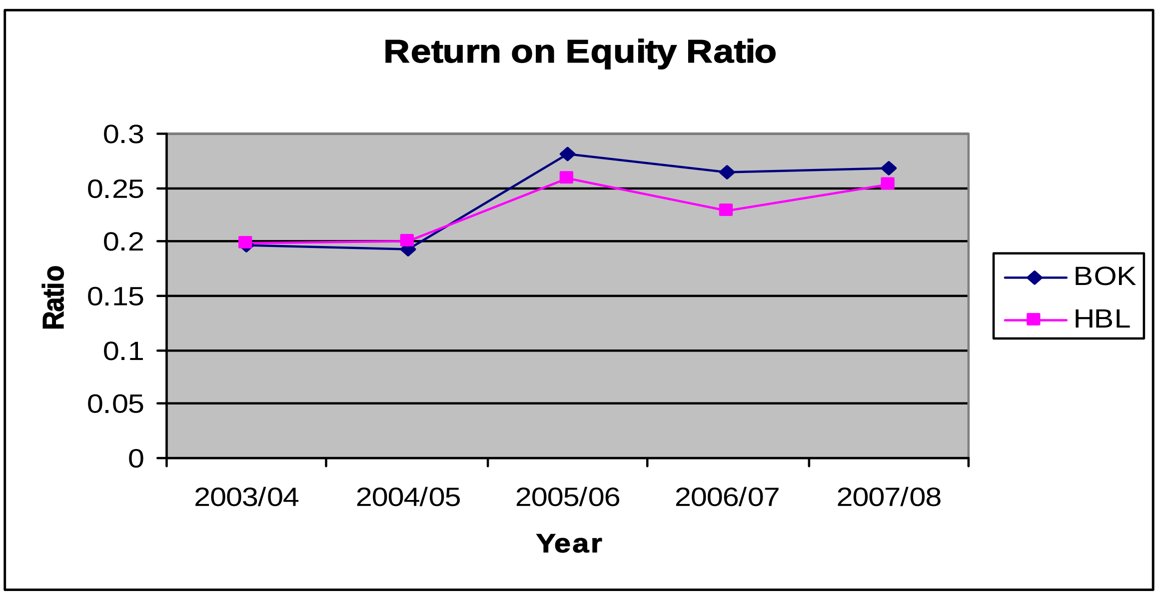
Table No. 4.11

Return on Equity Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.196	0.193	0.281	0.264	0.269	0.241	0.0425	0.176
HBL	0.199	0.200	0.259	0.229	0.253	0.228	0.0284	0.125

Source: *Source: Annual Report of Concern Banks*

Figure No 4.11



Above table and Figure shows Return on Equity Ratio of BOK and HBL. Above calculated statistic indicate that BOK and HBL have fluctuating return on equity ratio.

BOK has lower ratio in 1st two years and BOK has higher ratio in last 3 years. However, BOK has higher mean ratio than that of HBL (i.e. 24.1%>22.8%).

Despite stiff competition and an adverse macro economic environment, BOK is currently generating higher ROE in comparison with HBL. In brief, it signifies that the shareholders of BOK are getting higher return but in case of HBL, they are getting lesser. It can be concluded that BOK has better utilized the equity for the profit generation. It proves to be a good strength of BOK in attracting future investment also while HBL shows its weakness regarding efficient utilization of its owner's equity in comparison with BOK.

BOK has relatively more inconsistency through out the study period because its C.V is higher.

D) Total Interest Earned to Total Assets Ratio

Total interest earned to total assets ratio evaluates how successful the selected banks are mobilizing their total assets to achieve high amount of interest. Higher the ratio indicates the higher interest income of the selected sample banks. The total interest earned to total assets ratio of BOK and HBL

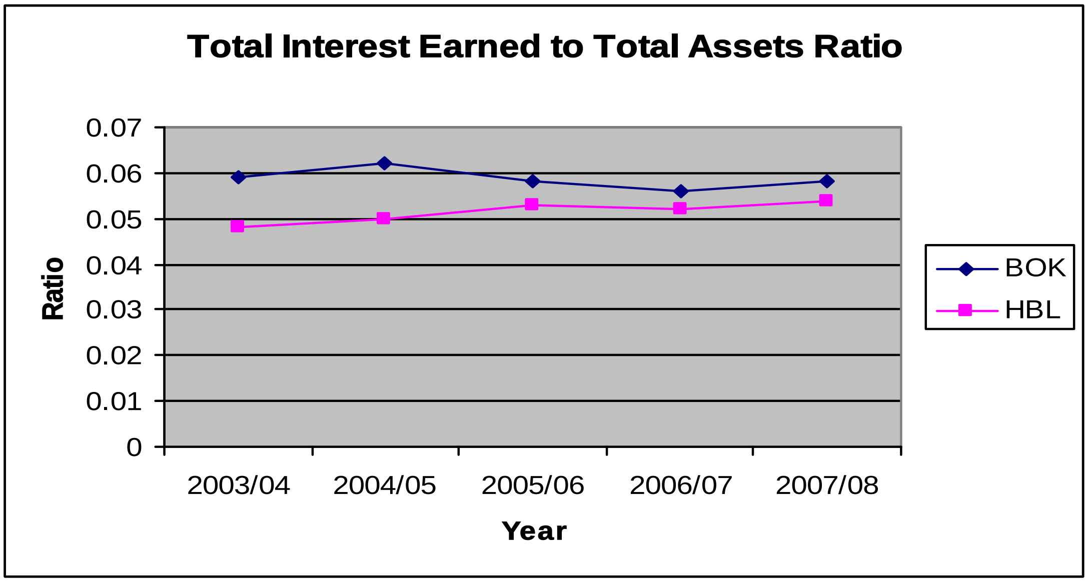
Table No. 4.12

Total Interest Earned to Total Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.059	0.062	0.058	0.056	0.058	0.059	0.002	0.034
HBL	0.048	0.050	0.053	0.052	0.054	0.052	0.0024	0.046

Source: Source: Annual Report of Concern Banks

Figure No 4.12



Above Table and Figure, shows both have increased total interest earned during studied period. Despite the higher Total assets and interest earned in HBL, it seems less conscious about managing its assets in order to earn more interest ratio. HBL shows the increasing trend of the interest earned ratio and its average ratio is 5.20% whereas BOK shows fluctuating trend and it has maintained average ratio 5.90%. The mean ratio of BOK is more than that of HBL. In comparison, BOK seems effective in earning interest to some extent

Moreover, BOK also has higher uniformity in the ratios during the study period. It can be concluded that BOK has successfully mobilized their fund in interest generating assets.

E) Total Interest Earned To Total outside Assets Ratio

The main assets of commercial banks are it's out side assets, which includes loan and advances, investment on government securities, investment on shares and debentures and other all types of investment. Thus, this ratio reflects the extent to which the banks are successful to earn interest as major income on all the outside assets. A high ratio indicates high earning on such total assets and vice-versa. The following Table No. 4.15 exhibits the ratio of total interest earned to total outside assets of BOK and HBL during the study period.

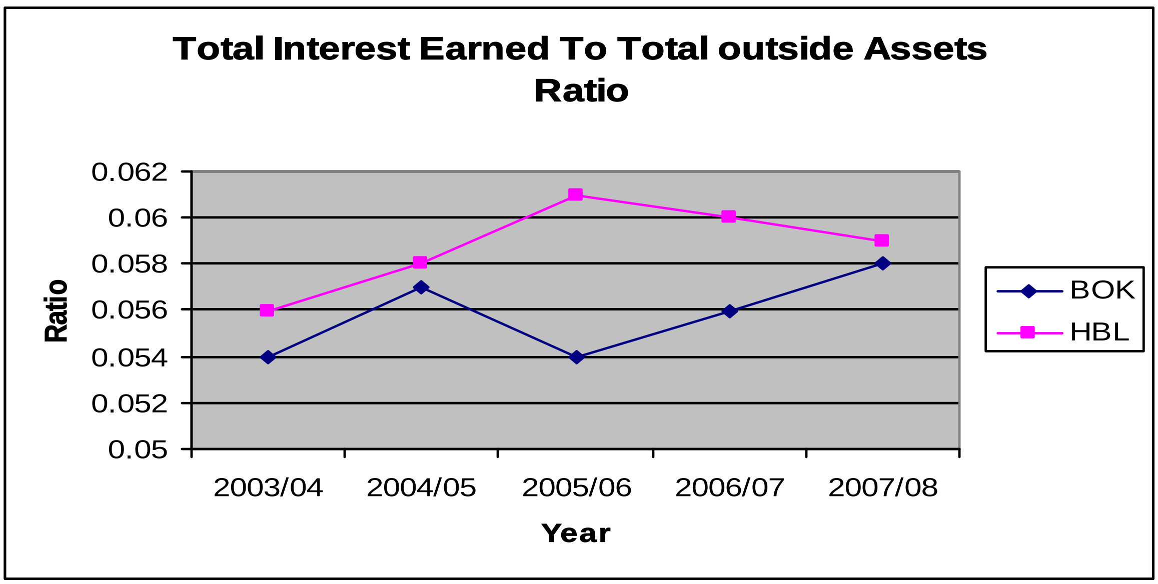
Table No. 4.13

Total Interest Earned To Total outside Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.054	0.057	0.054	0.056	0.058	0.056	0.0018	0.032
HBL	0.056	0.058	0.061	0.060	0.059	0.059	0.0019	0.032

Source: Source: Annual Report of Concern Banks

Figure No 4.13



Above Table and Figure shows the total interest earned to total outside assets ratio. The total interest earned to total outside assets ratio of both bank BOK and HBL are in fluctuating trend. The highest ratio 5.8 percent in 2007/08 and lowest ratio is equal in 2003/05 and 2005/06 of BOK. Similarly, the highest ratio 6.1 percent in 2005/06 and lowest ratio 5.6 percent is in 2003/04 of HBL. The mean ratio of BOK and HBL are 5.60% and 5.90% respectively. Here HBL seems to have more efficiency in generating total interest through well utilizations of outside assets. But it has relatively inconsistent in returns.

F) Total interest Earned to Total Operating Income Ratio

Total interest earned to total operating income ratio reveals that portion of interest income on total operating income of the firms. The major sources of income for the bank are interest income so the banks should mobilize their funds in more interest generating sectors considering the risk and return. This ratio measures how successfully the selected banks have been mobilizing their fund uninterested generating assets during last from FY 2003/04 to 2007/08 are presented to analyze in the following table. The major sources of income for the bank are interest income. So the banks should mobilize their funds in more interest generating sectors considering the risk and return.

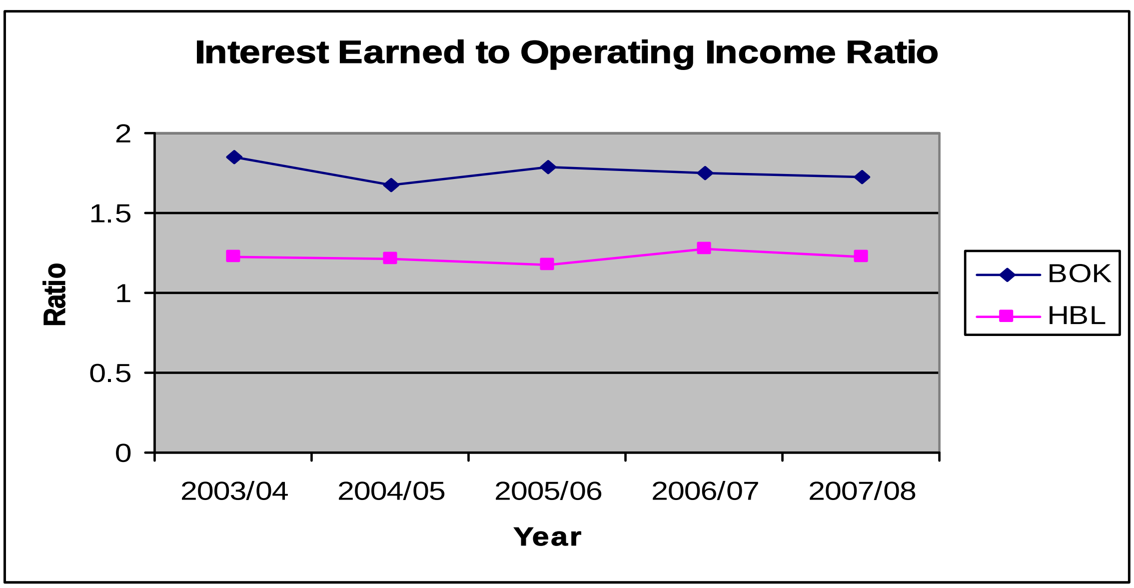
Table No. 4.14

Interest Earned to Operating Income Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	1.85	1.67	1.79	1.75	1.72	1.76	0.066	0.037
HBL	1.22	1.21	1.17	1.27	1.23	1.22	0.039	0.032

Source: *Source: Annual Report of Concern Banks*

Figure No 4.14



Above table shows Interest Earned to Operating Income Ratio of BOK and HBL. Both banks has fluctuating ratio of study period. BOK has greater share of total interest earn in its total operating income in each year and mean too. The mean ratio of HBL and BOK are 1.76 times and 1.22 times respectively. BOK has higher ratio, it indicates the high contribution in operating income made by lending and investing activities (core banking activity).HBL has lower ratio, it indicates that high contribution in operating income do not made by lending and investing activities (core banking activity).High contribution in operating income made by lending and investing activities (core banking activity) is not good for long run but in short run it is not so bad. Thus, from short term view, BOK is in good condition but from long term view, HBL is in good condition. In overall, HBL has managed sound interest earned to operating income ratio.

The mean, S.D. and C.V of BOK is 1.76, 0.066 and 0.037 times similarly HBL have 1.22, 0.039 and 0.032 times.

G) Total Interest Paid to Total Assets Ratio

Total interest paid to total assets ratio help to show and measure the percentage of interest paid by the firm in comparison with total assets. If interest paid to total assets ratio is higher, there will be higher interest expenditure on total assets. The following table shows that total interest paid to total assets of BOK and HBL.

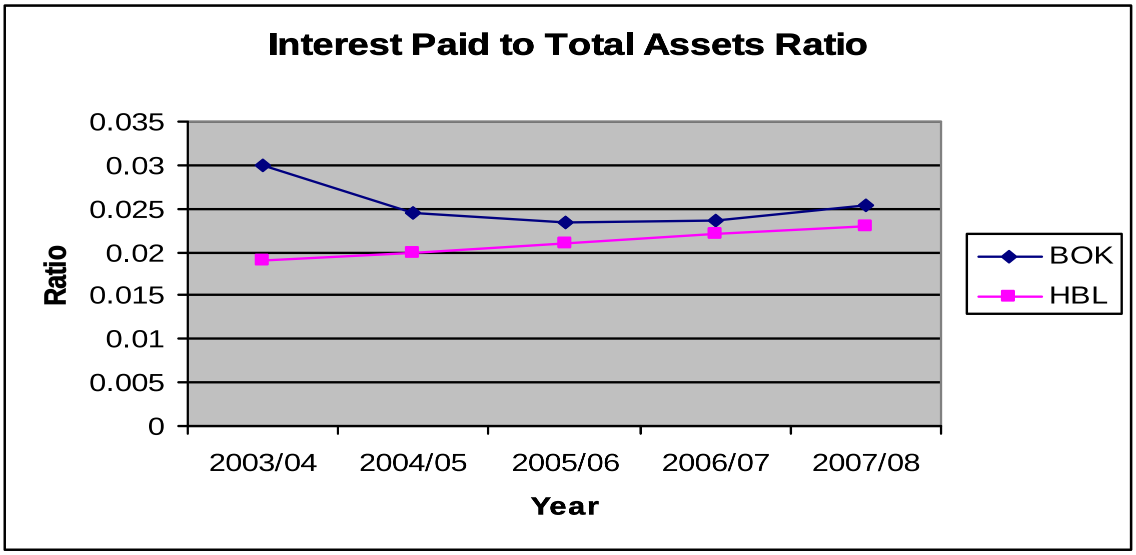
Table No. 4.15

Interest Paid to Total Assets Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.030	0.0245	0.0233	0.0236	0.0253	0.025	0.0028	0.111
HBL	0.019	0.020	0.021	0.022	0.023	0.021	0.0017	0.081

Source: Source: Annual Report of Concern Banks

Figure No 4.15



Due to the higher ratio in each year of BOK, it seems less conscious about borrowing cheaper fund. BOK shows the decreasing trend of the interest paid ratio except in subsequent two years and its average ratio is 2.50% whereas HBL also shows increasing trend and it has maintained average ratio2.10%. The mean ratio of BOK is more than that of HBL. In comparison, BOK seems ineffective in getting cheaper fund from the mean point of view. However, BOK has been conscious in each year for getting cheaper fund as it has decreased ratio in each year whereas HBL has been less conscious in each year as its ratio is in increasing trend in each year.

The S.D. and C. V. of BOK is greater than the HBL it indicate high risk and insignificant of BOK rather than HBL

4.1.1.4 Activity Risk Ratio

Risk and uncertainty is a part of business loss. All the business activities are influenced by risk, so business organization cannot achieve a good return as per their desires. The profitability of risk makes banks investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is compensated by the increase in profit. So the banks options for high profit have to accept the risk and manage it efficiently. A bank has to have idea of the level of risk of risk that one has to bear while investing its funds.

Through following ratios, effort has been made to measure the level of risk inherent in the BOK and HBL.

A) Credit Risk Ratio/Non-Performing Loan to Total Loan Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition, credit risk ratio is expressed as the percentage of non- performing loan to total Loan and Advances.

Bank utilizes its collected funds by providing credit to different sections. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. The credit risk ratio shows the proportion of no-performing assets in total Loan and Advances. Higher ratio indicates more risky assets in the volume of Loan and Advances of the bank and vice-versa.

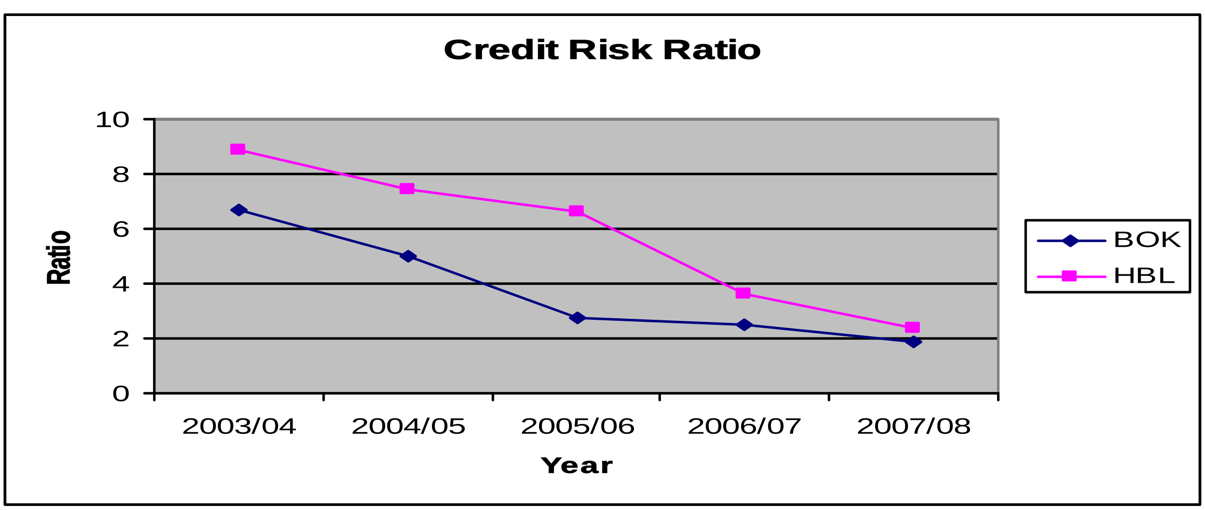
Table 4.16

Credit Risk Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	6.66	4.99	2.72	2.51	1.86	3.75	2.011	0.53
HBL	8.88	7.44	6.60	3.61	2.36	5.78	2.71	0.47

Source: Source: Annual Report of Concern Banks

Figure No 4.16



Above table shows that NPL to total loan and advances of BOK and HBL are in decreasing trend. Decreasing trend is the good sign of the efficient credit management. From mean point of view, non-performing loan to total loan and advances ratio of BOK and HBL are3.75 % and 5.78% respectively during the study period. These Ratios indicate the more efficient operating of credit management of both banks according to NRB directives. However, in comparison, BOK has efficient operating of credit management than that of HBL. In another words, HBL has lower efficient operating of credit management than that of BOK. As, BOK has lower ratio, BOK has efficiently used the total loan and advances than that of HBL Here BOK is more successful in loan recovery because it has lower non performing loan in total Loan and Advances.

(B) Liquidity Risk Ratio:

The liquidity risk of the bank defines its liquidity need for deposit. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposit as the liquidity needs. The ratio of cash and bank balance to total deposit is an indicator of bank's liquidity of need. This ratio is low if funds are kept idle as cash balance but this reduces profitability, when the banks makes loan, its profitability increase and also the risk. Thus, higher liquidity ratio indicates less profitable return and vice-versa. This ratio is calculated as below:

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

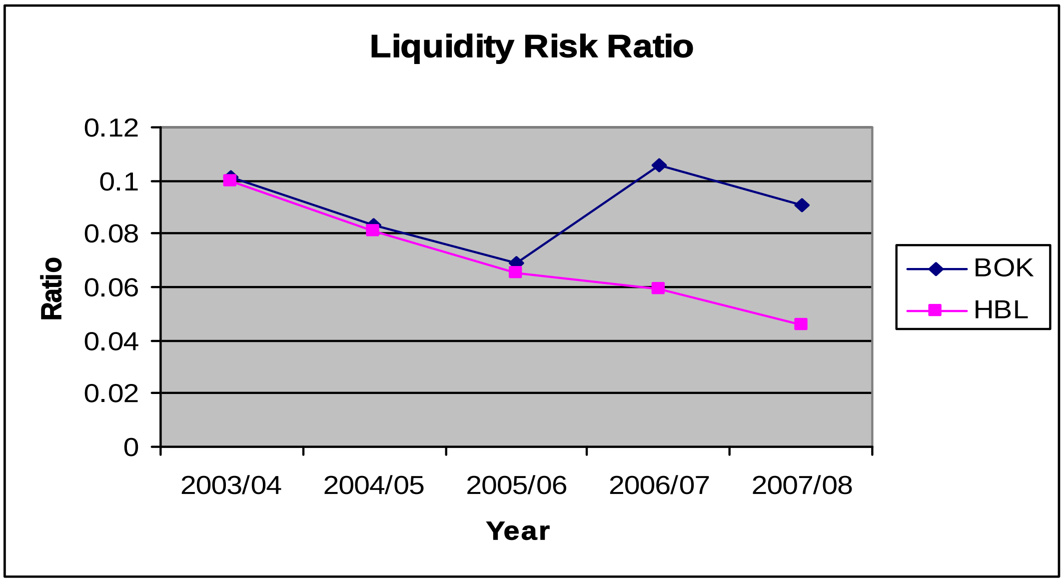
Table: 4.17

Liquidity Risk Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.101	0.083	0.069	0.106	0.091	0.090	0.015	0.166
HBL	0.100	0.081	0.065	0.059	0.046	0.068	0.018	0.265

Source: *Annual Report of Concern Banks*

Figure No 4.17



Above Table and Figure shows cash and bank balance to total deposits ratio of the BOK is in fluctuating trend whereas ratio of HBL is in decreasing trend in 2006/07. The higher ratio of BOK and HBL are 10.6% and 10.0%% respectively in 2006/07 and 2003/04 respectively year whereas lower ratio of BOK and HBL are 6.9% and 4.6% in 2005/06 and 2007/08 respectively. The average mean ratio of BOK is greater than that of HBL (i.e.9.00%>6.80%). It signifies that BOK has sound liquid fund to make immediate payment to the depositors

(D) Asset Risk Ratio

Bank utilizes its collected funds in providing credit to different sectors. There is risk of default or non-repayment of loan. While making investment, bank examines the credit risk involved in the project. Generally Asset risk ratio shows proportion of non-performing assets in the total investment plus loan and advances of a bank it is computed as:

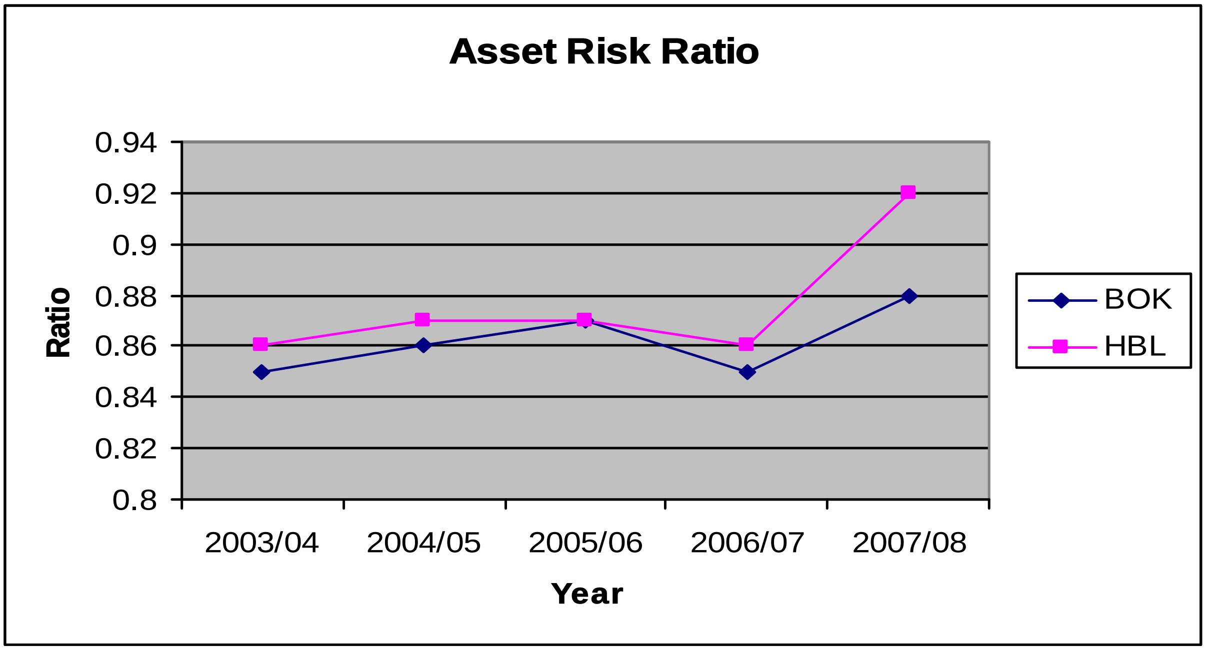
Table: 4.18

Asset Risk Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	0.85	0.86	0.87	0.85	0.88	0.86	0.013	0.015
HBL	0.86	0.87	0.87	0.86	0.92	0.88	0.027	0.031

Source: *Annual Report of Concern Banks*

Figure No 4.18



The above table shows the Asset risk ratio of BOK and HBL. The analysis shows that BOK and HBL have the Asset risk ratio in fluctuating trend. BOK has highest and lowest ratio of 88% and same 85% in the year 2007/08 and 2003/04 and 2006/07 respectively. Similarly HBL has the highest and lowest ratio of 92% and 86% in the same year 2007/08 and 2003/04 and 2006/07 respectively. The mean ratio of BOK is lower than that of HBL (i.e.88% %< 92%). The S.D. and C.V. both are higher of HBL i.e 0.27 > 0.013 and 0.031 > 0.015 than the BOK.

4.1.1.6 Other Ratios

A) Earning Per Share

EPS measure the efficiency of a firm in relative terms. It is a widely used ratio, which measures the profit available to the ordinary shareholders on per share basis. Earning per share calculation made over years indicates whether the bank's earning power on per share basis has changed over that period or not but it doesn't reflect how much is paid as dividend and how much is retained in the business. Following table shows the EPS of related banks during the study period.

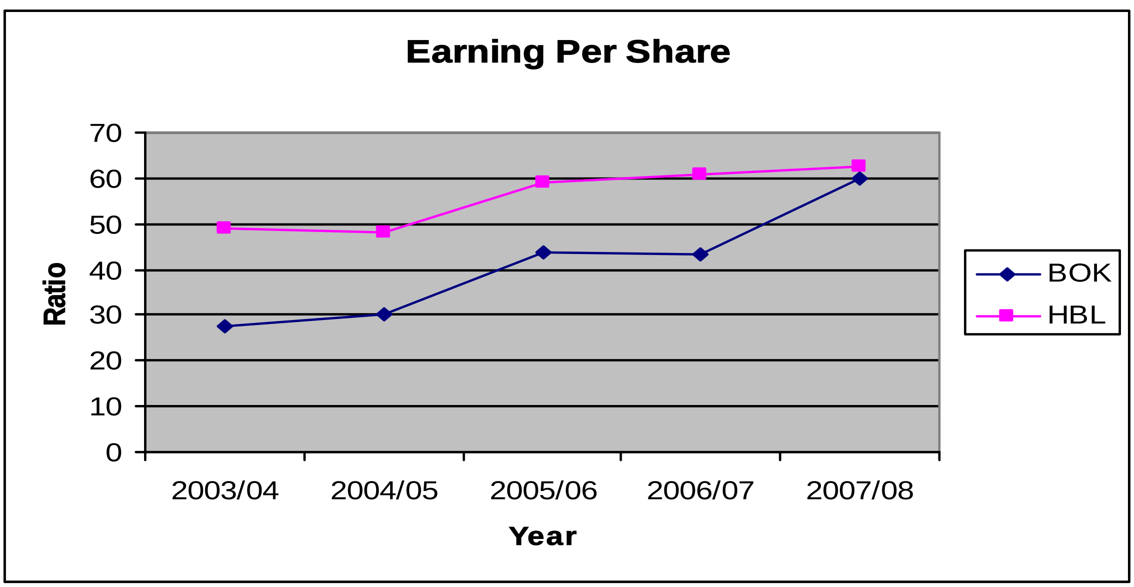
Table No. 4.19

Earning Per Share

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	27.49	30.09	43.67	43.50	59.93	40.94	12.97	0.32
HBL	49.05	47.91	59.24	60.66	62.74	55.92	6.917	0.12

Source: *Annual Report of Concern Banks*

Figure No 4.19



Above Table and Figure shows that earning price per share of BOK and HBL. BOK has increasing trend of EPS except 2006/07 and HBL has increasing trend of EPS except in 2004/05. While observing their ratios in overall; HBL is better mobilizing it resources to get more earning per share (EPS) and it seems quite successful by generating higher EPS in each year and in average too. It is quite satisfying to state that HBL has been able to maximizing shareholder wealth from the view pointy of EPS.

The S.D of BOK is higher than HBL. C.V. of HBL is lower.

B) Dividend per Share

Shareholders want to receive dividend from their investment. They may have interest to know about the firm's activities, earning, and dividend so; each firm must announce the total dividend and dividend per Share which shows the position of the firm.

A firm wants to distribute dividend to its shareholder if a firm suppose the insufficient investment opportunities and sector. Sometimes, it does not distribute dividend and sometime issues bonus shares. On the other hand, shareholders want to receive dividend from their investment. They may have interest to know about the firm's activities, earning, divisible profit or proposed dividend or declared dividend. So, each firm must announce the total dividend and dividend per share which show the position of the firm.

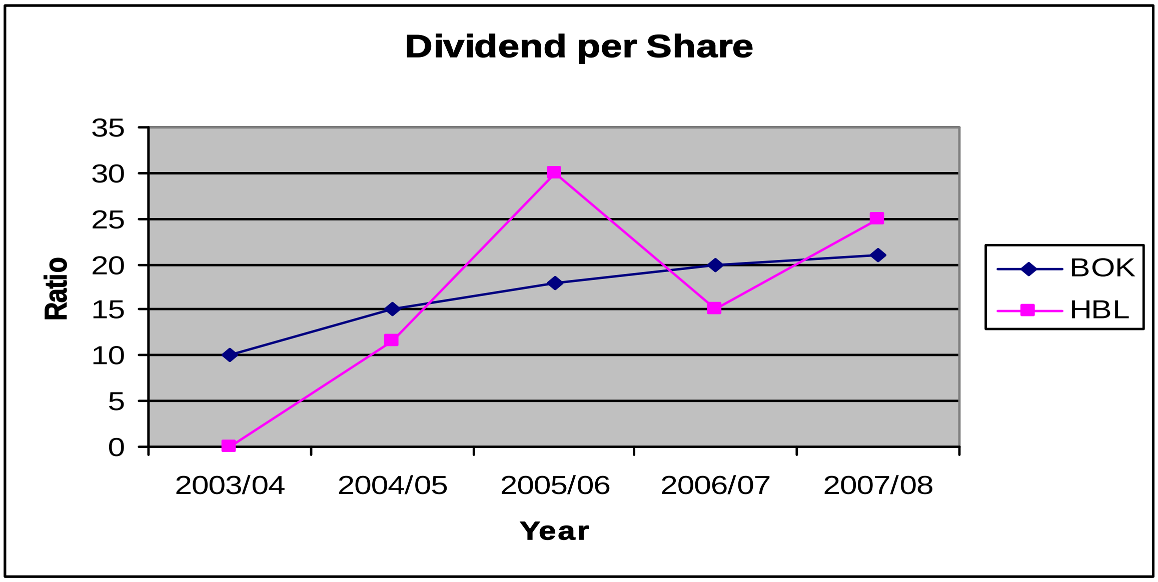
Table No. 4.20

Dividend per Share

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	10	15	18	20	21.1	16.8	4.44	0.26
HBL	0	11.58	30	15	25	16.32	11.76	0.72

Source: Annual Report of Concern Banks

Figure No 4.20



The above statistics shows the dividend per share of HBL and BOK seem to be equal that of BOK in2005/06 and in 2007/08 and in other studied period BOK has higher ratio. Average dividend per share of BOK is little higher than that of HBL (i.e16.8>16.32), the S.D. of HBL is high so it indicate high volatile in dividend and high C.V. indicate more inconsistency in dividends during the study period.

It can be concluded HBL has adopted the policy of paying high amount in the form of cash dividends where as BOK is trying to capitalized its earnings by keeping it in the form of retained earnings.

C) Market Price per Share

Market price per share is the price at which shares are traded in the stock market. The secondary markets provide liquidity for securities purchased in primary market. Generally MPS is determined through supply and demand factors.

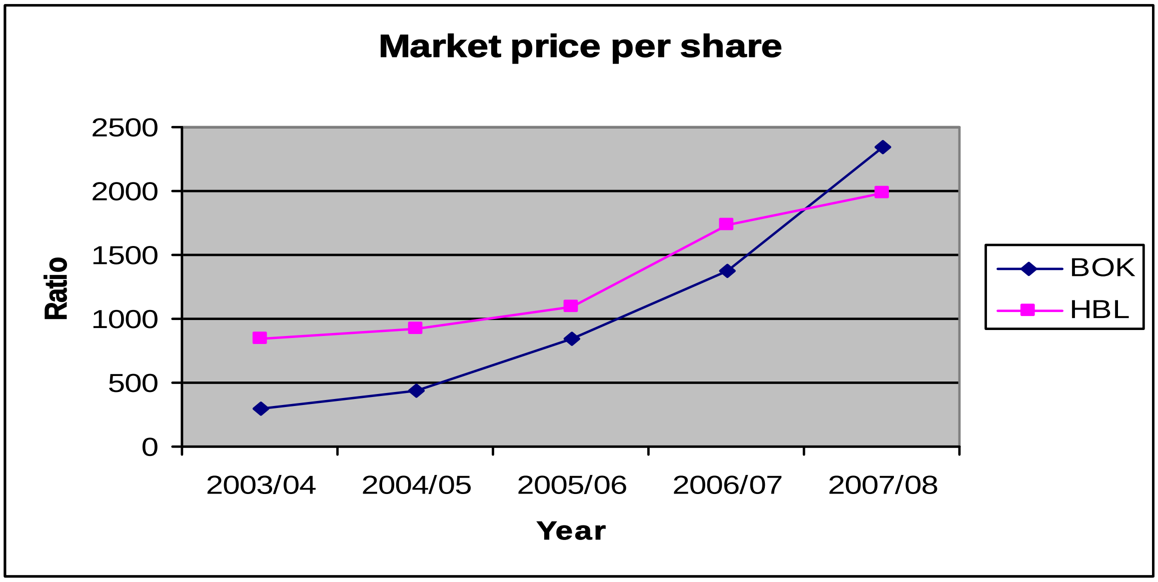
Table No. 4.21

Market price per share (in Rs)

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	295	430	850	1375	2350	1060	835.1	0.788
HBL	840	920	1100	1740	1980	1316	512.52	0.389

Source: Annual Report of Concern Banks

Figure No 4.21



Above Table and Figure shows market price of the share of BOK and HBL. Both bank BOK and HBL has increasing trend of Market price. Its indicate better performance of company and high expectation by shareholder. Average mean price of HBL is greater than that of BOK. i.e. 1316 >1060. It indicates that shareholder of HBL are getting higher price. The S.D. and C.V. of BOK high than HBL.

D) Price Earning Ratio

This ratio is closely related to the earning per share. It is calculated by dividing the market value per share by EPS. Price earning ratio indicates investor's judgments or expectation about the firm's performance. This ratio widely used by the security analysis to value the firm's performance. This ratio widely used by the security analysis to value the firm's performance as accepted by investors. Price earning ratio reflects investor expectations about the growth in the firm's earning. Higher ratio indicates the more value of the stock that is being ascribed to future earning as opposed to present earning.

Table No. 4.22

Price Earning Ratio

Name of Banks	Fiscal Year							
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean	S.D.	C.V.
BOK	10.73	14.29	19.47	32.60	39.21	23.06	11.991	0.52
HBL	17.12	19.20	18.57	28.69	31.56	23.03	6.6	0.29

Source: Annual Report of Concern Banks

Figure No 4.22

Above Table and Figure shows that price earning ratio earning of BOK and HBL are in increasing trend. From the mean point of view, mean ratio of the BOK and HBL are 23.06 and 23.03 times respectively. It indicates that for getting Rs 1 as earning, one should invest Rs 23.06 in BOK and Rs 23.03 in HBL. Looking the mean ratio we conclude that in short run, investor of BOK are getting better profitability because they are selling their shares in high price although EPS of BOK is lower in comparison than that of HBL. But from the long term view and sustainable fair price, investor of HBL will get better profitability and they will be in safe side a little bit in comparison with BOK.

The S.D and C.V of BOK is high than the HBL it indicate its risk to invest in BOK rather than the HBL.

4.2 Statistical Analysis

Statistical tool is one of the important tools to analyze the data. There are various tools for the analysis of tabulated data such as, mean, standard deviation, regression analysis, co-relation analysis, trend analysis, various types of tests etc. There is convenient statistical tools are used in this thesis study.

4.2.1 Coefficient of Correlation Analysis

Co-efficient of co-relation shows the relationship between two or more than two variables. It measures that the two variables are positively or negatively co-related. For this purpose, Karl Pearson’s co-efficient of correlation has been taken and applied to find out and analyze the relationship between deposit and loan and advances, deposit and total investment, total assets and net profit, total investment and net profit and also analyze the correlation of total deposit, total investment, loan and advances and net profit BOK and HBL using Karl Persons coefficient of correlation, value of coefficient of determination (R^2) probable error (P.Er.) and (6 P.Er.) are also calculated and value of them are analyzed.

A) Correlation Coefficient between Deposit and Loan and Advances

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

Table No. 4.23

Correlation between Deposit and Loan and Advances

Name of Banks	**Evaluation Criterions**				
	r	R^2	P.Er.	6 P.Er.	Remarks
BOK	0.993	0.986	0.00423	0.0254	Significant
HBL	0.975	0.951	0.00452	0.0271	Significant

Source: Through SPSS Data Editor

From the above table, it is found that coefficient of correlation between deposits and loan and advances of BOK and HBL is 0.993 and 0.975. It is shows that both have the positive relationship between these two variables. It refers that deposit and loan and advances of BOK move together very closely but not proportionately. Moreover, the coefficient of determination of BOK is 0.986. It means 98.60 percent of variation in loan and advances has been explained by deposit. Similarly, value of coefficient of determination of HBL is 0.951. It refers that 95.1 percent variance in loan and advances are affected by total deposit. The correlation coefficient of both bank is significant because the correlation coefficient is greater than the relative value of 6 P.Er. in other words, there is significant relationship between deposits and loan and advances.

B) Coefficient of Correlation between Total Deposits and Total Investment

The coefficient of correlation between deposit and investment measures the degree of relationship between these two variables or deposit is significantly utilized or not. In correlation analysis, deposit is independent variable (X) and total investment is dependent variable (Y).

The following Table No. 4.24 shows the coefficient correlation between deposits and total investments i.e. r, P. Er., 6 P. Er. and coefficient of determination (R^2) of BOK and HBL during the study period.

Table No. 4.24

Correlation between Deposit and Total Investment

Name of Banks	Evaluation Criterions				
	r	R^2	P.Er.	6 P.Er.	Remarks
BOK	0.681	0.464	0.1625	0.749	Insignificant
HBL	0.890	0.792	0.063	0.38	Significant

Source: Through SPSS Data Editor

From the above Table, the researcher found that the coefficient of correlation between total deposit and total investment of BOK is 0.681. It shows the moderate degree positive correlation. In addition, coefficient of determination of BOK is 0.464 It means only 46.4 percent of total investment is explained by total deposit. The correlation coefficient is insignificant because the correlation coefficient is less than 6 P.Er. It refers that there is no significant relationship between total deposit and total investment of BOK.

Similarly, there is high degree correlation positive coefficient between total deposit and total investment of HBL, which is indicator by correlation coefficient of 0.890. The value of coefficient of determination is found 0.792 this refers that 79.2 percent of the variation in total investment is explained by total deposit. The correlation coefficient is insignificant because the correlation coefficient is less than 6 P.Er. It refers that there is no significant relationship between total deposit and total investment of HBL

From the above analysis, the conclusion can be drawn in the case of BOK and HBL that HBL has high degree positive correlation where as BOK has little low degree positive correlation. This indicates that HBL is successful to mobilize its deposit in proper way in comparison to BOK.

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C) Co-efficient of Correlation between Loan and advance and Net Profit

Co-efficient of correlation between total assets and net profit is used to measure the degree of relationship between two variable i.e. Loan and advance and net profit of BOK and HBL during the study period. Where Loan and advance is independent variable (X) and net profit is dependent variable (Y). The main objective of calculating this ratio is to determine the degree of relationship whether there the net profit is significantly correlated or not and the variation of net profit to loan and advance through the coefficient of determination. The following table shows the ‘r’, R^2, P.Er. and 6 P. Er. between those variables of BOK and HBL for the study period.

Table No. 4.25

Correlation between Loan and advance and Net profit

Name of Banks	Evaluation Criterions				
	r	R^2	P.Er.	6 P.Er.	Remarks
BOK	0.997	0.994	0.0018	0.011	Significant
HBL	0.986	0.972	0.0085	0.051	Significant

Source: Through SPSS Data Editor

Above Table shows correlation coefficient between, Loan and advance and net profit is 0.997 of BOK. It refers that there is positive correlation between these two variables. Here, 99.4 percent of net profit is contribute by Loan and advance as its coefficient of determination of 0.994 shows. Moreover, this relationship is significant because the coefficient of correlation is more than 6 P.Er. Likewise HBL also high degree positive correlation i.e. 0.986 between Loan and advance and net profit. The coefficient of determination R^2 is 0.972 which indicates that 97.2 percent variability in net profit is explained by Loan and advance. Moreover, greater correlation coefficient than 6P.Er. Shows that the relationship between Loan and advance and net profit is significant for HBL. In calculation, BOK has more significant relationship between Loan and advance and net profit than that of HBL.

D) Coefficient of Correlation between Total Investment and Net Profit

Coefficient of correlation between total investment and net profit measures the degree of their relationship. In the, correlation analysis, investment is independent variable and net profit is dependent variable. The following Table shows the coefficient of correlation coefficient of determination, probable error and six times of P.Er. During the fiscal year 2003/04 to 2007/08.

Table No. 4.26

Correlation between Total Investment and Net Profit

Name of Banks	**Evaluation Criterions**				
	r	R^2	P.Er.	6 P.Er.	Remarks
BOK	0.687	0.472	0.16	0.96	Insignificant
HBL	0.823	0.677	0.084	0.097	Significant

Source: Through SPSS Data Editor

Above Table shows, correlation coefficient between total investment and net profit of BOK is 0.687 which implies there is positive correlation between total investment and net profit. In addition, coefficient of determination of BOK is 0.472. It means only 47.2 percent of Profit is contribute by total investment. Obviously, this correlation is not significant at all due to coefficient of determination is lower than P.Error. On the other hand HBL has high positive correlation between total investment and net profit i.e. 0.823. The coefficient of determination of HBL is 0.677 It means 67.7 percent of Profit is contribute by total investment but this relationship is significant as its correlation coefficient is higher than 6 P.Er. i.e. 0.097.HBL has more significant relationship between total investment and net profit than that of BOK

Thus it can be concluded that the degree of relationship between total investment and net profit of BOK is little poor than the HBL. This little correlation coefficient indicates that the bank has poor performed in order to generate net profit.

E) Coefficient of Correlation of Total Deposit between BOK and HBL

Coefficient of correlation of total deposit between BOK and HBL and shows their linear relationship.

Table No. 4.27

Correlation between Total Deposit of BOK and HBL

Evaluation Criterions				
R	R^2	P.Er.	6 P.Er.	Remarks
0.967	0.935	0.0196	0.11	Significant

Source: Through SPSS Data Editor

This Table shows how the total deposit of BOK and HBL is related 0.967 of correlation coefficient shows that there is highly positive correlation between this two banks in this regard. But this correlation coefficient is also significant because the correlation coefficient is high than 6 P.Er. As the 0.935 of coefficient of determination, this shows the 93.5 percent of the degree of relationship.

The degree of relationship between these two banks is also high.

F) Coefficient of Correlation of Total Investment between BOK and HBL

The coefficient of correlation of total investment between selected commercial banks is shown as follow:

Table No. 4.28

Correlation between Total Investment of BOK and HBL

Evaluation Criterions				
R	R^2	P.Er.	6 P.Er.	Remarks
0.521	0.271	0.209	0.1.32	Insignificant

Source: Through SPSS Data Editor

The above table reveals that there is moderate positive correlation between BOK and HBL in case of total investment. It implies that the total investment of BOK and HBL move in the same direction. Here $R^2 < 6$ P.Er. Therefore, correlation coefficient is not significant. This can be said that both BOK and HBL increase its total investment as same direction. The coefficient of determination is 0.271, which shows the only 27.1 percent of the degree of relationship.

G) Coefficient of Correlation of Loan and Advances between BOK and HBL

The coefficient of correlation of loan and advances between BOK and HBL has been given below.

Table No. 4.29

Correlation between Loan and Advances of BOK and HBL

Evaluation Criterions				
R	R^2	P.Er.	6 P.Er.	Remarks
0.985	0.970	0.00905	0.054	Significant

Source: Through SPSS Data Editor

Above Table show that there is high degree positive correlation between the loan and advances of BOK and HBL. The correlation coefficient between two bank is 0.985. It means loan and advances of these two banks moves in the same direction in high proportion. This correlation coefficient is significant in order to show the relationship between loan and advances of these two banks because correlation coefficient is greater than 6 P.Er. The coefficient of determination is 0.970 which shows the 97 percent of the degree of relationship.

H) Coefficient of Correlation of Net Profit between BOK and HBL

The coefficient of net profit between the selected commercial banks shows the relationship between the banks.

Table No. 4.30

Correlation between Net Profit of BOK and HBL

Evaluation Criterions				
R	R^2	P.Er.	6 P.Er.	Remarks
0.979	0.958	0.0127	0.076	Significant

Source: Through SPSS Data Editor

Above statistics shows that there is high degree positive correlation between profits of BOK and HBL which is indicated by correlation coefficient of 0.979 This relationship is significant because its correlation coefficient is greater than 6 P.Er. The coefficient of determination is 0.958 which shows the 95.8 percent of the degree of relationship.

4.2.2 Time Series Analysis (Trend Analysis)

Trend analysis plays an important role in the analysis and interpretation of financial statement. Trend in general terms, signifies a tendency. It helps in forecasting and planning future operation. Trend analysis is a statistical tool, which shows the previous trend of the financial performance and forecasts the future financial results of the firms.

A) Trend Analysis of Total Deposit:

Deposits are the important part in banking sector hence its trend for next seven years will be forecasted for future analysis. This is calculated by the least square method. Here the effort has been made to calculate the trend values of Total deposit of BOK and HBL for further eight year

$Y= a + bx$

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

$Y = a + b x$……………………. (I)

Where $x = X$ - Middle year

Where as

$Y_c = 11078.41 + 1963.04 X$ of BOK

$Y_c = 27041.28+2489.93 X$ of HBL

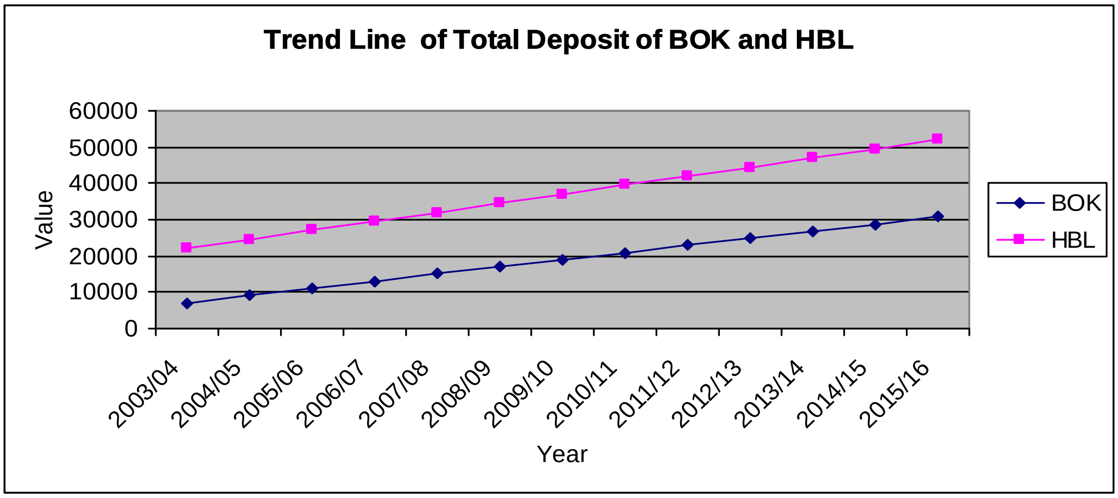
Table No. 4.31

Trend analysis of Total Deposit of BOK and HBL		
Year(x)	BOK	HBL
2003/04	7152.33	22061.42
2004/05	9115.37	24551.35
2005/06	11078.41	27041.28
2006/07	13041.45	29531.21
2007/08	15004.49	32021.14
2008/09	16967.53	34511.07
2009/10	18930.57	37001
2010/11	20893.61	39490.93
2011/12	22856.65	41980.86
2012/13	24819.69	44470.79
2013/14	26782.73	46960.72
2014/15	28745.77	49450.65
2015/16	30708.81	51940.58

Source: Annul Report of Concern Bank

Appendix -1

Figure No 4.23



Above Table and figure shows that total deposit of BOK and HBL. Both Banks is in increasing trend. The rate of increment of total deposit for HBL seems to be higher than that of BOK. The actual value of total deposit for BOK is quite fluctuated in relation to HBL. The trend analysis has projected deposit amount in fiscal year FY 2008/09 to FY 2015/16. From the above trend analysis it is clear that HBL has higher position in collecting deposit than BOK.

B) Trend Analysis of Loan and advances

Here, the trend values of loan and advances Between BOK and HBL have been calculated for further Eight year. The following Table shows the actual and trend values of BOK and HBL.

Y= a + bx

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Yc = 8136.064 + 1711.865 X of BOK

Yc=16021.22+1886.25 X of HBL

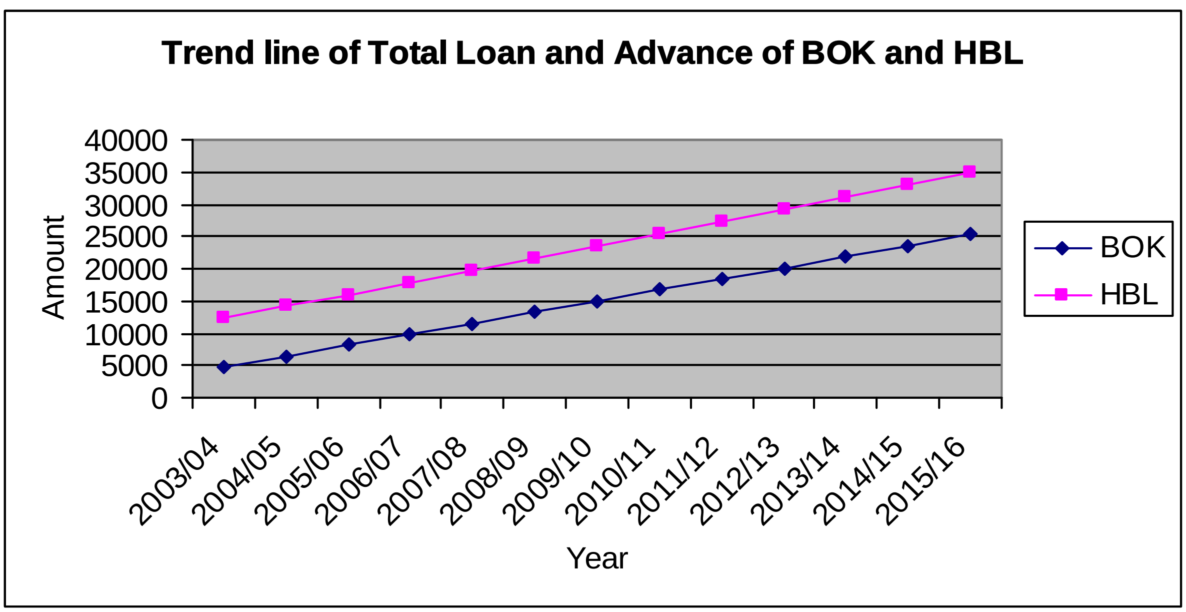
Table No. 4.32

Trend line of Total Loan and Advance of BOK and HBL		
Year(x)	BOK	HBL
2003/04	4712.334	12248.72
2004/05	6424.199	14134.97
2005/06	8136.064	16021.22
2006/07	9847.929	17907.47
2007/08	11559.794	19793.72
2008/09	13271.659	21679.97
2009/10	14983.524	23566.22
2010/11	16695.389	25452.47
2011/12	18407.254	27338.72
2012/13	20119.119	29224.97
2013/14	21830.984	31111.22
2014/15	23542.849	32997.47
2015/16	25254.714	34883.72

Source: Annul Report of Concern Bank

Appendix - 2

Figure No 4.24



Above Table depicts that loan and advances of BOK and HBL. Both Banks has in increasing trend. The increasing trend of HBL is higher than BOK. The actual value of loan and advances for BOK is quite fluctuating in relation to HBL. The trend projected for father eight year FY 2007/08 to FY 2015/16 From the above analysis, it is clear that both BOK and HBL is mobilizing its collected deposits and other funds in the form of loan and advances. Above table and figure shows the HBL has little highly mobilizing loan and advances than the BOK.

C) Trend Analysis of Total Investment

Under this topic, an attempt has been made to analyze trend analysis total investment of BOK and HBL for further eight years

Y= a + bx

Where,

Y= dependent variable, a=Y-intercept, b=slope of trend line or annual growth rate,

X = deviation from some convenient time periods.

Let trend line be

Y = a + b x……………………. (I)

Where x = X - Middle year

Yc = 2930.056+184.752 X of Bank of Kathmandu Limited

Yc = 11407.33+ 822.68 X of Himalayan Bank Limited

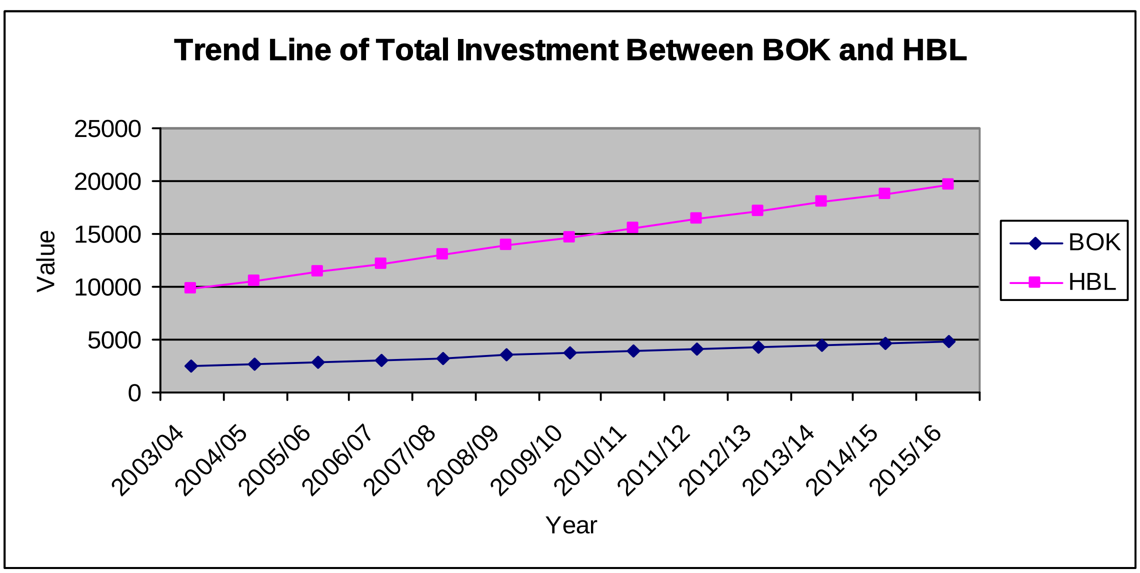
Table No. 4.33

Trend Line of Total Investment Between BOK and HBL		
Year(x)	BOK	HBL
2003/04	2560.552	9761.97
2004/05	2745.304	10584.65
2005/06	2930.056	11407.33
2006/07	3114.808	12230.01
2007/08	3299.56	13052.69
2008/09	3484.312	13875.37
2009/10	3669.064	14698.05
2010/11	3853.816	15520.73
2011/12	4038.568	16343.41
2012/13	4223.32	17166.09
2013/14	4408.072	17988.77
2014/15	4592.824	18811.45
2015/16	4777.576	19634.13

Source: Annul Report of Concern Bank

Appendix -3

Figure No 4.25



Above Table shows the Trend of Total Investment between BOK and HBL. Both Bank BOK and HBL have increasing trend in making investment. BOK has little trend of increasing, but HBL has high increasing trend of total investment. The trend of total investment projected to FY 2015/16. The forecasted trend projected that the HBL has greater increment rate in total investment than the increment rate of BOK. The figure indicates HBL has highly mobilized the total investment rather than BOK.

D) Trend Analysis of Net Profit

Here, the trend values of net profit of BOK and HBL have been calculated for five years FY 2001/02 to FY 2005/06 and forecasting of the same for next two year till FY 2006/2007 and FY 2007/2008.

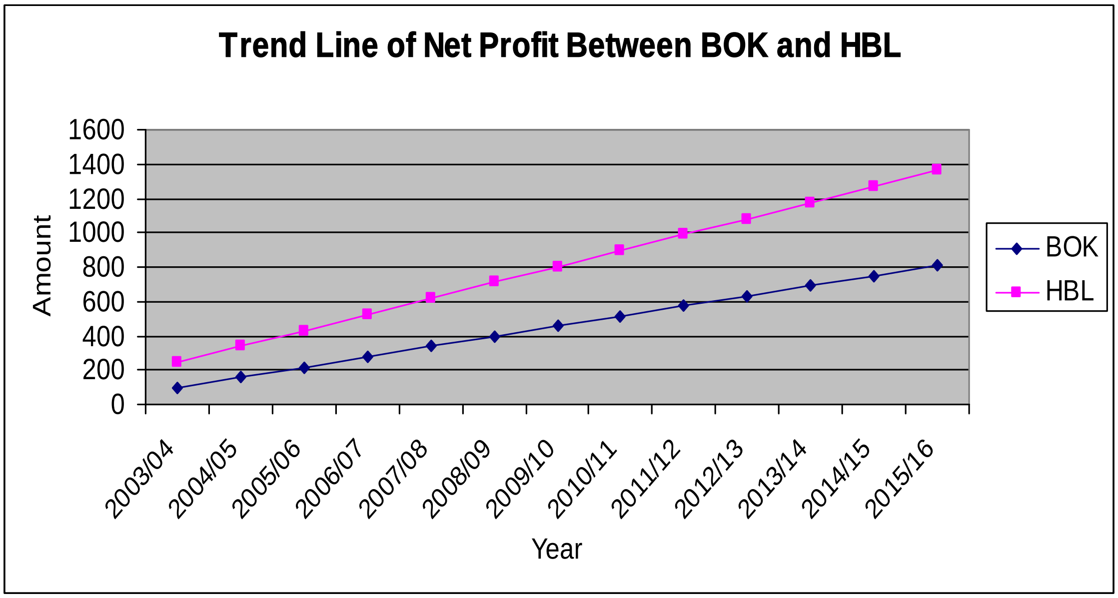
Table No. 4.34

Trend Analysis of Net Profit Between BOK and HBL		
Year(x)	BOK	HBL
2003/04	100.486	111.736
2004/05	159.575	185.805
2005/06	218.664	259.874
2006/07	277.753	333.943
2007/08	336.842	408.012
2008/09	395.931	482.081
2009/10	455.02	556.15
2010/11	514.109	630.219
2011/12	573.198	704.288
2012/13	632.287	778.357
2013/14	691.376	852.426
2014/15	750.465	926.495
2015/16	809.554	1000.56

Source: Annul Report of Concern Bank

Appendix - 4

Figure No 4.26



The above Table reveals the trend of Net profit of BOK and HBL. Net profit both bank BOK and HBL forecasted in increasing trend. The trend of increasing value of net profit of HBL is higher than BOK. The net profit of BOK and HBL has been increasing every year by Rs.59.089 million and Rs. 92.92 million respectively. The trend of Net profit projected to FY 2015/16 i.e. further Eight year. Above statistics, shows that both the banks have inconsistent net profit throughout the study period. In conclusion, HBL is doing better in order to generate net profit during the projected study period, though both BOK and HBL have increasing trend.

4.3 Major Findings of the study

From the above research study, following findings are drawn on the liquidity position of the selected commercial banks.

1. Generally banks have to maintain more liquid assets but the current ratios of all banks are below the standard of 1:1. The mean current ratio of BOK is 1.039 and HBL is 1.10 the current ratio of HBL is higher than BOK
2. Cash and bank balance to total deposit ratio of BOK has higher HBL than i.e. 9.01% > 6.82% which indicates that the bank has higher liquidity of BOK as compare to HBL. A high ratio of cash and bank balance may be undesirable which indicates inability to invest in more productive sectors like short-term

marketable securities insuring enough liquidity which will help the bank to improve its profitability. But liquidity position is good.

3. Cash and bank balance to current assets ratio of BOK is little higher than HBL i.e. 8.40%. > 8.03%
4. Investment on government securities to current assets of HBL is higher than BOK i.e. 24.37% > 21.35%. It shows HBL has invested more fund in government securities. BOK has invested little portion of their funds in purchasing of government securities.
5. Above findings shows that liquidity position of HBL is comparatively better than BOK. Lower liquidity position of BOK shows that the current assets have been utilized in some profit generating sectors, but at the same time the bank has weak short-tern solvency position.
6. The loan and advances to total deposit ratio of HBL is lower than BOK 58.18% < 74.21%. It indicates the better mobilization of deposit by BOK. So, BOK is more efficiently utilizing the outsiders' funds in extending credit for profit generating sectors.
7. The total investment to total deposit of HBL is higher than BOK i.e. 42.34% > 27.53%. It shows the HBL is mobilizing its funds on investment in various securities efficiently. It can be said that HBL is more successful in utilizing its total deposit by investing in marketable securities.
8. The loan and advances to total assets ratio of BOK is greater than HBL i.e. 62.67 > 51.20%. It refers BOK has utilized its total assets more efficiently in the form of loan and advances with more risk because it has greater variability in the ratio.
9. Investment on government securities to total assets ratio of BOK is higher than HBL i.e. 19.26% > 18.15%. This indicates that BOK has invested more portions of total assets on government securities. The higher ratio of HBL shows that better fund mobilization.
10. Return on loan and advances ratio of HBL is higher than that of BOK i.e. 2.63%> 2.61%. It refers that HBL seems to be success to earn high profit on loan and advances. But the return is not consistent. Since both banks have small mean

returns on its loan and advances. Both banks seem to have poor performance in order to have returns from loan and advances.

11. Return on total assets ratio of BOK is slightly higher than HBL i.e. 1.65% > 1.28%. But it has greater variability in the ratio.
12. Return on equity of BOK is higher than HBL i.e.24.08% > 22.80% which shows that BOK is more successful to earn high profit through the efficient utilization of its equity capital.
13. Total interest earned to total assets ratio of HBL is relatively little lower than that of BOK i.e. 5.15% < 5.89% and also has lower variability in the ratio. It indicates that BOK has efficiently used its total assets to earn higher interest income in comparison to HBL and it is also stable in terms of interest earning.
14. Total interest earned to total outside assets ratio of HBL is higher than the BOK i.e. 5.86% > 5.57%.
15. Total interest earned to total operating income ratio of HBL is lower than BOK i.e. 1.21% > 1.76. It means the greater portion of total operating income is occupied by total interest for BOK. It reveals BOK has successful mobilizing their fund in interest generating assets.
16. Total interest paid to total assets ratio of BOK is higher than HBL i.e. 2.53 % < 2.10%. It shows BOK has high interest expenditure to total assets. It supports bok to increase to interest paid to operating income**.**
17. The credit risk ratio shows the proportion of no-performing loan in total Loan and Advances. Average credit risk ratio of BOK is lower than HBL i.e.3.75<5.78. BOK has efficiently used the total loan and advances than that of HBL. Higher ratio indicates more risky assets in the volume of Loan and Advances of the bank and vice-versa.
18. The liquidity risk of the bank defines its liquidity need for deposit. The average mean ratio of BOK is greater than that of HBL (i.e. 9% > 6.8%). It signifies that BOK has sound liquid fund to make immediate payment to the depositors
19. Asset Risk Ratio shows the Asset Risk Ratio of BOK and HBL. The analysis shows that BOK and HBL have the Asset Risk Ratio in fluctuating trend. The

mean ratio of BOK is lower than that of HBL (i.e.86% %< 92%). The S.D. and C.V. both are higher of HBL i.e 0.27 > 0.013 and 0.031 > 0.015 than the BOK.

20. Average earning per share of HBL is greater than that of BOK i.e. Rs. 55.92 > Rs. 40.94. But HBL has more inconsistency in earning per share as its higher coefficient of variation shows. It shows the higher earning capacity of HBL in comparison to BOK
21. The dividend per share of HBL and BOK seem to be equal that of BOK in2005/06 and in 2007/08 and in other studied period BOK has higher ratio. Average dividend per share of BOK is little higher than that of HBL (i.e16.8>16.32).
22. Average mean price of HBL is greater than that of BOK. i.e.1316 >1060. It indicates that shareholder of HBL are getting higher price It shows HBL has better financial performance than BOK in order to increase market price per share
23. The mean price-earning ratio of BOK is little higher than that of HBL i.e. 23.06 is greater than 23.03.. It indicates that for getting Rs 1 as earning, one should invest Rs 23.06 in BOK and Rs 23.03 in HBL. Looking the mean ratio we conclude that in short run, investor of BOK are getting better profitability because they are selling their shares in high price although EPS of BOK is lower in comparison than that of HBL
24. Both BOK and HBL have high positive co-relation between total deposit and loan and advances because BOK and HBL have 0.993 and 0.975 of co-relation coefficient between deposit and loan and advances. These relationships are significant. This can be regarded as good indication in financial performance for the banks. The correlation coefficient of both bank is significant
25. There is positive correlation between total deposit and total investment of BOK and HBL. Where as BOK has low degree of positive co-relation i.e.0.681 than HBL i.e. 0.890. HBL has high degree positive correlation where as BOK has little low degree positive correlation. This indicates that HBL is successful to mobilize its deposit in order to make good investment in comparison to BOK.
26. There is positive correlation between Loan and advance and net profit. Correlation between Loan and advance and net profit of BOK is 0.997 and HBL

is 0.86. The relationship between Loan and advance and net profit of both banks has significant. In calculation, BOK has more significant relationship between Loan and advance and net profit than that of HBL

27. The degree of relationship between total investment and net profit of BOK is poor than HBL i.e. correlation coefficient between total investment and net profit of BOK and HBL is 0.687 and 0.823 respectively. It refers that HBL is comparatively successful to generate net profit through the total investment in relations to BOK.
28. Correlation coefficient of total deposit between BOK and HBL shows high positive correlation i.e. 0.967. The correlation coefficient shows that It refers that total deposit of both banks move in the same direction in this regard. Correlation coefficient is also significant.
29. The correlation of total investment between BOK and HBL is positive correlation i.e. 0.521. It implies that the total investment of both banks move in the same direction but less proportionately. correlation coefficient of bank is insignificant
30. The degree of relationship of loan and advances between the BOK and HBL is high because correlation coefficient between loan and advances of these two banks is 0.985. It means loan and advances of these two banks moves in the same direction in high. correlation coefficient is also significant
31. The correlation of net profit between BOK and HBL is positive. BOK and HBL are high because correlation coefficient between net profit of these two banks is 0.979. The relationship between two banks is significant because its correlation coefficient is greater than 6 P.Er. The net profit of these two banks also moves very closely in the same direction.
32. BOK and HBL have increasing trend in collecting deposit the rate of increment of total deposit for HBL seems to be higher than that of BOK. Here HBL has better position in collecting deposit than BOK.
33. The trend line of loan and advances for both banks is upward slopping. It refers that both the banks are increasing in disbursement of loan and advances. The trend line of loan and advances for HBL seems high growing than BOK. It refers that HBL is more aggressive in mobilizing its collected deposits.

34. The total investment trend line of BOK and HBL is upward slopping where as HBL has aggressive upward slopping of total investment trend line. It refers that HBL has better increasing trend of total investment than BOK.
35. The trend line of Net profit for BOK and HBL is upward slopping. The position of HBL is better in order to generate profit than BOK.
36. Both the banks have well their ratio. Trend of Both bank has increasing trend. In comparison to both bank every ratio of HBL is higher than the BOK. It indicate better performance of HBL rather than BOK

CHAPTER – III
CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The researcher has identified that research problem and set objectives to solve research problems about credit risk management of Bank of Kathmandu and Himalayan Bank Limited. To make this study more effective, related literatures have been reviewed. The review of literature provides the foundation of knowledge in order to under take this research more precisely.

Research methodology has been described in third chapter, which is a way to solve the research problems with the help of various tools and techniques. This chapter includes the various financial as well as statistical tools to analyze the data in order to come to the decisions. This chapter includes the research design, population and sample data collection procedure, data period covered and methods of analysis. These studies is mainly conducted on the basis of secondary data collected from annual reports of concern bank, official report, economic journal, financial statement etc. and authorize web site of Nepal stock exchange and security board of Nepal.

The presentation and analysis of data has been made comparative analytical and their interpretation has done in chapter four by applying the wide varieties of methodology as stated in chapter three. It includes the various financial and statistical tools. In case of financial tools ratio analysis is done which consists current ratio, liquidity ratio, assets management ratio, profitability ratio, risk ratio and other ratios. Other ratio includes EPS, MPS and P.E. ratio. Various statistical tools such as arithmetic mean, standard deviation, coefficient of correlation, regression analysis and trend analysis, have been applied to fulfill the objective of this study. The analysis has been done mainly through secondary. The major findings of the study are also included in the final section of the presentation and analysis chapter.

Economic development is not possible without the proper development of banking sector in a country, as banks are the real facilitator for mobilizing the resources. Banks are the institutions, which collect the scattered small savings from the public and invest them into productive sector that ultimately contributes to economic development of a country. Besides providing the services for economic development, they are established to earn profit. In the context of current competitive scenario, banks need to face challenges from all around. One of the major challenges for Nepalese commercial banks is to properly manage the risk, especially the credit risk as it covers about 60% of the total risk that a bank face. Considering the importance of credit risk management in commercial banks, this research aimed at studying the credit risk management system of selected commercial banks. For this purpose, descriptive cum analytical research design was adopted. Out of total population of 26 commercial banks (till 2010), 2 banks were taken as sample using judgmental sampling method. BOK and HBL have been taken for comparative study because of their similarities in terms of business size, date of establishment, capital size etc.

The basic task of financial institutions is to mobilize the saving of the community and ensure efficient allocation of the savings to high yielding investment projects to offer attractive and secured returns to different sectors of the economy according to the planned priorities of the country. On the other hand, this process of financial institutions gives rise to the money and other financial assets, which therefore have a central place in the development process of the economy. Banking sector plays an important role in the economic development of the country. It provides an effective payment and credit system, which facilitates the channeling of funds from the surplus (savers) units to the deficit units (investors) in the economy.

Credit practice of commercial banks is a very risky one. For this, commercial banks have to pay due consideration while formulating investment policy. A healthy development of any commercial bank depends upon its investment policy. A good investment policy attracts both the borrowers and the lenders, which helps to increase the volume of quality deposits and investment.

In most years, banks are the leading buyers of bonds and notes issued by the government to finance public facilities, ranging from hospitals and football stadium to airport and highways. Moreover, bank reserves the principal channel for government economic policy to stabilize the economy. In addition, banks are the most important sources of short-term working capital needed for the businesses. They have increasingly become active in recent years in making long-term business loans for new plant and equipments. When businesses and consumers must make payments for the purchase of goods and services, more often they use bank provided cheques, credit or debit cards, or electronic accounts connected to a computer network. It is the bankers, to whom they turn most frequently for advice and counsel when they need financial information and financial planning.

Credit positions are undertaken with the goal of earning some expected rate of return. Investors seek to minimize inefficient deviations from the expected rate of return. Diversification is essential to the creation of an efficient investment because it can reduce the variability of returns around the expected return.

5.2 Conclusion

The overall aspect of liquidity position of HBL is comparatively better than BOK. But the current ratio and investment on government securities to total assets of BOK are slightly higher than HBL. HBL has utilized its liquid assets in more profit generating sectors.

Assets management aspect of HBL is better than BOK which is justified by little higher loan and advances to total deposit ratio, loan and advances to total assets ratio for HBL.

Overall profitability ratios show that HBL has earned higher profit in relation to every aspects of the bank than BOK

Earning per share, dividend per share and market price per share of is higher for HBL in comparison to BOK .It gives good signal of financial performance of the bank in the market. Price- earning of HBL is higher than BOK which is considered better in security analyzing in order to make investment decision.

Both commercial banks HBL and BOK have positive correlation between deposit and loan and advances, deposit and total investment, total assets and net profit total investment and net profit. Comparatively both banks have strong relationship between these variables. It is also found that there is positive correlation between total deposit of BOK and HBL, between loan and advances of both banks and between net profits of both banks

Total Investment, loan and advances, net profit of BOK and HBL are in increasing trend. Its show positive trend of both banks.

Both BOK and HBL have high positive co-relation between total deposit and loan and advances, total deposit and total investment

Correlation between total assets and net profit, total investment and net profit shows both the banks have positive relationship but BOK has greater correlation coefficient than.

Correlation coefficient of total deposit, total investment, loan and advances and net profit between BOK and HBL shows positive correlation. It refers that all the variable of both bank moves in the same direction some are closely in the same direction and some are less proportionately

BOK and HBL have increasing trend in collecting deposit the rate of increment of total deposit for HBL seems to be higher than that of BOK.. HBL has better position in collecting deposit than BOK.

The trend line of loan and advances and total investment trend line for both banks is upward slopping. It refers that both the banks are increasing in disbursement of loan and advances.

The trend line of Net profit for BOK and HBL is upward slopping. The position of HBL is better in order to generate profit than BOK.

The trend analysis reveals that both the banks have well their ratio. Trend of Both bank has increasing trend. In comparison to both bank every ratio of HBL is higher than the BOK

From the entire research study, overall all financial performance of HBL is little better than BOK. But BOK is operating smoothly and success in becoming the pillar of economic system of the country.

The profile of financial executives and customers reveals that more Nepalese investors have not knowledge about investment practice adopted by commercial banks. Similarly, BOK and HBL are adopting investment practices. Commercial banks are not providing investment priority to the rural sectors but being a developing country it is very necessary to give investment priority to the rural area. Therefore, the banks should formulate sound investment policies. Good investment practices ensures maximum amount of investment to all sectors with proper utilization.

5.3 Recommendations

Based on the analysis and finding of the study, the following recommendations can be made as suggestions to make the investment practices of BOK and HBL effective and efficient. This would help to draw some outline and make reforms in the respective banks

- Generally, banks have to maintained liquid assets. The current ratio of the two banks, BOK and HBL is considerable. This can be regarded as good liquidity position. The liquidity position affects external and internal factors such as prevalent investment situations, central bank requirements and so on. Considering the growth position of financial market, the lending policy management capabilities, strategic planning and fund flow situation, bank should maintain enough liquid assets to pay short-term obligations. So, it is recommended to maintain sound liquidity position to BOK and HBL.

- Government securities such as Treasury bills, Development bonds, saving certificates etc. are risk less investment alternatives because they are free of default risk as well as liquidity risk and can be easily sold in the market. In this research study, it has found that both banks, BOK and HBL have made some amount of fund in Government securities. But BOK and HBL are recommended to invest more funds in Government securities instead of keeping them idle.

- To get success in competitive banking environment, deposit must be utilized as loan and advances. The largest item of bank assets side is loan and advances. It has been found that loan and advances to total deposit ratio of BOK is lower than that of HBL. It means BOK has not properly used their existing fund as loan and advances. So BOK is recommended to follow liberal lending policy and to invest more deposit in loan and advances.

- BOK and HBL have a possible risk because there is large amount of doubtful loan and advances and risky investment. So it is recommended to evaluate the investment opportunities and alternatives using statistical, capital budgeting and other financial tools to avoid large amount of doubtful debt and risk.

- EPS and DPS play a vital role to determine the market price of the share and also indicate the financial performance of banks. Higher EPS and DPS indicate the banks

- Both the banks are recommended to formulate and implement the sound and effective investment policy to increase volume of total investment and loan and advances that helps to meet required level of profitability as well as social responsibility. The banks should consider rural areas in making investment policy.

- Last political instability directly affected the economic sector such as hotel and tourism, manufacturing and trading sector. Bank loan and advances is decreasing in this sector. So banks should give priority to these sectors as well as banks should create new investing sector to mobilize deposit.

- 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 by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices. The bank is also required to explore new market areas. For this purpose, it is recommended to form a strong market department in its central level, which deals with the banking products, places, price and promotion.

Keeping all these in consideration, the BOK has little less performance than that of HBL. Therefore, in the future ahead, the BOK should improve its weaknesses by adopting the innovative approach to marketing. In the light of growing competition in the banking sector, both bank BOK and HBL should be customer oriented. It should strengthen and activate its marketing function as it is an effective tool to attract and retain the customers.