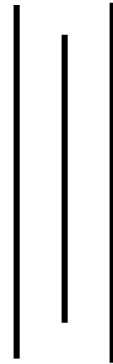


**A COMPARATIVE STUDY ON INVESTMENT
POLICY OF JOINT VENTURE BANKS**

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CHAPTER - I

INTRODUCTION

1.1 Background of the Study

The Himalayan kingdom of Nepal is sandwiched between two large and most populous countries, India and China. Nepal is one among the least developed countries.

The development of any country largely depends upon its economic development. Thus, the primary goal of any nation, including Nepal is to embark upon the path of economic development by economic growth rate and developing all sectors of economy. Even though, the process of economic development depends upon various factors, economists are now convinced that capital formation and its proper utilization play a paramount role.

Bank is the major financial need for various developments. The modern age is the business competition age. The bank can play a vital role for the financing activities in the business. The saving and investment is most necessary for the developing country, which can be managed by the banks. Capital accumulation also plays a vital role to accelerate the economic growth of the developing countries; which is quiet low with a relatively higher marginal propensity of consumption. As a result, such countries are badly trapped into the vicious circle of poverty. Therefore, the basic problem for developing countries will be to raise the level of saving and thus investment.

In the modern day business world, the scope of bank has become so wide that it covers all the financial activities from the issue of money to the performance of agency services to its customers. In this sense, a bank may be defined as a financial institution, which accepts the deposit for the purpose of lending or investment from the public, repayable on demand through cheques, drafts or otherwise or also performs a number of agency services to its clients, on instruction.

1.2 Banking History of Nepal

In Nepal, the institutional banking transaction started with the establishment of 'Tejarath Adda'. It did not collect deposits from the public but gave loans to government employees.

Banking in modern sense started with the inception of Nepal Bank Limited (NBL) on B.S. 1994. NBL had a Herculean responsibility of attracting people towards banking sector from pre-dominant moneylender's net and of expanding banking services. Being a commercial bank, it was natural that NBL paid more attention to profit generating business and preferred opening branches at urban centers.

Government however had onus of stretching banking services to the nook and corner of the country and also managing financial system in a proper way. Thus, Nepal Rastra Bank (NRB) was set up on B.S. 2013 as a central bank under Nepal Rastra Bank Act 2012 B.S. Since then, it has been functioning as the government's bank and has contributed to the growth of financial sector.

Integrated and speedy development of the country is possible only when competitive banking service reaches nooks and corners of the country. Keeping this in mind, government set up Rastriya Banijya Bank (RBB) in B.S. 2022 as a fully government owned commercial bank under Commercial Bank Act 2020.

As the name suggests, commercial banks are to carry out commercial transactions only. But they also had to carry out the functions of all types of financial institutions. Hence, Industrial Development Centre (IDC) was set up in B.S. 2013 for industrial development. In 2016, IDC was converted to Nepal Industrial development Corporation (NIDC). Similarly, Agricultural Development Bank (ADB) was established in B.S. 2024 to provide finance for agricultural produces so that agricultural productivity could be enhanced by introducing modern agricultural techniques.

With the establishment of RBB and ADB, banking services spread to both urban and rural areas. This helped the common people reduce their burden of paying higher rate of interest to the moneylenders.

In the early 2040 B.S., when the government gave permission for the establishment of foreign Joint Venture Banks (JVBs), NABIL was established in 2041 as the first JVB in Nepal. The establishment of JVBs gave a new horizon to the financial sectors of the country. They are expected to enter foreign capital, technology, experiences, healthy competitive concept, expertise and skills in the management of Nepalese commercial banks. After the restoration of multiparty

democratic system, elected government has adopted the liberal and market oriented economic policy, in this context, the role of JVBs is considered more significant.

1.3 Major Functions of Commercial Banks

- They collect scattered idle money from individuals and institutions as deposits.
- They issue loans to individuals and institutions under sufficient security and possibility of return.
- They function as agent on behalf customers. A commercial bank undertakes the payment of subscription, insurance premium, rents etc and collection of cheques, bills, interest, salaries, dividends on behalf of customers. They arrange to remit money from place to place by means of cheques, drafts, wire transfer etc. They take small amount of commission for these services.
- They perform general utility function. It includes issue of travelers' cheque, exchange of credit information, foreign-currency exchange transaction, and safe custody of valuable metals, jewels and documents and provides economic and commercial suggestions, etc.

1.4 Statement of Problems

From the point of view of financial sectors, banks and shareholders, the term 'investment' is the most important word of the world. No doubt, commercial banks are the Kingpins in the economic sector of a country; however they have to

face a number of problems due to increasing competition and commercial complexity in global prospective.

Appropriate investment, which follows smooth operation, sufficient dividend to the shareholders, optimum service to customers, motivation to personnel, are the most important factors to each commercial bank. Several commercial banks and financial institutions have been established in a short period of time, but most of them are unable to earn sufficient return on investment. There is a lack of sound investment policy.

Similarly, there is an unhealthy competition among the banks to attract and retain the new and old customers respectively. In this regard, they have compromised on security aspects and sanctioned loans to customers beyond customers' real requirement. In the long run, it will prove very costly to both borrowers and the bank.

All the banks do not have expert lending officials and loans / investment are being made without proper analysis of risks. Since loan is the risky asset, proper appraisal of the project is a must. Similarly, shrinkage in the value of investment portfolio erodes capital of the bank.

There is also lack of effective investment diversification. Banks are not serious towards research and development. Sometimes, their loan portfolio is diversified while sometimes concentrated. They are unable to foresee the profitable areas

and act accordingly. Moreover, banks in Nepal are copying the products of international marketing, that too, very late. They do not have vision to activate money market of the country by launching products that suits our requirement.

In the context of Nepalese commercial banks, the investment policies have not been formulated in the clear view of an organizational manner. They mainly rely upon the instructions and guidelines of Nepal Rastra Bank. Furthermore, the implementation of the policies is not in not in an effective way.

Thus, there are many dimensions to be considered. This study basically deals with the following issues of the banks:

- Commercial banks are considered efficient but how far are they efficient.
- Relationship of investment and loan and advances with total deposits and net profits.
- Whether these commercial banks are able to meet obligations.
- Fund mobilization and investment policy are effective and efficient or not?
- Are they maintaining sufficient liquidity position or not?

1.5 Objectives of the Study

The basic objective is the comparative analysis and evaluation of the investment policy of the selected Joint Venture Banks. The other objectives in this study are:

- ❖ To evaluate liquidity, activity and profitability ratios.

- ❖ To analyze relationship of loan and advances, and total investment with total deposits and net profit.
- ❖ To use trend analysis to compare loan and advances, total investment, total deposit and net profit.
- ❖ To examine the loan loss provision.

1.6 Benefit of the Study

The benefit of this study lies mainly in filling a research gap on the study of investment policy of commercial banks. The study is basically confined to reviewing the investment policy of commercial banks in the five year periods. This study is definitely expected to provide a useful feedback to the policy makers of commercial banks of Nepal and also to the government and the Central Bank (NRB) in formulating appropriate strategies for the improvement in the performance of commercial banks.

1.7 Methodology Used

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view.

1.7.1 Research Design

It is the plan, structure and strategy of investigation adopted to gain answers to research questions and to control variances. The descriptive and analytical research design will help to achieve the objectives of this study.

Some statistical and financial tools will be used to examine facts and descriptive techniques to evaluate investment performance of Joint Venture Banks and comparing between themselves.

1.7.2 Financial Tools Used

- a. Liquidity ratio
- b. Assets management ratio
- c. Profitability ratio
- d. Risk ratio
- e. Growth ratio

1.7.3 Statistical Tools

- a. Co-efficient of correlation analysis
- b. Trend analysis
- c. Test of hypothesis
- d. Mean
- e. Standard deviation
- f. Co-efficient of variation

1.7.4 Periods Covered

This study will cover the time period of five financial years. The data and the facts related to these periods will be used for the purpose of this study.

1.7.5 Sources of Data

This study basically will include secondary data relating to ‘investment’ e.g. deposits, loan and advances and profit / loss that will be collected from financial statement, magazines, newspaper, bulletin, booklets of the concerned banks, previous studies, Security Exchange Board, budget speeches of different fiscal years, economic survey and libraries. Primary data will also be used where secondary data are inadequate.

1.7.6 Population and Sample

There are twenty licensed commercial banks and among them 3 banks have been taken as sample for this study namely, Himalayan Bank Limited, Everest Bank Limited and Bank of Kathmandu Limited. These banks are taken as sample because these are the second generation banks.

1.8 Brief Profile of the Concerned Banks

Among the twenty licensed commercial banks, a brief profile of three selected banks is presented below:

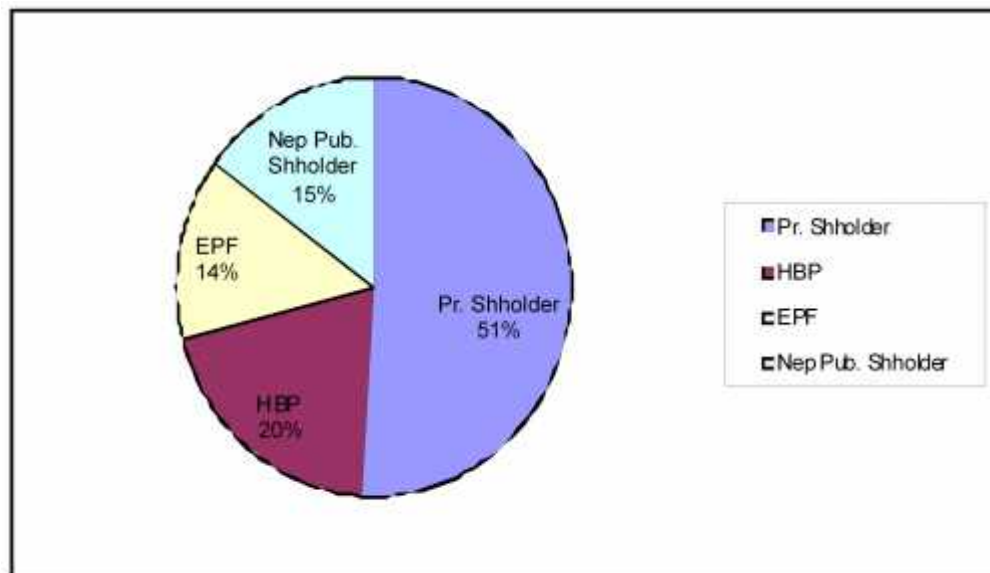
Himalayan Bank Limited (HBL)

HBL is the fourth Joint Venture Bank of Nepal, which was incorporated in 1992 A.D. in partnership with Employees Provident Fund (EPF) and Habib Bank Limited, one of the largest commercial banks of Pakistan. Banks operation was commenced from January 1993. Its ownership is composed of promoter

shareholder (Pr. Shholder) 51%, Habib Bank of Pakistan (HBP) 20%, Employees Provident Fund (EPF) 14% and Nepalese public shareholders (Nep Pub. Shholder) 15% and the Board of Directors contain 16 members.

Figure 1.1

Shareholding Pattern of HBL



The bank at present has five branches in Kathmandu valley, namely Thamel, New Road, Maharajgunj, Pulchowk (Patan) and Suryavinayak (moved from Nagarkot). Besides, it has nine branches outside Kathmandu valley, namely Banepa, Tandi, Bharatpur, Birgunj, Hetauda, Bhairawa, Biratnagar, Pokhara and Dharan. The bank is also operating a counter in the premise of the Royal Palace.

HBL offers services like credit card, tele-banking, any branch banking, Automatic Teller Machine (ATM), LC services, fund transfer, account opening, internet banking etc.

Present Capital Structure of HBL

Authorized Capital	: Rs. 1,000,000,000
Issued Capital	: Rs. 772,200,000
Paid-up Capital	: Rs. 772,200,000

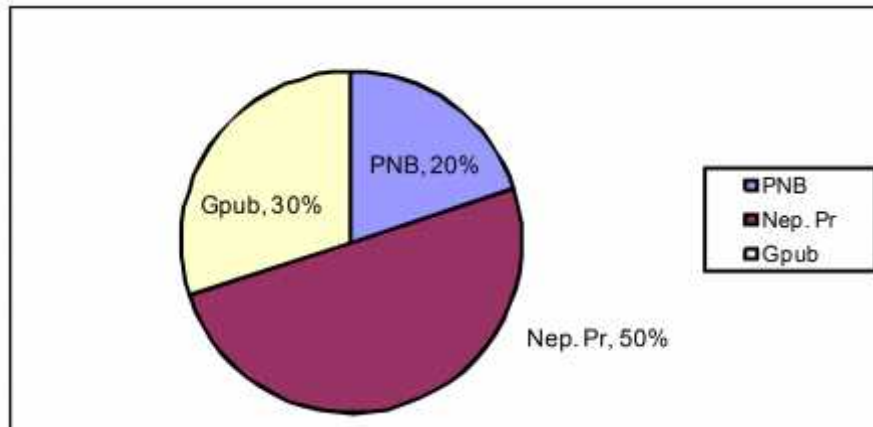
(Sources: www.himalayanbank.com and Annual Report)

Everest Bank Limited (EBL)

EBL which started operations from October 18, 1994 has been established with the objective of extending professionalized banking services to various sections of the society in the kingdom of Nepal and thereby contribute to the economic development of the country. EBL has been promoted by well established business / industrial house of Nepal as a joint venture with Punjab National Bank Ltd. (PNB) of India which hold 20% equity on the bank's share capital, 50% is held by Nepalese promoters (Nep.Pr) and 30% of share capital is held by general public (GPUB). The Board of Directors contains 9 members.

Figure 1.2

Shareholding Pattern of EBL



EBL has kingdom. The major branches are connected through Anywhere Branch Banking System (SBBS) through which the clients can withdraw and deposit money from any branch connected by ABBS. It has six branches 22 branches across the in Kathmandu valley namely Baneshwor, New Road, Teku, Pulchowk (Lalitpur), Lazimpat and Satungal and it has 10 branches outside Kathmandu valley namely Biratnagar, Duhabi, Janakpur, Birgunj, Simara, Butwal, Dhangadi, Jhapa, Itahari, Parsha, Baglung, Pokhara, Bairaba and Nepalgunj.

EBL offers service like deposit, loan and advances, trade finances activities, remittance facilities, foreign exchange, foreign currency deposit, SWIFT transfer, T.T Transfer, L.C facilities, Deposit locker, Drawing arrangement etc.

Present Capital Structure of EBL:

Authorized Capital	: Rs. 1,00,00,00,000
Issues Capital	: Rs. 72,98,00,000
Paid-Up Capital	: Rs. 37,80,00,000

(Source: www.everestbankltd.com and Annual Report)

Bank of Kathmandu Ltd. (BOKL)

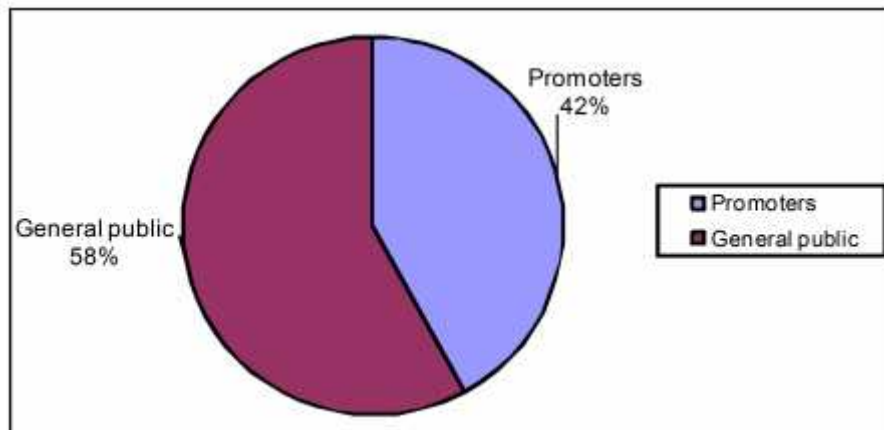
BOKL is a culmination of a comprehensive vision of the promoters to take the Nepalese economy to newer realm in the global market. The bank was established in 1993 A.D. in collaboration with SIAM Commercial Bank Public Company Ltd., Thailand (30%), Nepalese promoters (45%) and general public

(25%) of its total equity. The major objective of the bank was to operate commercial banking activities throughout the country with the approval of Nepal Rastra Bank.

The SIAM commercial bank out of its 30% holding diluted 25% holdings to the Nepalese citizens in 1998. BOKL has 16 branches and has 8 members in Board of Directors.

Figure 1.3

Shareholding Pattern of BOKL



The bank has been providing many client-oriented facilities to its customer including normal and general services like deposit services, management information system, ATM, credit facilities, internal trade center, safety deposit lockers etc.

Present Capital Structure of BOKL:

Authorized Capital	: Rs. 1,000,000,000
Issued Capital	: Rs. 606,173,000
Paid-up Capital	: Rs. 606,141,000

(Source: www.bokltd.com and Annual Report)

1.9 Limitation of the Study

This study will be limited by the following factors:

- ❖ This study concentrates only on those factors that are related with investment.
- ❖ This study is based on the secondary data.
- ❖ The whole study is based on the data of five years (2002 to 2007) and the conclusion drawn confines to these periods only.
- ❖ The truth of research result is based upon the available data from the HBL, EBL and BOKL banks.

1.10 Organization of the Study

The whole study is divided into five chapters.

Chapter- I: Introduction

The first chapter is the introductory chapter. It consists of general background, statement of problems, objective of the study, importance of the study, limitations of the study and organization of the study.

Chapter – II: Review of Literature

The second chapter deals with the review of literature, which consist of conceptual framework and review of relevant research studies.

Chapter – III: Research Methodology

This chapter is concerned with the research methodology used in this study. It includes research design, sources of data, population and sample and methods of analysis.

Chapter – IV: Data Presentation and Analysis

This chapter is the heart of the study. This chapter is the interpretation, which includes the analysis of different financial and statistical tools to drawn out the conclusion and findings.

Chapter – V: Summary, Conclusion and Recommendations

The fifth chapter is associated with the summary, conclusion and recommendations. The bibliography and appendices are also included as supplements to the above chapters.

CHAPTER - II

REVIEW OF LITERATURE

The field of investment is enormously great. Proper utilization of collected fund plays a prominent role in the development of the country. Effective investment decisions rejoice to every investor giving precious return. This unit of study tries to describe the conceptual framework, concept of commercial banks, joint venture banks and investment. Besides these, this chapter highlights the literature that is available in concerned subject as to my knowledge, review of reports related to concerned banks, review of research works, review of books, review of articles and relevant study on this topic and review of thesis works performed previously.

2.1 Conceptual Framework

2.1.1 Commercial Bank

“The commercial bank has its own role and contribution in the economic development. It is a resource for the economic development, it maintains economic confidence of various segments and extends credit to people.”

“Commercial bank deals with other people’s money. They have to find ways of keeping their assets liquid so that they could meet their demands of their customers. In their anxiety to make profit, the banks can’t afford to lock up their funds in assets, which are not easily realizable. The depositors’ confidence could be secured only if the bank is able to meet the demand for cash promptly and

fully. The banker has to keep adequate cash for this purpose. Cash is an idle asset and hence the banker cannot afford to keep a large portion of his assets in the form of cash. Cash brings in no income to the bank. Therefore, the banker has to distribute his assets in such a way that he can have adequate profits without sacrificing liquidity”.

“Commercial bank is a corporation which accepts demand deposits subject to check and makes short-term loans to business enterprises, regardless of the scope its other services”.

“A commercial bank is one which exchanges money, deposits money, accepts deposits, grant loans and performs. Commercial banking functions which is not a bank meant for co-operative, agriculture industries or for such specific purpose.”

The main function of commercial bank is the accumulation of the temporarily idle money of general public for the purpose of providing short-term or long-term loan necessary for trade and commerce. It accepts deposits and grants loan, exchange, and purchase and discount bill for promissory notes, exchange foreign currency, to provide loan, agency function, over seas trading services, information and other services. Commercial bank earns profit by proper mobilization of their resources.

Many commercial banks have been established to provide a suitable service, according to their customers. The list of licensed commercial banks is as follows:

Table 2.1
List of Licensed Commercial Banks

S.N.	Commercial Banks	Established Date	Head Office
1.	Nepal Bank Ltd.	1937/11/15	Kathmandu
2.	Rastriya Banijya Bank	1966/01/23	Kathmandu
3.	Nabil Bank	1984/07/16	Kathmandu
4.	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu
5.	Standard Chartered Bank	1987/01/30	Kathmandu
6.	Himalayan Bank Ltd.	1993/01/18	Kathmandu
7.	Nepal Bangladesh Bank	1993/06/05	Kathmandu
8.	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu
9.	Everest Bank Ltd.	1994/10/18	Kathmandu
10.	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu
11.	Nepal Credit and Commercial Bank	1996/10/14	Siddhartha Nagar
12.	Lumbini Bank Ltd.	1998/07/17	Naryanghat
13.	Nepal Industrial and Commercial Bank Ltd.	1998/07/2	Biratnagar
14.	Macchapuchhre Bank Ltd.	2000/10/03	Kathmandu
15.	Kumari Bank Ltd	2001/04/03	Pokhara
16.	Laxmi Bank Ltd.	2002/04/03	Kathmandu
17.	Siddhartha Bank Ltd	2002/12/24	Kathmandu
18.	Agricultural Development Bank Ltd.	1968/01/02	Kathmandu
19.	Global Bank Ltd.	2007/01/02	Birgunj, Parsa
20.	Citizen Bank Ltd.	2007/06/21	Kathmandu
21.	Prime Bank Ltd.	2007/09/24	Kathmandu
22.	Sunrise Bank Ltd.	2007/10/12	Kathmandu
23.	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu
24.	Nepal Development and Credit Bank Ltd	2008	Kathmandu
25.	NMB Bank	2008	Kathmandu

Source: <http://brf.nrb.org.np>

2.1.2 Joint Venture

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

Joint venture banks are such type of institution that deal with money and substitute of money. They collect fund from corner part of the country in the form of (various types) of deposits for the purpose of advancing to others for expenditure.

Joint venture banks play an important role to search new field of investment so that they can mobilize their funds as much as possible. The objective of establishment of joint venture banks is to help (economically) finance for country, industries, trade etc. It always looks for profit.

The history of banking has been started after the establishment of Nepal Bank Ltd. By special Act on 1937 A.D. with Rs. 10 million of authorized capital and then opened its branches all over the country one after other. Nepal Rastra Bank was established under the NRB ACT 1954 A.D. (2012 B.S.) in 1956 A.D. as a leader of banking in Nepal, and then Rastriya Banijya Bank was established in 1966 A.D. Apart from this, NIDC, ADB and co-operative societies have also been established now.

2.1.3 Investment

Investment is concerned with the management of an investor's wealth which are the sum of current income and the present value of all future income funds to be invested that come from assets already owned, borrowed money or savings and foregone consumption by foregoing today and investing the saving. Investor expects to enhance their future consumption possibilities , i.e., they invest to increase wealth. Investors also seek to manage their wealth effectively by obtaining the most from it, while protecting it from inflation, taxes and factors.

Investment is the use of money to earn income or profit. The term also refers to the expenditure of funds for capital goods- such items as factories, farm equipment, livestock, and machinery. Most people invest part of their income for future financial gain. Others make investment to protect the purchasing power of their savings against rising prices. Some invest because they want to buy their own business, such as a store or a gas station.

Before making any kind of investment, a person should learn as much as possible about how the money will be used. The person should also find out what he/she can gain from an investment. Every investment involves some risk- that is a chance for loss.

Some scholars have given the actual meaning of investment, which are as follows:

“An investment is a commitment of money that is expected to generate additional money. Every investment entails some degree of risk, it requires a present certain sacrifice for a future uncertain benefit.”

“Investment policy fixes responsibilities for the investment deposition of the bank assets in terms of allocating funds for investment and loan and establishing responsibility for day to day management of those assets.”

V.K. Bhalla has given the basic concept of investment in three points. They are as follows:

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

From the above definitions, we can say that investment means use of rupee of amount today by expecting more income in future. If someone invests his fund today, he will get financial benefit in the future from the mobilization of his fund. The value of rupee in future is increased than the current value, for the expected change in price during the period and for the uncertainty involved in cash flow. So, it is clear that investment is the mobilization of funds today with expected additional return in future but the return maybe negative also, if wrongly invested without sound knowledge of investment and their related factors.

In commercial sector, investment is the use of fund at present for benefit in the future. There is the sacrifice of present consumption of fund for earning more in the future. Taxes, inflation, depression, labour relations, government action and countless other social phenomena affect the productivity and value of invested saving. All the above term create problem in investment. Therefore, an amount of technical information on financial matters is necessary.

Investment has to undergo various types of risk, e.g. Business risk like possibility of being weak in earning power of investment due to competition, uncontrollable costs, change in market demand etc. and Market risk like possibility of strong change in market price and collateral value of securities and real properties etc. All the investor does not achieve success. Therefore, simply making an investment is not sufficient. One should also follow sound investment policy.

The term investment has primary significance in financial sector, which refers to the process of determining the proper area in order to lodge a firm's fund to procure expected gain or profit known as a favourable return by its maximum utility at minimized risks. According to the investor's view, there must be a compulsory return on their investment but there may be unfavourable situations so that investor may incur loss. However, investment is the act of proper utilization of funds to be mobilized so that achievement of a high return could be ensured.

It also implies all such expenditure of a fund into capital nature assets. It is also one of the decisions of financial management, which involves the decision of

capital investment. Or commitment of funds to long-term assets that would provide benefits in future.

The banks and finance companies are such type of financial institution, which deals in money and substitute for money, or they deal with credit and credit instruments. Good management of credit and credit instruments is very important for the banks and financial institutions to collect fund and utilize it in good investment sector.

“Investment promotes economic growth and contributes to a nation’s wealth. When people deposit in a saving account in a bank, for example, the bank may invest by leaning the fund to various business companies. These firms in return, may invest the money in new factories and equipments to increase their production. In addition to borrowing from the banks, most companies issue stocks and bonds that they sell to investors to raise capital needed for business expansion. Government also issues bond to obtain funds to invest in such projects as construction of dams, roads and schools. All such investments by individuals, business and government involves a present sacrifice of income to get an expected future benefits. As a result, investment raises a nation’s standard of living.”

“Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generate positive return.”

“The term investing can cover a large range of activities. It often refers to invest money in certificates of deposits, bond, common stock or mutual funds. More

knowledgeable investor would include other financial assets such as warrants, puts and call, future contracts and convertible securities. Investing encompasses very conservative positions and aggressive speculation.”

Dr. Preety Singh has defined investment in this way, “Investment is the employment of funds with the aim of achieving additional income or growth in value”.

Above mentioned definitions about investment clarify that investment means to trade money for expected future stream of payment or benefits that will exceed the current cash outflow which is the benefit to the investors for sacrificing the time and commitment or due to uncertainty or risk factors. Financial institutions must be able to mobilize their deposit collection of funds in profitable, secured and marketable sector so that they can earn good return on their investment.

2.1.4 Investment Policy of Bank

A bank receives funds in the following ways:

- ❖ Capital fund
- ❖ Borrowing
- ❖ Deposits
- ❖ Other liabilities

These funds are invested in the following assets:

- ❖ Cash and bank balance

- ❖ Investment
- ❖ Loans, advances and bills purchased / discounted
- ❖ Fixed assets
- ❖ Other assets

2.1.5 Features of Sound Lending and Investment Policy

The income and profit of the bank depends upon its lending procedure and investment policy of collected fund in different securities. The greater the credit created by the bank, the higher will be the profitability. A sound lending and investment policy is not only pre-requisite for bank's profitability but also crucially significant for the promotion of commercial savings of a backward country like Nepal.

Some required features for sound lending and investment policies which most of the banks must consider could be explained as under:

a) Safety and Security

The bank should never invest its fund in those securities, which are subject to too much depreciation and fluctuations because a little difference may cause a great loss. It must not invest funds into speculative businessman who may be bankrupt at once and who may earn millions in a minute also. The bank should accept that type of case, "MAST" should be applied for the investment, where,

M = Marketability

A = Ascertain ability

S = Stability

T = Transferability

b) Profitability

A commercial bank can maximize its volume of wealth through maximization of return on their investment and lending. So, they must invest their fund where they gain maximum profit. The profit of commercial bank mainly depends on the interest rate, volume of loan, its time period and nature of investment in different in different securities.

c) Purpose of Loan

Why is a customer in need of loan? This is a very important question for a banker. If borrower misuses the loan granted by the bank, they can never repay and bank will possess heavy bad debts. Detailed information about the scheme of project or activities should be examined before lending.

d) Legality

Every financial institution must follow the rules and regulations of the company, government and various directions supplied by Nepal Rastra Bank, Ministry of Finance and others while issuing securities and mobilizing their fund. Illegal securities will bring out many problems to the investors. Lastly, the reputation and goodwill of the firm may be lost.

e) Liquidity

Liquidity is the position of the firm to meet current or short-term obligations. General public or customers deposit their savings at the bank in different accounts with full of confidence of repayment by the banks whenever they

require. To show a good current position and maintain the confidence of the customers, every firm must keep proper cash balance with them while investing in different securities and granting loan for excess fund.

f) Diversification

A bank should always be careful not to grant loan to only one sector. It can invest its deposit collection in various securities to maximize the risk. So, all banks must diversify their fund or make portfolio investment. Diversification helps to earn a good return and maximize the risk and uncertainty.

g) Tangibility

Though it may be considered that tangible property doesn't yield an income apart from direct satisfaction of possession of property, many times, intangible securities have lost their values due to price level inflation. A commercial bank should prefer tangible security to intangible one.

2.1.6 Meaning of Some Important Terms

Deposits

Deposit means the amount deposited in a current, saving or fixed account of a bank or financial institution. Deposit is the main source of fund that a bank usually uses for the generation of profit. Therefore, the efficiency of the banks depends upon the ability to attract deposits. Deposits being the borrowed amount from the depositors or from general public, it constitutes the liability of the bank.

The management of the bank is always influencing it through deliberate policy action.

Loan and Advances

Loan and advances and overdrafts are the main source of income for a firm. Bank deposits can be crossed beyond a desired level but the level of loans and advances and overdrafts will never cross it. Commercial banks and other financial institutions may take more preferential collateral while granting loan and advances. Some portion of loan and advances and overdrafts includes that amount which is given to staffs of the bank as home loan, vehicle loan, personal loan and others.

Investment on Government Securities, Shares and Debentures

Commercial bank makes investment on government securities, shares and debenture and earns some interest and dividend. This is the secondary source of income to the bank.

Investment on other Company's Shares and Debentures

Commercial banks invest their excess fund in the shares and debentures of the other company. They generally do so when there is excess of funds than required and there is no alternative opportunity to make investment in the profitable sector.

Other uses of fund

Commercial banks must maintain the bank balance with Nepal Rastra Bank as prescribed by the bank. Similarly, they have to maintain the cash balance in local

currency in the vault of the bank. Again some part of the fund has to be used for the bank balance in foreign bank.

Off-Balance Sheet

Off-balance sheet activities cover the contingent liabilities. These activities are not recognized as asset and liabilities in balance sheet. They are letter of credit, guarantee, commission, bills for collection etc. These activities are very important as they are the good source of profit to the bank though they have risk.

2.1.7 Review of Legislative Provisions

In this section, the review of legislative framework (environment) under which the commercial banks are opening has been discussed. This legislative environment has significant impact on the commercial banks' establishment, their mobilization and utilization provisions specified in the Commercial Bank Act 1975 A.D. (2013 B.S.) and the rules and regulations formulated to facilitate the smooth running of commercial banks. The preamble of Nepal Bank Act 1994 clearly states the need of commercial banks in Nepal, " In the absence of any bank in Nepal the economic progress of the country was being hampered and causing inconvenience to the people and therefore, with the objective of fulfilling that need by providing services to the people and for the betterment of the country. This law is hereby promulgated for establishment of the bank and its operation" (Nepal Bank Act, 1994).

As mentioned in this act, commercial banks will help in banking business by opening its branches in the different parts of the country. Under the direction of NRB, the main functions of commercial bank were established. Providing this act will be exchange of money, to accept deposit and provide loan to commercial banks and business activities to mobilize bank's deposit in different sectors of the different parts of the nation to prevent them from the financial problems. Central bank (NRB) established a legal framework by formulating various rules and regulations (prudential norms). A commercial bank is directly related to the fact that, how much fund must collected as paid up capital while being established as a certain place of the nation, how much fund is needed to expand the branches and counters, how much flexible and helpful is the NRB rules, are important. But here, we discuss only those, which are related to the investment function of the commercial bank. The main provisions or directives established by the NRB in the form of prudential norms in above relevant area briefly discussed below:

1. Provisions for Investment in the Deprived Sector

The provision was instructed by government (Ministry of Finance) and NRB. Some rules, which are formulated by NRB, affect the areas of credit and investment extension to the deprived sector by the commercial bank. According to the new provision, with effect from 16 July 2001, investment in shares of rural development banks by commercial banks, which used to be counted for the priority sector lending, only is new to be including under the deprived sector lending.

According to the provision, following banks are required to extend to the deprived sector as stipulated percentage maintained below:

Name of Banks	Minimum % of total outstanding credit to be extended for deprived sector
Nepal Bank Limited	3
Rastriya Banijya Bank	3
Nabil Bank Limited	3
Nepal Investment Bank Limited	3
Standard Chartered Bank Limited	3
Himalayan Bank Limited	2
Nepal SBI Bank Limited	2
Nepal Bangladesh Limited	2
Everest Bank Limited	2
Bank of Kathmandu Limited	1.75
Bank of Ceylon	0.75
Lumbini Bank Limited	0.25
Nepal Industrial and Commercial Bank Limited	0.00
Nepal Credit and Commerce Bank Limited	0.75
Kumari Bank Limited	0.25
Machhapuchhre Bank Limited	0.25

Sources : Banking and Financial Statistics

2. Provision for Credit to the Priority Sector

NRB requires commercial banks to extend loan and advances, amounting at least to 12% of their total outstanding credit to priority sector. Commercial banks' credit to the deprived sector is also a part of priority sector, credit under priority sector, credit to agriculture, and credit to cottage and small industries. Credit to service and counted commercial bank's loan to the co-operative, licensed by the

NRB is also to be computed as the priority sector credit from the fiscal year 1995/96 onwards.

3. Provision for the Investment in Productive Sectors

There are various productive sectors of the country. Nepal being a developing country needs to develop infrastructure and other primary productive sectors like agriculture, industries, commerce, etc. For this, NRB has directed commercial banks to extend at least 40% of their total credit to the productive sectors. Loans to priority sector, agricultural sectors, industrial sector has to be included in productive sector investment.

4. Provision for the Single Borrower Credit Limit

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

Time Table	CAR of Risk Weighted Assets	
Fiscal Year	Core Capital	Capital Fund (supplementary)
2058 / 059	4.5	9.0
2059 / 060	5.0	10.0
2060 / 061	5.5	11.0
2061 / 062	5.5	11.0

Sources: Banking and Financial Statistics, No-39

5. Directives to Raise Capital Funds

The commercial banks are allowed to include paid up capital and reserves for meeting the minimum capital requirement but they have to deduct the net loss from such funds if they are in loss.

Similarly, the commercial banks are directed to maintain the minimum capital fund on the basis of their risk weighted asset, i.e., CAR (Capital Adequacy Ratio) in the following ratio given below:

Where, are capital includes paid up capital, share premium, non-redeemable preference share, general reserve fund and accumulated loss / profit.

Supplementary capital includes general loan loss provision, exchange equalization reserve, asset revaluation reserve, hybrid capital instrument, subordinate term debt and free reserve.

6. Cash Reserve Ratio (CRR)

Cash reserve is a nerve center of the banks. To ensure adequate liquidity in the commercial banks, to meet the depositor's demand for cash at any time and to inject the confidence in depositors regarding the safety of their deposit funds, CBs are required to have maximum CRR. In this regard, as per NRB regulation regarding maintenance of minimum liquidity effective from 06 Shrawan 2059 B.S. banks are required to maintain minimum cash reserve as under:

Cash at till	:	2% of total deposit
Balance at NRB	:	(a) 7% of current and savings deposit (b) 4.5% of fixed deposit

7. Loan classification and Loss Provision

There are different types of loan provided by the banks, with the instruction of NRB and government. With the view to improving the quality of assets of CBs, NRB has directed CBs to classify their outstanding loan and advances, investment and other assets into four categories. The classification is done in two ways. The loans of more than one hundred thousands are to be classified as per debt service charge ratio, repayment situation, and financial condition of borrower, management efficiency and quality of collateral. The loans of less than one hundred thousands have to be classified as per maturity period.

The loan loss provision has to be maintained by CBs as instructed by NRB. Furthermore, NRB has directed CBs to maintain certain reserves for loans so classified. The existing loan loss Provisioning is as under:

Loan classification	Loan Loss Provisioning (in percent of overdue loan)
Pass	1
Substandard	25
Doubtful	50
Loss	100

Source: NRB

8. Directives Regarding Interest Rate Spread

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

2.1.7.1 Policy Relating to the Establishment of New Commercial Banks or Joint Venture Banks

The Central Bank NRB has issued the following regulations for the establishment of new banks:

As per NRB provision for establishment of new banks, minimum of Rs. 500 million of paid-up capital is required to open with it's headquarter in Kathmandu

Valley. If a new bank is to be established with its headquarter in any municipality in the kingdom then Rs. 120 million is required. Similarly, a minimum of Rs. 50 million paid-up capital is required to establish a bank with its headquarter in districts outside the Kathmandu valley and a minimum of Rs.30 million is required to establish a new bank outside Kathmandu valley.

If the bank is promoted only by domestic promoters, then they can invest maximum of 70% share of total capital and at least 30% paid-up capital has to be floated for the general public. If the bank is established with foreign investor, they are required to invest 40% to 50% of total paid-up capital and at least 30% has to be floated for the general public.

Any individual, firm, company or company of a group can invest up to 10% of the total paid-up capital of any one bank or up to 15% of the paid-up capital of all banks and applications for the establishment of new banks are to be entertained within the stipulated time period fixed by the NRB.

2.1.7.2 Policies Regarding the Expansion of Branches of Commercial Banks

NRB has issued the following new regulations relating to the expansion of branches of CBs:

- ❖ Commercial banks are generally not allowed to open any branches within metropolitan and semi-metropolitan cities. However, they can open such counters for stipulated short period to collect deposits only on special

occasions like trade, fairs and ceremonies, celebrations and festivals, pension distributions, with the prior approval of NRB.

- ❖ Except for the areas of metropolitan and semi-metropolitan cities mentioned above in rule (1) CBs can open extension counter anywhere with the approval of NRB. But those counters should be converted into bank branches within two years complying with the existing NRB policies of bank branch expansion. Otherwise, such counters should be automatically closed after two years.
- ❖ Regarding the working areas of extension counter opened as per clause (2) the counter can accept deposits and make of the depositors. In addition, they can buy foreign currencies, if permitted by foreign exchange department of NRB.
- ❖ If the extension counter is opened within the area of royal palace, hospitals and foreign diplomatic offices, the provision of (1) and (2) will not be applied. Likewise, if the counter is opened for special purpose like remittance and pension payments for Nepalese workers, then those clauses will not be applicable.

NRB has adopted the following policies for the expansion of commercial bank's branches:

1. While opening a new bank branch within the area of municipalities of Kathmandu, Biratnagar, Lalitpur, Bhaktapur, Pokhara, Birgunj and Narayangadh, CBs are required to open:

- ❖ At least two branches in adjoining semi-urban area, or
 - ❖ At least one branch in rural areas, which is not adjoining to any municipalities.
2. While seeking permission for the opening of a new branch as per the criteria (1) CBs need to specify the details including the purposed place for semi-urban or rural branch. Once approved by the NRB, banks are allowed to open new branches in urban areas only after opening their branches in semi-urban or rural areas.
 3. Banks are not required to open their new branch in semi-urban or rural areas if they open new branches outside the seven municipalities mentioned in (1).
 4. CBs established at a regional level, also need to comply with the above mentioned rules for the expansion of their branches.

2.2 Review of Related Studies

2.2.1 Conceptual Review

The banks are such type of financial institutions, which deal in money and substitute for money, or they deal with credit and credit instruments. Good management of credit or credit instruments is very important for a bank.

Williams J. Sharpe and Alexander J. Gorden (1998) has defined ‘Investment’ as the sacrifice of money today for the prospective money tomorrow. They write “Investment in its broadest sense means the sacrifice of current dollars for future dollars. Two different attributes are generally involved, time and risk. The

sacrifice takes place in the present and is certain. The reward comes later, if at all and the magnitude is uncertain. In some cases, the element of time predominates (e.g. government bond). In other cases, risk is the dominant attribute (e.g. call option on common stock). Yet in both, time and risk are important.”

Charles P. Jones (1988), emphasizing on the proper management of the investor’s wealth, says, “Investment is the commitment of funds to one or more assets that will be held over some future time period. Investment is concerned with the management of the investor’s wealth, which is the sum of current income and present value of all future income.”

Shakespeare Baidhya (1997) has an elaborated definition on ‘investment’ which beseeches of sound investment policy and covers wider aspects. He writes, “A sound investment policy of a bank is such that its funds are distributed on different types of assets with good profitability on one hand and provides maximum safety and security to the depositors and banks on the other hand. Moreover, risk in banking sector tends to be concentrated in the loan portfolio. When the bank gets into serious financial problem, its problem usually springs from significant amount of loans that have become uncollectible due to due to mismanagement, illegal economic downturn. Therefore, bank’s investment policy must be such that it ensures sound and prudent in order to prevent public funds.

Further in details he deals with what type of loans do banks make? And, how much of loan is to be invested? The banks make a variety of loans to a wide variety of customers for many different purposes from buying automobile to construction of homes and making trade with foreign countries. There, no uniform rules can be laid down to determine the portfolio of a bank. The environment in which the bank operates influences its investment policy. The nature and availability of funds and assets also differ widely from region to region within a country or country to country. For example, the scope of operating a bank in Jumla will be different from the scope of operating a bank in Kathmandu. The investment policy to be applied in Kathmandu may not be applicable to the customers of Jumla because the demand for loans is less in rural areas whereas it is higher in urban areas”.

Cheney and Moses (1999) are concerned with the objective of investment and indicate that the risk is in proportion with the degree of return. They write “The investment objective is to increase systematically the individual’s wealth: defined as assets minus liabilities. An investor seeking higher return must be willing to face higher level of risk.”

Dr. Sunity Shrestha (1998) has expressed similar view on investment. She stresses on the fulfillment of credit needs of various sectors which ensues investment. She expressed in her book ‘Portfolio Behaviours of Commercial Banks in Nepal’, “The commercial banks fulfill the credit needs of various

economic sectors including policy of commercial banks which is based on profit maximization of the institute as well as the economic enhancement of the country”.

2.2.2 Review of Article

Under this heading efforts have been made to examine and review some of the related articles.

Sunil Chopra (1989) in his article, “Role of Foreign Banks in Nepal” had conducted that the joint venture banks playing an increasingly dynamic and vital role in the economic development of the country that will undoubtedly increase with time.

Murari R. Sharma (1988) in his article, “A Study of Joint Venture Banks in Nepal; coexisting and crowding out” pointed out that it is very much beneficial for Nepalese to let joint venture banks to enhance the development of local commercial banks. But the government should charge more cost to joint venture banks than the local commercial banks. He suggested HMG to treat equally to joint venture banks and local banks, both types of banks will coexist complementing each other and contributing the nations accelerated development”.

Dr. Sunity Shrestha (2055) in her article, “Lending Operation of Commercial Banks and its Impact on Gross Domestic Product (GDP)” has presented with the objectives to make an analysis of contribution of commercial banks leading to the Gross Domestic Product (GDP) of Nepal. She has set a hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending viz., agriculture, industrial and commercial service, general and social sector as independent variables. A multiple regression technique has been analyzed in the contribution.

Bodhi B. Bajaracharya (2047) in his article, “Monetary Policy and Deposit Mobilization in Nepal” concludes that the mobilization of domestic saving is one of the prime objectives of the monetary policy in Nepal. And for this purpose, commercial banks are the active financial intermediary for generating resources in the form of deposit of the private sector and providing credit to the investors in the different sectors of the economy.

Ramesh Lal Shrestha (2047) in his article, “A Study on Deposit and Credit of Commercial Banks in Nepal”, concluded the credit deposit ratio would be 51.30% other things remaining in Nepal, which was the lowest under the period of review. Therefore, he had strongly recommended that the joint venture banks should try to give more credit entering few fields as far as possible; otherwise they might not be able to absorb even the total expenses.

2.2.3 Review of Journal

Journals published in the different economic journal, dissertation papers, magazines, newspapers and other related books.

F. Morries, (1980) in his dissertation paper, “Latin America’s Banking System in the 1980s” has concluded that most of the banks concentrated on compliance with central bank rules on reserve requirements, credit allocation and interest rates. While analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked. The huge losses now find in the bank’s portfolio in many developing countries and testimony to the poor quality of this over right investment function.

He further adds that mismanagement in financial institutions has involved inadequate and over optimistic loan appraisal, tax loan recover, high risk diversification of lending and investment, high risk concentration connected and insider lending, loan mismatching. This has led many banks of developing countries to the failure in 1980s.

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

2.2.4 Review of Article Work

Nowadays, the field of investment is going on in wide concept. Therefore, many researchers have published their research article about the invest policy in Nepal. In the Nepalese context, there has been research in commercial banks and financial institutions in order to achieve their goal effectively.

Shiba Raj Shrestha (2055), in his research work “Portfolio Management in Commercial Bank, Theory and Practice”, has highlighted that any individual or institutions wants to invest excess funds and surplus funds in best and profitable sectors or portfolio. The financial institutions are looking for the good and profitable investment which maximizes the return of funds. Due to the lack of technical expertise they are facing the problems of how to make best investment decisions.

He has further stressed in the following issues; in case of investors having lower income, portfolio management may be limited to small saving income. But, on the other hand, portfolio management means to invest funds in various schemes of mutual funds like deposits, shares and debentures for the investors with surplus income. Therefore, portfolio management becomes very important for both individual as well as institutional investors. Large investors would like to select a best mix of investment assets and subject to the following aspects:

- ❖ Higher return which is comparable with the available alternative opportunities.
- ❖ Good liquidity with adequate safety of investment.

- ❖ Certain capital games.
- ❖ Maximum tax concession.
- ❖ Flexible investment.
- ❖ Economic and efficient investment.

To obtain the above mentioned aspects, investors do not hold single security, they try to have a portfolio investment and choose such a portfolio of securities, which can make maximum return with low risk and uncertainty. To find out a good portfolio investment on securities, they can do analytical study, i.e., fundamental analysis and technical analysis.

Shrestha has also presented the following approaches to be adopted:

- ❖ To find out the investing assets (generally securities) having scope for better returns depending upon individual characteristics like age, health, need, deposition, liquidity and tax liquidity etc.
- ❖ To find out the risk of securities depending upon the attitude of investor towards risk.
- ❖ To develop alternative investment strategies for selecting of better portfolio, this will ensure a trade-off between risk and return so as to attain the primary objective of wealth maximization at low risk.
- ❖ To identify variety of securities for investment to reduce volatility of risk and returns

Dr. Radhe S. Pradhan (1992) has conducted a new research, “Financial Management Practices in Nepal”. The survey mainly with financial functions, sources and types of financing, financing decisions involving debt, effect of change in taxes on capital structure, financial distress, dealing with banks and dividend policy.

The major findings of the study connected with the financial management are given as:-

-) The enterprises have a definite performance for bank loans at a lower level of debt.
-) Banks and retained earning are the two most widely used financial sources.
-) Most enterprises do not borrow from one bank only they do switch between banks whichever offer best interest rates.
-) Most enterprises find that banks are flexible at interest rate and convenience.
-) Generally, there is no definite time to borrow the issues stocks that is majority of the respondents are unable to predict when interest rate will lower or go up or unable to predict when the stock will go down or up.

Thus, it can be said that out of numerous studies on the capital market of Nepal, these studies established itself as a milestone and an outstanding one.

Dr. Sunity Shrestha (1993) has explained her view on research, “Investment Planning of Commercial Banks in Nepal”, has made remarkable efforts to

examine the investment planning of commercial banks in Nepal. On the basis of studies she concluded that the bank portfolio (land and investment) of commercial banks have been influenced by the variable securities rates. Investment planning of commercial bank in Nepal is directly traced to fiscal policy of government and heavy regulatory procedure of the central bank (NRB). So, the investments are not made in professional manners. Investment planning and operation of commercial banks in Nepal has not been found satisfactory in terms of profitability. To overcome this problem she has suggested, “Commercial banks should take their investment function with proper business attitude and should perform leading and investment operation efficiently with proper analysis of the project”.

Bhaskar Sharma (2000), in his study, “Banking the Future on Competition”, has found some results that all the commercial banks are establishing and operating in urban areas. His achievements are:

Commercial banks are establishing and providing their services in urban areas only. They do have interest to establish in rural areas. Only the branches of Nepal Bank Ltd. and Rastriya Banijya Bank Ltd. are running in those sectors.

Commercial banks are charging higher rates on lending.

They have maximum tax concession.

They do not properly analyze the credit system.

According to him, “Due to the lack of investment avenues, banks are tempted to invest without proper credit appraisal and on personal guarantee, whose negative side effects would show colours only after four or five years.” He has further included that private commercial banks have mushroomed only in urban areas where large volume of banking transaction and activities are possible.

Ajay Ghimire, General Manager of ACE Finance Ltd. on the topic, “Process Involved in Financing a Corporation: A Nepalese Context” has explained about the procedures of establishing a finance company. After establishment of a firm, any firm has an objective of maximizing the value of the firm. He gives emphasis towards the financing decisions and says that it is more important towards the finance companies. He has concluded that “Financing an investment decision or for that matter any decision of a firm is an outcome of a complex equilibrium process. Therefore, there is no ‘one investment policy’ of all organizations. The organizations are interested in optimizing its investment decisions should formulate its investment policy taking into consideration the skill, taste and preferences of managers involved in the decision making process.”

Shekhar Bahadur Pradhan (2053), in his article, “Deposit mobilization, its problem and prospects”, he has presented the following problems in the context of Nepal:

- ❖ People do not have knowledge and proper education for saving in institutional manner. They do not know financial organization process, withdrawal system, depositing system etc.

- ❖ Financial institutions do not want to operate and provide their services in rural areas.
- ❖ He has also recommended about how to mobilize the deposit collection by the financial institutions by rendering their services in rural areas, by adding various services.
- ❖ By operating rural banking programmes and unit.
- ❖ Nepal Rastra Bank must organize training programmes to develop the skilled human resources.
- ❖ By spreading a number of cooperative societies to develop mini banking services and improve the habits of public on deposit collection to the rural areas.

Bodhi B. Bajaracharya (2047), in his article, “Monetary Policy and Deposit Mobilization in Nepal” he states, “the mobilization of domestic saving is one of the prime objectives of monetary policy in Nepal. For this purpose, commercial banks stood as the active and vital financial intermediary for generating resources in form of deposit of the private sectors. So, providing credit to the investors is a different aspect of economy.”

He has explained that commercial banks can only play an important role to mobilize the national savings. Nowadays, other financial institutions like Finance companies, co-operative societies have been established actively to mobilize deposits in the proper sectors so that return can be ensured from the investment.

2.2.5 Review of Thesis

Under the topic “Investment Policy”, several thesis works have been conducted by some students, some of them, which are relevant for this study, are presented below:

Ramala Bhattarai (1997) in her thesis study entitled, “Lending Policy of Commercial Banks in Nepal”, has tried to examine the lending policy. Her main objective was to examine the collection of resources, utilization of those resources, and investment sectors. She has concluded in the last section that commercial banks should be able to generate capital. Otherwise, lower capital formation hampers economic development of the people and the whole country. So they must give more preference on collection and utilization of the fund properly.

Her study is not concerned with the investment policy of the firms. She has tried to show the position of deposit collection and lending them. Other factors are not analyzed. Her study period is up to FY 1996 / 97. Therefore, her findings cannot represent the lending position of the CBs after FY 1996 / 97.

Raja Ram Khadka (1998) in his thesis work entitled “A Study on the Investment Policy of Nepal Arab Bank Limited in Comparison to Other Joint Venture Banks on Nepal”, has made an attempt to examine and interpret the investment policies

adopted by NABIL and other joint venture banks of Nepal. He has included the following objectives:

- ❖ To evaluate the liquidity, asset management efficiency and profitability position.
- ❖ To discuss fund mobilization and investment policy and growth ratios of loan and advances and total deposit, net profit and total investment.
- ❖ To find out the relationship between deposit and total investment, deposits and loan and advances etc.
- ❖ To evaluate the trends of deposit utilization and its projection for next five years.

His major findings are:

- ❖ The mean current ratio of NABIL is slightly lower than that of other JVBs but the mean ratio of cash and bank balance to current asset of NABIL is greater than that of other JVBs
- ❖ .The mean ratio of loan and advances to total deposits of NABIL is lower than that of other JVBs; similarly, the mean ratio of NABIL is lower than that of other JVBs.
- ❖ The mean ratio of investment on government securities to total working fund of NABIL is slightly lower than that of other JVBs.
- ❖ Profitability position of NABIL is comparatively not better than that of other JVBs.

- ❖ There is a significant relationship between deposit and loan and advances as well as outside assets and net profit but not between deposit and total investment in case of NABIL and other JVBs.
- ❖ Growth ratios of NABIL are in increasing trend. It is seen to increase its sources of funds more successfully for deposit mobilization and granting loan and advances and maintain a good investment but it seems to be failure to maintain a high growth rate of profit in comparison with other JVBs.

He has recommended that NABIL has to collect a large amount of fund and make a variety of deposit scheme, increase cash and banks balance to meet loan and cash demand of the customers. It has to follow the liberal lending policy and invest more and more percentage of total deposits in loan and advances, invest on government securities also, to utilize the shareholders' fund in high profitable sectors and reduce its cost and expenses. It has to try for the collection of the fund at a cheaper rate.

His study period is based on the fiscal year up to 1997 / 98, which cannot explain the investment policy of NABIL and other JVBs after FY 1997 / 98.

Prem Bahadur Shahi (1999), in his study, "Investment Policy of Commercial Banks in Nepal" has comparatively analyzed the various aspects of JVBs with their counter points of Nepal Bank Limited (NBL) and other banks. He has basically emphasized on their investment policy. He is motivated by the ideas of

comparing or contrasting between their policies rather than good or bad finding about them. JVBs have comparatively fewer branches in the country. On the other hand, NBL, a semi-governmental bank, has around 211 branches throughout the country. JVBs are the commercial banks with foreign investors but NBL is rather affected by governmental interference to the global market unlike the other commercial banks. This study period is from 1992-1997.

In his study, he has found that the liquidity position of JVBs is comparatively weaker than that of NBL. However, the On-Balance Sheet as well as the Off-Balance Sheet operations of JVBs are comparatively more successful. Similarly, JVBs and NBL are in the similar profitability position and JVBs growth ratio is more satisfactory than that of NBL.

Prem has come up with some recommendations for better investment policy of the JVBs. According to him, the financial and economic development of a country largely rests on industrialization and commercialization. Commercial banks must mobilize their funds in the sectors yielding optimal returns such as purchasing of shares and debentures of other financial and non-financial institutions. The JVBs are to venture in new sectors of investment with low level of risk. The loan default in commercial banks is a result of various factors, i.e., political influence, lack of necessary skills of project appraisal, improper collateral evaluation, irregular supervision and lack of entrepreneurial attitude. He has suggested for the enactment of strong loan recovery act and its proper

implementation. His study cannot explain the result after FY 1998 / 99. It is also unable to examine the risk factors.

Upendra Tuladhar (2000) in his thesis work entitled, “A Study on the Investment Policy of Nepal Grindlays Banks Limited in Comparison to Other Joint Venture Banks in Nepal” has highlighted the following objectives:

- ❖ To study the mobilization of fund and investment policy.
- ❖ To evaluate the liquidity, efficiency of asset management and profitability position, growth ratios.

In last section of his study, he has concluded the following findings:

- ❖ Mean Current ratio of NGBL is slightly higher than that of other banks, i.e., NABIL and HBL. Liquidity position of NGBL is less than that of other two JVBs.
- ❖ Mean of cash and bank balance to current ratio of NGBL is less than that of NABIL and HBL.
- ❖ Mean of loan and advances to total deposit ratio of NGBL is less than that of other two JVBs.
- ❖ Mean of investment on government securities to working fund ratio of NGBL is better than that of other two JVBs.
- ❖ NGBL has the largest profit margin in comparison with the other two JVBs.

- ❖ Growth ratio of NGBL and NABIL are negative but it is found that HBL has increasing growth ratio.

Finally, ha has presented the following suggestions:

- ❖ JVBs are recommended to provide information about their services and facilities.
- ❖ JVBs should extend their services to rural areas and priority sectors of the kingdom.
- ❖ JVBs should increase cash and bank balance to meet the need of investment and demand of loan and advances.
- ❖ JVBs should follow the liberal lending policy.

He has recommended investing their funds in the purchase of shares and debentures of other financial, non-financial companies, hotels and government companies. His study period is up to 1999/ 00, which cannot represent the investment policy of the succeeding years.

Samiksha Thapa (2001) has conducted a thesis research on “A Comparative Study on the Investment Policy of Nepal Bangladesh Bank Ltd and Other Joint Venture Banks (NABIL and NGBL)”.

A research study conducted by Samiksha Thapa has the following major objectives:

- ❖ To evaluate the liquidity, assets management efficiency, profitability and risk position of NB Bank in comparison to NABIL and NGBL
- ❖ .To analyze the relationship between loan and advances and total investment with other financial variables of NB Bank and compare them with NABIL and NGBL.
- ❖ To examine the fund mobilization and investment policy on NB Bank through Off-balance sheet and On-balance sheet in comparison to the other two banks.
- ❖ To study the various risks in investment of NB bank in comparison to NABIL and NGBL.
- ❖ To analyze the deposit utilization trend and its position for the next five years of NB bank and compare it with those on NABIL and NGBL.
- ❖ To provide suggestions for improving the investment policy of NB bank.

The major findings of the study were as follows:

- ❖ NB bank has good deposit collections, it has better liquidity position, it has made enough loan and advances but, it has made a negligible amount of investment in government securities.
- ❖ Profitability position of NB bank is comparatively worse than that of NABIL and NGBL.

- ❖ The growth ratio of total deposits, loan and advances and net profit of NB bank is higher than NABIL and NGBL. While, growth ratio of total investment of NB bank is comparatively worse than NABIL and NGBL.
- ❖ There is a significant relationship between deposit and loan and advances, outside assets and net profit on NB bank but there is no significant relationship between deposit and investment of the bank.
- ❖ The position of NB banking regard to utilization of fund to earn profit is not better in comparison to NABIL and NGBL.
- ❖ There is significant difference in mean ratios of loan and advances to total deposit ratio, mean ratio of total off-balance sheet operation to loan and advances, mean ratio of return on loan and advances and mean ratio of total interest earned to total outside assets of NB bank.
- ❖ NB bank has been earning higher cost for its collected fund.

This research has been conducted on only three banks and cannot provided information of other banks.

Dilip Roy (2002) has conducted a thesis research on “An Investment Analysis of Rastriya Banijya Bank (in comparison with Nepal Bank Limited)” .

The objectives of the research were as follows:

- ❖ To evaluate liquidity, activity and profitability ratios of RBB in comparison with NBL and industry average.

- ❖ To use trend analysis to compare loan and advances, total investment with total deposit and net profit of RBB and compare the same with NBL.
- ❖ To analyze the relationship of loan and advances and total investment with total deposit and net profit of RBB, and to compare it with that of NBL and industry average.
- ❖ To examine the loan loss provision of RBB and NBL.
- ❖ To provide suggestions and recommendations on the basis of findings.

Findings of the research were as follows:

- ❖ RBB has good deposit collection, enough loan and advances and small investment on government securities.
- ❖ The asset management ratio of RBB is not better than that of NBL.
- ❖ The profitability position of RBB is worse in comparison to NBL due to low return on working fund, loan and advances and outside assets.
- ❖ The RBB's fund collection and mobilization position is satisfactory in comparison to NBL, while considering growth rate.
- ❖ By considering fund flow analysis, the RBB has poor loan and advances issued.
- ❖ There is significant relationship between deposit and loan and advances, where there is not significant relationship between deposit and investment of both banks, RBB and NBL. And there is no significant relationship between outside assets and net profit.

- ❖ RBB has better positive relationship between net profit, return on loan and advances and return on investment but RBB has worse performance in income as commission, and discount and exchange income.
- ❖ The trend analysis of total deposit, loan and advances were increasing trend but the trend analysis of total investment is in decreasing trend of both RBB and NBL.

This research work is concentrated only in the analysis of two banks and also cannot explain the result after FY 2000 / 01. Investment policy of commercial banks cannot be defined by this study for succeeding fiscal years.

Rajesh Dhital (2004) in his research study entitled, “A Comparative Study of Investment Policy of Standard Chartered Bank Nepal Limited and bank of Kathmandu Limited” has highlighted the following objectives:

- ❖ To find out the relationship between total investment, deposit, loan and advances, net profit and outside assets and compare them.
- ❖ To compare the investment policy of the concerned banks.
- ❖ To evaluate the liquidity, asset management, profitability and risk portion of SCBNL and BOKL.
- ❖ To analyze the deposit utilization trend and its projection for five years.
- ❖ To provide package and workable suggestions.

His major findings were,

- ❖ The liquidity position of both banks is satisfactory but BOKL is comparatively better than SCBNL.
- ❖ SCBNL is not able to provide its deposit as loan and advances in comparison to BOKL.
- ❖ SCBNL has more portion of deposit invested as investment.
- ❖ Profitability position of SCBNL is better.
- ❖ SCBNL has bared lower degree of liquidity and credit risk compared to BOKL.
- ❖ All relationships between different variables taken for study are insignificant except deposit and interest earned in case of SCBNL whereas more relationships were significant in case of BOKL.
- ❖ Trend values are in increasing trend.
- ❖ The test of hypothesis showed no significant difference.

In his study, he recommended to increase more deposit, adopt liberal lending policy, expand the branches, and adopt project-oriented approach. His study is based only on the two banks; it cannot provide the information of the other banks.

2.3 Research Gap

After detail study of the previous thesis, it has been concluded that the other research studies have researched and analyzed the data on the topic related to financial performance and investment policy up to the FY 2001 / 02. That is why;

it has been tried here, in this study to analyze the data related to investment policy of the four JVBs up to FY 2005 / 06. Study period of this research is different than previous studies although there are similar topics.

More secondary data and only few primary data are used in this study. The factors of all the three banks have been analyzed and studied.

CHAPTER – III

RESEARCH METHODOLOGY

Research methodology is the way to solve systematically about the research problems, which includes many techniques and tools, as it is necessary for every study. It sequentially refers to the various steps to be adopted by a researcher.

3.1 Research Design

Research design is the plan, structure and strategy of investigations conceived so as to obtain answers to research questions and to control variances. It is the arrangement of conditions for collections for collection and analysis of data. To achieve the objective of this study, descriptive and analytical research design has been used.

Some financial and statistical tools have been applied to examine facts and descriptive and analytical research design also has been used.

3.2 Sources of Data

This study is conducted on the basis of secondary data. The data required for the analysis are directly obtained from the balance sheet and the P / L account of the concerned bank's annual reports and the publication of NEPSE. Supplementary data and information are collected from a number of institutions and authorities

like NRB, Security Exchange Board, Nepal Stock Exchange Ltd., Ministry of Finance, budget speech of different fiscal years, economic survey, etc.

All the secondary data are compiled, processed and tabulated in the time series as per the need and objectives.

Likewise, various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and documents from various sources.

3.3 Populations and Sample

There are altogether twenty- five commercial banks functioning all over the kingdom and most of their stocks are traded actively in the stock market.

Samples are taken from the following total population:

S.N.	Commercial Banks	Established Date	Head Office
1.	Nepal Bank Ltd.	1937/11/15	Kathmandu
2.	Rastriya Banijya Bank	1966/01/23	Kathmandu
3.	Nabil Bank	1984/07/16	Kathmandu
4.	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu
5.	Standard Chartered Bank	1987/01/30	Kathmandu
6.	Himalayan Bank Ltd.	1993/01/18	Kathmandu
7.	Nepal Bangladesh Bank	1993/06/05	Kathmandu
8.	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu
9.	Everest Bank Ltd.	1994/10/18	Kathmandu
10.	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu
11.	Nepal Credit and Commercial Bank	1996/10/14	Siddhartha Nagar
12.	Lumbini Bank Ltd.	1998/07/17	Naryanghat
13.	Nepal Industrial and Commercial Bank Ltd.	1998/07/2	Biratnagar
14.	Macchapuchhre Bank Ltd.	2000/10/03	Kathmandu
15.	Kumari Bank Ltd	2001/04/03	Pokhara
16.	Laxmi Bank Ltd.	2002/04/03	Kathmandu
17.	Siddhartha Bank Ltd	2002/12/24	Kathmandu
18.	Agricultural Development Bank Ltd.	1968/01/02	Kathmandu
19.	Global Bank Ltd.	2007/01/02	Birgunj, Parsa
20.	Citizen Bank Ltd.	2007/06/21	Kathmandu
21.	Prime Bank Ltd.	2007/09/24	Kathmandu
22.	Sunrise Bank Ltd.	2007/10/12	Kathmandu
23.	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu
24.	Nepal Development and Credit Bank Ltd	2008	Kathmandu
25.	NMB Bank	2008	Kathmandu

Source: <http://brf.nrb.org.np>

From the above population, three JVBs are selected and the comparative study of investment policy of these banks is made.

The Three banks taken are:

1. Himalayan Bank Limited
2. Everest Bank Limited
3. Bank of Kathmandu Limited

3.4 Analysis of Data

In this study, various financial, accounting and statistical tools have been used to achieve the objective of the study. The analysis of data is done according to the pattern o data available. The various tools applied in this study are presented as follows:

3.4.1 Financial Tools

Financial tools are used to examine the financial strengths and weakness of the bank. In this study, financial tools like ratio analysis have been used.

3.4.2 Ratio Analysis

Financial ratio is the mathematical relationship between two accounting figures. “Ratio analysis is a part of the whole process of analysis of financial statements of any business or industrial concern especially to take output and credit decisions”.

Thus, ratio analysis is used to compare a firm's financial performance and status to that of other firms or to itself over times. The qualitative judgment regarding financial performance of a firm can be done with the help of ratio analysis.

Even though, there are many ratios, only those ratios have been covered in this study, which are related to investment operation of the bank. This study contains the following ratios.

A. Liquidity Ratios

Liquidity ratios are used to judge the ability of banks to meet its short term liabilities that are likely to mature in the short period. From them, such insights can be obtained to present cash solvency of the bank and its ability to remain solvent in the event of adversities. It is the measurement of speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations. The following ratios are evaluated under liquidity ratios:

1. Current Ratio

This ratio shows the banks short-term solvency. It shows the relationship between current assets and current liabilities.

Current assets include cash and bank balance, money at call or short notice, loans and advances, investment on government securities and other interest receivables, overdrafts, bills purchased and discounted and miscellaneous current assets. Similarly, current liabilities include deposits, bills payable, tax provision, staff bonus, dividend payables and other miscellaneous current liabilities.

Current ratio is calculated as,

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

The widely accepted standard of current ratio is 2:1 but accurate standard depends on circumstances in case of seasonal business ratio and the nature of business.

2. Cash and Bank Balance to Total Deposit Ratio

Cash and bank balance are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositors.

This ratio is computed by dividing cash and bank balance by total deposit. This can be presented as,

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

Cash and bank balance includes cash in hand, foreign cash in hand, cheques and other cash items, balance with domestic banks and balance held in foreign banks.

The total deposit encompasses current deposits, saving deposits, fixed deposits, money at call or short notice and other deposits.

3. Cash and Bank Balance to Current Assets Ratio

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

This ratio is calculated as,

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

4. Investment on Government Securities to Current Assets Ratio

This ratio is calculated to find out the percentage of current assets invested in government securities, i.e., treasury bills and development bonds.

This ratio is computed by dividing investment on government securities by current assets. We can state it as,

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

5. Loans and Advances to Current Assets Ratio

Loans and advances are the current assets, which generate income for the banks.

This ratio shows the percentage of loans and advances in the total current assets.

$$\frac{\text{Loans and Advances}}{\text{Current Assets}}$$

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

B. Asset Management Ratios

Asset management or turnover or activity ratios are employed to evaluate the efficiency with which the firm manages to utilize its assets. This ratio measures the efficiency of bank's management to mobilize its resources in productive sectors. The following ratios are important to evaluate bank's management.

1. Loans and Advances to Total Deposit Ratio

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

$$\frac{\text{Loans and Advances}}{\text{Total Deposits}}$$

2. Total Investment to Total Deposit Ratio

Investment is one of the major credits created to earn income. This ratio is calculated as,

$$\frac{\text{Total Investment}}{\text{Total Deposits}}$$

Total investment includes investment on government securities, investment on debentures and bonds, shares in subsidiary company, shares in other companies and other investments. Large ratio shows the good efficiency of bank's management toward the use of its total deposits.

3. Loan and Advances to Total Working Fund Ratio

Loan and advances is the major component in the total working fund (total assets), which indicate the ability of a bank to channelize its deposit in the form of loan and advances to earn high returns. This can be calculated by dividing loan and advances by total working fund which is shown below,

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

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

4. Investment on Government Securities to Total Working Fund Ratio

This ratio shows the bank investment on government securities in comparison to the total working fund. This ratio is calculated by dividing investment on government securities by total working fund, which can be stated as,

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

The large ratio shows investment on risk-less securities and vice versa.

5. Investment on Shares and Debentures to Total Working Fund Ratio

This ratio shows the bank investment in shares and debentures of the subsidiary and other companies. This ratio can be computed as investment on shares and

debentures divided by total working fund. The numerator includes investment on debentures, bonds and shares of other companies.

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

6. Loan Loss Ratio

This ratio shows the possibilities of loan default of a bank. It indicates how efficiently it manages its loan and advances and makes efforts for loan recovery. Higher ratio implies higher portion of non-performing loan in total portfolio. This ratio is derived by dividing loan loss provision by total loan and advances. It can be stated as,

$$\frac{\text{Loan Loss Provision}}{\text{Total Loan and Advances}}$$

Here, the numerator indicates the amount of provisions for possible loan loss.

C. Profitability Ratios

Profitability ratios are the indicator of the financial performance of any institution. It is calculated to measure the efficiency of the firm in terms of generating profit. Higher the profitability ratios, better the financial performance of the bank and vice versa. Profitability ratios can be evaluated through the following ratios:

1. Return on Total Working fund Ratio (ROA)

This ratio indicates the overall profitability of all working funds, i.e., total assets, it is also known as return on assets (RAO). A firm has to earn satisfactory return

on assets or working fund for its survival. This ratio is calculated by dividing net profit (loss) by total working fund.

$$\frac{\text{Net Profit (loss)}}{\text{Total Working Fund}}$$

The numerator indicates the portion of income left to the internal equities after all costs, expenses have been deducted.

2. Total Interest Earned To Total Outside Assets Ratio

This ratio measures the interest earning capacity of a bank through the efficient utilization of outside assets. Higher ratio implies efficient use of outside assets to earn interest. This ratio is calculated by dividing total interest earned by total outside assets and can be mentioned as,

$$\frac{\text{Total Interest Earned}}{\text{Total Outside Assets}}$$

The denominator includes loan and advances, bills purchased and discounted and all types of investments. The numerator comprises of total interest income from loan, advances, cash credit and overdrafts, government securities and other investments.

3. Return on Loan and Advances Ratio

This ratio indicates how efficiently the bank has employed its resources in the form of loan and advances. This ratio is calculated by dividing net profit (loss) by loan and advances. This can be expressed as,

$$\frac{\text{Net Profit (loss)}}{\text{Loan and Advances}}$$

4. Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find out the percentage of interest earned to total working fund (assets). Higher ratio shows better performance of the bank in terms of earning interest on its total working fund. It can be calculated as,

$$\frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

5. Total Interest Paid to Total Working Fund Ratio

This ratio evaluates the percentage of interest paid on liabilities with respect to total working fund. This ratio can be calculated by dividing total interest paid by total working fund. It can be stated as,

$$\frac{\text{Total Interest Paid}}{\text{Total Working Fund}}$$

The numerator consists of total interest expenses on deposit liabilities, loan and advances (borrowing) and other deposits.

D. Risk Ratios

Risk taking is the prime business of the bank's investment management. It increases effectiveness and profitability of the bank. These ratios indicate the amount of risk associated with the various banking operations, which ultimately influences the bank's investment policy. The following ratios are evaluated under this topic:

1. Credit Risk Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that the investment will deteriorate in quality or go into default consequently causing loss to the bank. By definition, credit risk ratio is expressed as the percentage of non-performing loan to total loan and advances. This ratio is calculated by dividing total loan and advances by total assets. It can be stated as,

$$\frac{\text{Total Loan and Advances}}{\text{Total Assets}}$$

2. Liquidity Risk Ratio

The liquidity risk ratio measures the level of risk associated with the liquidity with the liquid assets, i.e., bank balance that is kept in the bank for the purpose of satisfying the depositor's demand for cash. Higher ratio shows lower liquidity risk and vice versa. This ratio is calculated by dividing liquid assets, i.e., total cash and bank balance by total deposits. It can be stated as,

$$\frac{\text{Liquidity Assets}}{\text{Total Deposits}}$$

E. Growth Ratios

To examine and analyze the expansion and growth of the bank's business, following growth ratios are calculated under this topic:

1. Growth Ratio of Total Deposits

2. Growth Ratio of Loan and Advances

3.Growth Ratio of Total Investment

4.Growth Ratio of Net Profit

3.4.2. Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study, statistical tools such as, Karl Pearson's coefficient of correlation, least square linear trend and hypothesis testing have been used.

3.4.2.1. Coefficient of Correlation Analysis

This analysis identifies and interprets the relationship between two or more variables. In case of highly correlated variables, the effect on one variable may have effect on other correlated variable. Karl Pearson's coefficient of correlation has been used to find out the relationship between the following variables:

1. Co-efficient of correlation between deposits and total investment
2. Co-efficient of correlation between deposits and loan and advances
3. Co-efficient of correlation between total outside assets and net profit
4. Co-efficient of correlation between loan and advances and net profit

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

To find out those relationships, the following formula is used,

$$r = \frac{\sum_{i=1}^N dx_i dy_i}{\sqrt{\sum_{i=1}^N dx_i^2} \sqrt{\sum_{i=1}^N dy_i^2}}$$

The result of coefficient of correlation is always between +1 to -1.

When, $r = +1$, there is perfect positive correlation

1. $r = -1$, there is perfect negative correlation
2. $r = 0$, there is no correlation
3. r lies between 0.7 to 0.999 (-0.7 to -0.999) there is a high degree of positive (or v negative) correlation
4. r lies between 0.5 to 1.699, there is a moderate degree of correlation
5. r is less than 0.5, there is low degree of correlation

3.4.2.2. Trend Analysis

This topic analyzes the trend of deposits, loans and advances, investment and net profit of HBL, EBL and BOKL from FY 2002 / 03 to 2006/07. Under this topic, the trend of following have been analyzed:

1. Trend analysis of total deposits
2. Trend analysis of loan and advances
3. Trend analysis of total investment
4. Trend analysis of net profit

The trends of related variables are calculated as, $y = a + bx$

Where, y = dependent variable

x = independent variable

a = y-intercept

b = slope of trend line

3.4.2.3. Test of Hypothesis

The objective of this test is to test the significance regarding the parameters of the population on the basis of sample drawn from the population. Under this, to test the homogeneity of several means, the analysis of variance (ANOVA) is used. This analysis provides a techniques to make inferences about whether all the samples have come from the same normal population having the same means or not. The following test has been conducted on the various ratios related to the banking business.

1. Test of hypothesis of loan and advances to total deposit ratio of HBL, EBL and BOKL
2. Test of hypothesis of total investment to total deposit ratio of HBL, EBL and BOKL
3. Test of hypothesis of total interest earned to total outside assets ratio of HBL, EBL and BOKL
4. Test of hypothesis of return on loan and advances ratio of HBL, EBL and BOKL

Research methodology and the various financial and statistical tools discussed above have been used in the next chapter (4) to analyze and interpret the data regarding HBL, EBL and BOKL for the study from FY 2002 / 03 to 2006/07

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

Interpretation and Analysis of Ratio

4.1 Financial Analysis

The main purpose of this chapter is to study, evaluate and analyze those major financial performances, which are mainly related to the investment management and fund mobilization of HBL, EBL and BOKL. It is notable that all types of financial ratios are not studied under this chapter. Only those ratios are calculated and analyzed which are very important to evaluate fund mobilization of a commercial bank. The important ratios that are studied for this purpose are given below.

1. Liquidity Ratio
2. Asset Management Ratio
3. Profitability Ratio
4. Risk Ratio
5. Growth Ratio

4.1.1 Liquidity Ratio

Commercial banks collect funds from the community on commitment of returning their money when they demand it. So, a bank must maintain its sufficient liquidity position to fulfill that commitment of returning depositor's deposit, withdraw, convert non-cash assets into cash to satisfy the immediate needs without any loss to bank and consequent impact on the long-run profit.

Liquidity position of HBL, EBL, and BOKL are comparatively studied through following ratios.

4.1.1.1 Current Ratio

This ratio indicates the ability of the bank to meet its current obligation. It measures the liquidity position of financial institutions. Current ratio is calculated by dividing current assets by current liabilities (details in appendix D). This standard current ratio is 2:1 for banking and for seasonal business is 1:1 is also said to be ok. The current ratio, mean, standard deviation and coefficient of variation of HBL, EBL and BOKL are given in the following table.

Table 4.1
Current Ratio
(Times)

Bank	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
HBL	1.03	1.09	1.09	0.65	1.07	0.9860	0.1894	0.0359
EBL	1.15	1.09	1.12	1.12	1.15	1.1260	0.0251	0.0006
BOKL	0.90	1.00	0.97	0.58	0.93	0.8759	0.1700	0.0289
Industry Average						0.9960		

Sources: Annual Report of HBL, EBL, and BOKL

From the above table, we can see that current assets of HBL and BOKL are more than current liabilities except in F/Y 2005/06 of HBL and F/Y 2003/04 of BOKL which indicates that these two banks were not able to pay their current obligations during that year. Current assets of EBL is more than current liabilities.

In average the liquidity position of EBL is greater than the other banks, BOKL has lowest liquidity position i.e. $1.1260 > 0.9860 > 0.8759$ due to high mean ratio.

It shows that the liquidity position of EBL is better than the other two banks.

Likewise the coefficient of variation of EBL is less than other banks i.e. $0.0006 < 0.0289 < 0.0359$. It can be said that current ratio of BOKL is more consistent than that of other banks.

Though, the optimal standard of current ratio should be 2:1, it seems that all these three banks do not have the poor liquidity position.

Figure 4.1

Current Ratio

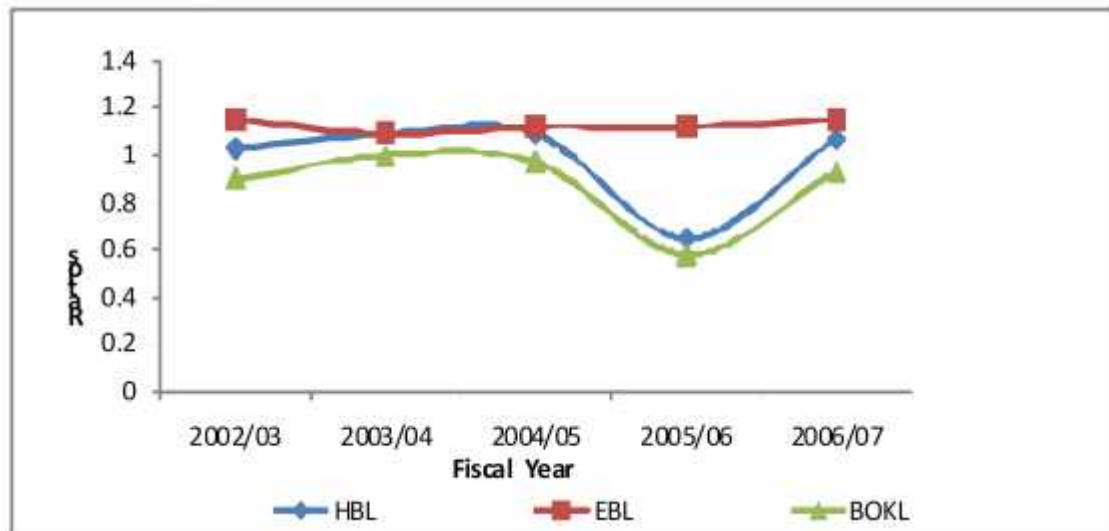


Figure shows that EBL line is greater than HBL and BOKL. Liquidity position of EBL is greater than HBL and BOKL. Current assets of EBL is more than current liabilities which means this bank is able to pay current obligation but current assets of HBL and BOKL are less than current liabilities which indicates these banks were not able to pay their current obligation.

4.1.1.2 Cash and Bank Balance to Total Deposit Ratio

For commercial banks, cash and bank balance is said to be the first defense of every cash transaction. The ratio between the cash and bank balance and total deposit measures the ability of the bank to meet the unanticipated cash and all types of deposits. Higher the ratio, the greater will be the ability to meet sudden demand of deposit. But every high ratio is not desirable since the bank has to pay interest on deposits. This will also maximize the cost of fund to the bank(details in appendix E). The ratio is calculated by dividing cash and bank balance by total deposit. The ratio is presented in the following table.

Table 4.2
Cash and Bank Balance to Total Deposit Ratio (%)

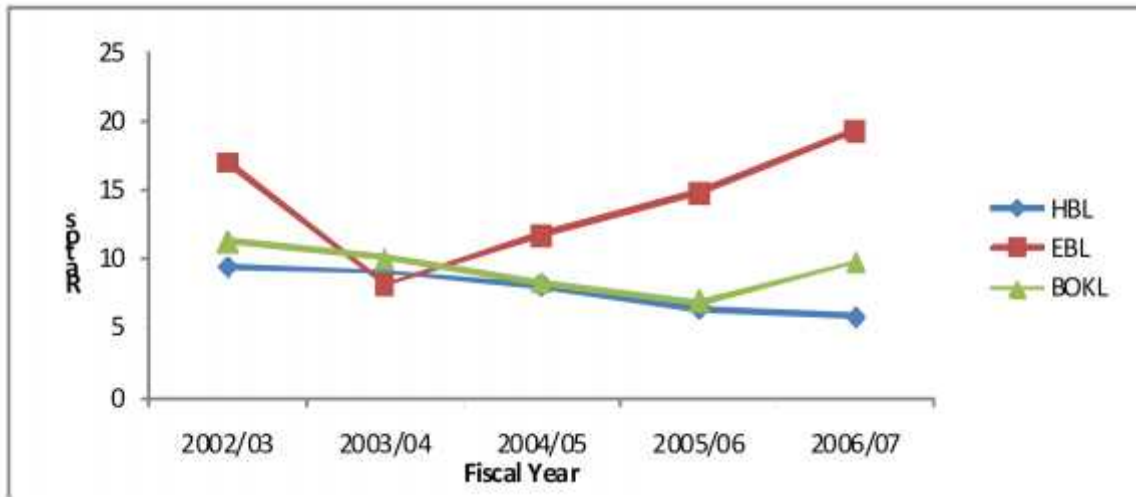
Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	9.42	9.09	8.12	6.48	5.85	7.7920	1.5760	20.2263
EBL	17.02	8.16	11.74	14.81	19.3	14.2060	4.3837	30.8581
BOKL	11.23	10.11	8.28	6.95	9.81	9.2760	1.6734	18.0401
Industry Average						10.4247		

Sources: Annual Report of HBL, EBL, and BOKL

From table 4.2 we can see that all banks are in a fluctuating trend under the study period. In average EBL has maintained higher cash & bank balance to total deposit than HBL and BOKL. This states that cash and bank balance in liquidity position of EBL is higher than other banks. Moreover, EBL has mean ratio above than industry average while other bank's mean ratio are lower than the industry average. On the other hand, C.V. of BOKL is comparatively lower which shows the high consistency than the other banks, i.e. C.V. of BOKL 18.0401 < 20.2263 <

30.8581. Comparatively, BOKL has maintained low ratios which shows that there may be some difficulties to meet demand of its customer on their deposit to pay at any time but it may earn more due to invest cash to different sectors.

Figure 4.2
Cash and Bank Balance o Total Deposits Ratio



The above figure 4.2 shows that EBL line is higher than other two banks. In starting 2003/04, EBL is sloping down then after in 2004/05 the line of EBL is increasing trend till 2006/07. HBL line is sloping downward likewise BOKL is line is decreasing downward till 2005/06 then increased in 2006/07. This figure shows that BOKL shows high consistency than other two banks.

4.1.1.3 Cash and Bank Balance to Current Assets Ratio

The ratio examines the bank's liquidity capacity on the basis of its most liquid assets, i.e., cash and bank balance. This ratio reveals the ability of the bank to make the quick payment of its customer's deposits. A high ratio indicates the sound ability to meet their daily cash requirement of their customer's deposits and vice-versa.

In this ratio, both higher and lower ratio are not desirable because if a bank maintains higher ratio of cash, it has to pay interest on deposits and some earnings may be lost and if it maintains a low ratio of cash, it may fail to make the payment for the presented cheques by its customers. So sufficient and appropriate cash reserves should be maintained properly.

This ratio is calculated by dividing cash and bank balance by current assets (details in appendix F). The comparative ratios are presented in the following table.

Table 4.3

Cash and Bank Balance to Current Assets Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	9.42	9.09	8.12	6.48	5.85	7.7920	1.5760	20.2263
EBL	17.02	8.16	11.74	14.81	19.3	14.2060	4.3837	30.8581
BOKL	11.23	10.11	8.28	6.95	9.81	9.2760	1.6734	18.0401
Industry Average						10.4247		

Sources: Annual Report of HBL, EBL, and BOKL

Table 4.3 shows that banks ratios are fluctuating trend. HBL has maximum ratio of 9.42 and Minimum of 5.85 in F/Y 2002/03 and F/Y 2006/07 respectively. EBL has high ratio of 19.3 and low ratio of 8.16 in F/Y 2006/07 respectively. Likewise BOKL has high ratio of 11.23 in F/Y 2002/03 and low ratio of 6.95 in F/Y 2005/06. So here we see that banks ratios are of fluctuating type.

In average, the mean ratio of EBL is the highest and the HBL is the lowest than other banks. Further EBL has high mean ratio than overall average but the other banks are unable to maintain higher ratio than the industry average. As a result, we can say that in spite of its fluctuating trend in ratios. EBL has maintained high cash and bank balance to current assets ratio and has higher liquidity position than other banks.

However, the C.V. of BOKL's variability of ratios are less than other banks and EBL has the maximum variability in ratios.

In conclusion , it can be said that BOKL is not in a better position to maintain its cash & bank balance in comparison to other two banks but it doesn't mean that it can't meet its daily requirement to make the payments on customer's deposit. In contrast HBL and EBL may have to invest their fund in more productive areas.

Figure 4.3

Cash and Bank Balance to Current Assets Ratio

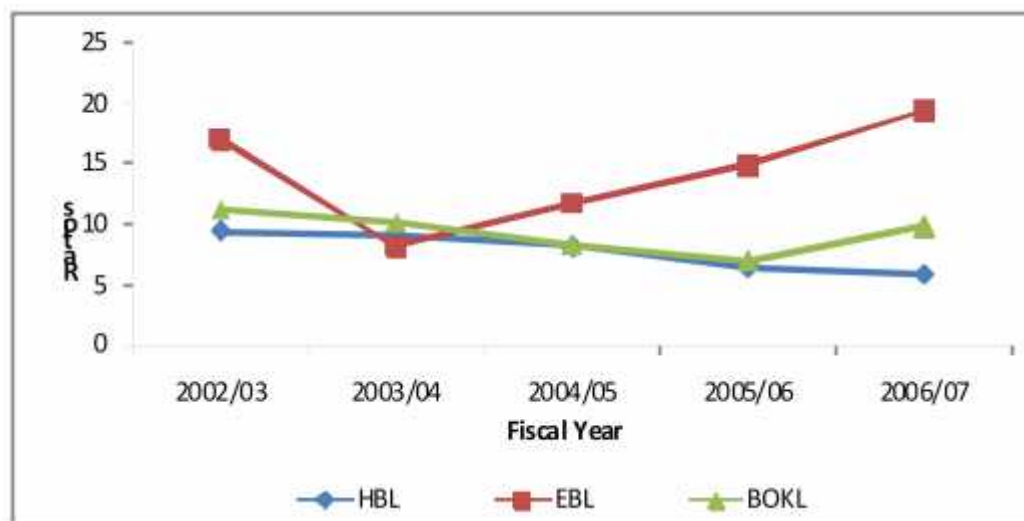


Figure 4.3 shows that EBL line is higher than other two banks. This figure shows that EBL has maintained high cash and bank balance to current assets ratio and has higher liquidity position than other banks.

4.1.1.4 Investment on Government Securities to the Current Assets Ratio

The major objective of this ratio is to examine the portion of the commercial bank's current assets, which is invested on various government securities issued by the government. More or less, each commercial bank is invest their collected fund on different government securities in different times to utilize their excess funds and / or for other purpose. Though the government securities are not so liquid as cash and bank balance, they can be easily sold in the market or they can be converted into cash in other ways.

The main objective of a commercial bank is to maximize profit. The government securities do not give more return to the investors but they are fully secured investment. So the banks invest their excess fund on government securities for diversification of investment but more fund investment on government securities is also not preferable to achieve the bank's goal.

The ratio is calculated by dividing investment on government securities by total current assets(details in appendix G).

Table 4.4

Investment on Government Securities to Current Assets Ratio(%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	15	11.78	12.36	29.62	19.99	17.7500	7.3853	41.6073
EBL	20.25	26.7	18.48	21.27	17.18	20.7760	3.6680	17.6551
BOKL	21.33	68.26	44.81	22.84	16.70	34.7880	21.6325	62.1839
Industry Average						24.4380		

Sources: Annual Report of HBL, EBL, and BOKL

From the above table it seen that the ratios of all the banks are in fluctuating trend. Comparatively, BOKL has maintained the high ratio within 5 years of study period by investing in government securities. The table shows that the mean of investment on government securities to Current Assets Ratio of BOKL is higher than other banks. i.e $34.7880\% > 20.7760\% > 17.7500\%$. It means BOKL has invested much portion of CA in government securities than other banks. Further, BOKL and HBL has higher mean ratio than the composite company average. On the other hand, CV in ratio of BOKL is higher than HBL and EBL i.e $62.1839\% > 41.6073\% > 17.6551\%$ respectively.

From the analysis, we can say that EBL has made negligible amount of investment in government securities. This may be the reason of more deposit collection and unavailability of other secure and profitable investment sectors.

Investment on government securities to CA ratio of the 3 banks is graphically presented below.

Figure 4.4

Investment on Government Securities to Current Assets Ratio

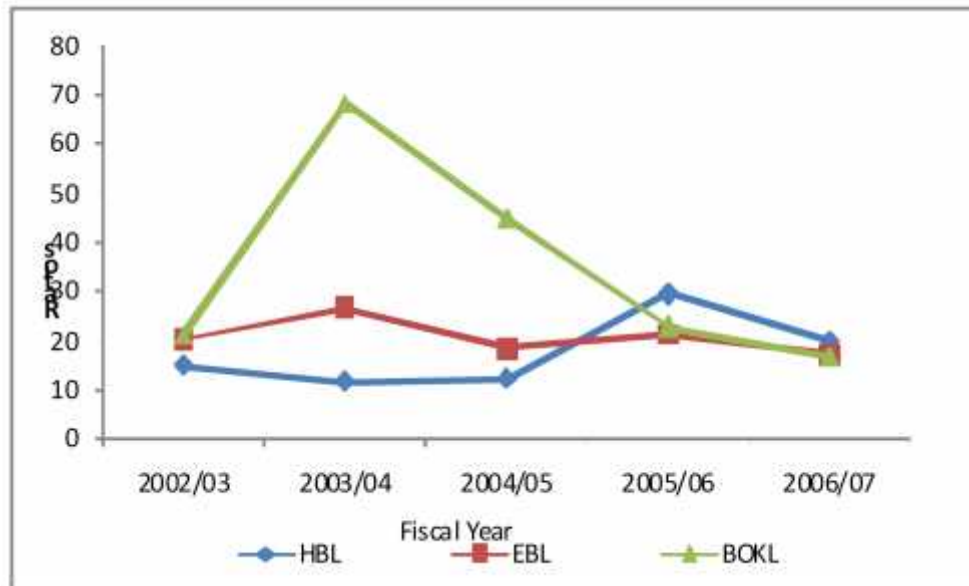


Figure 4.4 shows that BOKL has invested higher amount in government securities whereas EBL line is more consistent compared to HBL. HBL has spent minimum amount of current assets in government securities and the line of HBL shows that the ratio are less consistent of this bank.

4.1.1.5 Loan and Advances to Current Assets Ratio

A commercial bank should not keep all its collected fund as bank and balance but they should be invested as loan and advances to the customers because they must earn high profit by mobilizing funds from the long- term survival of the bank. They must pay interest on the deposits fund even if they don't grant loan and advances and may lose some earnings. But high loan and advances may also be harmful because they can only be collected at the time of maturity and this will affect liquidity position of the bank.

Loan and advances are also included in the current assets of a commercial bank because they generally provide short-term advances, overdrafts and cash credit.

This ratio is calculated by dividing loan and advances by current assets ratio(details in appendix H). The following table exhibits this ratio.

Table 4.5

Loan and Advance to Current Assets Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	44.84	42.36	30.67	84.32	52.64	50.9660	20.2411	39.7149
EBL	63.73	63.69	67.02	62.74	64.94	54.9180	21.0303	38.2940
BOKL	64.15	81.25	61.72	62.35	67.30	67.3540	8.0646	11.9734
Industry Average						57.7460		

Sources: Annual Report of HBL, EBL, and BOKL

The table 4.5 shows that HBL has recorded highest ratio of 84.32% in F/Y 2005/06 and lowest of 30.67 % in F/Y 2004/05 respectively. EBL has the highest ratio of 67.12 % in F/Y 2004/05 and lowest of 63.69 % in F/Y 2003/04. Similarly, BOKL has maintained the highest ratio of 81.25 % in F/y 2003/04 and lowest of 61.72 % in F/Y 2004/05. So here we can see that the ratios of all banks are less stable and are of fluctuating nature. While examining the mean ratio, BOKL has the highest and HBL has the lowest mean ratio i.e. 67.3540 % > 54.9180 % > 50.9660 % and CV of HBL is the highest in comparison to other two banks which indicates less uniform values on ratios of this banks. The most consistent bank among these three banks in regard to loan and advances to

current ratio. BOKL i.e 11.9734 % < 38.2940 % < 39.7149 %. While analyzing the industry average, we can see that BOKL has highest mean ratio than industry average and HBL has lowest mean ratio than industry average, it indicates HBL has lower potential to mobilize current assets as loan and advances.

So, we can say that HBL is poor in mobilizing its fund as loan and advances with respect to current assets in comparison to EBL and BOKL. The mean reveals that HBL's loan and advances to current assets is in satisfactory level but overall liquidity position of HBL is not satisfactory than that of other banks. On the other hand, BOKL has highly mobilized its fund as loan and advances comparatively. Whereas EBL shows more consistency in the ratios.

The comparative loan and advances to current assets ratio of the three banks are presented in the line diagram below:

Figure 4.5
Loan and Advances to Current Assets Ratio

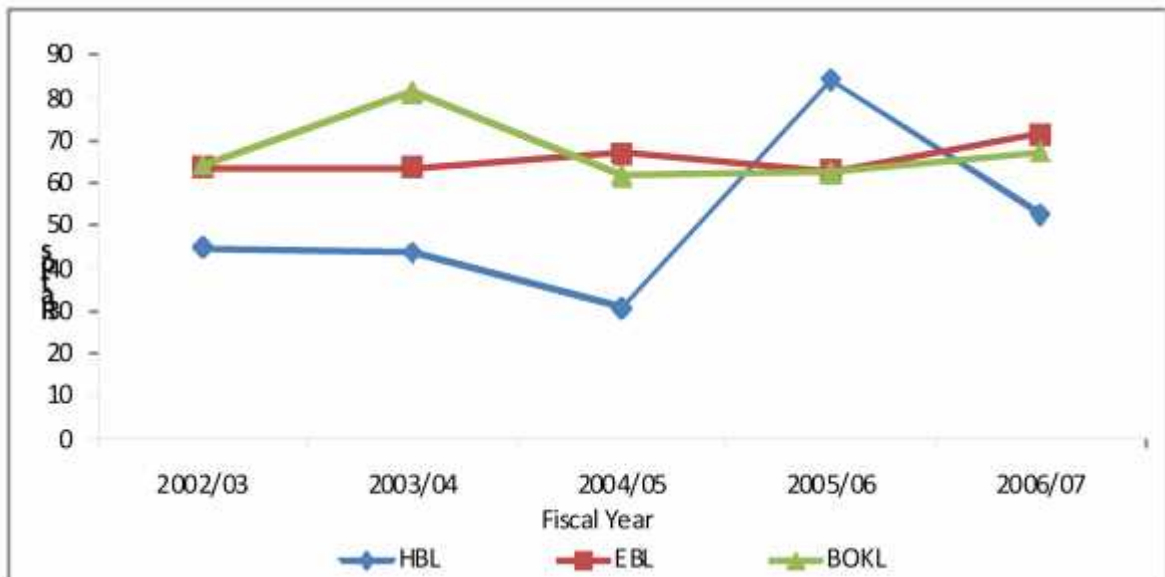


Figure 4.5 shows that EBL line higher than other two banks. EBL is more consistency in ratios. HBL line is decreasing trend till F/Y 2004/05 then increased in F/Y 2005/06 then decreased in FY 2006/07. It means HBL's loan and advances to current assets is in satisfactory level but overall liquidity position is not satisfactory than that of other banks. BOKL line shows that it is highly mobilized its fund as loan and advances comparatively.

4.1.2 Assets Management Ratio

A commercial bank must be able to manage its assets very well to earn high profit, to satisfy its customers and for its own existence. Asset management ratio measures how efficiently the bank manages its resources at its commands. The following ratios are studied comparatively to measure the assets management ability of HBL, EBL, and BOKL.

4.1.2.1 Loan and Advances to Total Deposit Ratio

In the process of portfolio management of banks, various factors such as availability of fund, liquidity requirement, central bank norms etc are considered in general. A high ratio is the indicator of high success to mobilize the banking fund or total deposit in investment and vice versa.

The ratio is calculated by dividing total investment by total deposit (details in appendix I) and the ratios of HBL, EBL, and BOKL are presented in the following table.

This ratio actually measures the bank's success in mobilizing the deposit on loan and advances for the purpose of profit generation.

A high ratio indicates better mobilization of collected and vice –versa. But it should be noted that too high ratio might not be better from the liquidity point of view. This ratio is calculated by dividing loan and advances by total deposits.

The following table shows the loan and advances to total deposit ratio of the three banks throughout the study period.

Table 4.6
Loan and Advances to Total Deposit Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	47.61	46.87	48.19	55.27	56.57	50.9027	4.6281	9.0920
EBL	73.32	72.97	75.45	71.01	20.15	62.5800	23.7713	37.9855
BOKL	64.15	81.25	61.72	62.35	67.30	67.3540	8.0646	11.9734
Industry Average						60.2789		

Sources: Annual Report of HBL, EBL, and BOKL

The above table shows that the ratios of three banks are in fluctuating trend. The mean shows that HBL has the high mobilization of total deposits in investment and EBL and BOKL has mobilized only a minimum amount of total deposits into investment i.e 67.3540 % > 62.5800% > 50.9027% .

While comparing the mean ratios with industry average, it seen that only EBL has higher mean ratio while other banks has lower ratios.

The table also shows that EBL is highly consistent in ratios through the study period with CV of 37.9855 % whereas the other two are highly inconsistent in comparison to EBL.

This analysis shows that EBL is in good position in mobilizing its total deposit in investment and has also maintained consistency in its ratios whereas the other two banks have inconsistent ratios and have mobilized only a little amount of total deposits into investment.

Figure 4.6

Loan and Advances to Total Deposit Ratio

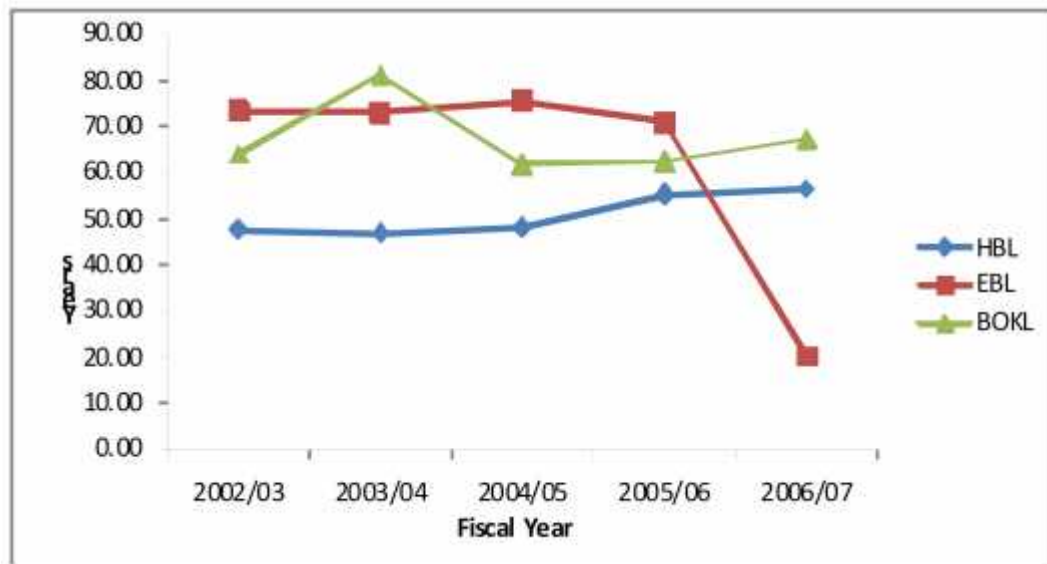


Figure shows that HBL line is increasing trend but EBL line and BOKL line are in fluctuating trend. HBL has the high mobilization of total deposits in investment EBL is in good position in mobilizing its total deposit in investment and has also maintained consistency in its ratios whereas the other two banks have inconsistent ratios and have mobilized only a little amount of total deposits into investment.

4.1.2.2. Total Investment to Total Deposit Ratio

A commercial bank may mobilize its deposit by investing its fund in different securities issued by government and other financial and non- financial companies. Here, efforts have been made to measure the extent to which the bank are successful in mobilizing the total deposit on investment.

In the process of portfolio management of banks, various factors such as availability of fund, liquidity requirement , central bank norms etc, are to be considered in general. A high ratio is the indicator of high success to mobilize the banking fund or total deposit in investment and vice-versa.

The ratio is calculated by dividing total investment by total deposit (details in appendix J) and the ratios of HBL, EBL and BOKL are presented in the following table.

Table 4.7
Total Investment To Total Deposit Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	48.44	42.217	47.11801	41.10487	39.34643	43.6453	3.9377	9.0221
EBL	24.7	31.44508	21.08302	30.42949	27.40704	27.0129	4.2422	15.7044
BOKL	29.92	32.00106	29.05426	32.18497	24.15406	29.4629	3.2562	11.0519
Industry Average						33.3737		

Sources: Annual Report of HBL, EBL, and BOKL

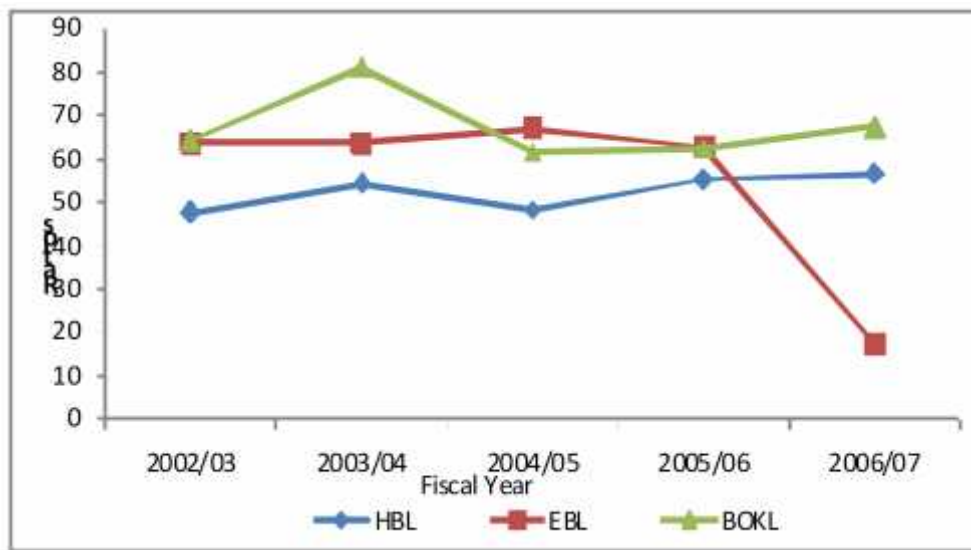
The above table 4.7 shows that the ratios of HBL, EBL and BOKL are fluctuating trend. The mean ratios shows that HBL has the high mobilization of

total deposits in investment and EBL has mobilized only a minimum amount of total deposits into investment .i.e $43.6453\% > 29.4629\% > 27.01239\%$. While comparing the means ratios with industry average, it is seen that only HBL has high mean ratio while other banks have lower ratios.

This table shows that HBL is highly consistent in ratios through the study period with CV of 9.0219 % whereas other two banks are highly inconsistent in comparison to HBL.

This analysis shows that HBL is in good position in mobilizing its total deposits in investment and has also maintained consistency in its ratios whereas the other two banks have inconsistent ratios and have mobilized only a little amount of total deposits into investment.

Figure 4.7
Total Investment to Total Deposit Ratio



The above figure shows that HBL line is higher than other two banks. This figure shows that HBL is highly consistent in ratios but other two banks i.e EBL, BOKL are highly inconsistent in ratios. It means HBL is in good position in mobilizing its total deposits in investment and other two banks have mobilized only a little amount of total deposits into investment.

4.1.2.3 Loan and Advances to Total Working Fund Ratio

Loan and advances is an important part of total asset (total working fund). Commercial banks must be very careful in mobilizing its total assets as the total working fund plays a very significant role in profit generation through fund mobilization. Total working fund is composed of current assets, fixed assets, miscellaneous assets and investment.

This ratio reflects the extent to which the commercial banks are successful in mobilizing their assets on loan and advances for the purpose of income generation. A high ratio indicates the better mobilization of funds in loan and advances and vice versa.

This ratio is calculated by dividing loan and advances by total working fund(details in appendix K). The table below shows the loan and advances to total working fund ratio of HBL, EBL and BOKL.

Table 4.8

Loan and Advances to Total Working Fund Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	42.96	41.66	42.95	49.70	50.71	45.5972	4.2562	9.3343
EBL	73.32	72.96	75.45	71.01	75.13	73.5740	1.7997	2.4462
BOKL	73.62	72.94	66.12	69.23	75.87	71.5560	3.8648	5.4011
Industry Average						63.5757		

Sources: Annual Report of HBL, EBL, and BOKL

From the above table we can see that the ratios of three banks are fluctuating trend. HBL has highest ratio in F/Y 2006/07 which is 50.71% and the lowest in F/Y 2003/04 which is 41.66%. EBL has the maximum ratio of 75.45% in F/Y 2005/06 and the minimum ratio of 71.01% in F/Y 2004/05. BOKL has maximum value of 75.87 in F/Y 2006/07 and minimum value of 66.12% in F/Y 2004/05 respectively.

On the basis of mean ratios, EBL has the highest mean ratio and HBL has the lowest, which indicates that EBL is more efficient in mobilizing its total working fund in loans and advances and HBL is the least efficient in comparison with two banks. There is very slight difference between the mean ratio of BOKL and EBL. i.e $73.5740\% > 71.5560\% > 45.5972\%$.

Comparing overall performance of banks selected for study with the mean ratio of each bank only HBL has been found unable to maintain its mean ratio higher

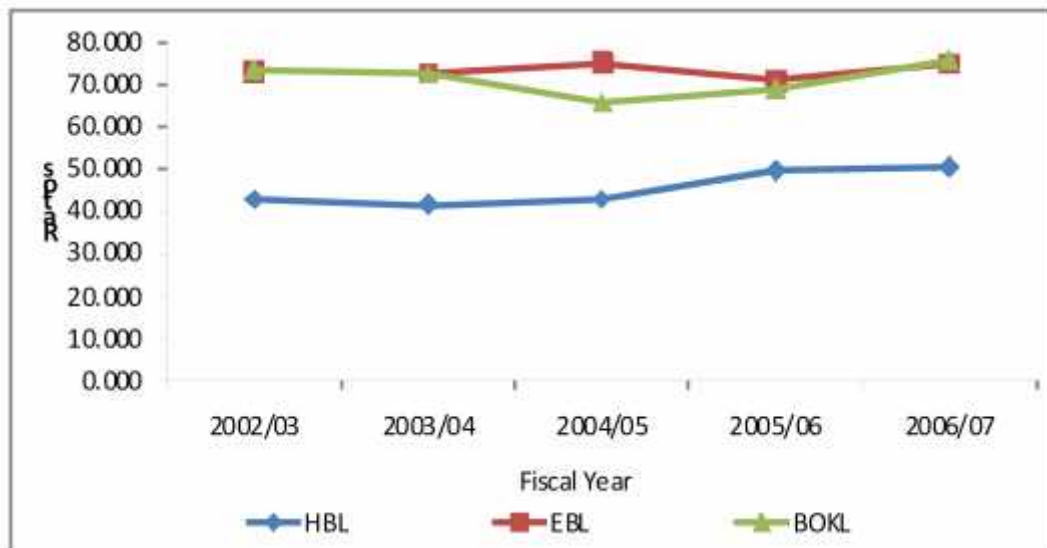
than composite average which indicates HBL's lower capacity to utilize its total working fund as loan and advances.

On the other hand, even if HBL has lowest mean ratio, it has shown the highest consistency and homogeneity in the ratios through the study period with CV of $9.3343\% > 5.4011\% > 2.4462\%$.

From the above analysis, it can be concluded that BOKL's fund mobilized in term of loan and advances with respect to total working fund is more satisfactory than other banks whereas that of HBL is less satisfactory but it has maintained more consistency in the ratio.

Figure 4.8

Loan and Advances to Total Working Fund



In the above figure, we can see that HBL line is lowest than other two banks it means it has lower capacity to utilize its total working fund as loan and advances and highest consistency whereas BOKL is better mobilization of fund in loan and

advances than HBL but not than EBL. EBL line shows that it has high capacity to utilize total working fund as loan and advances.

4.1.2.4 Investment on Government Securities to Total Working Fund Ratio

All the deposits of the bank should not utilize in loan and advances and other credits from the security point of view . Therefore, up to some extent, commercial banks should utilize their deposits by purchasing government securities. The ratio of investment on government securities to total working fund is very helpful to know the extent on which the banks are mobilizing their total working fund on different types of government securities. All the commercial banks invest their fund on government securities for investment diversification and security only otherwise it is not helpful for the profit maximization.

The ratio is calculated by dividing investment on government securities by total working fund (details in appendix L. The following table shows the ratios of three banks.

Table 4.9

Investment on Government Securities to Total Working Fund Ratio(%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	14.38	11.23	17.31	17.46	19.26	15.9280	3.1554	19.8105
EBL	19.37	25.67	17.81	20.82	16.86	20.1060	3.4575	17.1964
BOKL	20.29	49.95	43.55	21.65	16.01	30.2900	15.3371	50.6343
Industry Average						22.1080		

Sources: Annual Report of HBL, EBL, and BOKL

From the above table we can see that the ratios of all the banks are in fluctuating trend. HBL has the highest ratio of 19.26% and lowest of 11.23%. EBL has the higher ratio of 25.67% lowest is 16.86%. Likewise, BOKL has the maximum ratio of 49.95% and minimum ratio is 16.01% through the study period of five years.

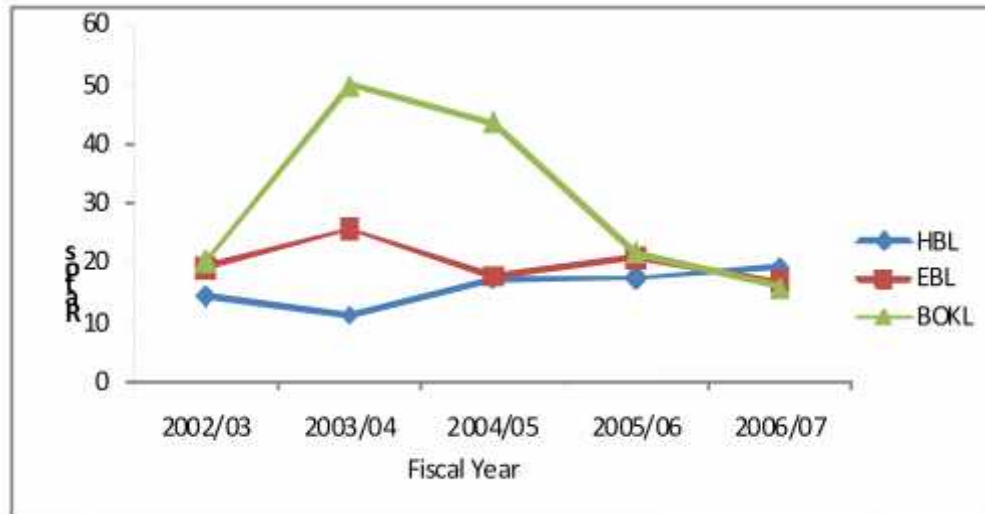
From the above table, the mean ratio of BOKL i.e 30.2900% shows that its investment in government securities is high compared to the other two banks. EBL comes in second with 20.1060%. HBL has invested very little amount in the government securities, i.e 30.2900% > 20.1060% > 15.9280%.

While comparing the overall performance, BOKL and EBL has higher mean ratio than the overall average ratio while HBL has lower mean ratio.

The CV shows that EBL with 17.1964% is more consistent and homogeneous than other banks followed by HBL and BOKL i.e 50.06343% > 19.8105% > 17.1964%. BOKL is least consistent than other banks. Hence the above analysis shows that even BOKL has invested high amount in government securities than other two banks. EBL and HBL has invested minimum amount of total working fund in government securities and the ratios are also very inconsistent. This shows these banks have no certain investment policy toward government securities.

Figure 4.9

Investment on Government Securities to Total Working Fund Ratio



This figure 4.9 shows that three banks line are fluctuating trends. BOKL is more consistent and homogeneous and has invested high amount of total working fund in government securities. HBL is inconsistent and invested minimum amount of total working fund in government securities. EBL has also invested minimum amount of total working fund in government securities but more than HBL and less than BOKL.

4.1.2.5 Investment on Shares and Debentures to Total Working Fund Ratio

Commercial banks invest not only in the government securities but also in the shares and debentures of other companies. During the study period, most of the commercial banks including HBL, EBL and BOKL have purchased the shares of other companies too.

Investment on shares and debentures to total working fund ratio reflects the extent to which the banks are successful to mobilize their total working fund on purchase of shares and debentures of other companies to generate income and utilize excess fund. A high ratio indicates more portion of investment on shares and debentures and vice-versa.

This is calculated by dividing investment on shares and debentures by total working fund (details in appendix M).

Table 4.10
Investment on Share and Debenture to Total Working Fund Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	0.15	0.14	0.14	0.13	0.22	0.1560	0.0365	23.3777
EBL	0.21	0.18	0.16	0.12	0.09	0.1520	0.0476	31.3451
BOKL	0.51	0.24	0.94	0.79	0.62	0.6200	0.2682	43.2637
Industry Average						0.3093		

Sources: Annual Report of HBL, EBL, and BOKL

The above table 4.10 shows that the ratios are in fluctuating trend. All the banks has invested a very minimum amount in share and debenture of the other companies. Comparatively, BOKL has invested high amount in share and debenture which has mean ratio of 0.6200 % of total working fund and which is higher than other two banks. EBL has the lowest mean ratio which is 0.1520 % of total working fund and this shows that EBL has invested minimum amount compared to other two banks. HBL has also invested very little amount but it is

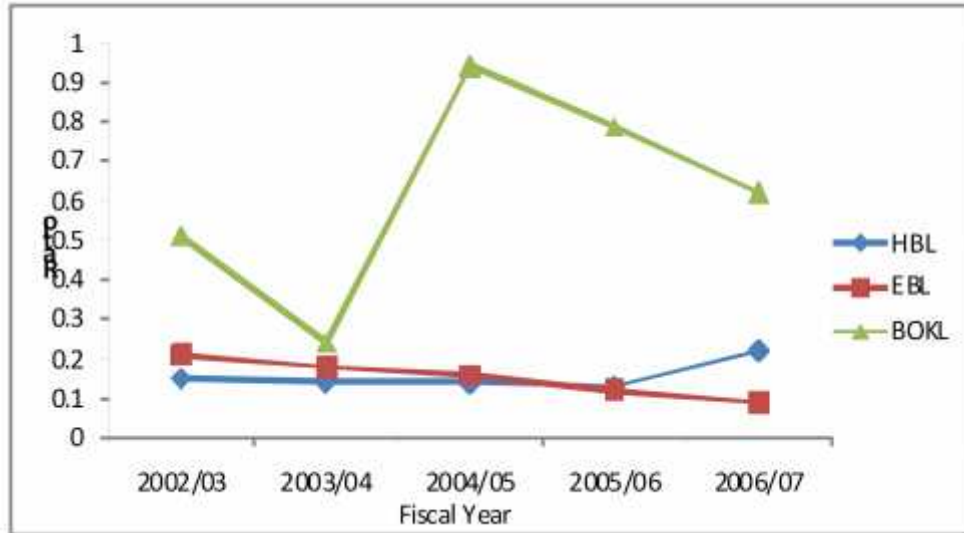
higher than EBL. Comparatively, mean ratios can be shown as $.06200 \% > .1560 \% > 0.1520 \%$.

While comparing the mean ratios with industry average of the selected banks, it is found that only BOKL is able to maintain the ratio above the composite average but it can also be seen that comparatively, even with the higher ratio, it has also invested very little amount of its total working fund in shares and debenture of their companies. The CV in the above table also shows that BOKL is more consistent and has maintained a stable ratio than other two banks during the study period of five years. EBL which has high CV comparatively i.e $43.2637 \% > 31.3451 \% > 23.3777 \%$.

Lastly, it has been found that all the three banks have invested nominal percentage of total working fund into shares and debenture of other companies as in all cases the ratio percentage is less than 1 %. However, in comparison, BOKL has invested more than other banks and also has maintained more consistent ratios.

Figure 4.10

Investment on Shares and Debenture to Total Working Fund Ratio



The above figure 4.12, we can see that BOKL line is higher than other two banks. It means BOKL has invested high amount in share and debenture of total working fund. EBL line shows it has invested minimum amount in share and debenture of total working fund. HBL line also shows that it has invested very little amount but it is higher than EBL.

4.1.2.6 Loan Loss Ratio

The loan loss occurs when a borrower fails to repay the loan. The bank's failure in loan recovery leads to the loss of its loan. So the control of loan loss is an important fact of bank operation and bank should be highly concerned to minimize it. It may lead the bank to low profit and ultimately to loss.

The loan loss ratio shows the possibility of higher risk in loan loss and provision made for such loss. This ratio is calculated by dividing loan loss provision by total loan and advances of the bank (details in appendix N). The following table shows the comparative loan loss ratio of the three banks.

Table 4.11
Loan Loss Provision (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	8.43	9.38	8.59	7.64	4.68	7.7440	1.8208	23.5128
EBL	2.88	3.77	4.01	3.83	12.37	5.3720	3.9364	73.2764
BOKL	6.90	9.42	9.59	12.83	7.54	9.2551	2.3164	25.0281
Industry Average						7.4570		

Sources: Annual Report of HBL, EBL, and BOKL

From the above table it can be seen that the ratios of all the three banks are in fluctuating trends.

However, BOKL has high ratios and EBL has lowest ratios in comparison. It shows that BOKL has high risk of loan loss and therefore, has made highest provision. HBL has higher ratios than EBL.

Likewise, comparing the mean ratio of each bank with the industry average, it is seen that except EBL, all two banks has higher ratio. From this, it is be said that they have invested more and are in risk of loan loss.

Similarly, CV from the above table also shows that HBL has more homogeneous ratios comparatively followed by EBL and BOKL.

4.1.3 Profitability Ratio

The Major Objective of all commercial banks is to earn profit. Strictly speaking, no bank can survive without profit. Profit is the indicator of efficient operation of a bank. The bank acquire profit by providing different services to its customers or by making investment of different kinds. Sufficient profit is a must to have good liquidity to grab the hidden investment opportunities, expand banking transaction, finance government is need of development fund, overcome the future contingencies and meet fixed internal obligation for a bank.

The profitability ratios are the best indicators of overall efficiency. It measures the efficiency of a bank. Higher the ratio higher will be the efficiency of a bank. Here, mainly those major ratios are presented and analyzed through which the effort has been made to measure the profit earning capacity of HBL, EBL and BOKL.

4.1.3.1 Return on Total Working Fund Ratio

Return on total working fund ratio is a measuring rod for the profitability with respect to each financial resources investment of the bank's assets. If the bank's total working fund is well managed an efficiently utilized, return on such assets will be higher and vice-versa. Minimizing taxes within the legal options available will also improve the return.

This ratio is calculated by dividing net profit by total working fund or total assets (details in appendix O). The following table shows the profitability position with respect to total working fund of HBL, EBL and BOKL.

Table 4.12
Return On Total Working Fund Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	0.91	1.06	1.11	1.55	1.47	1.2200	0.2762	22.6414
EBL	1.17	1.49	1.45	1.49	1.38	1.3960	0.1341	9.6053
BOKL	1.10	1.34	1.42	1.65	1.80	1.4620	0.2726	18.6469
Industry Average						1.3593		

Sources: Annual Report of HBL, EBL, and BOKL

The above table shows that the ratios of HBL and EBL are in fluctuating trend. BOK's ratios have increased from F/Y 2002/03 to 2006/07.

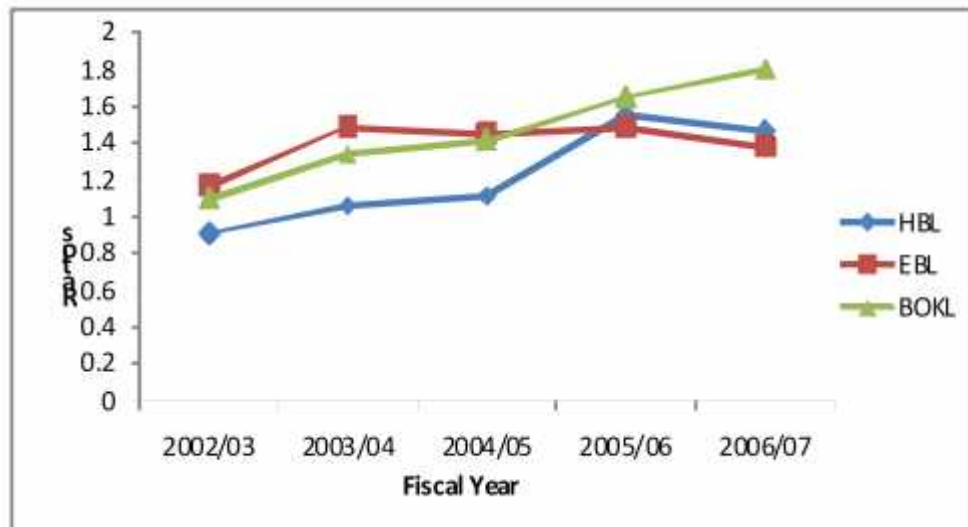
When the mean ratios are observed, BOKL seems to have earned higher return on total assets (ROA) of 1.46202%, which is slightly higher than that of EBL which is 1.3960%. HBL has earned the lowest return of 1.2200 % in comparison with other banks.

The composite average also shows that only HBL has low ratio while the other have higher ratio than the industry average.

However CV of HBL seems to be more consistent than that of BOKL. EBL has the CV of 9.6053%.

From the above analysis, it can be said that BOKL has the highest capacity to earn high return on total working fund but it has maintained less consistent ratios than that of EBL. On the other hand, comparatively HBL is highly inconsistent and has low capacity regarding ROA.

Figure 4.12
Return on Total Working Fund Ratio



In the above figure, BOKL line is higher than other two banks. It means BOKL has the highest capacity to earn high return on total working fund and EBL line is less than two banks so it has low capacity to earn high return on total working fund. HBL has also low capacity to earn high return but not more than EBL

4.1.3.2 Total Interest Earned To Total Outside Assets Ratio

The main assets of a commercial bank are its outside assets, which include loan and advances, investment on government securities, investment on share and debentures and all other types of investment. Thus, this ratio reflects the extent to which the banks are successful to earn interest as a major income on all the outside assets. A high ratio indicates high earning power on such outside assets and vice-versa.

This ratio is calculated by dividing total interest earned by total outside assets (details in appendix P). The following table exhibits the ratio of total interest earned to total outside assets of HBL, EBL, and BOKL.

Table 4.13

Total Interest Earned To Total Outside Assets Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	5.95	5.86	6	15.3	14.33	9.4880	4.8752	51.3828
EBL	7.93	7.81	7.38	6.45	0.61	6.0360	3.0884	51.1668
BOKL	7.78	6.98	7.13	6.75	6.61	7.0500	0.4549	6.4527
Industry Average						7.5247		

Sources: Annual Report of HBL, EBL, and BOKL

The above table shows that the ratios of HBL is fluctuating trend upto F/Y 2005/06 and have decreased in F/Y 2006/07. The ratios of EBL is decreasing trend up to FY/Y 2006/07 and BOKL is Fluctuating trend.

While analyzing, the mean ratios, we can see that HBL has the highest mean ratio which indicates that it has than highest capacity to earn interest income from the outside assets whereas EBL has the lowest mean ratio which is 6.0360% and this indicates that comparatively, EBL is not in a strong position to earn interest income from the total outside assets. The table shows that BOKL is the better position than EBL regarding interest earning on outside assets.

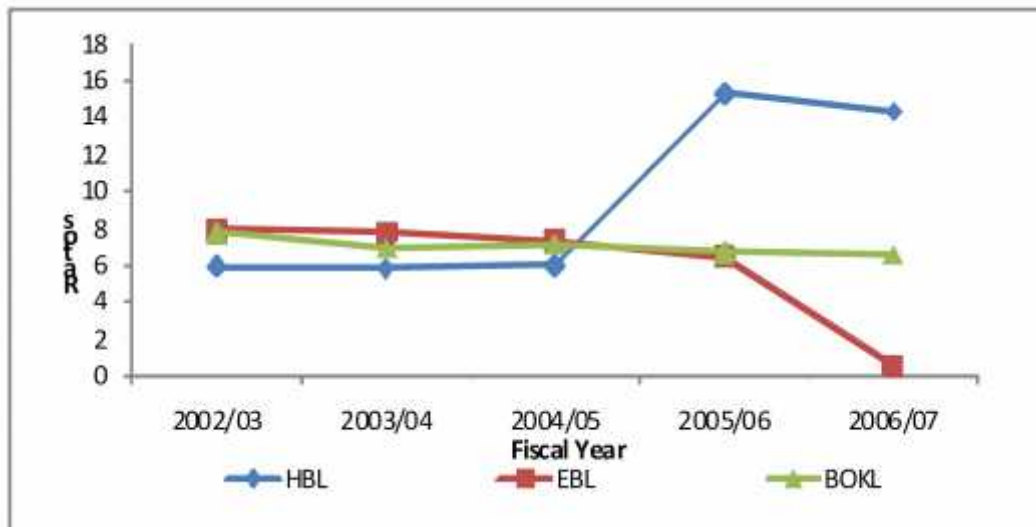
While comparing the industry average ratio with mean ratio of each bank, it is found that HBL and BOKL have able to keep their ratios higher than the composite ratio but EBL is unable to keep higher ratio. On the other hand, when CV observed BOKL seems to have more inconsistent ratios and EBL seems to have more consistent than HBL.

It can be said that from the above analysis that HBL has the highest capacity in earning interest income from the outside assets but however ratios are the least consistent ratios in comparison with other two banks.

The comparative total interest earned to total outside assets of three banks is presented in the below diagram.

Figure 4.13

Total Interest Earned to Total Outside Assets Ratio



The above figure show that HBL line is higher than two banks. It means it has higher capacity to earn interest income from outside assets. BOKL has better

position to earn interest income from outside assets than EBL. EBL has weak position to earn interest income from outside assets.

4.1.3.3 Return on Loan and Advances Ratio

Return on loan and advances ratio measures the earning capacity of a commercial banks on its deposits mobilized as loan and advances. Mostly loan and advances include loan cash credit, overdrafts, bill purchased and discounted. A higher ratio indicates greater success to mobilize fund as loan and advances and vice-versa.

The ratio is calculated by dividing net profit by loan and advances(details in appendix Q). The following table shows this ratio of the three banks.

Table 4.14

Return on Loan and Advances Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
HBL	2.21	2.55	2.58	3.12	2.89	2.6700	0.3482	13.0417
EBL	1.92	2.44	2.24	2.24	8.09	3.3860	2.6362	77.8560
BOKL	1.81	2.26	2.36	2.79	2.79	2.4020	0.4103	17.0828
Industry Average						2.8193		

Sources: Annual Report of HBL, EBL, and BOKL

The above table shows that BOKL is increasing trend up to F/Y 2005/06 and remain constant till F/Y 2006/07. HBL is increasing trend up to F/Y 2005/06 and then decreased in F/Y 2006/07. EBL is also increased up to F/Y 2003/04 and remain constant till F/y 2005/06 then increased F/y 2006/07.

The mean ratio shows that EBL has the higher capacity to mobilize its deposit as loan and advances and earn high return. BOKL has the lowest mean ratio which shows that comparatively , it has the lowest capacity to earn return as loan and advances. HBL is in strong position to earn return than BOKL but not than EBL.

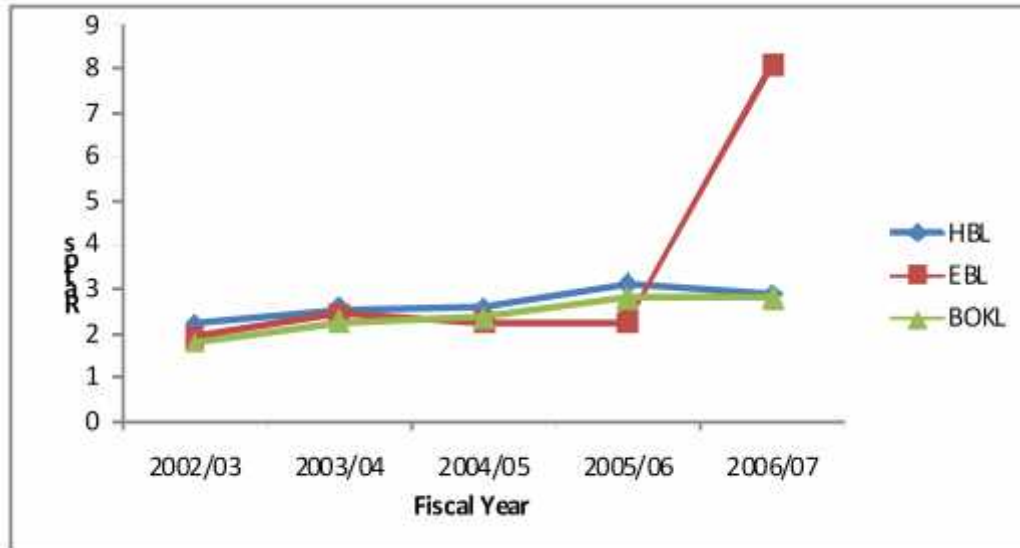
On the other hand, while comparing mean ratios with composite average, it found that HBL and BOKL has lower mean ratios which means they have lower capability to earn on loan and advances

Observing the CV , HBL has more stable and homogeneous ratio then other banks. Second comes EBL is highly inconsistent ratios in comparison with other banks.

It is concluded that EBL's capacity is the highest whereas BOKL has maintained the most consistent, it means. HBL have capacity to earn more return on loan and advances but BOKL has lowest capacity to earn on loan and advances

Figure 4.14

Return on Loan and Advances Ratio



In the above figure 4.14, EBL line is higher than other banks. It means EBL has the higher capacity to mobilize its deposit as loan and advances and earn high return. HBL line higher than BOKL but lower than EBL. It means HBL have capacity to earn more return on loan and advances but BOKL has lowest capacity to earn on loan and advances.

4.1.3.4 Total Interest Earned To Total Working Fund Ratio

To present the earning capacity of the commercial bank in its total working fund (total assets), this ratio is very helpful. In other words, this ratio reflects the extent to which the banks are successful in mobilizing their total assets to acquire higher interest income. A high ratio is an indicator of high earning power of the bank on its total working fund and vice-versa.

This ratio is calculated by dividing total interest earned by total working fund or total assets(details in appendix R). The following table shows this ratio of the three banks.

Table 4.15

Total Interest Earned To Total Working Fund Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	5.16	5.03	5.19	5.52	5.3	5.2400	0.1837	3.5059
EBL	6.46	6.84	6.1	5.66	0.53	5.1180	2.6016	50.8331
BOKL	6.67	5.97	6.16	5.85	5.62	6.0540	0.3961	6.5435
Industry Average						5.4707		

Sources: Annual Report of HBL, EBL, and BOKL

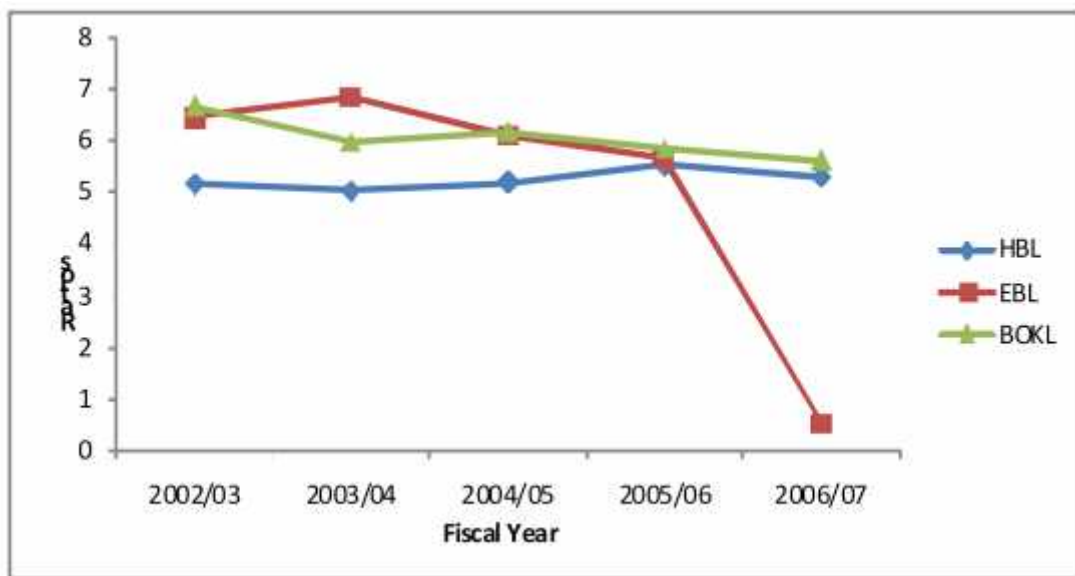
The above table shows that the ratios are in fluctuating trend. HBL has the highest ratio of 5.52 % in F/Y 2005/06 and lowest of 5.03 % in F/ Y2003/04 respectively. EBL has the maximum ratio of 6.84 % in F/Y 2003/04 and minimum ratio of 5.34 % in F/Y 2002/03 and lowest ratio is 5.85 % in F/Y 2005/06.

The mean ratio from the above table show that BOKL has the highest capacity to mobilize total assets and earn interest income whereas EBL has the lowest capacity. HBL has earned more interest income than EBL but less than BOKL. Likewise, HBL and EBL has lower ratio than the composite average.

However, CV shows that BOKL has more homogeneous ratio comparatively. HBL has maintained more consistent ratio than EBL but less consistent than BOKL.

Thus, it can be concluded that BOKL is able to earn high interest income from the total working fund in comparison to other banks because high ratio is an indicator of high earning power.

Figure 1.15
Total Interest Earned To Total Working Fund Ratio



In the above figure we can see that BOKL line is higher than other two banks. It means BOKL has the highest capacity to mobilize total assets and earn interest income than other two banks whereas EBL has the lowest capacity to mobilize total assets and earn interest income. HBL has earned more interest income than EBL but less than BOKL.

4.1.3.5 Total Interest Paid to Total Working Fund Ratio

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

This ratio is calculated by dividing total interest paid by total working funds (details in appendix S).The following table shows the total interest paid to total working fund ratio of the three banks.

Table 4.16

Total Interest Paid To Total Working Fund Ratio (%)

Bank	Fiscal Year					Mean	S.D	C.V (%)
	2002/03	2003/04	2004/05	2005/06	2006/07			
HBL	2.38	1.99	2.02	2.2	2.29	2.1760	0.1689	7.7623
EBL	3.82	3.29	2.54	2.52	2.41	2.9160	0.6147	21.0795
BOKL	3.72	3.01	2.45	2.51	2.33	2.8040	0.5740	20.4709
Industry Average						2.6320		

Sources: Annual Report of HBL, EBL, and BOKL

The above table 4.16 shows that the ratios of HBL, EBL and BOKL are in fluctuating trend. The mean ratios shows that EBL has paid more interest followed but BOKL and HBL has paid least interest whereas CV shows that HBL has more consistent ratios and EBL has the least consistent ratios compared to the other two banks BOKL has more consistent ratios than HBL and not than EBL.

Figure 4.16

Total Interest Paid To Total Working Fund Ratio

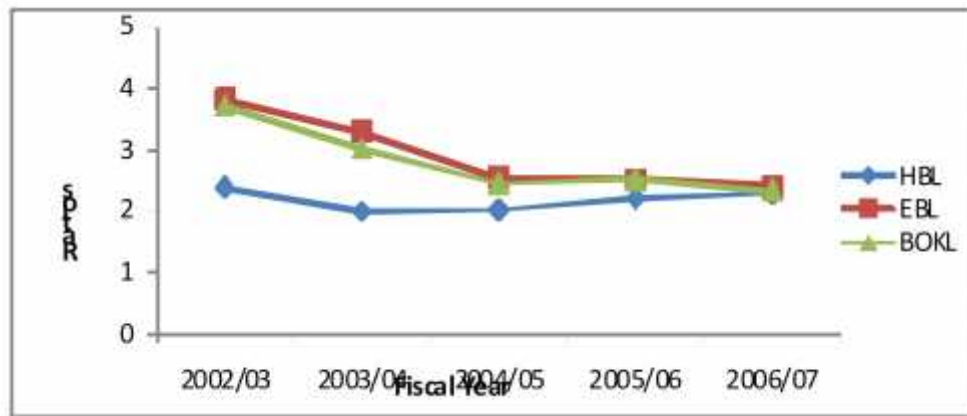


Figure , HBL line shows HBL and BOKL are more consistent and EBL is least consistent .It means EBL has paid more interest to total working fund than BOKL . And BOKL has paid more interest to total working fund than HBL.

4.1.4 Risk Ratio

The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on its investment. The risk taken is satisfied by the increase in profit. So, the banks operating for high profit have to accept risk and manage it efficiently. A bank has to have the idea of the level of risk that one has to bear while investing its funds.

Through the following ratios, efforts have been made to measure the level of risk in the HBL, EBL and BOKL.

4.1.4.1 Credit Risk Ratio

This ratio is very important for a bank to scrutinize the project, i.e., the risk involved in it to avoid default or non-payment of loan before making investment on them. Bank makes investment by utilizing its collected fund. The credit risk ratio measures the risk behind making investment or granting loans. Actually, the proportion of non-performing assets show credit risk ratio in total loan and advances of a bank. But unavailability of related data, the risk is calculated with the help of total loan and advances and total assets.

This ratio is computed by dividing total loan and advances by total assets (details in appendix T). The following table shows the credit risk ratio of HBL, EBL and BOKL.

Table 4.17
Credit Risk Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	42.96	41.66	42.95	49.7	50.71	45.5960	4.2555	9.3331
EBL	60.96	61.24	64.61	61.41	17.1	53.0640	20.1592	37.9903
BOKL	61.02	59.46	59.98	59.12	64.51	60.8180	2.1853	3.5931
Industry Average						53.1593		

Sources: Annual Report of HBL, EBL, and BOKL

From the above table 4.17 , we can see that the credit risk ratio of HBL, EBL and BOKL are fluctuating trend. The mean ratios in the above table shows that BOKL has the highest mean ratio which mean that BOKL has higher credit risk

in comparison to the other banks. In case of CV, HBL's credit policy seems to be more consistent than other banks and EBL's credit policy seems to be least consistent. Comparing overall performance of banks selected for study with mean ratio of each bank it has been found that BOKL has higher ratio than the composite average which means that they have higher credit risk in loan and advances.

Figure 4.17

Credit Risk Ratio

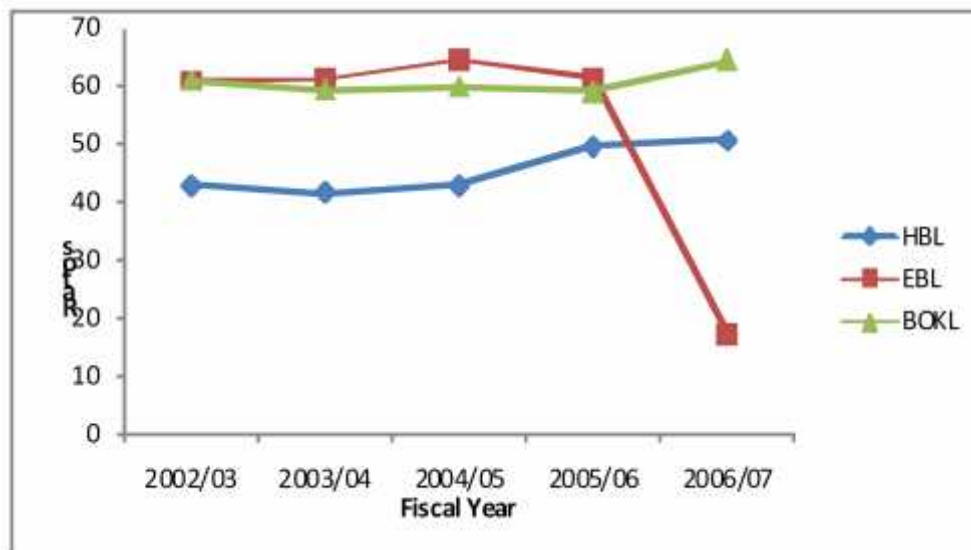


Figure no. 20 shows that BOKL line is higher than other two banks. It means BOKL has higher credit risk in loans and advances. HBL line seems to be more consistent and EBL shows least consistent.

4.1.4.2 Liquidity Risk Ratio

The liquidity risk of a bank defines its liquidity need for deposit. The cash and bank balance are the most liquid assets and they are considered as the banks

liquidity sources and deposit. The ratio of total cash and bank balance to the total deposit is the indicator of bank liquidity needed.

The risk is low if funds are kept idle as cash and bank balance. But this reduces profitability. When bank grants loan, its profitability increases and so does the risk. The higher liquidity ratio indicates less risk and less profitable bank and vice-versa. This ratio is calculated by dividing cash and bank balance by total deposits (details in appendix U). The following table shows the liquidity risk ratio inherent in the four banks

Table 4.18
Liquidity Risk Ratio (%)

Bank	Fiscal Year							
	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D	C.V (%)
HBL	9.42	9.09	8.12	6.48	5.85	7.7920	1.5760	20.2263
EBL	17.02	8.16	11.74	14.81	19.3	14.2060	4.3837	30.8581
BOKL	11.23	10.11	8.28	6.95	9.81	9.2760	1.6734	18.0401
Industry Average						10.4247		

Sources: Annual Report of HBL, EBL, and BOKL

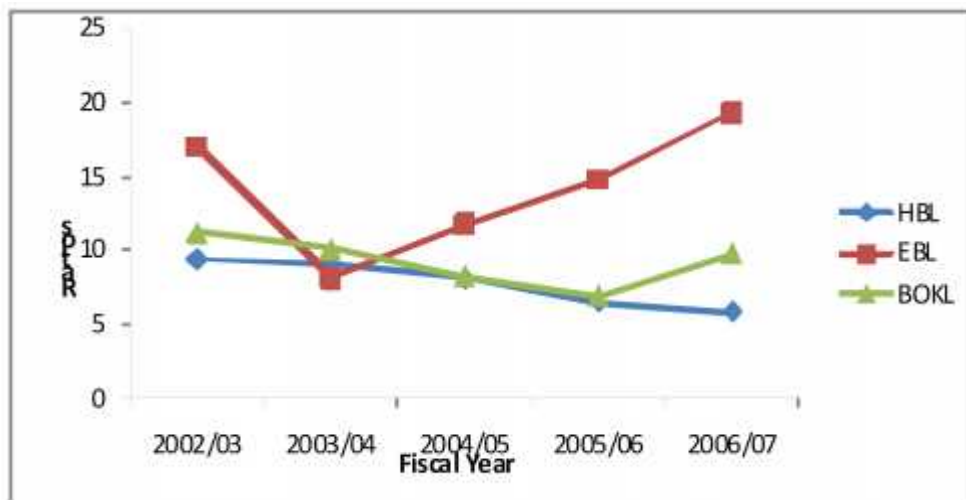
The above liquidity ratios shows that they are in fluctuating trend. The mean liquidity risk ratios of HBL is the lowest whereas EBL has the highest than HBL and lowest than EBL.

The comparison of mean ratio of each bank with the industry average shows that HBL and BOKL has lower ratio than the composite average which indicates that they have higher liquidity risk than EBL.

Thus, it can be concluded that HBL has maintained lower liquidity, which mean it operate with high risk which increase profitability and it has also maintained homogeneous ratio than other two banks. On the other hands, EBL has higher liquidity which indicates that it operate with lower risk and which lower profitability. BOKL has also lower liquidity position than EBL but not than HBL.

Figure 4.18

Liquidity Ratio



The above figure shows that EBL line is higher than other two banks. It means EBL has higher liquidity position that it operate with lower risk. BOKL line is lower than EBL line but higher than HBL line ,its means BOKL has also lower liquidity position than EBL but not than HBL.

4.1.5 Growth Ratio

The growth ratio represents how well the commercial banks are maintaining their economic and financial position. Under this topic, those growth ratios are

analyzed and interpreted which are directly related to the fund mobilization and investment management of commercial banks.

These ratios are as follows.

1. Growth ratio of total deposit
2. Growth ratio of loan and advances
3. Growth ratio of total investment, and
4. Growth ratio of net profit

This ratio can be computed by subtracting the previous year figure from the following year figure and dividing the sum of all year's growth rate by 4 (simple average).

Table 4.19

Growth Ratio of Total Deposit (%)

Bank	Fiscal Year					Growth Ratio
	2002/03	2003/04	2004/05	2005/06	2006/07	
HBL	21007.38	22010.33	24815.01	26490.85	30048.42	0.2347
EBL	6695.00	8063.9	10097.7	13802.40	18186.2	0.2492
BOKL	6170.71	7741.65	8942.75	10485.36	12388.93	0.1480

Sources: Annual Report of HBL, EBL, and BOKL

The above table shows that the growth ratio of total deposit of BOKL is lower than other two banks, it means that the performance of BOKL to collect greater deposits year is lower compared to the other two banks. EBL has the highest growth ratio which means that it is in better position to collect proportionately

greater deposit year by year, whereas HBL has higher ratio than BOKL but not than EBL.

Table 4.20

Growth Ratio of Loan and Advances

Bank	Fiscal Year					Growth Ratio
	2002/03	2003/04	2004/05	2005/06	2006/07	
HBL	10001.85	10315.86	11958.64	14642.56	16998	0.1252
EBL	4908.46	5884.12	7618.67	9801.00	3664.07	0.0181
BOKL	4542.7	5646.7	5912.58	7259.08	9399.33	0.1551

Sources: Annual Report of HBL, EBL, and BOKL

The above table shows that BOKL has higher growth ratio of loan and advances whereas EBL has the lowest i.e. $0.1551 > 0.1252 > 0.0181$. It means BOKL is better position to grant loan and advances year by year. HBL has higher growth rate than EBL but not than BOKL.

Table 4.21

Growth Ratio of Total Investment (%)

Bank	Fiscal Year					Growth Ratio
	2002/03	2003/04	2004/05	2005/06	2006/07	
HBL	10325.54	9292.1	11692.34	10889.03	11822.98	0.2065
EBL	1653.98	2535.7	2128.9	4200.00	4984.3	0.2492
BOKL	1846.5	2477.41	2598.25	3374.71	2992.43	0.1480

Sources: Annual Report of HBL, EBL, and BOKL

The above table shows that HBL has the lowest growth ratio of total investment which means it is comparatively not in better position to invest proportionately more than the previous years whereas EBL has highest growth ratio i.e. $0.2492 > 0.2065 > 0.1480$. HBL has higher ratio than BOKL but not than EBL.

Table 4.22
Growth Ratio Of Net Profit(%)

Bank	Fiscal Year					Growth Ratio
	2002/03	2003/04	2004/05	2005/06	2006/07	
HBL	212.13	263.05	308.28	457.46	491.873	0.2939
EBL	94.2	143.6	170.8	237.2	296.4	0.2652
BOKL	82.13	127.47	139.53	202.44	262.39	0.6025

Sources: Annual report of HBL, EBL, and BOKL

The above table shows that BOKL has highest growth ratio of net profit of 0.6025 which is very high compared to other two banks. HBL has higher growth ratio than EBL but not than BOKL. EBL has the lowest growth ratio of net profit.

From the above analysis, it can be concluded that EBL is comparatively in better position in collecting proportionately more deposit, and making investments year by year whereas BOKL is better in granting loan and advances and earning net profit and HBL is in the lowest position in making proportionately earning profit and more investment .

4.2 Statistical Analysis

Under this, some statistical tools are used to achieve the objective of the study.

Following statistical tools are used for this purpose.

1. Coefficient of correlation analysis
2. Trend analysis
3. Test of hypothesis

In this topic, Karl Pearson's coefficient of correlation has been used to find out the relationship between deposit and total investment, deposit and loan and advances, outside assets and net profit.

4.2.1 Coefficient of Correlation Analysis

Correlation between Deposit and Total Investment

The coefficient of correlation between deposit and investment measures the degree of relationship between two variables. In correlation analysis, deposit is independent variables (X) and total investment is dependent variables (Y). The purpose of computing coefficient of correlation is to justify whether the deposits are significantly used in proper way or not and whether there is any relationship between these two variables or not. The following table shows the coefficient of correlation between deposit and total investment i.e r , r^2 , P.Er, 6 P.Er and coefficient of determination (r^2) of HBL, EBL, and BOKL (Calculation in appendix W).

Table 4.23
Correlation between deposit and total investment

Bank	Evaluation criteria			
	r	r^2	P. Er	6P.Er
HBL	0.7632	0.582	0.007	0.042
EBL	0.9565	0.915	0.026	0.156
BOKL	0.8541	0.730	0.081	0.486

Sources: Annual Report of HBL, EBL, and BOKL

From the above table, we find that the value of co-efficient of correlation (r) between deposit (independent) and total investment (dependent) is 0.7632 in

case of HBL which shows that there is high degree positive relationship between these two variables. Similarly co-efficient of determination (r^2) is .0.582 which indicates that 58.2 % of total variation in dependent variable (Total Investment) is due to the effect of independent variable (Deposit) and remaining $100 \% - 58.2 \% = 41.80 \%$ is due to the effect of other factors. Further the value of t P.Er is 0.042. So, we can say that the co-efficient of correlation (r) between deposit and total investment is significant because (r) is greater than t times of P.Er $0.7632\% > 0.042\%$.

In case of EBL , co-efficient of correlation (r) between deposit (independent) and total investment (dependent) is 0.9565 which indicates high degree of positive relationship between these two variables. Similarly co-efficient of determination (r^2) is .0.915. It means 91.5 % of variation in investment due to deposit. On the basis of t Per, it can be said that 'r' is significant because it is greater than t times P.Er., i.e. $0.9565 > 0.156$.

Similarly, the co-efficient of correlation of BOKL is positive. The value of 'r' is 0.8541 which shows that there is a moderate degree of correlation between these two variables and 'r²' is 0.730 which indicates that 7.30% in investment due to variation in deposit. The value of P.Er is 0.486 which shows that 'r' is significant because (r) is greater than t times of P.Er. i.e. $0.8541 > 0.486$.

Correlation between Deposit and Loan and Advances

Coefficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. In this analysis, deposit is independent (X) and loan and advances (Y) . The main objective of computing ‘r’ between these two variables is to justify whether deposit are significantly used as loan and advances in proper way or not.

The following table exhibits the value of r, r², P.Er and 6P.Er between deposit and loan and advances of HBL, EBL, and BOKL for the study period.

Table 4.24

Correlation between Deposit and Loan and Advances

Bank	r	r ²	P.Er	6P.Er
HBL	0.9838	0.9678	0.0134	0.0805
EBL	-0.0727	0.0053	0.0315	0.1892
BOKL	0.9732	0.9472	0.1867	1.1203

Sources: Annual Report of HBL, EBL, and BOKL

The above table shows that coefficient of correlation (r) between deposit and loan and advances of HBL is 0.9838, it means there is a positive relationship between these two variables. Moreover, coefficient of determination (r²) is 0.9678, which means 96.78% of the variation in the dependent variation in the dependent variable (loan and advances) has been explained by the independent variables (deposit) and remaining 3.22% has been explained by the other factor. Further, value of 6P.Er is 0.2233, it shows that the value of coefficient of correlation (r) is higher than the value of 6 P.Er which means that the value of ‘r’

is significant. In other word, there is significant relationship between deposit and loan and advances in case of HBL.

In case of EBL, also coefficient of correlation between deposit and loan and advances is -0.0727, which indicates negative correlation between these two variables. Similarly, the value of coefficient of determination (r^2) is found to be 0.0053 which shows that 0.53% of the total variation in dependent variable (loan and advances) is due to the effect of independent variable (deposit) and remaining 99.47% is due to the effect of other factor. Further the value of $6P.Er$ is 0.1892, so we can say coefficient of correlation (r) between deposit and loan and advances is not significant because ' r ' is less than 6 times of $P.Er$ i.e. - $0.0805 < 0.1892$.

Similarly, the coefficient of correlation of BOKL is positive. The value of ' r ' is 0.9732 and ' r^2 ' is 0.9472. There will be variation of 94.72 % in loan and advances due to variation in deposit. The value of $P.Er$ is 0.1867 and $6P.Er$ is 1.1203 which shows that ' r ' is not significant because it is less than 6 times $P.Er$. i.e. $0.9473 < 1.1203$.

From the above analysis, it can be concluded that HBL and BOKL has positive relationship between deposit and loan and advances. EBL has negative relationship between deposit and loan and advances. HBL has higher ' r ' which means that it has successful in mobilizing deposit as loan and advances. On the other hand, r^2 of EBL shows low percentage of dependency in comparison with HBL.

Correlation between Total Outside Assets and Net Profit

The outside assets includes loan and advances and all types of investment of a commercial bank. In this analysis , total outside assets is independent variable (X) and net profit is dependent variable (Y). The main Objective of calculation of this correlation is to justify whether the net profit is significantly correlated with total outside assets or not.

The following table exhibits the value of r , r^2 , P.Er and 6P.Er between total outside assets and net profit of HBL,EBL, and BOKL for the study period.

Table 4.25

Correlation between Total Outside Assets and Net Profit

Bank	r	r^2	P. Er	6P.Er
HBL	-0.8449	0.7139	0.1279	0.7677
EBL	0.9906	0.9813	0.0084	0.0502
BOKL	0.9772	0.9549	0.0202	0.1210

Sources: Annual Report of HBL, EBL, and BOKL

From the above table, it is found that the coefficient of correlation between total outside assets (independent) and net profit (dependent) is -0.8449 in case of HBL, which indicates negative relationship between these two variables. Similarly, while considering the coefficient of determination (r^2) i.e. 0.7139, it is indicate that 71.39 % of the variation in the dependent variable has been explained by the independent variable. Moreover, by considering the P.Er, we can say that there is no significant relationship between total outside assets and net profit because the value of ' r ' ,i.e. -0.8449 is low than 6P.Er i.e 0.7677.

Likewise , coefficient of correlation between total outside assets (independent) and net profit (dependent) is 0.9936 in case of EBL, which indicates that it has positive relationship between these two variables. If we consider the value of coefficient of determination 'r²' , it is 0.9813, which means only 98.13% of change in net profit has been explained by the total outside assets. Further on the basis of comparison between the value of 6P.Er and r², we can say that there is significant relationship between these two variables because 'r' begin more than 6 times of P.Er i.e 0.9906>0.05022.

Likewise, in case of BOKL, coefficient of correlation between total outside assets (independent) and net profit (dependent) is positive and low . The value of 'r' is 0.9772 and 'r²' is 0.9549 which explain there is variation of 95.49 % in net profit due to variation of total outside assets. The value of 6P.Eri.e. 0.1210 which so that 'r' is significant because it is more than 6. times P. Eri. e. 0.9772> 0.1210.

In conclusion, we can say that HBL has negative relationship between outside assets and net profit which shows it is not successful in earn profit by mobilizing its outside assets in comparison to other two banks.EBL and BOKL has positive relationship between outside assets and net profit but 'r' of EBL is higher than other two banks which means it is better position in obtaining of the net profit from mobilized fund.

Correlation between Loan and Advances and Net Profit

In this analysis, loan and advances is independent variables (X) and net profit is dependent variables (Y). The purpose computing coefficient between these two variables is to justify whether the net profit is significantly correlated with loan and advances or not.

The following table exhibits the value of r , r^2 , P.Er and δ P.Er between loan and advances and net profit of HBL, EBL, and BOKL for the study period.

Table 4.26
Correlation between loan and advances and net profit

Bank	r	r^2	P.Er	δ P.Er
HBL	0.9775	0.9555	0.0200	0.1200
EBL	0.0166	0.0003	0.0084	0.0502
BOKL	0.9964	0.9928	0.0202	0.1210

Sources: Annual report of HBL, EBL, and BOKL

The above table shows that, coefficient of correlation between loan and advances (X) and net profit (Y) of HBL is 0.1073, which indicates positive relation between these two variables. The coefficient of determination ' r^2 ' is 0.9555 which means 95.55 % of variation in net profit is due to the variation of loan and advances. Further the value of δ P.Er is 0.1200 which is less than ' r ' which means that there is significant relationship between these two variables or in other words, the bank is successful in earning profit by mobilizing its loan and advances.

Coefficient of correlation between loan and advances and net profit in case of EBL is found to be 0.0166, which indicates that there is no significant relationship between these two variables. Further, on the basis of comparison between the value of 6 P.Er and r, we can say that there is no significant relation between these two variables because 'r' is greater than 6 times of probable error i.e. $0.0525 < 0.0166$.

In case of BOKL, the value of coefficient of correlation between loan and advances and net profit is 0.9964, which indicates positive relationship between these two variables. Similarly coefficient of determination 'r²' is 0.9928 which indicates that is 99.28 % of the total variation in dependent variable (net profit) is due to the effect of independent variables (loan and advances) and remaining 0.72% is due to the effect of other factor. Further, the value of 6P.Er is 0.1210, so we can say that the correlation between loan and advances and net profit is significant because 'r' is more than 6 times of P.Er i.e. $0.39964 > 0.1210$.

In conclusion , we can say that HBL, EBL and BOKL have positive relationship between these two variables. Among these three banks , BOKL has higher 'r' which means that it has efficiently mobilized its fund as loan and advances to earn net profit. On the basis of coefficient of determination , EBL has the minimum percentage of dependency whereas HBL has the highest. On the other hand, while analyzing 6 times P.Er, the coefficient correlation of HBL, EBL and BOKL are significant.

4.2.2 Trend analysis and projection for next five years

The main objective of this analysis is to analyze the trend of deposit collection. Utilization and net profit of HBL, EBL and BOKL Granting loan and advances and investing some of the funds in government securities and shares and debenture of other companies by the commercial banks is the utilization of deposits. This topic analysis the trend of total deposit, loan and advances, total investment and net profit and are forecast for next five years. on the basis of the past performance and record.

The projection are based on the following assumption

- a. The main assumption is that other things will remain unchanged.
- b. The bank will run in this present position.
- c. The economy will remain in the present stage.
- d. The forecast will be true only when the limitation of least square methods is carried out.
- e. Nepal Rastra Bank will not change its guideline to commercial banks.

4.2.2.1 Trend analysis of Total Deposits

An effort has been made under this topic to calculate the trend values of deposits of HBL, EBL and BOKL for the five years from 2002/03 to 2006/07 and forecast has been done for next five years from 2007/08 to 2011/12 (Calculation in appendix X). The following table shows the trend values of deposits for ten years from F/Y 2002/03 to 2011/12.

Table 4.27
Trend Value of Total Deposits

Year	Trend value of HBL	Trend value of EBL	Trend Value Of BOKL
2002/03	20,361.88	5624.86	6109.85
2003/04	22,618.14	8496.95	7627.865
2004/05	24,874.40	11369.04	9145.88
2005/06	27,130.66	14241.13	10663.895
2006/07	29,386.92	17113.22	12181.91
2007/08	31,643.18	19985.31	13699.925
2008/09	33,899.44	22857.4	15217.94
2009/10	36,155.70	25729.49	16735.955
2010/11	38,411.96	28601.58	18253.97
2011/12	40,668.22	31473.67	19771.985

Sources: Annual report of HBL, EBL, and BOKL

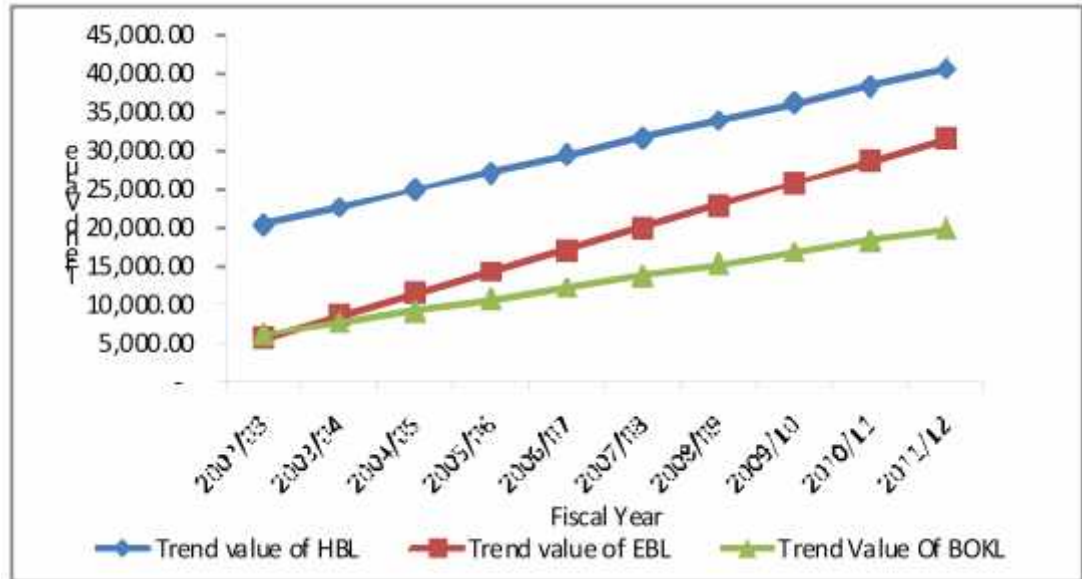
From the above comparative table , it is clear that total deposit of all the three banks are in increasing trend. Other things remaining same or constant, total deposit in F/Y 2011/12 is predicated to be 40668.22 Million, 31473.67 Million, 19771.985 Million, which is highest under the study period.

From the above trend analysis, it is quite obvious that HBL's deposit collection position in relation to other two banks is better, it has highest deposit position, HBL deposit collection is proportionally better than EBL and BOKL.

The above calculates trend values of total deposit of HBL,EBL and BOKL are fitted in the trend line given values:

Figure 4.19

Trend Value of Total Deposits



From the above figure 4.26, we can see that trend value of HBL is higher than other two banks. EBL is also higher than BOKL but lower than HBL.

4.2.2.2 Trend analysis of Loan and Advances

Here the trend values of loan and advances of HBL, EBL and BOKL for the five years from 2002/03 to 2006/07 and forecast has been done for next five years from 2007/08 to 2011/12. The following table shows the trend values of loan and advances for ten years from F/Y 2002/03 to 2011/12.

Table 4.28
Trend Value of Loan and Advances

Year	Rs. In Million		
	Trend value of HBL	Trend value of EBL	Trend Value Of BOKL
2002/03	9119.582	6089.644	4286.95
2003/04	10951.482	6232.454	5419.514
2004/05	12783.382	6375.264	6552.078
2005/06	14615.282	6518.074	7684.642
2006/07	16447.182	6660.884	8817.206
2007/08	18279.082	6803.694	9949.77
2008/09	20110.982	6946.504	11082.334
2009/10	21942.882	7089.314	12214.898
2010/11	23774.782	7232.124	13347.462
2011/12	25606.682	7374.934	14480.026

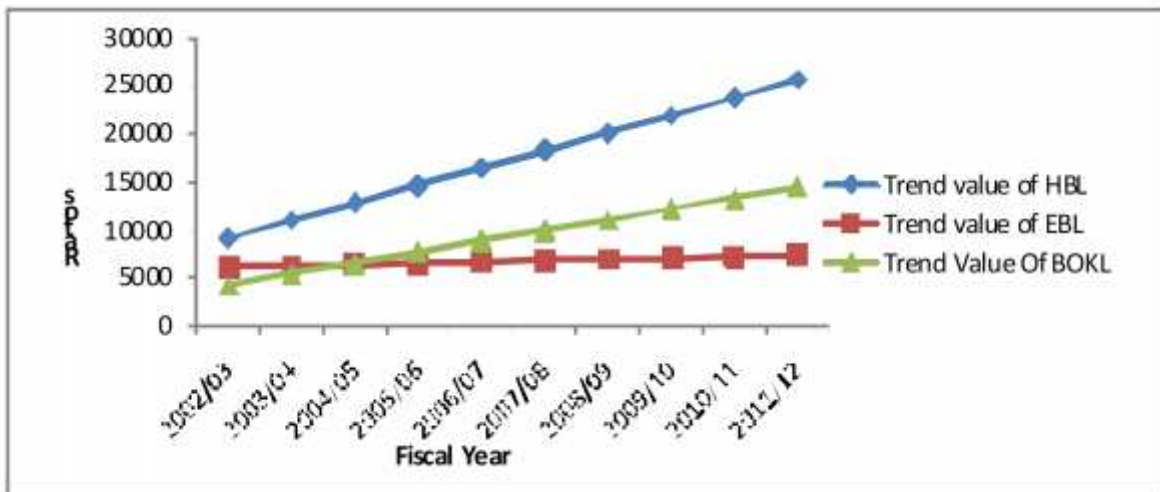
Sources: Annual report of HBL, EBL, and BOKL

From the above comparative table , it is clear that total deposit of all the three banks are in increasing trend. Other things remaining same or constant, loan and advances in F/Y 2011/12 is predicated to be 25606.682 Million, 7374.934 Million, 14480.026 Million, of HBL,EBL and BOKL.

The above comparative trend value shows that HBL is in better position than other two banks in utilization of deposit in term of loan and advances. EBL's utilization of deposit in term of loan and advances is comparatively lesser than HBL. Likewise BOKL's utilization of deposit in term of loan and advances is lesser than these two banks,.

The above calculates trend values of total deposit of HBL, EBL and BOKL are fitted in the trend line given values :

Figure 4.20
Trend Value of Total Deposits



From the above figure , we can see that HBL line is higher than other two banks. BOKL is higher than EBL but lower than HBL.

4.2.2.3 Trend analysis of Investment

Here the trend values of investment of HBL, EBL and BOKL for the five years from 2002/03 to 2006/07 and forecast has been done for next five years from 2007/08 to 2011/12 .The following table shows the trend values of investment for ten years from F/Y 2002/03 to 2011/12.

Table 4.29
Trend Value of Total Investment

Rs. In Million

Years	Trend value of HBL	Trend value of EBL	Trend Value Of BOKL
2002/03	6,075.21	5624.86	2576.49
2003/04	8,439.80	8496.95	2617.18
2004/05	10,804.40	11369.04	2657.86
2005/06	13,168.99	14241.13	2698.54
2006/07	15,533.59	17113.22	2739.23
2007/08	17,898.19	19985.31	2779.91
2008/09	20,262.78	22857.4	2820.59
2009/10	22,627.38	25729.49	2861.27
2010/11	24,991.97	28601.58	2901.96
2011/12	27,356.57	31473.67	2942.64

Sources: Annual report of HBL, EBL, and BOKL

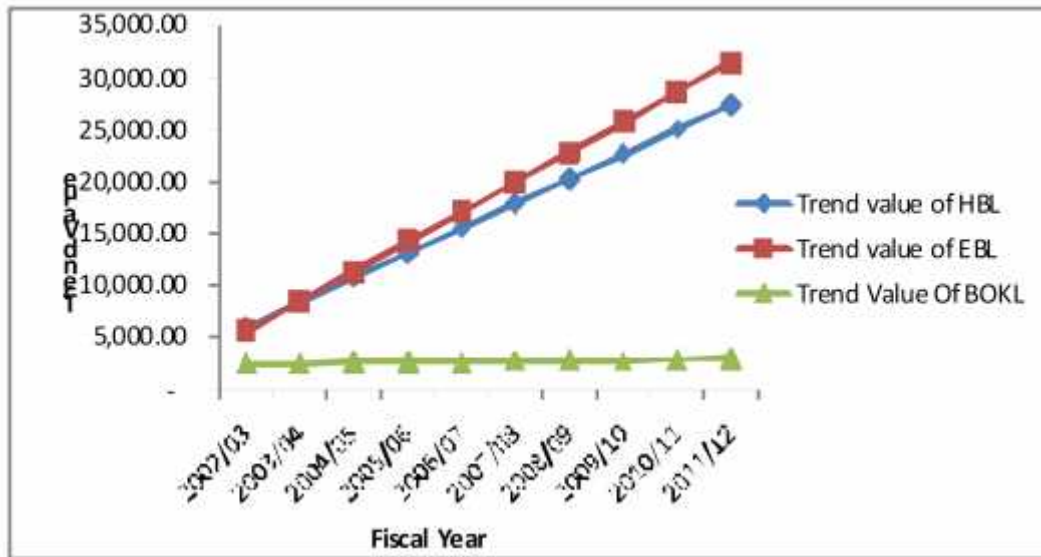
The above table shows that of all three banks are in increasing trend. Other things remaining the same , investment in F/Y 2011/12 is predicted to be 27.356.57 Million,31473.67 Million and 2942.64 Million of HBL,EBL and BOKL respectively .

The above presented comparative trend value shows that EBL has the highest investment in all ten years than other two banks. The investment of HBL is lower than HBL and BOKL.

The above calculates trend values of total deposit of HBL, EBL and BOKL are fitted in the trend line given values :

Figure 4.21

Trend Value of Investment



From the above figure, we can see that EBL is higher than two banks. HBL is less than EBL but higher than BOKL.

4.2.2.4 Trend value of Net Profit

Under this topic, an effort has been made under this topic to calculate the trend values of net profit of HBL, EBL and BOKL for the five years from 2002/03 to 2006/07 and forecast has been done for next five years from 2007/08 to 2011/12 . The following table shows the trend values of net profit for ten years from F/Y 2002/03 to 2011/12.

Table 4.30
Trend Value of Net Profit

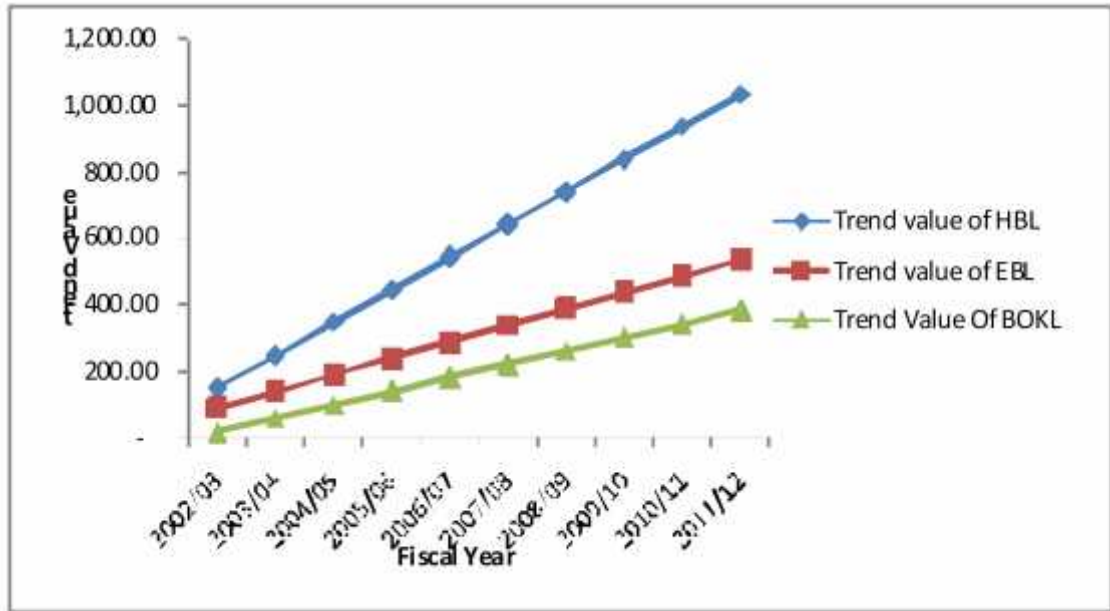
Year	Trend value of HBL	Trend value of EBL	Trend Value Of BOKL
2002/03	149.81	88.84	17.01
2003/04	248.18	138.64	57.69
2004/05	346.56	188.44	98.37
2005/06	444.93	238.24	139.06
2006/07	543.31	288.04	179.74
2007/08	641.68	337.84	220.42
2008/09	740.06	387.64	261.11
2009/10	838.43	437.44	301.79
2010/11	936.81	487.24	342.47
2011/12	1035.18	537.04	383.15

Sources: Annual report of HBL, EBL, and BOKL

The above table 30 shows that of all three banks are in increasing trend. Other things remaining the same , net profit in F/Y 2011/12 is predicted to be 1035.18 Million,537.04 Million and 383.15 Million of HBL,EBL and BOKL respectively Comparatively ,HBL is predicated to earn high profit than other two banks.EBL is predicated to earn more than BOKL . We can draw a conclusion that BOKL seem to have failed to utilize its funds to earn handsome amount of profit in comparison to other two banks.

Figure 4.22

Trend Value of Net Profit



From the above figure we can see that three banks are increasing trend. HBL line is higher than other two banks . It means HBL is able to earn more profit.

4.2.3 Test of Hypothesis

Under this topic, an effort has been made to test the significance regarding the parameter of the population on the basis of sample drawn from the population..

Generally steps are followed for the test of hypothesis.

- a. Formulating hypothesis
 - Null hypothesis
 - Alternative hypothesis
 - Computing the test statistic

- b. Fixing the level of significance
- c. Finding criteria region
- d. Deciding two tailed or one tailed test
- e. Making Decision

Some of the mean hypothesis test are calculated and decision are made as follows:

4.2.3.1 Test of hypothesis of loan and advances to total deposit ratio of HBL, EBL and BOKL

Null hypothesis (H_1): $\hat{\mu}_1 = \hat{\mu}_2 = \hat{\mu}_3$, i.e, there is no significance different between mean ratio of loan and advances to total deposit of HBL,EBL and BOKL or the ratio do not differ significantly among themselves.

Alternative hypothesis (H_2) : $\hat{\mu}_1 \neq \hat{\mu}_2 \neq \hat{\mu}_3$, (Two tailed test) there is significance different between mean ratio of loan and advances to total deposit of HBL,EBL and BOKL or the ratio do not differ significantly among themselves.

Test hypothesis : Under H_0 , the one way ANOVA F-test statistic is $F = MSC/MSE$ with degree of freedom. (k-1), (n-1)

Sources of variation	Sum of square(S.S)	Degree of freedom (d.f)	Mean sum of square(MMS)	F-ratio (MSC/MSE)
Between samples	SSC = 1072.26	k-1=3-1=2	MSC= 536.1219	2.67
Within samples	SSE= 2405.79	n-k=15-3=12	MSE= 200.48	
Total	SST=3478.05	n-1=15-1=14		

From the above ANOVA, we get

Calculated F (Degree of freedom) = F Ratio

$$F(2,12) = 2.67$$

The tabulated value of F at 5% level of significance for

That is, $F_{0.05} = 3.89$

Decision

Since the calculated value of F is more than the tabulated value of F (cal F > tab F) alternative hypothesis is accepted, i.e., there is significant difference between mean ratio of loan and advances to total deposit of HBL, EBL and BOKL.

4.2.3.2 Test of hypothesis of total investment to total deposit ratio of HBL, EBL and BOKL

Null hypothesis (H_1): $\hat{\mu}_1 = \hat{\mu}_2 = \hat{\mu}_3$, i.e., there is no significant difference between mean ratio of total investment to total deposit of HBL, EBL and BOKL or the ratios do not differ significantly among themselves.

Alternative hypothesis (H_2): $\hat{\mu}_1 \neq \hat{\mu}_2 \neq \hat{\mu}_3$, (Two-tailed test) there is significant difference between mean ratio of total investment to total deposit of HBL, EBL and BOKL or the ratios do not differ significantly among themselves.

Test hypothesis: Under H_0 , the one-way ANOVA F-test statistic is $F = MSC/MSE$ with degree of freedom. (k-1), (n-1)

Sources of variation	Sum of square(S.S)	Degree of freedom (d.f)	Mean sum of square(MMS)	F-ratio (MSC/MSE)
Between samples	SSC = 806.15	k-1=3-1=2	MSC= 403.08	27.42
Within samples	SSE= 176.38	n-k=15-3=12	MSE= 14.70	
Total	SST= 982.53	n-1=15-1=14		

(Appendix Calculation in appendix)

From the above ANOVA, we get

Calculated F (Degree of freedom) = F Ratio

$$F (2,12)= 27.42$$

The tabulated value of F at 5% level of significance for

That is , $F_{0.005} = 3.89$

Decision

Since the calculated value of F is more than the tabulated value of F (cal F > tab F) alternative hypothesis is accepted, i.e , there is significance different between mean ratio of total investment to total deposit of HBL,EBL and BOKL

4.2.3.3 Test of hypothesis of Return to loan and advances ratio of HBL, EBL and BOKL

Null hypothesis (H_1): $\hat{\mu}_1 = \hat{\mu}_2 = \hat{\mu}_3$, i.e, there is no significance different between mean ratio of return to loan and advances of HBL,EBL and BOKL or the ratio do not differ significantly among themselves.

Alternative hypothesis (H_2) : $\hat{\mu}_{1\ddagger} \hat{\mu}_{2\ddagger} \hat{\mu}_{3\ddagger}$, (Two tailed test) there is significance different between mean ratio return to loan and advances of HBL,EBL and BOKL or the ratio do not differ significantly among themselves.

Test hypothesis : Under H_0 , the one way ANOVA F-test statistic is $F=MSC/MSE$ with degree of freedom. (k-1), (n-1)

Sources of variation	Sum of square(S.S)	Degree of freedom (d.f)	Mean sum of square(MMS)	F-ratio (MSC/MSE)
Between samples	SSC = 1.53	k-1=3-1=2	MSC= 0.765769	F= 0.21
Within samples	SSE= 43.30	n-k=15-3=12	MSE=3.608315	
Total	SST= 44.83	n-1=15-1=14		

(Appendix Calculation in appendix Y)

From the above ANOVA, we get

Calculated F (Degree of freedom) = F Ratio

$$F(2,12) = 0.21$$

The tabulated value of F at 5% level of significance for

That is , $F_{0.005} = 3.89$

Decision

Since the calculated value of F is less than the tabulated value of F (cal F > tab F) alternative hypothesis is accepted, i.e. , there is no significant different between mean ratio of return to loan and advances of HBL,EBL and BOKL .

**4.2.3.4 Test of Hypothesis of Total Interest Earned to Total Outside Assets
Ratio of HBL, EBL and BOKL**

Null hypothesis (H_1): $\hat{\mu}_1 = \hat{\mu}_2 = \hat{\mu}_3$, i.e, there is no significance different between mean ratio of total interest earned to total outside of HBL,EBL and BOKL or the ratio do not differ significantly among themselves.

Alternative hypothesis (H_2) : $\hat{\mu}_1 \neq \hat{\mu}_2 \neq \hat{\mu}_3$, (Two tailed test) there is significance different between mean ratio return to loan and advances of HBL,EBL and BOKL or the ratio do not differ significantly among themselves.

Test hypothesis : Under H_0 , the one way ANOVA F-test statistic is $F = MSC/MSE$ with degree of freedom. (k-1), (n-1)

Sources of variation	Sum of square(S.S)	Degree of freedom (d.f)	Mean sum of square(MMS)	F-ratio (MSC/MSE)
Between samples	SSC = 31.49	k-1=3-1=2	MSC= 15.74283	F=1.4112
Within samples	SSE= -133.87	n-k=15-3=12	MSE= -11.15563	
Total	SST= 165.35	n-1=15-1=14		

(Appendix Calculation in appendix Y)

From the above ANOVA, we get

Calculated F (Degree of freedom) = F Ratio

$$F (2,12) = 1.4112$$

The tabulated value of F at 5% level of significance for

That is , $F_{0.05} = 3.89$

Decision

Since the calculated value of F is less than the tabulated value of F ($\text{cal } F < \text{tab } F$) alternative hypothesis is accepted, i.e, no significance different between mean ratio of total interest earned to total outside of HBL,EBL and BOKL there is not significant different deposit of HBL,EBL and BOKL .

4.3 Major Findings

Having completed the basis required for the study, the final and the most important task of the researchers to enlist the finding of the study.

4.3.1 Liquidity Ratio

The liquidity position of HBL, EBL and BOKL reveals that,

- The mean current ratio of EBL is higher than HBL and BOKL .It Means EBL has maintained higher liquidity position in comparison to other two banks.
- The mean cash and bank balance to total deposit ratio of EBL is higher than other two banks. This states that the cash and bank balance in liquidity position of EBL is higher than other two banks.
- The mean cash and bank balance to current asset ratio of EBL is higher and HBL is the lowest. EBL shows consistency than HBL and BOKL.
- BOKL has higher mean ratio of investment in government securities to current assets whereas HBL has maintained lowest.

- BOKL has the highest mean loan and advance to current assets ratio and HBL has the lowest.

The above finding shows that in overall HBL has maintained lowest liquidity position however it has maintained more consistent ratios than other two banks. EBL has the highest cash and bank balance to total deposit, cash and bank balance to current assets ratio, this may make the bank is to be in good position to meet the daily cash requirement. BOKL has higher investment in government securities in comparison to other two banks. BOKL has the highest loan and advances to current assets ratio, which means that it has highly mobilized its fund as loan and advances.

4.3.2 Asset Management Ratio

The assets management ratio of HBL, EBL and BOKL reveals that,

-) HBL has the high mobilization of total deposits in investment and EBL and BOKL has mobilized only a minimum amount of total deposits into investment. EBL is in good position in mobilizing its total deposit in investment and has also maintained consistency in its ratios whereas the other two banks have inconsistent ratios and have mobilized only a little amount of total deposits into investment.
-) HBL has the high mobilization of total deposits in investment and EBL has mobilized only a minimum amount of total deposits into investment

.HBL is in good position in mobilizing its total deposits in investment and has also maintained consistency in its ratios whereas the other two banks have inconsistent ratios and have mobilized only a little amount of total deposits into investment.

) EBL has the highest mean ratio and HBL has the lowest, which indicates that EBL is more efficient in mobilizing its total working fund in loans and advances and HBL is the least efficient in comparison with two banks. There is very slight difference between the mean ratio of BOKL and EBL.

) EBL has the highest mean ratio and HBL has the lowest, which indicates that EBL is more efficient in mobilizing its total working fund in loans and advances and HBL is the least efficient in comparison with two banks. There is very slight difference between the mean ratio of BOKL and EBL

) BOKL and EBL has higher mean ratio than the overall average ratio while HBL has lower mean ratio. BOKL has invested high amount in government securities than other two banks. EBL and HBL has invested minimum amount of total working fund in government securities and the ratios are also very inconsistent. This shows these banks have no certain investment policy toward government securities.

) BOKL has invested high amount in share and debenture which has mean ratio of of total working fund and which is higher than other two banks.

EBL has the lowest mean ratio.HBL has also invested very little amount but it is higher than EBL.

-) BOKL has high ratios and EBL has lowest ratios in comparison. It shows that BOKL has high risk of loan loss and therefore, has made highest provision. HBL has higher ratios than EBL.

4.3.3 Profitability Ratio

The profitability ratios of the three banks reveal that:

-) BOKL has the highest capacity to earn high return on total working fund but it has maintained less consistent ratios than that of EBL. On the other hand, comparatively HBL is highly inconsistent and has low capacity regarding ROA.
-) HBL has the highest mean ratio which indicates that it has than highest capacity to earn interest income from the outside assets whereas EBL has the lowest mean ratio and this indicates that comparatively, EBL is not in a strong position to earn interest income from the total outside assets. The table shows that BOKL is the better position than EBL regarding interest earning on outside assets.
-) EBL has the higher capacity to mobilize its deposit as loan and advances and earn high return. BOKL has the lowest mean ratio which shows that comparatively , it has the lowest capacity to earn return as loan and advances. HBL is in strong position to earn return than BOKL but not than EBL.

-) BOKL has the highest capacity to mobilize total assets and earn interest income whereas EBL has the lowest capacity. HBL has earned more interest income than EBL but less than BOKL.
-) The mean ratios shows that EBL has paid more interest followed but BOKL and HBL has paid least interest.

4.3.4 Risk Ratio

The risk ratios of three banks reveal that,

- BOKL has the highest mean ratio which mean that BOKL has higher credit risk in comparison to the other banks.
- The mean liquidity risk ratios of HBL is the lowest whereas EBL has the highest than HBL and lowest than BOKL.

It can be summed up from the above finding that BOKL has adopted more stable policy regarding risk. EBL has less risk involved in investment and is more profitability bank regarding liquidity risk.

4.3.5 Growth Ratio

The analysis of growth ratios reveals that:

- The growth ratio of total deposit of BOKL is lower than other two banks, it means that the performance of BOKL to collect greater deposits year is lower compared to the other two banks. EBL has the highest growth ratio which means that it is in better position to collect proportionately greater

deposit year by year, whereas HBL has higher ratio than BOKL but not than EBL.

- BOKL has higher growth ratio of loan and advances whereas EBL has the lowest. It means BOKL is better position to grant loan and advances year by year. HBL has higher growth rate than EBL but not than BOKL.
- HBL has the lowest growth ratio of total investment which means it is comparatively not in better position to invest proportionately more than the previous years whereas EBL has highest growth ratio. HBL has higher ratio than BOKL but not than EBL.
- BOKL has highest growth ratio of net profit to other two banks. HBL has higher growth ratio than EBL but not than BOKL. EBL has the lowest growth ratio of net profit.

From the above findings, it can be concluded that EBL is comparatively in better position in collecting proportionately more deposit, granting loan and advances and making investments year by year whereas BOKL is not better position in collecting deposit, granting loan and advances and making investments but better position in earning more net profit year by year.

4.3.6 Coefficient of Correlation Analysis

Coefficient of Correlation Analysis between variables of HBL, EBL and BOKL reveals that:

- Co-efficient of correlation (r) between deposit (independent) and total investment (dependent) of HBL which shows that there is high degree

positive relationship between these two variables. Similarly EBL , co-efficient of correlation (r) between deposit (independent) and total investment (dependent) which indicates high degree of positive relationship between these two variables. The co-efficient of correlation of BOKL is positive, which shows that there is moderate degree of correlation between these two variables.

The coefficient of correlation (r) between deposit and loan and advances of HBL, there is a positive relationship between these two variables. In case of EBL, also coefficient of correlation between deposit and loan and advances is negative, which indicates negative correlation between these two variables. Similarly, the coefficient of correlation of BOKL is positive. From the above analysis, it can be concluded that HBL and BOKL has positive relationship between deposit and loan and advances. EBL has negative relationship between deposit and loan and advances. HBL has higher 'r' which means that it has successful in mobilizing deposit as loan and advances.

- It is found that the coefficient of correlation between total outside assets (independent) and net profit (dependent) is negative in case of HBL, which indicates negative relationship between these two variables. Likewise , coefficient of correlation between total outside assets (independent) and net profit (dependent) is positive in case of EBL, which indicates that it has positive relationship between these two variables Likewise, in case of BOKL coefficient of correlation between

total outside assets (independent) and net profit (dependent) is positive and low . In conclusion, we can say that HBL has negative relationship between outside assets and net profit which shows it is not successful in earn profit by mobilizing its outside assets in comparison to other two banks.EBL and BOKL has positive relationship between outside assets and net profit but 'r' of EBL is higher than other two banks which means it is better position in obtaining of the net profit from mobilized fund.

- Coefficient of correlation between loan and advances (X) and net profit (Y) of HBL has positive relation between these two variables. Coefficient of correlation between loan and advances and net profit in case of EBL is found to be positive which indicates that there is no significant relationship between these two variables. In case of BOKL, the value of coefficient of correlation between loan and advances and net profit has positive relationship between these two variables. In conclusion , we can say that HBL, EBL and BOKL have positive relationship between these two variables. Among these three banks , BOKL has higher 'r' which means that it has efficiently mobilized its fund as loan and advances to earn net profit. On the basis of coefficient of determination , EBL has the minimum percentage of dependency whereas HBL has the highest. On the other hand, while analyzing 6 times P.Er, the coefficient correlation of HBL, EBL and BOKL are significant.

4.3.7 Trend Analysis

Trend Analysis between variables of HBL, EBL and BOKL reveals that:

- All three banks are in increasing trend. Other things remaining the same , net profit in F/Y 2011/12 is predicted to be 1035.18 Million,537.04 Million and 383.15 Million of HBL,EBL and BOKL respectively .Comparatively ,HBL is predicated to earn high profit than other two banks.EBL is predicated to earn more than BOKL . We can draw a conclusion that BOKL seem to have failed to utilize its funds to earn handsome amount of profit in comparison to other two banks.
- The total deposit of all the three banks are in increasing trend. Other things remaining same or constant, total deposit in F/Y 2011/12 is predicated to be 40668.22 Million, 31473.67 Million, 19771.985 Million, which is highest under the study period.From the above trend analysis, it is quite obvious that HBL's deposit collection position in relation to other two banks is better, it has highest deposit position, HBL deposit collection is proportionally better than EBL and BOKL .
- All three banks are in increasing trend. Other things remaining the same , investment in F/Y 2011/12 is predicted to be 27.356.57 Million,31473.67 Million and 2942.64 Million of HBL,EBL and BOKL respectively .
- All three banks are in increasing trend. Other things remaining the same , net profit in F/Y 2011/12 is predicted to be 1035.18 Million,537.04 Million and 383.15 Million of HBL,EBL and BOKL respectively. Comparatively ,HBL is predicated to earn high profit than other two

banks. EBL is predicated to earn more than BOKL . We can draw a conclusion that BOKL seem to have failed to utilize its funds to earn handsome amount of profit in comparison to other two banks.

4.3.8 Test of Hypothesis

From the test of significance regarding the parameter of the population, it found that,

- There is significance different between mean ratio of loan and advances to total deposit of HBL,EBL and BOKL.
- There is significance different between mean ratio of total investment to total deposit of HBL,EBL and BOKL.
- There is no significance different between mean ratio return to loan and advances of HBL,EBL and BOKL.
- There is no significance different between mean ratio of total interest earned to total outside of HBL,EBL and BOKL

From the above findings, it can be conclude that all the three banks have significant difference between mean ratio of loan and advances and total investment but not significant difference between mean ratio of return to loan and advances and total interest earned to total outside of HBL,EBL and BOKL

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The last of this study is summary, conclusion and recommendation developed from the comparative analysis of various aspects of the investment of the commercial banks by using some important financial as well as statistical tools. After completing the basic analysis required for the study and the most important tasks of the researcher is to summarize the study and provide recommendations. This would be meaningful to the top management to the concerned banks to initiate the actions and achieve the desired results.

5.1 Summary

In this study, the financial tool ratio analysis viz. liquidity ratio, asset management ratio, profitability ratio, risk ratios, growth ratios and statistical tools like percentage, mean, standard deviation, coefficient of variation, coefficient of correlation, trend analysis and hypothesis have been used for the analysis and interpretation of the data. The data, which were employed in this research, are obtained from the annual reports of the concerned banks.

From the analysis, it has been found that the liquidity position of EBL, is comparatively better than other banks as it has highest cash and bank balance to current assets ratio. This mean that the bank is in good position to meet the daily

cash requirement but it has to bear high cost of fund. EBL has higher current ratio, which means it is more successful in meeting its current obligations. EBL has higher investment in government securities. EBL is also highest loan and advances to current assets which means that comparatively , it is highly mobilized its fund as loan and advances. HBL has the lowest liquidity position. At last , it can be concluded that EBL has good liquidity position whereas BOKL needs to increase cash and bank balance to increase liquidity. HBL is successful in investing more in government securities and BOKL is in good position in mobilizing current assets as loan and advances.

The assets management ratio shows that EBL is in better position in mobilizing total deposit and total working fund as loan and advances and comparatively it has also invested high amount in shares and debentures of other companies. Whereas, BOKL has more portion of deposit invested as investment in different sectors. Due to security, BOKL has invested more of its working fund in government securities. The analysis also shows that comparatively HBL is not better position in mobilizing its deposit as loan and advances and other investment.

5.2 Conclusion

Nepal is a developing country and its economic environment is also not in a good condition. The strong economic structure is needed for the rapid overall development. CBs play a very important role in the economic growth of the developing countries like Nepal. Nepal's CBs face many problems related to fund

mobilization and investment. They are working in traditional method. They have to rush with modern banking technology so that, they would be a professional business institutions. If CBs follow above mentioned suggestions, they would be successful in reaching to the modern innovative and competitive banking market. These suggestions would be helpful to the CBs to develop new systems in the banking business.

5.3 Recommendations

Recommendations are the final output of the whole study. It helps to convey positive information and proper way of improvement to the concerned banks, HBL, EBL and BOKL and to the other interested researchers in the upcoming days. Various analysis have been done till these steps. On the basis of these analysis and findings of this study, the following of utilizing resources. In this research study, it has been found that all the three banks have invested a very low amount of total working fund on shares and debentures but among them, BOKL has invested a little more. Nonetheless, all the suggestions and recommendations can be advanced to overcome weakness, in efficiency and for the satisfactory improvement policy of HBL, EBL and BOKL.

To the Concerned Banks

Increase More Deposit

The commercial bank's main source of fund is collecting deposit from public who don't need that fund recently. Deposit collection plays a significant role in term of daily activities in the commercial banks. Without enough deposit collection,

banks cannot operate efficiently. It has been found that comparatively , EBL and BOKL's deposit collection are lower than of HBL. It is recommended to them to collect more amount as deposit through large variety of deposit scheme and facilities, like cumulative deposit scheme, prize bonds scheme, gift cheques, recurring deposit scheme (life insurance) and monthly interest scheme. The minimum amount needed to open an account should also be minimized so that it will attract other small depositors.

Liberal Lending Policy

To get success in competitive environment, depositor's money must be utilized as loan and advances. The large item of the bank in the asset side is loan and advances. If it is neglected, then it could be the main cause of liquidity crises in the bank and one of the main reasons for a bank's failure. It has been found that BOKL has its large portions of fund invested as loan and advances and negligence to invest other sectors. HBL and EBL have not properly used their existing funds as loan and advances. To overcome this, these banks are recommended to follow liberal lending policy, invest more percentage of total deposit in loan and advances and maintain more stability on the investment policy.

More Investment in Government Securities

From the study, it has been found that BOKL and EBL have not invested more amount in government securities compared to HBL. Investment on those securities issued by government, i.e. treasury bill, development bonds, saving certificate are free of risk and highly liquid in nature but such securities yield low

interest rate of particular maturity due to lower risk in future, it is more better in regard to safety than other means of investment . So BOKL and EBL are strongly recommended to give importance opportunities to invest more amount in government securities as there is lack of investment opportunities now-a-days and the banks are heavily investing in treasury bills even with very low interest.

Increase Investment on Shares and Debentures

To be successful in a competitive market a commercial bank must mobilize its funds in different sectors like purchase of shares and debentures of other financial and non-financial companies and other government and non-government companies. It is also a genuine means three banks are recommended to invest more funds in shares and debentures of different other companies to earn more profit.

Effective Portfolio Management

Portfolio management is very important for each and every investor. The term investment has included many parts of risk. Risk is a chance of loss or variability of the return of a certain period. There is a high chance of return in the more risky projects. Portfolio management plays a vital role by dividing total investment in many sectors. Portfolio management of the bank assets basically means allocation of funds in different components of banking assets having different degrees of risk and varying rate of return in such a way that the conflicting goal of maximum risk can be achieved. HBL and BOLK have been increasing total investment in

every year whereas SBIL and EBLs total investment has decreased in certain years. This is due to appropriate portfolio management. So, it is recommended that the portfolio condition of the banks should be examined carefully from time to time and alteration should be made to maintain equilibrium in the portfolio condition as far as possible. Therefore it can be said that all the eggs should not be kept in the same basket. These banks should utilize effective portfolio management to increase total investment.

Project Oriented Approach

The project oriented approach is to be encouraged in lending business of the banks, in which security is not necessary. The project should be allowed to make themselves capable to generate their focus and to repay loans timely. So, it is recommended to these banks to adopt project – oriented approach, the possibility of increasing loan loss can be minimized by this approach.

Innovative Approach of Marketing

Well marketing role has played an important role in the banks development. Due to growth of high competition in the banking sector, the business of the bank should be customer oriented. Marketing is one of the best or effective tools to attract customers so it must be strong and active. Without effective marketing any organization could be alone in the competitive market. Different marketing method like advertisement through audio-visual, public web site, documentary, etc is followed. Likewise draw attention of customers through new technologies like

e-banking, internet banking service, increase investment through wide international banking network should be introduced. So it is recommended to follow appropriate marketing tools to be successful in the competitive market.

Expansion of Branches

Economic growth of a country depends upon the high growth of the commercial banks. If the service of the commercial banks expands all over the nation it will collect idle money from different areas and can be utilized for income generation purpose. So the CBs should expand its branches all over the rural and urban areas. NRB and HMG have also encouraged the JVBs to expand the banking services in the rural areas and communities without making unfavourable impact in their profits. Therefore, these banks are recommended to expand its branches and provide banking services and facilities to the rural areas and communities to accelerate the economic development of the rural areas.

To the Government

The government should make liberal policies and make a suitable environment in the country so that the banks will have more opportunities to collect deposit and invest in different productive sectors.

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Appendix

Sample Calculation of ANOVA (one way)

Test of Hypothesis of Loan and Advances to Total Deposit Ratio of HBL, EBL and BOKL

Here,

X_1 = Loan and Advances to total deposit ratio of HBL

X_2 = Loan and Advances to total deposit ratio of EBL

X_3 = Loan and Advances to total deposit ratio of BOKL

Calculation of X_1 , X_2 , X_3 , $(X_1)^2$, $(X_2)^2$, $(X_3)^2$

Fiscal Year	X_1	X_2	X_3	X_1^2	X_2^2	X_3^2
2002/03	47.611	73.315	73.617	2266.819	5375.135	5419.483
2003/04	46.870	72.969	72.939	2196.797	5324.426	5320.131
2004/05	48.191	75.450	66.116	2322.387	5692.636	4371.313
2005/06	55.274	71.009	69.231	3055.218	5042.333	4792.879
2006/07	56.569	20.148	75.869	3200.018	405.9229	5756.072
Total	254.52	312.89	357.77	13041.24	21840.45	25659.88

Now,

$$\begin{aligned}\text{Grand Total (T)} &= X_1 + X_2 + X_3 \\ &= 254.52 + 312.89 + 357.77 \\ &= 925.18\end{aligned}$$

$$\begin{aligned}\text{Correction Factor (C.F)} &= T^2/n \\ &= (925.18)^2/15\end{aligned}$$

$$= 57063.87$$

$$\begin{aligned}\text{Total Sum Of Square (SST)} &= (X_1^2 + X_2^2 + X_3^2) - \text{C.F.} \\ &= (13041.24 + 21840.45 + 25659.88) - 57063.87 \\ &= 60541.57 - 57063.87 \\ &= 3477.70\end{aligned}$$

$$\begin{aligned}\text{Sum of Square between Samples (SSC)} &= [(X_1)^2 / n_1 + (X_2)^2 / n_2 + (X_3)^2 / n_3] - \text{C.F.} \\ &= (254.520)^2 / 5 + (312.89)^2 / 5 + (357.77)^2 / 5 - 57063.87 \\ &= 1072.26\end{aligned}$$

$$\begin{aligned}\text{Sum of Square within samples (SSE)} &= \text{SST} - \text{SSC} \\ &= 3477.70 - 1072.26 \\ &= 2405.79\end{aligned}$$

$$\begin{aligned}\text{The mean sum of square between samples (MSC)} &= \text{SSC} / k - 1 \\ &= 1072.26 / 3 - 1 \\ &= 536.13\end{aligned}$$

$$\begin{aligned}\text{The mean sum of square within samples (MSE)} &= \text{SSE} / n - k \\ &= 2405.44 / 15 - 3 \\ &= 200.48\end{aligned}$$

$$\begin{aligned}\text{Finally, } F &= \text{MSC} / \text{MSE} \\ &= 536.13 / 200.48 \\ &= 2.6742\end{aligned}$$